Environment
Effects Statement

Technical Report F Business







North East Link Project

North East Link Environment Effects Statement Technical report F – Business Impact Assessment

Prepared for North East Link April 2019

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Table of contents

1.	Introd	luction	1
	1.1	Purpose of this report	1
	1.2	Why understanding business impacts is important	1
2.	EES	scoping requirements	3
	2.1	EES evaluation objectives	
	2.2	EES scoping requirements	3
	2.3	Linkages to other reports	5
3.	Proje	ct description	6
	3.1	Overview	6
	3.2	Construction	7
	3.3	Operation	7
	3.4	Activities and design considerations relevant to businesses	7
4.	Legis	slation, policy, guidelines and criteria	8
	4.1	Commonwealth legislation	8
	4.2	State legislation, strategies and policy	8
	4.3	Local planning schemes and policies	10
5.	Meth	od	17
	5.1	Overview of method	17
	5.2	Study area	18
	5.3	Existing conditions	23
	5.4	Business surveys	24
	5.5	Risk assessment	24
	5.6	Impact assessment	28
	5.7	Rationale	30
	5.8	Limitations, uncertainties and assumptions	30
	5.9	Stakeholder engagement	30
	5.10	Community feedback	33
6.	Existi	ing conditions	36
	6.1	Geographical context	36
	6.2	M80 Ring Road to northern portal	40
	6.3	Northern portal to southern portal	45
	6.4	Eastern Freeway	52
	6.5	Summary	61
7.	Risk	assessment	63
8.	Impa	ct assessment	65
	8.1	Key themes and concerns	65

2 Construction impacts	68
3 Operation	84
4 Cumulative impacts	90
5 Managing impacts	90
6 Alternative design options	93
7 Consistency of the project with business-related policies	94
nvironmental Performance Requirements	99
onclusion	101
.1 Existing conditions	101
0.2 Impact assessment	102
eferences	104
index	
Scoping requirements relevant to business impacts	3
2 Linkages to other technical reports	5
1 Summary of relevant state legislation, strategies and policies	8
1 Activity centres and economic areas within broader areas	20
2 Likelihood of an event occurring	27
3 Risk matrix	27
Stakeholder engagement undertaken for business impact assessment	31
Community feedback relevant to the business assessment	33
Municipalities – population, employment and numbers of businesses, 2016 and 2017	36
2 M80 Ring Road to northern portal employment (FTE), based on business survey responses	43
3 M80 Ring Road to northern portal revenue	43
Businesses by type in northern portal to southern portal precinct	48
5 Northern portal to southern portal precinct employment	49
1 Business risks	63
1 Key themes for business impact assessment	66
2 Businesses affected by permanent acquisition and temporary occupation	70
Businesses and local employment affected by displacement	70
4 North East Link construction workforce	71
5 Possible business impacts due to traffic changes during construction	77
Road closures and changed traffic arrangements, northern portal to southern portal precinct	79
Road closures and changed traffic arrangements, Eastern Freeway precinct	82
	3 Operation 4 Cumulative impacts 5 Managing impacts 6 Alternative design options 7 Consistency of the project with business-related policies 7 Consistency of the project with business-related policies 8 Invironmental Performance Requirements 9 Impact assessment efferences 1 Scoping requirements relevant to business impacts 1 Summary of relevant state legislation, strategies and policies 1 Activity centres and economic areas within broader areas 2 Likelihood of an event occurring 3 Risk matrix 4 Stakeholder engagement undertaken for business impact assessment 5 Community feedback relevant to the business assessment 1 Municipalities – population, employment and numbers of businesses, 2016 and 2017 2 M80 Ring Road to northern portal employment (FTE), based on business survey responses 3 M80 Ring Road to northern portal revenue 4 Businesses by type in northern portal to southern portal precinct 5 Northern portal to southern portal precinct employment 5 Northern portal to southern portal precinct employment 5 Businesses affected by permanent acquisition and temporary occupation 5 Businesses and local employment affected by displacement 6 Road closures and changed traffic arrangements, northern portal to southern portal precinct 6 Road closures and changed traffic arrangements, northern portal to southern portal precinct

Table 8-8	Consistency with relevant legislation, strategies and policies	94
Table 9-1	Environmental Performance Requirements	99
Table 9-2	Environmental Performance Requirements – other disciplines	100
Figure i	index	
Figure 3-1	Overview of North East Link	6
Figure 4-1	Municipalities in context of the North East Link alignment	11
Figure 5-1	Overview of assessment method	17
Figure 5-2	Precincts in the business impact study area	19
Figure 5-3	Precincts and areas/locations of interest in the broader area	22
Figure 5-4	Risk-analysis process	26
Figure 6-1	Business size by municipality, 2017	37
Figure 6-2	Industry divisions with the highest number of businesses, seven municipalities, 2017	38
Figure 6-3	Journey to work, proportion of residents travelling to work within home municipality, 2016 Census	39
Figure 6-4	Proportion of workers travelling from home municipalities to neighbouring municipalities and the City of Melbourne, 2016 Census	40
Figure 6-5	M80 to northern portal precinct and areas/locations of interest in the broader area	41
Figure 6-6	Northern portal and southern portal precinct and areas/locations of interest in the broader area	46
Figure 6-7	Annual business revenue, northern portal to southern portal precinct	50
Figure 6-8	Eastern Freeway precinct and areas/locations of interest in the broader area	53
Figure 6-9	Bulleen Road and Eastern Freeway connection	54
Figure 8-1	Bulleen Industrial Precinct construction footprint	73
Figure 8-2	Northern to southern portal precinct – construction footprint at the intersection with Eastern Freeway	74
Figure 8-3	Indicative construction compounds, northern portal to southern portal precinct	80
Figure 8-4	Indicative construction compounds, Eastern Freeway precinct	83

Appendices

Appendix A – Risk assessment

Appendix B – Business survey questionnaire

Executive summary

This technical report is an attachment to the North East Link Environment Effects Statement (EES). It has been used to inform the EES required for the project, and defines the Environmental Performance Requirements (EPRs) necessary to meet the EES objectives.

Overview

North East Link ('the project') is a proposed new freeway-standard road connection that would complete the missing link in Melbourne's ring road, giving the city a fully completed orbital connection for the first time. North East Link would connect the M80 Ring Road (otherwise known as the Metropolitan Ring Road) to the Eastern Freeway, and include works along the Eastern Freeway from near Hoddle Street to Springvale Road.

The Major Transport Infrastructure Authority (MTIA) is the proponent for North East Link. The MTIA is an administrative office within the Victorian Department of Transport with responsibility for overseeing major transport projects.

North East Link Project (NELP) is an organisation within MTIA that is responsible for developing and delivering North East Link. NELP is responsible for developing the reference project and coordinating development of the technical reports, engaging and informing stakeholders and the wider community, obtaining key planning and environmental approvals and coordinating procurement for construction and operation.

On 2 February 2018, the Minister for Planning declared North East Link to be 'public works' under Section 3(1) of the *Environment Effects Act 1978*, which was published in the *Victorian Government Gazette* on 6 February 2018 (No. S 38 Tuesday 6 February 2018). This declaration triggered the requirement for the preparation of an EES to inform the Minister's assessment of the project and the subsequent determinations of other decision-makers.

The EES was developed in consultation with the community and stakeholders and in parallel with the reference project development. The reference project has been assessed in this EES. The EES allows stakeholders to understand the likely environmental impacts of North East Link and how they are proposed to be managed.

GHD and Matters More – Economics Consultancy were commissioned to undertake a business impact assessment and to define the Environmental Performance Requirements (EPRs) necessary to meet the EES objectives.

Business context

The scoping requirements for the EES issued by the Minister for Planning set out the specific environmental matters to be investigated and documented in the project's EES, which informs that scope of the EES technical studies. The scoping requirements include a set of evaluation objectives. These objectives identify the desired outcomes to be achieved in managing the potential impacts of constructing and operating the project.

The following evaluation objective is relevant to the business impact assessment:

 To manage effects of the project on land use and the social fabric of the community with regard to wellbeing, community cohesion, business functionality and access to goods, services and facilities.

A summary of the key assets, values or uses potentially affected by the project and an assessment of the project's impacts on those assets, values and uses is set out below.

Methodology

This business impact assessment considered impacts across the construction and operation phases of the project as well as potential cumulative impacts. The construction phase was divided into pre-construction impacts and construction impacts:

Construction impacts:

This phase would include impacts associated with pre-construction activities as well as construction-related activities.

- Pre-construction impacts these impacts are due to persistent uncertainties and are being experienced now, and could continue until the project's final design is confirmed, the project approved, and construction is ready to commence.
- Construction impacts experienced by businesses at particular points of time during construction or throughout the project's entire construction. The nature and severity of construction impacts along the project alignment have been identified.
 The assessment considered direct impacts on business operations as well as potential flow-on impacts for businesses that may not be directly impacted but which may experience indirect consequences. It was assumed that displacement of businesses due to land acquisition or temporary occupation would be experienced during the project's construction phase although in some cases this could occur in the preconstruction phase. It is assumed that any business on land identified for acquisition would be acquired and cease operation. This is a worst-case scenario in terms of business service provision and employment opportunities impacts, but it is uncertain how many businesses would choose to relocate their business to another location.
- **Operational impacts** impacts on businesses once the project is operating include changes to the business operating environment due to changes in the road network and traffic conditions compared to the no-project scenario.
- Cumulative impacts experienced by businesses due to the construction of other major
 infrastructure projects at the same time that affect the transport network in and around
 North East Link. These impacts are cumulative with the pre-construction, construction
 and operation impacts as described above.

The methodology for the business impact assessment involved establishing a study area comprising:

- Three precincts that align with the three key elements of North East Link: M80 Ring Road to northern portal, northern portal to southern portal, and the Eastern Freeway
- 2. Broader areas encompassing nearby activity centres and economic areas.

The precincts were determined by applying a 200-metre buffer around the project alignment in the three project elements. Broader areas included the precincts as well as activity centres and business groupings within approximately two kilometres of the proposed project alignment. The precincts and broader areas are described in Section 5.2.

Existing conditions were established with desktop research, a review of Victorian Government and local council legislation and planning policy, multiple site visits, consultation with and surveys of businesses along the alignment, and interviews with relevant business stakeholders. These activities were also important for determining how businesses expect to be impacted by North East Link during its construction and operation.

A risk assessment was undertaken based on the risk-based approach outlined in Chapter 4 – EES assessment framework, and as required by section 3.1 of the scoping requirements and the *Ministerial guidelines for assessment of the environmental effects under the Environment Effects Act 1978.* The risk assessment identified potential risks to the business environment arising from the project. Where risks were allocated a risk level of medium or above in terms of significance, further control was explored through the provision of Environmental Performance Requirements (EPRs).

The business impact assessment considered the potential impacts on business assets, business value and business operations due to the construction and operation of North East Link. Desktop research was undertaken using information sourced from the Australian Bureau of Statistics (ABS) to develop an understanding of the project's potential impacts to businesses, which included interrogating employment and journey to work data. Consultation with and surveys of business owners and operators were conducted to build a deeper understanding of pre-construction, construction, operational and cumulative impacts.

The survey results were analysed to form an empirical data set for the business impact assessment. They informed the categorisation of key themes and concerns, and the assessment of potential impacts of the project.

Existing conditions

North East Link would be located within the boundaries of six municipalities (local government areas) and these have been included in the description of the existing conditions relevant for business activity in Section 6 of this report. The municipalities are Banyule, Boroondara, Manningham, Nillumbik, Whitehorse and Yarra.

It is noted the City of Whittlesea is located directly north of the reference project, on the northern side of the M80 Ring Road. While no project components would be located within Whittlesea, given the proximity of the project and the relationship (of Whittlesea) to the broader area, this municipality has been included in the assessment.

Important characteristics of businesses within the municipalities included in this study are:

The majority of businesses are small non-employing businesses operated by self-employed individuals:

- The majority of businesses operate in the construction industry and professional, scientific and technical services sectors
- The majority of residents work outside the municipality they live in, except in Yarra (ABS journey to work data)
- Banyule and Nillumbik have fewer jobs in their municipalities than the number of working residents, indicating a job deficit in these municipalities.

In the three precincts of the study area, approximately 260 businesses were identified in commercial areas. Most identified businesses are located in the northern portal to southern portal precinct. The main type of businesses are retail trade (which includes automotive), construction, and arts and recreation industries. The Table below summarises the number and proportion of businesses in each precinct and the main business types. The Table also identifies some of the key business clusters and activity centres in each precinct. An important element of these clusters and activity centres is the business-to-business activity and cooperation between businesses.

¹ Classified according to the Australian and New Zealand Standard Industrial Classification (ANZSIC).

Business numbers and types in each precinct

Precinct	Number of businesses ²	Key locations	Main business types
M80 Ring Road to northern portal	81 businesses	Watsonia Village Greensborough Road Grimshaw Street businesses	Retail trade Health care and social assistance Accommodation and food
Northern to southern portal	118 businesses	Bulleen Industrial Precinct	Retail trade (automotive services) Construction Arts and recreation Education and training
Eastern Freeway	61 businesses	Joseph Road	Retail trade Professional and technical services Arts and recreation

Impact assessment

The impact assessment has identified the various ways the project would impact businesses in the study area. The impact assessment focused on:

- Identifying potential impacts to individual businesses and commercial properties, aided by stakeholder consultation surveys
- Identifying potential impacts on businesses based on specialist analysis of planned construction and operation.

This report presents the land acquisition requirements associated with the reference project. Further refinements are ongoing as part of the EES process, with a view to ensuring an optimal environmental, economic and social outcome. The *Land Acquisition and Compensation Act* 1986 ('LAC Act') and the *Major Transport Projects Facilitation Act* 2009 ('MTPF Act') would regulate the permanent acquisition and temporary occupation required for the project. The project's permanent land acquisition and temporary occupation requirements would impact 102 businesses (three would be impacted by temporary occupation with the remainder impacted by full or partial acquisition). Land acquisition impacts are concentrated in the northern portal to southern portal precinct where approximately 88 per cent (rounded) of these businesses are located, most in the Bulleen Industrial Precinct.

The impact assessment identified a number of key impact themes and concerns for businesses along the project alignment. The themes are based on survey feedback and an experience-based assessment of planned construction methods and activity. The key impact themes are identified as:

- Uncertainty
- Business relocation
- Difficulty in finding alternative premises

² In reference to business numbers in this report, it should be noted that a commercial property is not one and the same as a business, as there may be multiple businesses on a single property, or there may be a single business occupying multiple properties.

- Established client base and business continuity
- Investment opportunities
- Hiring and retention of staff
- Employee and customer access
- Benefits of clustering
- Amenity.

These themes are associated with the construction and/or operation of the project. These impact themes are discussed in relation to the three precincts below.

Likely pre-construction impacts include reduced business investment and expansion and challenges with increased staff turnover and staff retention. Uncertainty affecting businesses prior to the project's construction starting would likely continue (although decreasing) until construction of the project started.

During construction, land acquisition would likely have the most significant impacts on businesses across the study area, followed by changes to access and amenity impacts associated with physical construction activities and construction compound sites. Businesses that rely on business-to-business relationships with surrounding enterprises would more likely be impacted by land acquisition (affecting their own or other businesses) and business displacement.

Once the construction of North East Link was completed, most impacts of the project would likely be positive for businesses. Improved access to and through the study area was most commonly identified as an expected improvement. Improved connectivity, the diversion of trucks from local and arterial roads, improved amenity as well as pedestrian and cyclist connectivity are also anticipated to benefit businesses (staff and customers).

M80 Ring Road to northern portal

Businesses in the M80 Ring Road to northern portal precinct would likely experience reduced business investment and expansion before the project's construction started and would be challenged by increased staff turnover and staff retention issues due to uncertainties about timing and business continuity. Impacts during construction are anticipated to result predominantly from land acquisition, including business displacement, and changes to access. Access impacts may be exacerbated by the location of construction compounds for construction materials storage.

During operation, the project would generate positive impacts for businesses in the M80 Ring Road to northern portal precinct, with improved connectivity and reduced congestion anticipated.

Northern portal to southern portal

Businesses in the northern portal to southern portal precinct would also likely experience pre-construction impacts associated with uncertainties about the final project design. Anecdotally, uncertainty is already impacting staff turnover and impeding business investment and expansion decisions. Construction of the project within the precinct would require land acquisition or temporary occupation affecting approximately 90 businesses. This would remove 75 per cent of the businesses in and bordering the Bulleen Industrial Precinct. Remaining businesses are predominantly in the retail trade sector. Survey responses identified that relocation is a viable option for most respondents, although there is concern about the availability of relocation options and the disruptive impact of the relocation process on the business.

Existing relationships among businesses and customer continuity would also need to be considered as part of the relocation impacts. Amenity impacts associated with construction for businesses that remained is also of concern. However, the magnitude of these impacts depends on business type. For example, businesses that provide on-site customer service have greater sensitivity to amenity impacts, such as noise dust and vibration, compared with businesses offering automotive and manufacturing services. During operation the project it is expected to generate significant benefits for those businesses remaining in the precinct with improved traffic flow and reduced congestion.

Eastern Freeway

Many of the impacts that businesses in the Eastern Freeway precinct would likely experience would occur during the project's construction. Impacts would largely be due to land acquisition, temporary occupation as well as changes to access and amenity from the construction works. Effects associated with physical construction (dust, noise, vibration) and changes to traffic movements due to construction-related detours, road closures and haulage routes would cause the anticipated changes in access and amenity.

Construction of the North East Link between North East Link and the Eastern Freeway would likely impact five businesses in the Eastern Freeway precinct, (four through displacement and one through necessary realignment of activities on the premises).

The project is expected to generate significant benefits for customers and staff of businesses in the Eastern Freeway precinct once the project is operating, especially for people travelling along North East Link to/from the north.

Conclusion

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. Prominent business types in the Bulleen Industrial Precinct have been identified as being those that support the automotive industry: repair, maintenance, specialised services, business-to-business sales, car hire and automotive sales. The impacts are anticipated to be disruption to business operations and disruption from relocation.

A number of businesses have identified, through consultation and surveys they could relocate if other suitable land was available. However, the number of businesses that actually would relocate is unknown at this stage. There would also likely be significant loss of local employment opportunities. This is notwithstanding the employment offered by project construction activity, which is anticipated to peak at around 2,800 people per shift.

EPRs have been developed to mitigate and manage impacts of the project and these would be part of the construction contractual obligations. The EPRs include pre-construction business support (EPR B1) and NELP is already working with local councils and businesses along the lines of this EPR. NELP will continue to investigate and identify ways to minimise disruption to business from the acquisition and occupation of land (EPR B2).

Uncertainty is the greatest concern for businesses before the project's construction started – it affects business decision-making and creates an unsettled working environment for staff. Access to businesses for staff and customers is expected to have a significant impact on businesses during the project's construction.

During the project's construction, it is a requirement that access and amenity impacts on businesses are minimised (EPR B4), and that any damage or impacts to third-party property and infrastructure is minimised and remedied (EPR B3). As the relocation of some utilities would be required, it is a performance requirement that utility assets are protected and impacts are minimised (EPR B5). Finally, to encourage good communication between businesses and those response for construction, it is proposed that business liaison groups be established to facilitate business involvement in the project and ensure timely reporting about traffic and parking changes and construction works that may be relevant to businesses (EPR B6).

Once the project is complete and operating, the impacts on businesses are expected to be positive with improved access and reduced congestion on roads. Substantial improvements to connectivity within, to and from Melbourne's north-east is anticipated. However, the project would require land acquisition leading to displacement of businesses or their temporary occupation of part of their premises which could impact customer access to businesses as well as business operations. In some instances, the changes may render businesses unviable in their current location. Through business interdependence and/or disruption to operations, business impacts could also be experienced more widely in the area and affect productivity.

Overall, the North East Link represents an opportunity to generate significant benefits for businesses in the study area and across wider Melbourne, with improved access, reduced travel times and enhanced transport network safety, in alignment with government policies and strategic objectives. However, businesses displaced by land acquisition would be a significant impact, particularly with the loss of businesses in the Bulleen Industrial Precinct.

Structure of the EES

Summary Report

EES main report

- 1. Introduction
- 2. Project rationale
- 3. Legislative framework
- 4. EES assessment framework
- 5. Communications and engagement
- 6. Project development
- 7. Urban design
- 8. Project description
- 9. Traffic and transport
- 10. Air quality

- 11. Surface noise and vibration
- 12. Tunnel vibration
- 13. Land use planning
- 14. Business
- 15. Arboriculture
- 16. Landscape and visual
- 17. Social
- 18. Human health
- 19. Historical heritage
- 20. Aboriginal cultural heritage

- 21. Ground movement
- 22. Groundwater
- 23. Contamination and soil
- 24. Surface water
- 25. Ecology
- 26. Greenhouse gas
- 27. Environmental management framework
- 28. Conclusion

Technical reports

- A. Traffic and transport
- B. Air quality
- C. Surface noise and vibration
- D. Tunnel vibration
- E. Land use planning
- F. Business

- G. Arboriculture
- H. Landscape and visual
- I. Social
- J. Human health
- K. Historical heritage
- L. Aboriginal cultural heritage
- M. Ground movement
- N. Groundwater
- O. Contamination and soil
- P. Surface water
- Q. Ecology
- R. Greenhouse gas

Attachments

- I. Sustainability approach
- II. Urban design strategy
- III. Risk report
- IV. Stakeholder consultation report
- V. Draft Planning Scheme Amendment
- VI. Works Approval Application

EES Map Book

Abbreviations

Abbreviation	Definition
BIA	Business Impact Assessment
CEMP	Construction Environmental Management Plan
EES	Environment Effects Statement
EPR	Environmental Performance Requirement
IN1Z	Industrial 1 Zone
LAC Act	Acquisition and Compensation Act 1986
LGA	Local Government Area
MSS	Municipal Strategic Statement
MTIA	Major Transport Infrastructure Authority
MTPF Act	Major Transport Projects Facilitation Act 2009.
NELP	North East Link Project
OEMP	Operations Environmental Management Plan

Glossary

Term	Definition
Activity Centre	Areas that provide a focus for services, employment, housing, transport and social interaction. They range in size and intensity of use from smaller neighbourhood centres to major suburban centres and larger metropolitan centres
Business	Commercial activity in which the aim is to make a profit.
Business cluster	A business cluster is a geographic concentration of interconnected businesses, suppliers, and associated institutions in a particular field. Clusters are considered to increase the productivity with which companies can compete regionally.
Department of Transport	The Victorian Department of Transport is responsible for delivering the government's transport infrastructure agenda. It was formed on 1 January 2019 when the former Victorian Department of Economic Development, Jobs, Transport and Resources transitioned into the Department of Transport and the Department of Jobs, Precincts and Regions.
Direct impact	An impact that is a direct result of the project's construction and operation. Such impacts are usually physical and include (but are not limited to) land acquisition (and any consequential business displacement), changes to property access, amenity impacts such as noise, dust and vibration.
Indirect impact	A situation that arises as a consequence of the construction or operation of the project. Such impacts include (but are not limited to) loss of passing trade, interruption of interdependence between businesses and their supply chains.
Major Activity Centre	Suburban centres that provide access to a wide range of goods and services. They have different attributes and provide different functions, with some serving larger subregional catchments. The Victorian Government's long-term metropolitan planning strategy, <i>Plan Melbourne</i> , identifies 121 Major Activity Centres.
Major Transport Infrastructure Authority	The Major Transport Infrastructure Authority is the proponent for North East Link. The MTIA is an administrative office within the Victorian Department of Transport with responsibility for overseeing major transport projects.
Neighbourhood Activity Centre	Local centres that provide access to local goods, services and employment opportunities and serve the needs of the surrounding community.
North East Link Project	North East Link Project is an organisation within MTIA that is responsible for developing and delivering North East Link. NELP was formerly known as the North East Link Authority prior to 1 January 2019. NELP is responsible for developing the reference project and coordinating development of the technical reports, engaging and informing stakeholders and the wider community, obtaining key planning and environmental approvals and coordinating procurement for construction and operation.
Schools/community facilities that have been assessed in this BIA	This business impact assessment considers private schools only and their business operation aspects. Potential impacts on all schools (public and private) in the study area are considered and assessed in EES Technical report I – Social.

1. Introduction

1.1 Purpose of this report

North East Link ('the project') is a proposed new freeway-standard road connection that would complete the missing link in Melbourne's ring road, giving the city a fully completed orbital connection for the first time. North East Link would connect the M80 Ring Road (otherwise known as the Metropolitan Ring Road) to the Eastern Freeway, and include works along the Eastern Freeway from near Hoddle Street to Springvale Road.

The Major Transport Infrastructure Authority (MTIA) is the proponent for North East Link. The MTIA is an administrative office within the Victorian Department of Transport with responsibility for overseeing major transport projects.

North East Link Project (NELP) is an organisation within MTIA that is responsible for developing and delivering North East Link. NELP is responsible for developing the reference project and coordinating development of the technical reports, engaging and informing stakeholders and the wider community, obtaining key planning and environmental approvals and coordinating procurement for construction and operation.

On 2 February 2018, the Minister declared the works proposed for North East Link as Public Works and issued a decision confirming that an Environment Effects Statement (EES) is required for the project due to the potential for significant environmental effects.

Similarly, the project was referred to the Australian Government's Department of the Environment and Energy on 17 January 2018. On 13 April 2018 the project was declared a 'controlled action', requiring assessment and approval under the *Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)*. Separate to this EES, a Public Environment Report (PER) is required to be prepared to satisfy the EPBC Act requirements, and assess the impacts of the project on Commonwealth land and matters of national environmental significance (MNES).

The purpose of this report is to assess the potential business impact associated with North East Link and to define the Environmental Performance Requirements (EPRs) necessary to meet the EES objectives.

1.2 Why understanding business impacts is important

Developing an understanding of the potential impacts to businesses is important as it enables the development of a framework to reduce and mitigate risks. This will assist in preserving the important functions served by businesses in Melbourne's north-east. Businesses are important because they provide jobs, generate economic activity and serve important community functions, including the convenient provision of goods and services that contribute to sustainable, vibrant and inclusive neighbourhoods.

The existing road networks in the area provide essential connections for businesses across the region, because they link businesses with their:

- Suppliers and clients within the north-east region and beyond
- Customers, which is particularly significant for service providers in retail, hospitality and other 'physical presence' service industries
- Employees that travel to work from their residences in the local and wider area.

The project directly and indirectly impacts businesses. Direct impacts are those that are a direct result of the project's construction and operation. These impacts are usually physical and include (but are not limited to):

- Land acquisition affecting businesses
- Temporary occupation during construction
- Changed or affected access that directly affects the business
- Amenity impacts, including noise, dust and vibration.

Indirect impacts are situations that arise as a consequence of the construction or operation of the project. These impacts include (but are not limited to):

- Loss of passing trade due to changes in traffic patterns and access
- Loss of business-to-business cooperation due to land acquisition or temporary occupation that displace other businesses that remaining businesses rely on
- Interruption of interdependence between businesses and their supply chains.

2. EES scoping requirements

2.1 EES evaluation objectives

The scoping requirements for the EES issued by the Minister for Planning set out the specific environmental matters to be investigated and documented in the project's EES, which informs the scope of the EES technical studies. The scoping requirements include a set of evaluation objectives. These objectives identify the desired outcomes to be achieved in managing the potential impacts of constructing and operating the project in accordance with the *Ministerial guidelines for assessment of environmental effects under the Environment Effects Act 1987*.

The following evaluation objective is relevant to the business impact assessment:

 To manage effects of the project on land use and the social fabric of the community with regard to wellbeing, community cohesion, business functionality and access to goods, services and facilities.

2.2 EES scoping requirements

The aspects from the scoping requirements relevant to the business impact assessment evaluation objective are shown in Table 2-1, as well as the location where these items have been addressed in this report.

Table 2-1 Scoping requirements relevant to business impacts

Aspect	Scoping requirement	Section addressed
Key issues	Changed accessibility for residents, including to jobs and community goods, services or facilities due to construction or operation of the project.	Section 8
	Potential effects on functionality of individual businesses and commercial precincts (eg resulting from changed access arrangements) and the implications for employment and the local economy.	Section 8
	Effects on businesses including access, freight transport and logistics supply chain.	Section 8
	Acquisitions of private property and temporary disruption or displacement of existing land use activities and infrastructure for project purposes.	Section 8
Priorities for characterising the existing	Describe the land that may be required permanently or temporarily for the delivery of the project, including its current uses and sensitivities.	Section 8.1
environment	Describe the individual businesses or business precincts (as may be appropriate) that could be affected temporarily or permanently by project activities.	Section 6 (6.2, 6.3, 6.4)
Design and mitigation measures	Describe measures to minimise the temporary or permanent acquisition of land and, where access is required, the processes to be applied to gain access to land, including the approach to compensation and managing adverse effects for landowners.	Section 8 (8.2.2, 8.4, 8.5)
	Describe the approach to provide alternative access to properties, public space or community facilities for which existing access may be disrupted or displaced by the project.	Section 8 (8.2.2, 8.4, 8.5)

Aspect	Scoping requirement	Section addressed
	Describe the approach to be taken to enable or assist businesses that may be temporarily or permanently adversely affected by the project to maintain business continuity.	Section 8 (8.2.2, 8.4, 8.5)
Assessment of likely effects	Analyse the effects of temporary and longer-term land use changes resulting from the project.	Section 8
	Analyse effects on businesses and business precincts, especially with respect to routine operations and business viability, and implications for the local economy and employment.	Section 8
	Analyse indirect temporary and permanent effects that might result from the project (eg on catchments for community facilities).	Section 8 (8.3, 8.4, 8.5)
	Evaluate the consistency of the project with the policies and provisions of the Yarra, Banyule, Boroondara, Nillumbik, Manningham, and Whitehorse planning schemes and other relevant land use planning, environmental, urban or built form strategies.	Section 4.3, and Section 8.7
	Assess consistency with strategic plans, including Plan Melbourne (2017-2050).	Section 4.3, and Section 8.7
	Describe any benefits for social cohesion, business, land use, or infrastructure from the project.	Section 8
Approach to manage performance	Describe the environmental performance requirements to set social, business, land use and infrastructure outcomes that the project must achieve.	Section 9

2.3 Linkages to other reports

This report relies on or informs the technical assessments as indicated in Table 2-2.

Table 2-2 Linkages to other technical reports

Technical report	Relevance to this impact assessment
Technical report A – Traffic and transport	Provides an assessment of the impacts to traffic during project construction and operation.
	Construction impacts include road closures, haulage routes for delivery of construction materials and removal of construction waste and spoil. Reduced efficiency of the road network has the potential to impact access to businesses.
	For operation, it includes the modelled redistribution of heavy and light vehicles and changes to vehicle travel times. This could influence access and passing trade volumes.
Technical report B – Air quality	Provides an assessment of the changes to air quality as a result of the project. Businesses that depend on a high level of amenity, such as hospitality and services businesses, may be impacted by reduced air quality.
Technical report C – Surface noise and vibration	Provides an assessment of surface noise and vibration that is likely to occur. Businesses which depend on high amenity may be impacted by changes to surface noise and vibration.
Technical report E – Land use planning	Provides an examination of the project's compatibility with existing land uses and the likely opportunities and constraints associated with planned future land use. The included overview of planning (zoning) for businesses and potential future business locations, is relevant for any businesses that would be displaced from their current location.
Technical report I – Social	Some businesses rely on community and social infrastructure (eg recreational facilities) around them to generate additional business opportunities. Adverse impacts to such infrastructure may therefore have an impact, for instance, where businesses rely on passing traffic generated by the asset.

3. Project description

3.1 Overview

The North East Link alignment and its key elements assessed in the Environment Effects Statement (EES) include:

- M80 Ring Road to the northern portal from the M80 Ring Road at Plenty Road, and
 the Greensborough Bypass at Plenty River Drive, North East Link would extend to the
 northern portal near Blamey Road utilising a mixture of above, below and at surface road
 sections. This would include new road interchanges at the M80 Ring Road and
 Grimshaw Street.
- Northern portal to southern portal from the northern portal the road would transition
 into twin tunnels that would connect to Lower Plenty Road via a new interchange, before
 travelling under residential areas, Banyule Flats and the Yarra River to a new interchange
 at Manningham Road. The tunnels would then continue to the southern portal located
 south of the Veneto Club.
- Eastern Freeway from around Hoddle Street in the west through to Springvale Road in the east, modifications to the Eastern Freeway would include widening to accommodate future traffic volumes and new dedicated bus lanes for the Doncaster Busway.
 There would also be a new interchange at Bulleen Road to connect North East Link to the Eastern Freeway.

These areas are illustrated in Figure 3-1.

The project would also improve existing bus services from Doncaster Road to Hoddle Street through the Doncaster Busway as well as pedestrian connections and the bicycle network with connected shared use paths from the M80 Ring Road to the Eastern Freeway. For a detailed description of the project, refer to EES Chapter 8 – Project description.

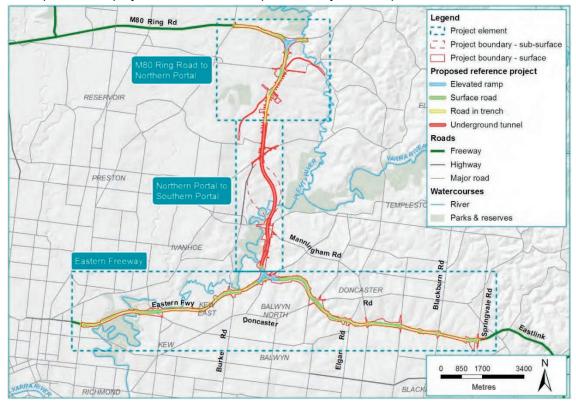


Figure 3-1 Overview of North East Link

3.2 Construction

Key construction activities for North East Link would include:

- General earthworks including topsoil removal, clearing and grubbing vegetation
- Relocation, adjustment or installation of new utility services
- Construction of retaining walls and diaphragm walls including piling
- Ground treatment to stabilise soils
- Tunnel portal and dive shaft construction
- Storage and removal of spoil
- Construction of cross passages, ventilation structures and access shafts
- Installation of drainage and water quality treatment facilities
- Installation of a Freeway Management System
- Tunnel construction using tunnel boring machines (TBMs), mining and cut and cover techniques
- Installation of noise barriers
- Restoration of surface areas.

3.3 Operation

Following construction of North East Link, the key operation phase activities would include:

- Operation and maintenance of new road infrastructure
- Operation and maintenance of Freeway Management System
- Operation of North East Link motorway control centre
- Operation and maintenance of the tunnel ventilation system
- Operation and maintenance of water treatment facilities
- Operation and maintenance of the motorways power supply (substations)
- Maintenance of landscaping and water sensitive urban design (WSUD) features.

3.4 Activities and design considerations relevant to businesses

There are some design considerations which could influence the magnitude of business impacts, particularly the tunnel and interchange at Manningham Road. The location and construction method demand a substantial footprint at the Bulleen Industrial Precinct.

The extent to which this area was used as a construction and staging site would also impact the extent of business displacement.

The affected businesses have been identified and considered in the existing conditions and impact assessment of the business impact assessment.

Legislation, policy, guidelines and criteria

Numerous legislative, policy and guidance documents were found to be relevant to this business impact assessment and are discussed further in this report. The key legislation, strategies, policy and guidelines that apply to the business impact assessment for the project are summarised in Table 4-1. Further detail is provided in Sections 4.2 and 0.

4.1 Commonwealth legislation

The Environment Protection and Biodiversity Conservation Act 1999 ('EPBC Act') provides for the protection of defined Matters of National Environmental Significance (MNES), including World Heritage Properties, National Heritage Places, Ramsar wetlands, nationally-listed threatened species and ecological communities and listed migratory species. The Department of Environment and Energy (DoEE) decided the construction of the North East Link is a controlled action under the EPBC Act. NELP will be preparing a Public Environment Report (PER) to be assessed by DoEE, which will include any business aspects of relevance.

4.2 State legislation, strategies and policy

The key Victorian Government legislation, strategies and policies that apply to the business impact assessment for the project are summarised in Table 4-1.

Table 4-1 Summary of relevant state legislation, strategies and policies

Legislation/strategy/policy	Description	Relevance to this impact assessment
Transport Integration Act 2010	A framework that contributes to inclusive, prosperous and environmentally responsible development outcomes for major infrastructure projects. Relevant objectives include: • Economic prosperity – the transport system should enable efficient and effective access to employment, markets and services; increase efficiency through reduced costs and travel time, thereby also fostering competition and facilitating investment • Efficiency, coordination and reliability – the transport system should facilitate network wide efficient, coordinated and relivable movements of persons and goods at all time.	Business owners and employees can reasonably expect to be considered and consulted during the EES/design process. The impact(s) of changes to access and movement patterns during construction and operation are considered in the business impact assessment.

Legislation/strategy/policy	Description	Relevance to this impact assessment
Planning and Environment Act 1987	The Planning and Environment Act has a purpose to manage the use, development and protection of land in the present and long-term interests of all Victorians. Its guiding principles are to: Provide for the fair, orderly, economic and sustainable use, and development of land Secure a pleasant, efficient and safe working, living and recreational environment for all Protect public utilities and other assets and enable the orderly provision and coordination of public utilities and other facilities for the benefit of the community.	This legislation requires that impacts on businesses resulting from temporary occupation and/or land acquisition be assessed and managed such as business displacement and/or changes to a landowner's ability to use and develop their land for business purposes. Temporary and permanent changes to the environment which affect amenity (such as pleasantness and safety of the environment) also requires consideration, as does project-related disruption or relocation of utilities.
Land Acquisition and Compensation Act 1986 and Valuation of Land Act 1960	This legislation provides a procedure for the acquisition of land for public purposes. It also specifies powers of entry and temporary occupation. For compulsory acquisition, the acquiring Authority must have regard to a certified market valuation. The In the case of temporary occupation, the Authority or any person authorised in writing can enter and remain upon any land with any assistants, vehicles, machinery or equipment temporarily, provided proper notice is served (minimum of seven days prior).	This legislation provides a form of mitigation or management to land acquisition impacts. It provides certainty to affected landowners that they would be reasonably compensated for losses. This business impact assessment relies on the legislative procedures set out in this Act to inform the assessment of impacts.
Major Transport Projects Facilitation Act 2009	North East Link has been declared as a major transport project under the Major Transport Project Facilitation Act. This Act sets the framework for assessment, approvals and delivery of major transport projects in Victoria.	The Act project delivery provisions are relevant for businesses as they facilitate the land acquisition process under Land Acquisition and Compensation Act.

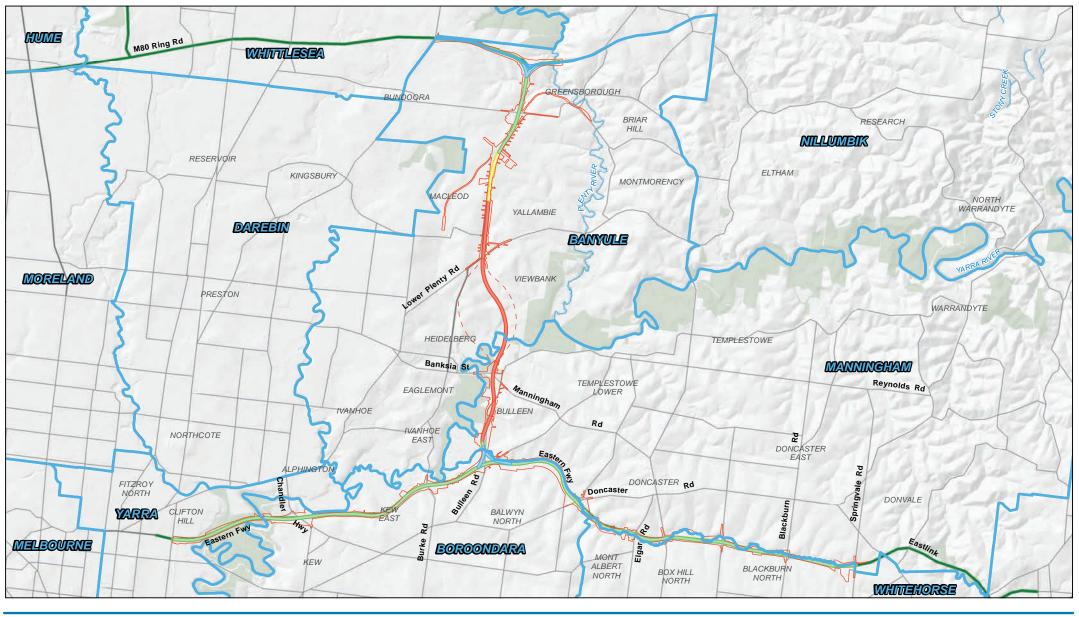
Legislation/strategy/policy	Description	Relevance to this impact assessment
Plan Melbourne 2017–2050	Plan Melbourne is the Victorian Government's long-term strategic plan for metropolitan Melbourne. Plan Melbourne seeks to achieve the following outcomes: • Melbourne has an integrated transport system that connects people to jobs and services and goods to market. This includes improving local travel options to support the 20-minute neighbourhood, and improving freight efficiency while protecting urban amenity • Melbourne provides local employment options through diversification of goods and services available under the 20-minute neighbourhood initiative.	Plan Melbourne provides the strategic context within which the business impacts of the project are assessed. This business impact assessment considers the ways in which business owners and employees would experience changes in transport access and efficiency, in the context of the improvements anticipated by Plan Melbourne for access to existing and/or new employment precincts.

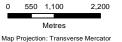
4.3 Local planning schemes and policies

North East Link would traverse through six municipalities (local government areas) that are managed by and are the responsibility of local governments. The boundaries of the relevant municipalities are shown in Figure 4-1. The municipalities are Banyule, Boroondara, Manningham, Nillumbik, Whitehorse and Yarra.

It is noted the City of Whittlesea is located directly north of the reference project, on the northern side of the M80 Ring Road. While no project components would be located within Whittlesea, given the proximity of the project and the relationship (of Whittlesea) to the broader area, this municipality has been included in the assessment.

Each municipality is subject to local planning regulations and the policies of their local government. A number of planning regulations and policies have been considered for this business impact assessment for a range of economic development, transport and industrial objectives. Note the assessment has considered the key planning regulations and policies and while this is comprehensive, it is not necessarily exhaustive. Relevant components of planning schemes for local councils along the project alignment are described below.





Paper Size A4

Map Projection: Transverse Mercator Horizontal Datum: GDA 1994 Grid: GDA 1994 MGA Zone 55



Legend
LGA — Highway Proposed reference project
Project boundary - sub-surface — Major road Elevated ramp
Project boundary - surface Watercourses — Surface road
Roads — River — Road in trench
Preeway — Parks & reserves — Underground tunnel



North East Link Project Jo Environment Effects Statement (EES)

Job Number | 31-35006 Revision | E Date | 27/02/2019

Municipalities in context of the North East Link alignment

Figure 4-1

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Banyule planning scheme

North East Link would include connections to the M80 Ring Road, Greensborough Bypass and Grimshaw Street and the northern tunnel portal near the intersection of Greensborough Road and Lower Plenty Road.

The vision of Banyule's Economic Development Plan 2015–2020 is:

Banyule has a prosperous local economy, responding positively to challenges and new opportunities, where individuals are supported to reach their economic potential and there are strong connections between business and community.

Strategic objectives to achieve this vision are:

- Vibrant precincts that contribute to community wellbeing
- Business support through events, programs and training
- Investment and attraction, including through increased tourism
- Leadership and partnerships to bring stakeholders together for mutual advantage.

There is one activity centre close to surface road works, the Watsonia Neighbourhood Centre (within Watsonia Village). The centre is zoned C1Z (Commercial Zone 1) which is designed to create vibrant mixed use commercial centres for retail, office, business, entertainment and community uses.

Picture Watsonia, A Vision for Watsonia Village is the current vision for Watsonia Village, adopted by the council in December 2014. The vision is focused on strengthening the attraction of the centre to encourage people to stay longer, increase local spending, and update the retail and services offered to meet contemporary needs. In particular, Picture Watsonia covers the main shopping street, the railway station and its large car park. With Picture Watsonia, the council aims to articulate the aspirations of the community, describe possible achievements and identify a range of actions to help the vision become a reality.

The objectives outlined in Picture Watsonia are as follows:

- Magnetic ideas to attract lots of people with reasons to visit and linger in the centre
- Big village ideas that successfully balance urban vitality with country town openness
- Kitted together ideas that unify the different areas and experiences of Watsonia Village
- Forward looking ideas that embraces the future, seeks new ideas, responds creatively to changing needs, new technology, new ways of working, playing and trading
- Known and loved ideas that present the personality and character of Watsonia Village
- Colourful ideas that capture the colour, texture, movement and playfulness of Watsonia Village
- Green ideas that connects Watsonia Village to nature and embraces the leafy, green, blooming and generous characteristics of Watsonia Village and is careful with the use of natural resources.

Banyule Council passed a resolution in June 2018 to refresh *Picture Watsonia* to include consideration of the North East Link in developing a revised vision for Watsonia Village. Road design would need to maintain arterial road access and active transport connections to Watsonia Neighbourhood Centre to ensure it remains an attractive commercial destination.

The Greensborough Major Activity Centre is located on Grimshaw Street approximately one kilometres east of the North East Link alignment. Clause 21.08-1 of the Banyule Municipal Strategic Statement (MSS) describes the centre and its potential 'to develop as one of Melbourne's most desirable urban centres, able to provide its community with a range of residential, leisure, recreational, retail, health and wellbeing, and commercial opportunities'.

A 2015 assessment of Greensborough Major Activity Centre (*Greensborough Structure Plan Review Economic Base Report, 2015*).identified limited opportunities for an expansion in traditional retail floorspace, in that the projected slow population growth and an ageing trade area population will impact upon available household expenditure.

The Heidelberg Major Activity Centre is a convenience shopping location, with cultural and entertainment opportunities within the Heidelberg Shopping Centre Precinct. The MSS (21.04) seeks to provide for high levels of access by walking, cycling and public transport. It also sets out to maintain convenient vehicle access to commercial premises. At the same time, the MSS encourages regional traffic to travel around the Heidelberg Major Activity Centre.

Maintaining access to the Greensborough Major Activity Centre and Heidelberg Major Activity Centre by road and public transport would be important to support the planning policy for Banyule.

Nillumbik planning scheme

The northern-most surface works associated with North East Link would be on the border of Nillumbik Shire.

The Shire of Nillumbik currently has a relatively small economic base. It is a commuter area, with more than half the workforce travelling to other areas for employment. The small economic base is influenced by the relatively small amount of commercial and industrial land within the Shire, the relatively high proportion of residents who work in managerial, professional and semi-professional roles, being jobs that are traditionally concentrated in central and inner Melbourne, and the ease of accessibility from Nillumbik to central Melbourne and other employment centres:

- Nillumbik is situated on the end of the Western Ring Road which provides good transport connections to the west and enables residents to access key employment areas including Melbourne Airport, La Trobe University, Greensborough and the Northern Hospital.
- Nillumbik is also within close proximity to the Eastern Freeway and the links that it provides to the eastern employment centres.

The businesses that are in Nillumbik are predominantly small, and many are home based. The *Nillumbik Economic Development Strategy 2011–2016* estimates there are approximately 3,900 home based businesses in Nillumbik. Further, it expects there is a growing trend towards home based business due to the benefits associated with decreased travel time.

Nillumbik 2020 identifies that the Nillumbik community aspires to retain a semi-rural/township lifestyle while increasing opportunities for employment within the Shire. In line with these aspirations, the Nillumbik Planning Scheme anticipates the Shire would remain a metropolitan 'green wedge' and the principal focus for business in the Shire would be to strengthen existing small business enterprises and facilitate new business initiatives that are low impact in terms of the broader environmental and social outcomes desired by the community. The Nillumbik Planning Scheme is encouraging of home based businesses.

At the same time, the Nillumbik Planning Scheme (MSS Clause 21.05-4) recognises the need to support larger commercial business development, and promotes the concentration of this business activity in the Eltham and Diamond Creek Major Activity Centres (separate to the local convenience centres). The Nillumbik Planning Scheme is also supportive of a road network which allows access to and from other key employment areas (MSS Clause 21.03).

Manningham planning scheme

North East Link would pass under and through the western-most part of the City of Manningham. The alignment includes connections to Banksia Street and Manningham Road, the southern tunnel portal, and cut and cover and structure viaducts along the Bulleen Road corridor.

According to the MSS (Clause 21.02-8) Manningham is home to approximately 16,000 businesses, 80 per cent of which are small businesses (of which approximately 12,000 are active businesses according to the Economic Development Strategy). Most jobs are generated by activities such as retailing, building and construction, tourism, education and services, health care and social assistance, and professional, scientific and technical services.

The aim of the Manningham Economic Development Strategy 2011–2030 is to support the creation of 'resilient, sustainable and vibrant community groups' and create an attractive place to invest, personally and professionally. The strategy recognises that supporting an improved integrated transport network is central to delivering this vision.

Other strategic directions for economic development include:

- Attracting and retaining business
- Developing leading local businesses
- Enhancing Manningham tourism
- Activating and improving activity centres
- Integrating economic development.

The council sees its role in economic development 'is to support research, planning and programs that enhance private investment in business development'. The MSS (Clause 21.02) notes the existence of approximately 19 hectares of land zoned for industrial purposes, most of which serves light industries, over only three industrial precincts in established areas. MSS Clause 21.08 recognises there are no further opportunities for the development of new industrial centres within the municipality. South of Bridge Street, Bulleen, the project would pass through IN1Z (Industrial Zone 1) zoned land, which is designed to provide for manufacturing businesses, and the storage and distribution of goods and associated uses, in a manner which does not affect the safety and amenity of local communities. The Bulleen Gateway Policy (Clause 22.10) states that Bulleen is subject to a number of development pressures arising from industrial, commercial and retail development and transport-based impacts, including road development. Manningham's Industrial Areas Policy (Clause 22.16) states the Bulleen Industrial Precinct is one of only two industrial areas that would be consolidated over time (with the third area phased out over time and replaced by residential uses) and so it is important to discourage the establishment of non-industrial uses in this area.

An objective of the Industrial Areas Policy that is relevant to this business impact assessment include:

• To ensure that use, development and/or redevelopment of sites within the industrial centres are for industrial uses.

Furthermore, the Manningham Economic Development Strategy 2011–2030 includes some actions that are relevant to this business impact assessment, in particular:

- Action 12 to 'identify yield targets and key sites to deliver a suitable mix of commercial and industrial land uses in Manningham'
- Action 13 to 'encourage external project partners to aid the development of business precincts'

- Action 16 to schedule and generate structure plans for future development of key out of centre, industrial and commercial sites' (that is, the Bulleen Gateway)
- Action 17 to 'identify opportunities to significantly increase industrial and commercial floor space to maintain a diverse local economy'.

It should be noted that Manningham City Council has raised the potential rezoning of 4.5 hectares of council-owned land at Websters Road, Templestowe. This could offset part of the loss of industrial land in the Bulleen Industrial Precinct. However, this proposal would likely require the realignment of the Urban Growth Boundary.

Further south of Bridge Street, the North East Link alignment would traverse land zoned SUZ1 (Special Use Zone 1), described in the Schedule as land for private education centres, golf courses and sports grounds. The purpose of this zone is to ensure the development of these facilities takes place in an orderly manner and does not cause a loss of amenity to the surrounding neighbourhood.

Adverse impacts on local employment in Bulleen INZ1 and land zoned SUZ1 due to land acquisition required for the project that would displace businesses and cause access constraints have been considered within the context of this business impact assessment.

Yarra planning scheme

Proposed works to facilitate the North East Link in the City of Yarra include surface works on the Eastern Freeway. There would also be upgrades and the construction of some new bicycle and pedestrian paths and crossings along the Eastern Freeway. Business impacts resulting from changes to amenity (where amenity is an important aspect of the business) is considered in this business impact assessment.

The Yarra Business and Industrial Land Strategy 2012 explores the demand and supply context for business and industrial land in Yarra. The strategy identifies industrial land adjacent to the project study area on Hoddle Street, Trenerry Crescent and Alexander Parade East that has the potential to be converted into mixed use land, and that could accommodate alternative employment through commercial office conversions and new residential dwellings, all serviced by an efficient transport network, as described in Technical report E – Land use planning.

Any business impacts resulting from reduced vehicle flow along and access to/from the Eastern Freeway is considered within this business impact assessment

Boroondara planning scheme

Proposed North East Link works in Boroondara include widening the Eastern Freeway and associated storm water facilities, the construction of interchange ramps between the Eastern Freeway and North East Link, and provision for the Doncaster Busway.

The Boroondara Economic Development and Tourism Strategy 2016–2021 highlights (amongst other things) Boroondara's proximity to the Melbourne CBD and the opportunities this provides for local businesses to service CBD-based businesses through supply chain links, providing essential business services as key inputs to their operations. The strategic direction for Boroondara is to continue to grow and expand its base of knowledge-intensive industries as well as its service sectors to enable a more diverse business base that can serve the local population, visitors and other businesses throughout Melbourne.

The majority of works in Boroondara would be contained within the existing Eastern Freeway road corridor. However, works around the Eastern Freeway/North East Link interchange would affect Boroondara recreation and health businesses.

Any business impacts due to land acquisition, temporary displacement and reduced vehicle flow along and access to/from the Eastern Freeway is considered within this business impact assessment.

Whitehorse planning scheme

Proposed works to facilitate the North East Link in Whitehorse include widening the Eastern Freeway, new elevated structures between Tram Road and Middleborough Road to facilitate road access and eliminate weaving, and an elevated structure at Middleborough Road. Some of the works in Whitehorse require land acquisition but no businesses would likely be displaced due to acquisition nor be directly affected by it. Business impacts from reduced vehicle flow along and access to/from the Eastern Freeway is considered within this business impact assessment.

Whittlesea planning scheme

The City of Whittlesea is experiencing rapid residential development and anticipates further growth in the future. The focus for Whittlesea going forward is to provide greater balance between housing supply and employment opportunities.

The Whittlesea Planning Scheme suggests the prospects for future development are good based on anticipated levels of population growth, as well as Whittlesea's locational advantages such as proximity and access to Melbourne Airport, and convenient road access to central Melbourne and other employment centres.

The Whittlesea Planning Scheme supports continued employment growth in Thomastown, Epping, Bundoora and South Morang. Particular areas where future business development is anticipated include:

- Epping Central Metropolitan Activity Centre
- Cooper Street Employment Area, including the Melbourne Wholesale Market
- Plenty Valley Town Centre
- Mernda Town Centre
- University Hill
- Wollert Town Centre and Wollert Employment Area
- Beveridge Interstate Freight Terminal
- Lockerbie Metropolitan Activity Centre
- Thomastown Industrial Area.

The Whittlesea Planning Scheme acknowledges that easy access between residential areas and business and activity centres is essential to support employment growth in the area.

5. Method

5.1 Overview of method

This section describes the method that was used to assess the potential impacts of North East Link. A risk-based approach was applied to prioritise the key issues for assessment and inform measures to avoid, minimise and offset potential effects. Figure 5-1 shows an overview of the assessment method.

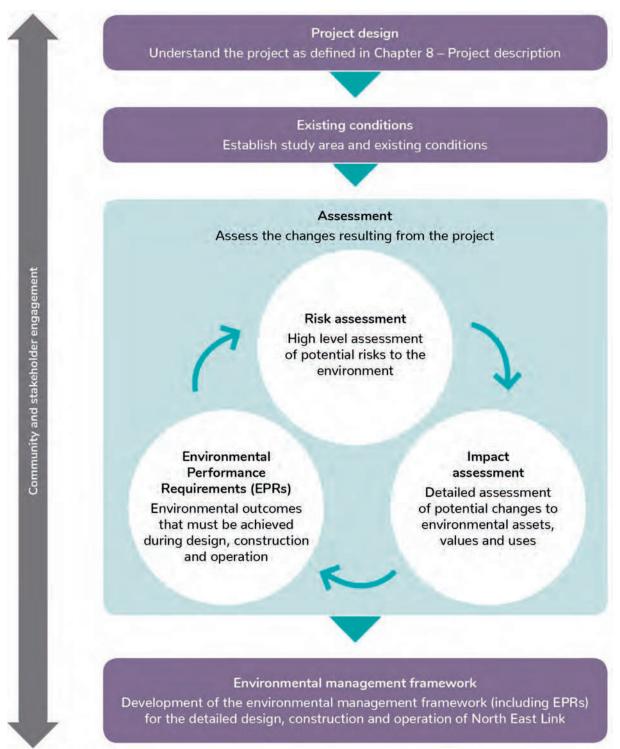


Figure 5-1 Overview of assessment method

The following sections outline the method adopted for the business impact assessment.

5.2 Study area

The method for the business impact assessment involved establishing a study area comprising:

- 1. Three precincts that align with the three key elements of North East Link: M80 Ring Road to northern portal, northern portal to southern portal, and the Eastern Freeway.
- 2. Broader areas encompassing nearby activity centres and economic areas.

The study area and precincts are shown in Figure 5-2.

This report has assessed the likely impacts within the precincts and broader area.

The 200-metre buffer for the precincts was established to capture the direct impacts of the project, including land acquisition, temporary occupation, changes to access and amenity impacts (noise, dust, vibration). The 200-metre distance was informed by the study areas adopted in Technical B – Air quality, Technical report I – Social, and Technical report P – Surface noise and vibration.

The broader area is more fluid and is intended to capture the indirect impacts of the project such as changes to traffic conditions which could cause loss of passing trade. The broader area includes key activity centres and business areas as identified by planning policy (such as Plan Melbourne or local planning policies in planning schemes) and as with the precincts, is also guided by the extent of the study area considered in other reports. In the case of the broader areas, the EES assessment of potential traffic and transport impacts enabled the capture of material traffic impacts to a key activity centre/business area. The findings of Technical report A – Traffic and transport are reflected in this business impact assessment.

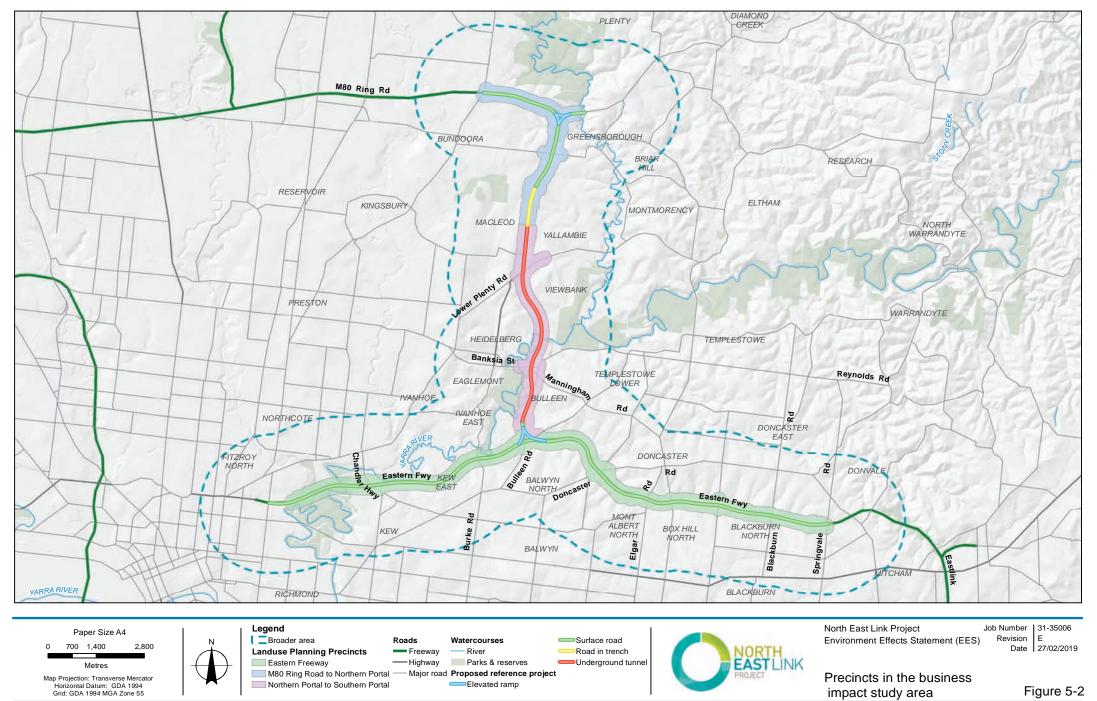
Assessment Precincts

Precincts enable a focused review, analysis and discussion of key areas within the project's key elements. Where necessary, precincts have been expanded to capture the entirety of business clusters, or to follow geographic or urban features such as waterways and roads where they separate business land uses from other land uses. However, for the most part, because 200 metres from the project alignment would be the likely extent of amenity impacts, this distance was chosen as the boundary as it was seen to capture most businesses that would be affected by likely project impacts such as land acquisition, changes to access as well as amenity impacts.

The assessment precincts are:

- M80 Ring Road to northern portal
- Northern to southern portal
- Eastern Freeway.

The precincts are shown in Figure 5-2.



Broader areas

The project's construction and operation may impact the area outside the 200-metre buffer yet within a couple of kilometres of North East Link. These would mainly be access impacts due to construction works or changes to the roadwork. To capture these possible impacts, broader areas are understood to cover activity centres and economic areas located within approximately two kilometres of the North East Link alignment.

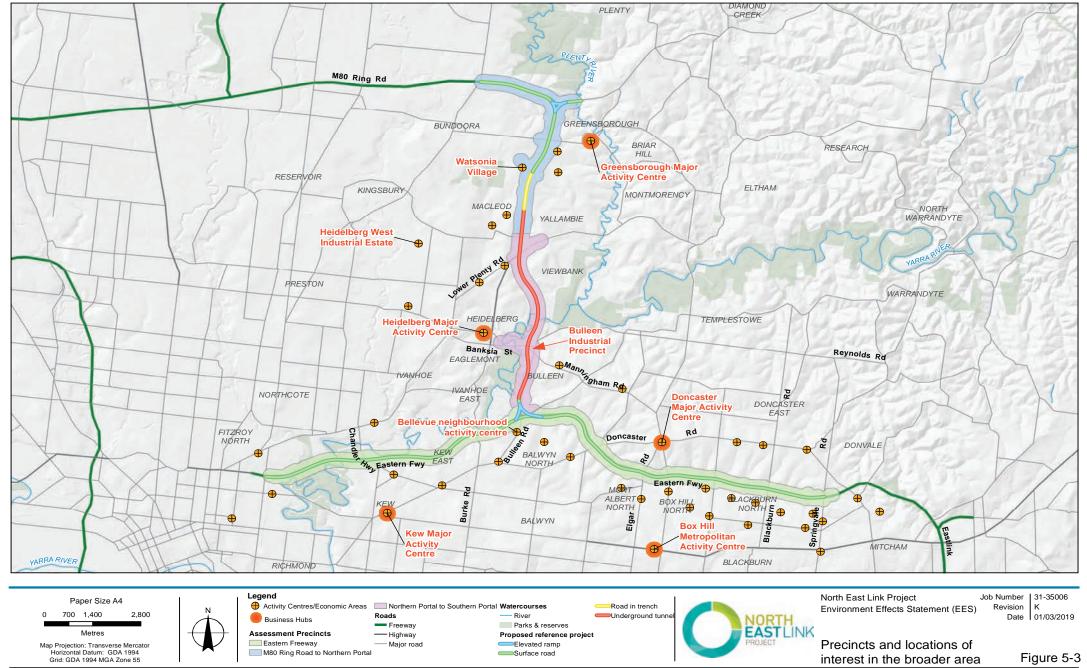
Activity centres and economic areas within the broader area are listed in Table 5-1 and shown in Figure 5-3. Note this is a comprehensive list but not necessarily exhaustive.

Table 5-1 Activity centres and economic areas within broader areas

Precinct	Activity centre/economic area	Municipality
M80 Ring Road to northern portal	Greensborough Major Activity Centre	Banyule
M80 Ring Road to northern portal	Grimshaw Street businesses	Banyule
M80 Ring Road to northern portal	Beewar Street Minor Activity Centre	Banyule
M80 Ring Road to northern portal	Diamond Village Neighbourhood Activity Centre	Banyule
M80 Ring Road to northern portal	Strathallan Road Minor Activity Centre	Banyule
M80 Ring Road to northern portal	Macleod Neighbourhood Activity Centre	Banyule
Northern portal to southern portal	Lower Plenty Road Minor Activity Centre	Banyule
Northern portal to southern portal	Rosanna Neighbourhood Activity Centre	Banyule
Northern portal to southern portal	Heidelberg Major Activity Centre	Banyule
Northern portal to southern portal	Heidelberg West Activity Centre	Banyule
Northern portal to southern portal	Bulleen Plaza Neighbourhood Activity Centre	Manningham
Northern portal to southern portal	Tunstall Neighbourhood Activity Centre	Manningham
Eastern Freeway	Johnston Street Neighbourhood Activity Centre	Yarra
Eastern Freeway	Queens Parade Neighbourhood Activity Centre	Yarra
Eastern Freeway	Gertrude Street Neighbourhood Activity Centre	Yarra
Eastern Freeway	St Georges Road Neighbourhood Activity Centre	Yarra
Eastern Freeway	Heidelberg Road Neighbourhood Activity Centre	Yarra
Eastern Freeway	Kew Junction Major Activity Centre	Boroondara
Eastern Freeway	Willsmere Village Neighbourhood Activity Centre	Boroondara
Eastern Freeway	Harp Village Neighbourhood Activity Centre	Boroondara
Eastern Freeway	Boroondara Neighbourhood Activity Centre	Boroondara
Eastern Freeway	Balwyn North Neighbourhood Activity Centre	Boroondara
Eastern Freeway	Bellevue Neighbourhood Activity Centre	Boroondara
Eastern Freeway	Greythorn Neighbourhood Activity Centre	Boroondara

Precinct	Activity centre/economic area	Municipality
Eastern Freeway	Milne Road/Sewell Street Neighbourhood Activity Centre	Whitehorse
Eastern Freeway	Box Hill Metropolitan Activity Centre	Whitehorse
Eastern Freeway	Woodhouse Grove/Elgar Road Neighbourhood Activity Centre	Whitehorse
Eastern Freeway	Woodhouse Grove/Station Street Neighbourhood Activity Centre	Whitehorse
Eastern Freeway	Joseph Street industrial area	Whitehorse
Eastern Freeway	Trawool Street Neighbourhood Activity Centre	Whitehorse
Eastern Freeway	Second Avenue shops Neighbourhood Activity Centre	Whitehorse
Eastern Freeway	Kerrimuir Neighbourhood Activity Centre	Whitehorse
Eastern Freeway	Caroline Crescent/Katrina Street Neighbourhood Activity Centre	Whitehorse
Eastern Freeway	North Blackburn Neighbourhood Activity Centre	Whitehorse
Eastern Freeway	Charlton Street/Raymond street Neighbourhood Activity Centre	Whitehorse
Eastern Freeway	Diana Drive Neighbourhood Activity Centre	Whitehorse
Eastern Freeway	Junction Road/Charles Street Neighbourhood Activity Centre	Whitehorse
Eastern Freeway	Mountain View Road Neighbourhood Activity Centre	Whitehorse
Eastern Freeway	Nunawading MegaMile Major Activity Centre	Whitehorse
Eastern Freeway	Lindsay Avenue Neighbourhood Activity Centre	Whitehorse
Eastern Freeway	Mitcham Road/Andover Avenue Neighbourhood Activity Centre	Whitehorse
Eastern Freeway	McKeon/Quarry Road Neighbourhood Activity Centre	Whitehorse
Eastern Freeway	Doncaster Hill Major Activity Centre	Manningham
Eastern Freeway	Jackson Court Neighbourhood Activity Centre	Manningham
Eastern Freeway	Devon Plaza Neighbourhood Activity Centre	Manningham
Eastern Freeway	Macedon Square Neighbourhood Activity Centre	Manningham

Other major business precincts in Melbourne such as the CBD have not been explicitly discussed in this business impact assessment. The North East Link Business Case provides an overview of the expected positive transport outcomes and benefits for businesses across the network as far as Gippsland in the south-east and interstate to the north via the Hume Freeway.



180 Lonsdale Street Melbourne VIC 3000 Australia T 61 3 8687 8000 F 61 3 8687 8111 E melmail@ghd.com W www.ghd.com

5.3 Existing conditions

Existing conditions were established through desktop research, a review of Victorian Government and local legislation, policy and planning context as well as multiple site visits, surveys of businesses along the project alignment and interviews with relevant business stakeholders.

A list of existing businesses and existing business conditions were established as follows:

- 1. Review of relevant State and local government legislation, policy and planning context and other documentation to determine business strategic and policy context
- 2. Desktop research of relevant publicly available information, including ABS data from the 2016 census
- 3. Initial identification of businesses via Google Maps Street View and site inspections
- 4. Analysis of design and aerial photo analysis to identify business layout, lot sizes, access arrangements etc and to identify precincts
- Site inspection to confirm business identification, complete information gaps and understand likely employee, customer and delivery vehicle access routes to business areas
- 6. Interviews with a range of businesses to understand their operations using a business survey see Appendix B for the business survey questionnaire
- 7. Interviews with a range of traders' associations to understand their retail area and possible and likely impacts of the project.

Businesses and relevant stakeholders such as traders' associations and business interest groups were consulted to inform the description of existing conditions and to understand how businesses expect to be impacted by North East Link during the pre-construction, construction and operation phases of the project. Approximately 150 businesses and stakeholders were approached with an invitation to participate in the business impacts consultation for North East Link. The approach consisted of a business briefing session on 19 April 2018 for businesses in Bulleen Industrial Precinct and subsequent letter drops and phone calls to businesses in the precincts and phone calls to and meetings with traders' associations the broader areas.

In the M80 Ring Road to northern portal precinct, the Watsonia Traders Association represented the broader views of the retail businesses in Watsonia Village supplemented with business surveys completed at interviews with eight businesses. Invitations for individual surveys were made to businesses that were close to the North East Link alignment.

Other traders' associations and business interest groups in the broader area were approached to understand their views on potential retail business impacts. These included Heidelberg Central Centre Management, Warringal Centre Management, Greensborough Chamber of Commerce, Kew Junction Traders Association, North Balwyn Traders Association, and Greythorn Traders Association. Further information was sought from Bolton Street traders to understand impacts of recent roadworks.

In reference to business numbers in this report, it should be noted that a commercial property is not one and the same as a business, as there may be multiple businesses on a single property, or there may be a single business occupying multiple properties.

5.4 Business surveys

Surveys were conducted either in person or were sent via email for business owners to complete and return where a meeting was not possible. 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 northern portal precinct; 60 businesses and two land owners in the northern portal to southern portal precinct; and three businesses in the Eastern Freeway precinct). It is noted that all businesses in the Bulleen Industrial Precinct were given the opportunity to participate in the survey, given all INZ1 businesses in this area would be subject to acquisition. However, surveys were not completed where businesses were not available during the survey period, were unable to be contacted or declined to participate. Businesses surveyed in Watsonia were selected based on advice provided by the Watsonia Traders Association.

The survey questions were based on questionnaires used for previous business impact assessments undertaken for major infrastructure projects in Victoria, and refined with consideration for preliminary design information and initial desktop analysis of the activity along the alignment to ensure the specific business environment was considered. A copy of the business survey questionnaire is included in Appendix B. Employment and revenue data were collected from businesses during the survey; the data collected was summed for each precinct. Businesses provided an indication of staffing and employment levels by specifying the number of full time, part time and casual staff.

To estimate full time equivalent (FTE) employee numbers, the following assumptions have been made:

- 1. One full-time staff to one FTE
- 2. Two-part time staff to one FTE
- Four casual staff to one FTE.

Respondents were provided with a range of annual revenue figures and were asked to indicate within which range they estimated their annual turnover. The indicative revenue ranges provided were:

- 1. Less than \$500,000
- 2. \$500,000 to \$1 million
- 3. \$1 million to \$5 million
- 4. \$5 million to \$10 million
- 5. \$10 million to \$20 million
- 6. Greater than \$20 million.

The midpoint for each revenue range has been used to estimate business revenue. For businesses with revenue greater than \$20 million, a figure of \$25 million has been used.

5.5 Risk assessment

An environmental risk assessment has been completed to identify environmental risks associated with construction and operation of North East Link. The risk-based approach is integral to the EES as required by section 3.1 of the Scoping Requirements and the *Ministerial guidelines for assessment of the environmental effects under the Environment Effects Act 1978.*

Specifically the EES risk assessment aimed to:

- Systematically identify the interactions between project elements and activities and assets, values and uses
- Focus the impact assessment and enable differentiation of significant and high risks and impacts from lower risks and impacts
- Inform development of the reference project to avoid, mitigate and manage environmental impacts
- Inform development of EPRs that set the minimum outcomes necessary to avoid, mitigate or manage environmental impacts and reduce environmental risks during delivery of the project.

This section presents an overview of the EES risk assessment process. EES Attachment III Environmental risk report describes each step in the risk assessment process in more detail and contains a consolidated risk register.

This technical report describes the risks associated with the project on business. Wherever risks relating to this study are referred to, the terminology 'risk BU01' is used. Wherever EPRs relating to this study are referred to, the terminology 'EPR B1' is used. The risk assessment completed for this study is provided as Appendix A.

5.5.1 Risk assessment process

The risk assessment process adopted for North East Link is consistent with AS/NZS ISO 31000:2009 Risk Management Process. The following tasks were undertaken to identify, analyse and evaluate risks:

- Use existing conditions and identify applicable legislation and policy to establish the context for the risk assessment
- Develop likelihood and consequence criteria and a risk matrix
- Consider construction and operational activities in the context of existing conditions to determine risk pathways
- Identify standard controls and requirements (Environmental Performance Requirements (EPRs)) to mitigate identified risks
- Assign likelihood and consequence ratings for each risk to determine risk ratings considering design, proposed activities and standard EPRs.

While there are clear steps in the risk process, it does not follow a linear progression and requires multiple iterations of risk ratings, pathways and EPRs as the technical assessments progress. Demonstrating this evolution, a set of initial and residual risk ratings and EPRs are produced for all technical reports. Figure 5-4 shows this process.

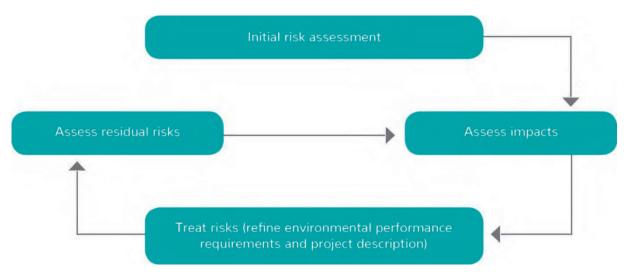


Figure 5-4 Risk-analysis process

Rating risk

Risk ratings were assessed by considering the consequence and likelihood of an event occurring. In assessing the consequence, the extent, severity and duration of the risks were considered. These are discussed below.

Assigning the consequences of risks

'Consequence' refers to the maximum credible outcome of an event affecting an asset, value or use. Consequence criteria as presented in Chapter 4 – EES assessment framework, were developed for the North East Link EES to enable a consistent assessment of consequence across the range of potential environmental effects. Consequence criteria were assigned based on the maximum credible consequence of the risk pathway occurring. Where there was uncertainty or incomplete information, a conservative assessment was made on the basis of the maximum credible consequence.

Consequence criteria have been developed to consider the following characteristics:

- Extent of impact
- Severity of impact
- Duration of threat.

Severity has been assigned a greater weighting than extent and duration as this is considered the most important characteristic.

Each risk pathway was assigned a value for each of the three characteristics, which were added together to provide an overall consequence rating.

Further detail on the consequence criteria are provided Chapter 4 – EES assessment framework.

Assigning the likelihood of risk

'Likelihood' refers to the chance of an event happening and the maximum credible consequence occurring from that event. The likelihood criteria are presented in Table 5-2.

Table 5-2 Likelihood of an event occurring

Planned	The event is certain to occur
Almost certain	The event is almost certain to occur one or more times a year
Likely	The event is likely to occur several times within a five-year timeframe
Possible	The event may occur once within a five-year timeframe
Unlikely	The event may occur under unusual circumstances but is not expected (ie once within a 20-year timeframe)
Rare	The event is very unlikely to occur but may occur in exceptional circumstances (ie once within a 100-year timeframe)

Risk matrix and risk rating

Risk levels were assessed using the matrix presented in Table 5-3.

Table 5-3 Risk matrix

	Consequence				
Likelihood	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)

Planned events

North East Link would result in some planned events, being events with outcomes that are certain to occur (ie planned impacts such as land acquisition), as distinct from risk events where the chance of the event occurring and its consequence is uncertain. Although planned events are not risks, these were still documented in the risk register as part of Attachment III – Risk report for completeness and assigned a consequence level in order to enable issues requiring further assessment or treatment to be prioritised.

These planned events were assessed further through the impact assessment process.

Risk evaluation and treatment

The risk assessment process was used as a screening tool to prioritise potential impacts and the subsequent level of assessment undertaken as part of the impact assessment. For example, an issue that was given a risk level of medium or above, or was identified as a planned event with a consequence of minor or above, would go through a more thorough impact assessment process than a low risk.

Where initial risk ratings were found to be 'medium' or higher, or were planned events with a consequence of 'minor' or higher, options for additional or modified EPRs or design changes were considered where practicable. It should be noted that the consequence ratings presented in the risk register are solely based on the consequence criteria presented in Attachment III – Risk report. Further analysis and evaluation of the impacts potentially arising from both risks and planned events and information on how these would be managed is provided in Section 8.

5.6 Impact assessment

The following tasks were undertaken to prepare the business impact assessment:

- Stakeholders were consulted to inform the assessment, including to understand expected impacts on businesses.
- 2. Key themes and concerns were developed from business survey data.
- 3. The likely nature and extent on businesses were assessed, based on qualifications and previous experience of the technical experts who prepared this business impact assessment.

The impact assessment was undertaken to determine and describe the potential impacts on business asset, values and uses from the construction and operation of North East Link. The impact assessment was divided into direct impacts and indirect impacts. Causes of direct impacts could include business displacement, temporary occupation, disruption to access to business premises, and changes to amenity due to noise dust and vibration. Causes of indirect impacts could include changes in traffic patterns due to construction activity or once the project was operating, and changes in business-to-business cooperation arrangements due to displacement.

The metrics used for the business impact assessment included the number of businesses and employment impacts (head count and FTEs).

The impact assessment was based on the following assumptions:

- Businesses affected by permanent land acquisition (96 full acquisition, three partial
 acquisition, and including one home based business) would be considered to be
 impacted during the project's construction whether or not they ceased operating or
 relocated and established elsewhere. This was also the case if the land acquisition
 occurred before construction works started and impacts on the business of the relocation
 continued into the construction phase.
- 2. Businesses that would be affected by the temporary occupation of land (three) are assumed to only be impacted during the project's construction even if they do not have the full use of the occupied land until the project was operating.

Employment loss due to business displacement from land acquisition (955 employees/723 FTEs) is estimated as if all business ceased operating and no businesses relocated. This is a 'worst case scenario' based on the limited knowledge about the relocation plans of businesses, and is consistent with the risk-based approach of this impact assessment. A number of businesses identified through consultation and surveys that they could relocate if there was other suitable land available. This assessment assumes that some businesses would be able to relocate to other premises but before land acquisition and attempted relocation, it is uncertain how many businesses would choose to relocate.

Desktop research was conducted to build an understanding of the potential impacts on businesses from the project. Consultations with key stakeholders, namely business owners and operators, informed the existing conditions and built understanding of impacts in each precinct. The survey results were analysed to provide a base data set for the assessment and to enable the categorisation and assessment of key themes and concerns and a determination of the severity and breadth of business impacts imposed.

The assessment has considered impacts on businesses during the project's construction and operation, and included an assessment of potential cumulative impacts.

The duration of impacts for the business impact assessment is mainly considered in terms of temporary or permanent, which is in line with the EES Chapter 8 – Project description. In particular:

- Temporary refers to impacts during construction and takes into consideration the duration of construction activities as indicated in the construction schedule in Chapter 8 Project description. While the construction timeframe of the entire project would be seven years, being a linear project the construction front would keep advancing so the assessment considers the duration of construction activities at any one given location would be less than the construction period outlined for that precinct of the project. For example, the entire construction period for the project's M80 Ring Road to northern portal precinct is estimated to take 51 months (approximately 4 years). However, construction at any one given location in this precinct would be less due to the staging of construction.
- Permanent refers to changes during the project's operation.

Construction Phase

Pre-construction activities as well as construction-related activities were assessed.

- Pre-construction impacts these impacts are due to persistent uncertainties and are being experienced now, and could continue until the project's final design is confirmed and the project is approved.
- Construction impacts businesses could be impacted at particular points of time during
 construction or throughout the project's entire construction. The business impact
 assessment identified the nature and severity of impacts on businesses along the project
 alignment. This included direct impacts on business operations as well as potential flowon impacts for businesses that may not be directly impacted but which may experience
 indirect consequences.

It was assumed that displacement of businesses due to land acquisition or temporary occupation would occur during the project's construction, although in some cases this could occur in the pre-construction phase. It is assumed that any business eligible for acquisition would be acquired. This is a worst-case scenario in terms of business service provision and employment opportunities impacts, but it is uncertain how many businesses would choose to relocate their business to another location.

Amenity impacts on businesses have also been considered. It is noted the level of amenity impacts is highly dependent on the business type. For example, retail, accommodation and other businesses that provide on-site customer service have greater sensitivity to amenity impacts such as noise dust and vibration compared with manufacturing businesses or those which provide automotive services.

Operation Phase

Operational impacts – impacts on businesses once the project was operating including
from the change in the business operating environment to the change in road network
and traffic conditions compared with the pre-construction and construction phases of the
project. impacts on businesses once the project was operating include changes to the
business operating environment due to changes in the road network and traffic conditions
compared with the pre-construction and construction phases. Impacts can also relate to
amenity such as changes to the noise environment from changed traffic conditions.

Cumulative impacts

Cumulative impacts would be experienced by businesses due to the construction of
other major infrastructure projects at the same time that affect the transport network in
and around North East Link. These impacts are cumulative for the pre-construction,
construction and operation impacts as described above.

5.7 Rationale

The business impact assessment relies on analysis of data collected throughout the project development as well as data collected in the field from business surveys and multiple site visits. This method provided detailed business information and knowledge of business interdependence, transport network reliance and other sensitivities that would otherwise not be available.

Business impacts have been quantified through estimates of impacts on employment numbers, business turnover and land acquisitions as these measures enable comparison with publicly available data for Melbourne and the project study area.

Land acquisition would be undertaken in accordance with the *Land acquisition and Compensation Act 1986* ('LAC Act') and the *Major Transport Projects Facilitation Act 2009* ('MTPF Act'). The business impact assessment does not address business compensation for acquisition.

5.8 Limitations, uncertainties and assumptions

The findings of this report are subject to the following assumptions and limitations:

- This report does not assess any changes in business or property values due to the project, nor does it attempt to quantify changes to business turnover that may result from the project's construction and operation.
- In some instances, a single business occupies multiple properties, and in other cases multiple businesses occupy the same property. The count of businesses affected by land acquisition in this report is based on the number of businesses affected by acquisition, not the number of properties acquired.
- It is likely that some businesses are operated from residential properties within the study area. A number of these businesses were identified in the broader area. Home based businesses that would be displaced by land acquisition have been included in the assessment. Impacts on home based businesses identified through stakeholder engagement have also been considered.
- Private community facilities such as private schools and sports facilities were included in the analysis and assessment.
- This report was in part developed through consideration of other technical reports (refer Section 2.3). These reports are subject to their own limitations and assumptions.

5.9 Stakeholder engagement

Stakeholders and the community were consulted to support the preparation of the North East Link EES and to inform the development of the project and understanding of potential impacts. Table 5-4 lists specific engagement activities that have occurred in relation to businesses, with more general engagement activities occurring at all stages of the project. Feedback received during community consultation sessions is summarised in Section 5.10.

Table 5-4 Stakeholder engagement undertaken for business impact assessment

Activity	When	Matters discussed	Outcome
Meetings with Manningham Council	6 April 2018, 29 October 2018	Relevant data that Manningham can provide to inform existing conditions. Manningham economic development strategy. Bulleen Industrial Precinct and potential business relocation opportunities. Comments on BIA and process.	Limited relevant data was available for the business impact assessment. Identified potential location for rezoning to industrial, however site is outside the urban growth boundary and approximately 9 km away from Bulleen Industrial Precinct. Other sites also discussed. This informed potential locations for business relocation. Current status of business impact assessment communicated.
Telephone Yarra City Council	29 March 2018	Relevant data that Yarra can provide to inform existing conditions.	No detailed relevant data available for the business impact assessment.
Email communication and meetings with Banyule City Council	27 March – 30 July 2018 14 September 2018 29 October 2018	Relevant data that Banyule can provide to inform existing conditions. Banyule economic development strategy. Banyule activity centre strategy and employment information. Discussion on Banyule's comments on the Business Impact and Council's expectations of same. Availability of detailed activity centre impact assessments. Discussions on Banyule's second round of comments on the report including about Greensborough Major Activity Centre, the outcome of traders consultation in Watsonia, and Hurstbridge line works' relevant to project.	No detailed relevant data was available for the business impact assessment. Activity centre strategy and employment information was provided to inform existing conditions for larger and smaller activity centres, including Watsonia Village. Information about activity centres in Banyule, contact details for traders' associations.
Meeting with Boroondara Council	6 September 2018	Suggestions for consultation with Traders Associations, concerns about smaller businesses in Greythorn, Bellevue and North Balwyn and other detail relevant to Boroondara retailers in particular.	Information about Boroondara retail structure, and community priorities. Boroondara Community Plan, Economic Development and Tourism Strategy and Who's Your Customer reports provided. Contact details for Traders Associations and data on Bellevue yet to come.

Activity	When	Matters discussed	Outcome
Meeting with Whitehorse Council	24 September 2018	Whitehorse comments on Business Impact Assessment. Council major projects planned in Nunawading and Box Hill development plans. Key Neighbourhood Activity Centres to consider (Kerrimuir, Woodhouse) with post construction traffic increases.	Identification of relevant Traders Association for Box Hill and key Neighbourhood Activity Centres to consider.
Meetings and telephone interviews with businesses in Bulleen, Heidelberg, Watsonia Village, Greensborough Road and home based businesses	29 March 2018 to 14 December 2018	Business Surveys (refer Appendix B for a copy of the survey).	86 surveys completed. 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. The surveys informed the existing conditions and themes for business impacts.
Meeting with Watsonia Traders Association	11 May 2018	Business surveys, the vision for Watsonia Village, future plans for Watsonia Village.	Traders Association concerns related back to NELP Feedback on business impacts informed the existing conditions and themes for business impacts.
Telephone with Heidelberg Centre Management	8 May 2018	Project construction activity and potential business impacts.	Information about Heidelberg traders' exposure to construction impacts. Informed existing conditions and themes for business impacts.
Meeting with Warringal Centre Management	10 May 2018	Project construction activity and potential business impacts.	Information about Warringal Centre traders' exposure to construction impacts. Informed existing conditions and themes for business impacts.
Telephone with Kew Traders Association	19 September 2018, 21 September 2018, 1 October 2018	Potential business impacts.	Traders agree that business impacts would be negligible.

Activity	When	Matters discussed	Outcome
Telephone with Balwyn North Traders Association	17 September 2018	Potential business impacts.	Do not expect impacts at North Balwyn even with road works on the Eastern Freeway. That traffic increased or decreased through North Balwyn has benefits and drawbacks and on balance it is difficult to say which is preferable.
Telephone with Eltham Traders Association	9 October 2018	Lessons on business impacts of Bolton Street upgrade.	Suggestions for contacts in Bolton Street.
Telephone and email with Box Hill Chamber of Commerce and Industry	11 October 2018	Potential business impacts.	Phone message left and email sent – no response/
Meeting with Greensborough Chamber of Commerce	19 November 2018	Potential business impacts.	Concerns about impact on traders if traffic in the area is congested, particularly customers from west of Greensborough Road. Requested regular updates and information on the project to enable them to inform the traders.

5.10 Community feedback

In addition to consultation with specific stakeholders, consultation has been ongoing with the community throughout the development of the project's design and EES. Feedback relevant to the business assessment is summarised in Table 5-5 along with where and how we have addressed those topics in this report.

Table 5-5 Community feedback relevant to the business assessment

Issues raised during community consultation	How it's been addressed
Requests to simplify the design of the Manningham Road interchange and reduce the construction footprint to minimise acquisition of business premises.	NELP has investigated different options for the Manningham Road interchange, and variations on launching sites for the tunnel boring machines (TBMs). Community and stakeholder feedback received via community information sessions, Community Liaison Groups, stakeholder meetings and other engagement activities were considered as part of the options investigation. For more information on the Manningham Road interchange options investigated is provided in Chapter 6 – Project development.

Issues raised during community consultation	How it's been addressed
Concerns about job losses associated with acquiring business premises.	Impacts on the availability of local employment through direct impacts on businesses along the project corridor, including at the Bulleen Industrial Precinct have been considered in Section 8.2.2, Section 8.3.4 and Section 8.5. It is recognised the Bulleen Industrial Precinct is unique within 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 Manningham City Council. NELP is actively working with the council to progress its strategic assessment of available sites across the municipality and the potential for rezoning or redevelopment. The successful relocation of displaced businesses would potentially reduce the disruption of business-to-business linkages, depending on the distance the businesses would need to relocate and whether alternative suppliers/customers would be located closer to the remaining businesses.
Concerns that acquisition of business premises will interrupt and dislocate interdependencies between businesses, particularly in the Bulleen industrial zone.	The assessment considered the impact on supply chains, networks and customers due to property acquisition as discussed in Section 8.2.2. Disruption to businesses due to permanent land acquisition requirements would need to be minimised as much as practicable. NELP would need to work with affected businesses and land owners to negotiate a possession date. This would allow planning for relocation of businesses and land owners (EPR B2). 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). This includes ongoing engagement with Manningham City Council about alternative sites that could be suitable for industrial land uses in future.
Requests for more information about how NELP will help businesses whose premises are acquired to relocate to new premises, or appropriately compensate businesses that cannot be relocated.	As discussed in Section 8.2.2, decisions to acquire land would be guided by relevant legislation and in accordance with the Land Acquisition and Compensation Act 1986 and the Major Transport Projects Facilitation Act 2009. Where possible, construction sites, infrastructure and other aspects of the project have been selected to minimise temporary occupation and permanent land acquisition impacts to businesses. Businesses would be consulted to understand individual circumstances about ongoing viability and availability of replacement properties for businesses occupying acquired land. EPRs have been developed to mitigate and manage impacts of the project and these would form part of contractual obligations for the project's construction. The EPRs include pre-construction business support (EPR B1) (and NELP is already working with the council and businesses along the lines of this EPR) and to work to minimise disruption to business from acquisition and temporary land occupation (EPR B2).
Community concern about access to the goods and services they currently source from businesses that would be displaced.	EPRs have been developed to mitigate and manage impacts of the project and these would form part of contractual obligations for the project's construction. The EPRs include pre-construction business support (EPR B1) (and NELP is already working with council and businesses along the lines of this EPR) and to work to minimise disruption to business from acquisition and occupation of land (EPR B2). Technical report I – Social provides further discussion on this issue.

Issues raised during community	
consultation	How it's been addressed
Requests for more information about activities that could impact on businesses during construction, including changes to road access, parking disruptions and other disruptions that could affect productivity or patronage such as noise.	This report discusses the impacts during construction and operation as a result of noise and vibration, air emissions and changes to access (Section 8.2.3, 8.2.4, 8.3.2 and 8.3.3). During project construction, it is a requirement that access and amenity impacts on businesses are minimised during construction (EPR B4), and that any damage or impacts to third party property and infrastructure is minimised and remedied (EPR B3). EPR B4 requires all permanent access to business and commercial facilities affected by the works is restored, or relocated as agreed with the relevant property owner. This includes associated landscaping and restoration works and provision of temporary access arrangements
Concerns about business impacts to Boroondara Tennis Centre and Freeway Public Golf Course	Impacts on communities from permanent acquisition of facilities including Boroondara Tennis Centre and areas of the Freeway Public Golf Course have been considered in this report (Section 8.2.1 and Section 8.2.2) The contractors would be required to minimise impacts on sporting, recreation and other facilities (EPR LP1). This includes working with local Councils and relevant State authorities to identify relocation opportunities for displaced facilities, with the objective of accommodating displaced facilities and maintaining the continuity of those recreational activities, where practicable (EPR SC4).

6. Existing conditions

The businesses within the study area are largely focused on serving their local communities. This is demonstrated by the fact that many of the businesses within these areas provide goods and services for household consumption (personal services, retail, food and beverages, education, sport and other services) or for goods that will ultimately be used by households (building and construction, particularly residential construction). This suggests that location is an important factor for many of these businesses, and proximity to their customers is central to the functioning and profitability of their businesses.

The description of the existing conditions starts with an overview of each municipality (local government area) the project alignment would pass through. It then focuses on each of the precincts and the clusters of businesses within them. Finally, it describes the businesses that are within 200 metres of the alignment, as these businesses would likely experience the greatest impacts of the project.

6.1 Geographical context

Works to facilitate the North East Link would occur in six municipalities: Banyule, Boroondara, Manningham, Nillumbik, Whitehorse and Yarra. Combined, these municipalities account for over 900,000 residents, 390,000 local jobs and nearly 100,000 businesses.³

Adjacent municipalities would likely also benefit from faster journey to work and travel times once North East Link is operating. The boundaries of the municipalities are shown in Figure 4-1 in Section 4.

The populations and employment figures (2016) as well as the number of businesses in each municipality (2017) are listed in Table 6-1. The project would pass through the municipalities of Banyule, Boroondara, Manningham, Nillumbik, Whitehorse and Yarra. The City of Whittlesea has also been included as the project ends on its boundary and so its residents would also likely benefit from North East Link due to faster journey times to work and travel times.

Table 6-1 Municipalities – population, employment and numbers of businesses, 2016 and 2017

Municipality	Estimated resident population (2016) ¹	Population density – persons per hectare (2016)	Local jobs (2016) ²	Employed residents (2016) ³	No. businesses (2017) ⁴
Banyule	127,693	20.7	46,934	65,281	10,734
Boroondara	177,361	29.9	78,791	93,809	25,511
Manningham	122,902	11.0	30,645	59,706	13,454
Nillumbik	64,280	1.5	14,948	35,755	6,398
Whitehorse	170,093	27.0	82,843	82,743	15,980
Whittlesea	207,881	4.4	58,715	94,352	13,728
Yarra	93,380	49.4	84,359	48,635	14,799
Total	963,590	n/a	397,235	480,281	100,604

³ Australian Bureau of Statistics, 8165.0 Counts of Australian Businesses, including Entries and Exits, Jun 2013 to Jun 2017

Municipality	Estimated resident population (2016) ¹	Population density – persons per hectare (2016)	Local jobs (2016) ²	Employed residents (2016) ³	No. businesses (2017) ⁴
Greater Melbourne	4,485,211	4.5	n/a	2,115,491	n/a

Data sources:

- 1. Australian Bureau of Statistics, Regional Population data 2016
- 2. REMPLAN data, accessed May 2018
- 3. REMPLAN data, with the exception of data for Yarra, which was derived from Census data, accessed May 2018.
- 4. Australian Bureau of Statistics, 8165.0 Counts of Australian Businesses, including Entries and Exits, Jun 2013 to Jun 2017

The municipalities generally have a jobs deficit, which requires people to journey outside their local area for work, although the inner municipality of Yarra has a jobs surplus. The city of Manningham, which includes the Bulleen Industrial Precinct, has approximately one job for every two employed residents. Manningham's jobs deficit is only eclipsed by the small and sparsely populated City of Nillumbik, where there is one job per 2.4 (rounded) residents.

In terms of business characteristics, Figure 6-1 shows that almost all registered businesses (98 per cent) are either non-employing businesses (63.2 per cent of total) or businesses that employee 1 to 19 employees (34.8 per cent of total). Non-employing businesses are businesses with no employees (often self-employed or sole traders). For the purposes of this assessment, businesses with 1 to 19 employees are classified as small, businesses with 20 to 199 employees are classified as medium, and businesses with 200 employees or more are classified as large.⁴

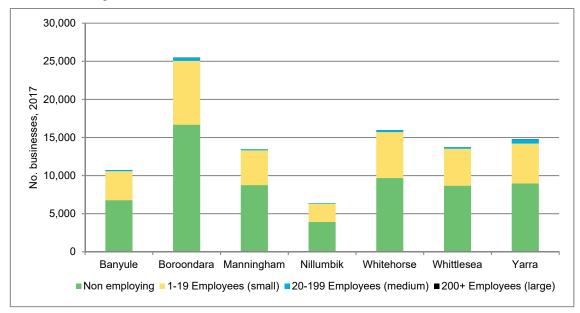


Figure 6-1 Business size by municipality, 2017

Source: ABS, 8165.0 Counts of Australian Businesses, including Entries and Exits, Jun 2013 to Jun 2017

-

⁴ The ABS does break down business size data to: non employing businesses, businesses employing 1-4 people, 5-19 people, 20-99 people, 100-199 people and those employing 200 or more people. However, this level of breakdown can only be presented when sufficient detail is available. The information available from ABS for Counts of Australian Businesses by Local Government Area by Industry Division by Employment Size Ranges presents counts for only non-employing businesses and businesses with 1-19, 20-199 and 200+ employees. This is what is presented and reported in this assessment.

Data shows that businesses in the municipalities surrounding the project alignment are primarily service based. Using the ABS business divisions, the industry divisions with the highest proportion of businesses (as a percentage of total businesses) are:

- Professional, scientific and technical services (15.8 per cent)
- Construction services (15.1 per cent)
- Rental, hiring and real estate services (12.4 per cent)
- Financial and insurance services (11.3 per cent)
- Health care and social assistance (7.9 per cent).

Other important sectors are retail and wholesale trade, transport and warehousing, accommodation and food services, and administration support. Most of the businesses in the municipalities cater to local or metropolitan markets, with few exposed to national or international markets. Figure 6-2 shows the industry divisions with the highest number of businesses (in percentage terms) across the municipalities.

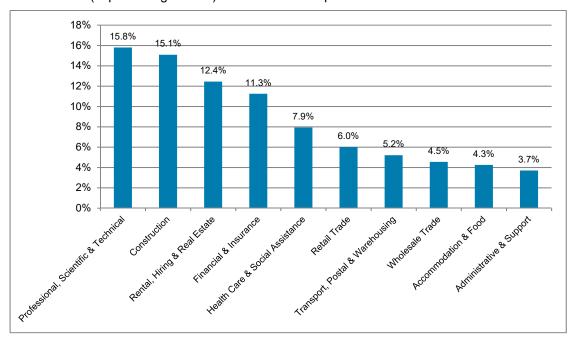


Figure 6-2 Industry divisions with the highest number of businesses, seven municipalities, 2017

Source: ABS, 8165.0 Counts of Australian Businesses, including Entries and Exits, Jun 2013 to Jun 2017

A key outcome of the Victorian Government's long-term metropolitan strategy, *Plan Melbourne*, is a transport system that connects people to jobs and services, and goods to market. This will be partly achieved with an improved transport system and by creating jobs in local areas. In the municipalities included in this business impact assessment, 20 to 30 per cent of workers are typically employed in the municipality they live in. As shown in Table 6-1 above, there are fewer jobs than workers in all municipalities except Yarra. Figure 6-3 shows that Whittlesea has the highest percentage of local employment, with 30 per cent of workers travelling to work within their municipality, while Nillumbik has the lowest with 22 per cent.

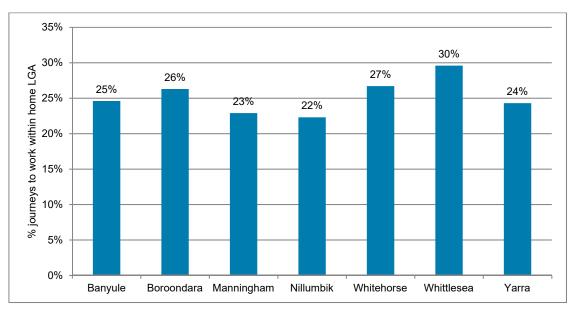


Figure 6-3 Journey to work, proportion of residents travelling to work within home municipality, 2016 Census

Source: Australian Bureau of Statistics 2016

A preference for local employment is also evident in the significant number of workers who only travel to a neighbouring municipality or the City of Melbourne for employment. For instance:

- In Yarra, 40 per cent of those in the workforce journey to work to the City of Melbourne, with another 16 per cent journeying to neighbouring municipalities
- In Whittlesea, 32 per cent of workers travel to work in neighbouring municipalities, with only 13 per cent travelling to the City of Melbourne
- In Boroondara, 26 per cent of workers journey to work to neighbouring municipalities and 28 per cent journey to the City of Melbourne.

Additional journey to work data by municipality is illustrated in Figure 6-4.

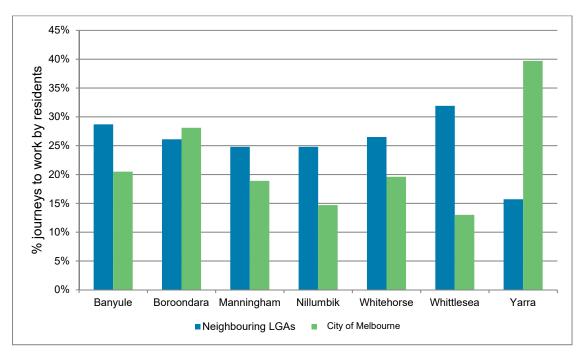


Figure 6-4 Proportion of workers travelling from home municipalities to neighbouring municipalities and the City of Melbourne, 2016 Census

Source: Australian Bureau of Statistics 2016

Overall, key trends and business patterns that can be identified across the municipalities that are part of this study are:

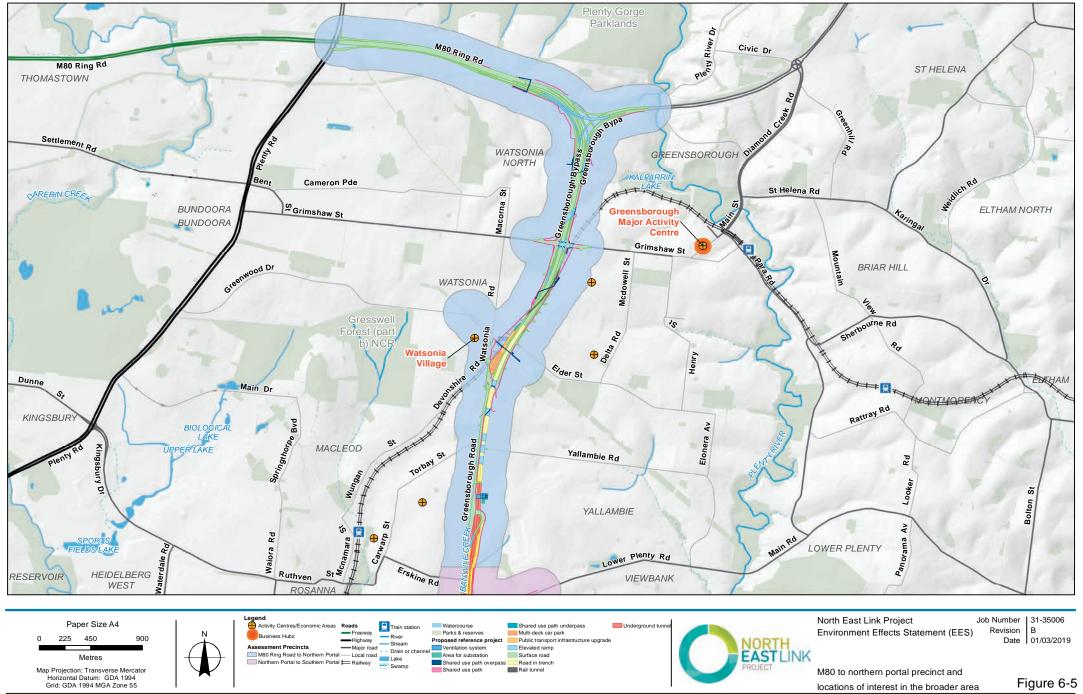
- The municipalities are generally characterised by small businesses servicing the local and metropolitan areas.
- The businesses in the municipalities that are part of this study are primarily service based, and the largest industries by number of businesses are the professional, scientific and technical services (15.8 per cent), and construction services (15.1 per cent) followed by rental, hiring and real estate services (12.4 per cent of businesses).
- With the exception of Yarra, all of the municipalities have fewer jobs than workers. Much of the land use within the municipalities is residential.
- In all municipalities, a minority of workers (21 to 30 per cent) work in the same municipality they live in.

The following sections focus on the businesses within each precinct.

6.2 M80 Ring Road to northern portal

The M80 Ring Road to northern portal precinct includes the connections from the M80 Ring Road at Plenty Road in the north along Greensborough Road to the northern tunnel portal at Blamey Road intersection in the south.

The precinct includes Macorna Street and Watsonia Road to the west and Plenty River to the east. The precinct extends along Greensborough Road and includes intersections with Grimshaw Street, Watsonia Road and Yallambie Road, as shown in Figure 6-5.



Business activity in the M80 Ring Road to northern portal precinct is concentrated in Watsonia Village, with a few businesses along Greensborough Road and at the Greensborough Road/Grimshaw Street intersection, including some health care businesses. The broader area includes the Greensborough Major Activity Centre and Grimshaw Street businesses. There are approximately 80 businesses in in the M80 Ring Road to northern portal precinct (including three identified home based businesses), with the majority being in retail trade, health care and social assistance, and accommodation and food

6.2.1 Watsonia Village

Watsonia Village contains a diverse mix of business types, with the most prominent being retail. Adjacent to Watsonia Road there are a variety of businesses that include a timber and hardware retailer, boutique and second-hand fashion retailers, service providers including those in the medical sector, eateries, homeware retailers, food and drink retailers, and a fuel service station. Estimated employment in Watsonia is approximately 865 according to Banyule City Council data. Most of this employment is in Watsonia Village which is a Neighbourhood Activity Centre with a local customer and employee catchment. The retail activity is concentrated around standard retail opening hours. The retail catchment for Watsonia Village is limited due to competing centres to the north but also extends to the south into part of the suburb of Macleod.

A few businesses, including a timber and hardware retailer, service the construction trades. These generate early morning activity as supplies are purchased before the day's work starts. Local eateries mainly focus on daytime customers, with a low level of evening activity. Watsonia railway station attracts public transport customers from the local area and further afield. Customers walk to the station from the local area (there is a pedestrian crossing on Greensborough Road) or they drive. In addition, anecdotally, city workers living north-east of Watsonia board the city-bound train at Watsonia railway station if car parks closer to the nearest station from their home are full.

Access to most businesses in Watsonia Village is from Watsonia Road adjacent to Greensborough Road. Other businesses are serviced by Greensborough Road but rely on access from Yallambie Road and Grimshaw Street.

Businesses in the M80 Ring Road to northern portal precinct generally operate during standard business hours of 8 am to 6 pm. A few businesses extend these hours and open around 5 am and close around 11 pm. Most operate Monday to Friday while a few also open on weekends with reduced opening hours. Businesses that operate 24-hours a day such as a Health Care and Social Assistance facility (as defined by the Australian and New Zealand Standard Industrial Classification [ANZSIC]) require property access 24-hours a day.

Employment and revenue

Sixteen respondents to the business survey in this precinct provided employment figures. FTE employment has been estimated based on a number of assumptions (refer Section 5.4). Table 6-2 shows the FTE figures with businesses identified by ANZSIC. Most businesses are small to medium sized. Only one business surveyed had over 100 employees; businesses with 20-199 employees are categorised as medium-sized.

Table 6-2 M80 Ring Road to northern portal employment (FTE), based on business survey responses

ANZSIC category	Total FTE employment	Total business responses
Accommodation and Food Services	39.25	4
Health Care and Social Assistance	107	2
Other Services	20	6
Retail Trade	42	4

Note that not all respondents to the business survey in the precinct provided information on annual business revenue.

Table 6-3 presents the indicative revenue ranges, with businesses identified by ANZSIC category.

Table 6-3 M80 Ring Road to northern portal revenue

ANZSIC category	Revenue range		
2 x Accommodation and Food Services	\$500,000 – 1 million		
2 x Accommodation and Food Services	\$1 million – 5 million		
Health Care and Social Assistance	Less than \$500,000		
Health Care and Social Assistance	\$5 million –10 million		
Retail Trade	Less than \$500,000		
Retail Trade	\$500,000 – 1 million		
2 x Retail Trade	\$1 million – 5 million		
4 x Other Services	Less than \$500,000		
Other Service	\$1 million – 5 million		

Home based businesses

Using Australian Business Registration (ABR) data as an indicator of an active home based business, there appears to be a home based business in up to approximately 17 per cent of dwellings in the area along the M80 Ring Road to northern portal precinct. This is based on the number of home based businesses in proportion to the number of dwellings and not correcting for instances of two or more active ABRs at one dwelling.

Planning scheme provisions (Clause 52.11) restrict the extent of activity that can occur as home based businesses so that home based businesses do not have adversely impact neighbourhood amenity. No more than two non-resident persons can work in the home based business at any one time, parking must be carefully managed, there are limits to the floor area used for the business including storage, and auto mechanical work (for gain) is not permitted.

ABR data shows the 10 largest industry categories for home based businesses along the project alignment in the M80 Ring Road to northern portal precinct (in order of importance) include:

- 1. Construction services (carpentry, electrical, plumbing and other construction services)
- Computer system design and related services
- 3. Creative artists, musicians, writers and performers (includes music teachers)
- 4. Management advice and related consulting services

- 5. Building and other industrial cleaning services
- 6. Hairdressing and beauty services
- 7. Accounting services
- 8. Other allied health services
- 9. Courier pick-up and delivery services
- 10. Other specialised design services.

Construction services is by far the largest category. These home based businesses rely on a well-functioning road network to attend to the building site or building they are currently working on. A small proportion of workers' time in these businesses is spent in a home office. Only a small number of their customers visit the home office.

6.2.2 The broader area around the M80 Ring Road to northern portal precinct

The M80 Ring Road to northern portal 'broader area' is generally the area south of the Metropolitan Ring Road and east of Diamond Creek Road and Plenty River, and west of Plenty Road. This 'broader area' is home to a number of activity centres and the La Trobe University Bundoora Campus and is otherwise mainly residential. It includes the Greensborough Major Activity Centre (including the Greensborough Plaza Shopping Centre), Diamond Village and Macleod and some industrial-zoned land to the south of Kingsbury Drive.

Greensborough Major Activity Centre

Greensborough is a Major Activity Centre located approximately 900 metres east of the Greensborough Road intersection along Grimshaw Street. It includes retail, commercial and community uses along Grimshaw Street, Main Street and Church Street as well as the Greensborough Plaza Shopping Centre. This Major Activity Centre is located on land zoned as Activity Centre Zone. This zone is designed to encourage development that supports a range of business types, as well as sustainable urban outcomes that maximise the use of infrastructure and public transport.

Greensborough Plaza Shopping Centre has an annual turnover of approximately \$330 million and the Greensborough Major Activity Centre attracts an estimated 10 million visitors each year. As a Major Activity Centre, it has a trade area catchment that 'would therefore be expected to be primarily orientated toward servicing the immediate surrounding area and less densely populated areas to the north-east' (refer *Greensborough Structure Plan Review: Economic Base Report*, Charter Keck Cramer, 2015). Watsonia Village is within the Greensborough Major Activity Centre trade area catchment (that is, within the area from which shoppers are drawn, but not part of the activity centre itself). The Greensborough Major Activity Centre includes some 400 rateable properties and provides jobs for around 3,000 workers. Thirty eight per cent of these workers are employed in the retail industry and 14 per cent are employed in the accommodation and food services sector (Banyule City Council, 2018, 2015).

While the Greensborough Plaza Shopping Centre is near to Greensborough railway station, a large proportion of staff and customers use private vehicles to access the centre. The shopping centre provides over 2,700 parking spaces (Greensborough Plaza, 2018).

The Greensborough Plaza Shopping Centre is accessible via Para Road to the south-east, Henry Street to the south, Grimshaw Street to the west, and Main Street to the north-east. Main Street provides the only major crossing of the Hurstbridge rail line within one kilometre of the shopping centre.

As discussed in the *Greensborough Structure Plan Review: Economic Base Report* (Charter Keck Cramer, 2015) the Greensborough industrial area is located within a kilometre of the Greensborough Plaza Shopping Centre. The area includes a mix of small and medium format tenancies, mainly along Para Road and to a lesser extent along Simms Road. The industrial properties in this area are generally older style properties, and there appear to be few vacancies or properties for sale.

Grimshaw Street businesses

Businesses along Grimshaw Street are located between Gleeson Drive and Witney Way, approximately 1.5 kilometres west of the Grimshaw Street and Greensborough Road intersection. The businesses in this location are predominantly automotive retail businesses, as well as a number of recreational businesses and retail stores. The land is zoned industrial (IN3Z and IN1Z).

Access to these businesses is via Grimshaw Street with connections to Greensborough Road to the east and Plenty Road to the west.

Diamond Village

Diamond Village is a Neighbourhood Activity Centre and comprises a small strip of shops located along Elmer Street in Nepean Street and Orana Drive approximately 800 metres east of Greensborough Road. With almost 20 retailers and service providers, Diamond Village mainly offers convenience shops including restaurants, cafés, takeaway food, pharmacy and a grocery store as well as health and fitness services (chiropractor, physiotherapy, pilates sessions and fitness centre).

Macleod Village

Macleod Village is a Neighbourhood Activity Centre and comprises a strip shopping centre located in Aberdeen Road, approximately one-kilometre west of Greensborough Road along Erskine Road, Oban Way, Edward Street or Strathallan Road. With approximately 40 retailers, Macleod Village offers a range of specialty and convenience shops including restaurants, cafés, takeaway food, a florist, pharmacy, bottle-shop and newsagent. It is serviced by the Hurstbridge rail line stopping at Macleod railway station as well as bus services to the station.

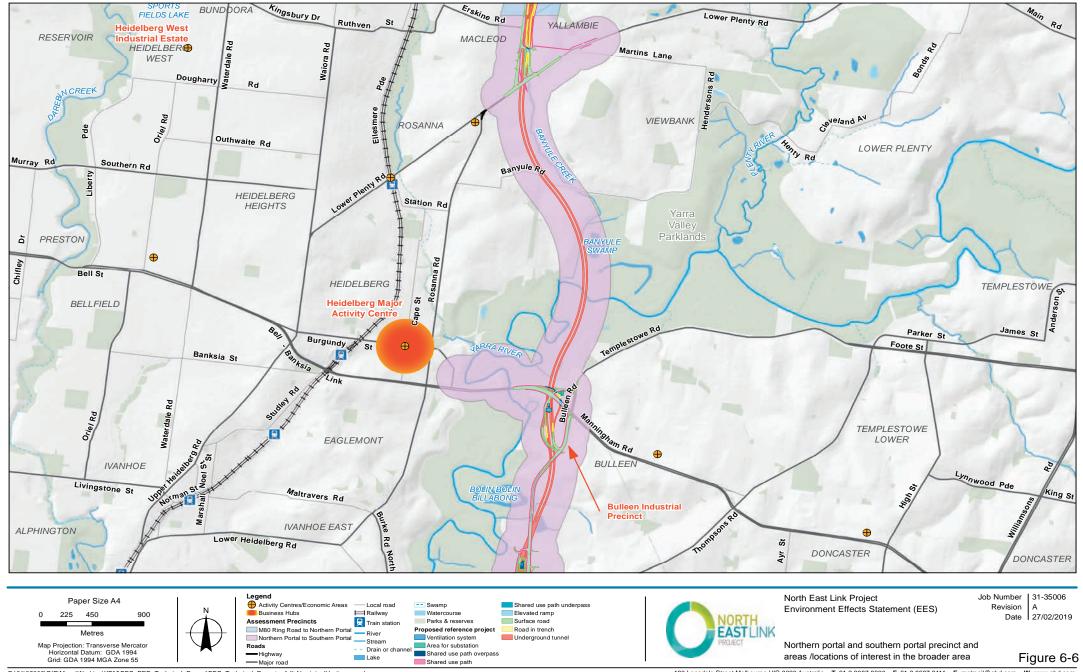
Minor centres

A network of minor activity centres provide additional convenience for local residents and others in the broader area. Minor centres are located at:

- Balaka Place, Bundoora
- Andrew Place, Bundoora
- Beewar Street, Greensborough
- Para Road, Greensborough
- Hopkins Street, Greensborough
- Louis Street, Greensborough
- Strathallan Road, Macleod
- McNamara Street Greensborough.

6.3 Northern portal to southern portal

The northern portal to southern portal precinct includes the northern portal connection of Greensborough Road to Lower Plenty Road, spans the underground tunnel component through to the southern portal connection with the Eastern Freeway. It includes the Bulleen and Manningham Road intersection, as shown in Figure 6-6.



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180 Lonsdale Street Melbourne VIC 3000 Australia T 61 3 8687 8000 F 61 3 8687 8111 E melmail@ghd.com W www.ghd.com

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The northern portal to southern portal precinct extends from around the Manningham Road and Bulleen Road intersection in the north to the Bulleen Road and Eastern Freeway intersection in the south. The precinct includes the Bulleen Industrial Precinct located at the Bulleen and Manningham Road intersection as well as the clubs and sporting facilities to the south near the Eastern Freeway.

The Bulleen Industrial Precinct includes the businesses along Bridge Street, Templestowe Road and Manningham Road to the east of the intersection with Bulleen Road. On the perimeter of the Bulleen Industrial Precinct there is a garden nursery retail business, a museum, a child care centre and medical businesses. Approximately 110 businesses are located in the Bulleen Industrial Precinct which are estimated to provide employment for 960 to 1,000 people, mainly from surrounding suburbs in the municipalities of Manningham and Banyule.

Closer to the Eastern Freeway, there are extensive green areas and playing fields as well as a number of businesses. This part of the precinct includes a concentration of commercial sports and recreation facilities (tennis centre, swim centre, soccer league facility), clubs, liquor retail, employee training and secondary level educational facilities. The majority of these businesses operate Monday to Friday. However, a few also open on weekends with reduced hours. There is one accommodation and food services business with a licence allowing it open until 1 am midweek and until 3 am Thursday to Saturday. More than 500 people are employed in this part of the precinct.

Total employment in the northern portal to southern portal precinct is estimated at approximately 1,500 people. Table 6-4 shows the distribution of businesses in this precinct by ANZSIC category.

Public transport services are limited in the area. Heidelberg railway station is the closest station approximately 1.8 kilometres from the precinct, Surveys show that almost all workers and customers access businesses by private vehicles. Non-restricted roadside parking is available but limited and there are two smaller carparks in the Bulleen Industrial Precinct, where businesses mainly operate Monday to Friday with some automotive and retail businesses open on Saturdays as well. Businesses tend to start work early from 7 am to 8 am and close around 5 pm. Customers are predominantly from the local catchment which includes nearby suburbs. Larger businesses have a greater catchment that extends to the Melbourne CBD whereas smaller businesses (unless they provide a specialised service) typically have a smaller catchment that includes the suburbs of Bulleen, Doncaster, Templestowe, Heidelberg and Eaglemont.

6.3.1 Bulleen Industrial Precinct

The Bulleen Industrial Precinct includes a high number of automotive and related businesses that co-operate closely with each other and with customers in the precinct, to the extent it can be described as an automotive cluster. A business cluster is a geographic concentration of interconnected businesses, suppliers and associated institutions in a particular field. Clusters are considered to increase the productivity of businesses so they can compete regionally. In addition to the automotive cluster, other business types in the Bulleen Industrial Precinct include a garden nursery retail business, eateries, dry cleaning services, fitness centres and industrial material retailers. In particular a large pre-mixed concrete business involves a significant logistics operation, while eateries have an established business customer base within the precinct.

The Bulleen Industrial Precinct has been established since the 1950s. Many businesses have been established there a long time and there is a low rate of change in tenancies compared with the benchmark rate of change in business supplied by Business Victoria (sourced from ABS Catalogue 8165.0). One business has been established for over 70 years in the area and provides laundry services to surrounding businesses. At least 15 other businesses have operated in the Bulleen Industrial Precinct for over 30 years. This has led to the development of the business cluster and the evolution of the precinct's characteristics present today.

Other business types in the northern portal to southern portal precinct include a garden nursery, a museum, a children's early learning centre and medical service providers.

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%	

Two garden nursery retail businesses are located in the northern portal to southern portal precinct. One has been established for 50 years (owned for 36 years by the current owner) and the other for 42 years. One of the nurseries in this precinct, along with the museum that has been established for 37 years, consider they have played a role in the development of a cultural hub which attracts local residents and visitors from across Melbourne and Victoria.

A rental and hiring (equipment hire company) business in the precinct has been operating for 56 years. Following the establishment of this business, a construction company was established close by and has remained a family-run business for over 45 years. Over the last 40 years, an agglomeration of businesses has formed along the western side of the intersection of Bulleen Road and Manningham Road. They have formed interdependent relationships and the area has evolved as a construction, automotive and distribution business cluster over the last 15 years. The businesses in this cluster specialise in providing niche automotive services such as car upholstery, body works, brake fitting, tyre sales, smash repair and general car service mechanics. It is understood these businesses benefit from supply chain efficiencies associated with agglomeration economies, such as knowledge share, labour pooling and customer referrals.

In addition, an accommodation and food services business has operating for 50 years. This business provides sports and gaming facilities as well as a restaurant and function club that serve surrounding sports clubs and education facilities, including a school that has been operating for 60 years. A number of business relationships have evolved around the sporting facilities in Bulleen.

Businesses in the northern portal to southern portal precinct differ in their operating hours. A large proportion operate within standard businesses hours from 8 am to 6 pm. However, it is common for businesses in this precinct to extend these hours and open around 7 am and close around 7 pm. There are several businesses that operate 24-hours a day and others which require 24-hour property access, such as equipment hire businesses that receive returning equipment overnight and hire it out again early the next day. Most businesses operate Monday to Friday although a portion open on weekends with reduced hours.

Employment and revenue

While no public information is available about total employment in the northern portal to southern portal precinct, an estimate based on the returned business surveys for this impact assessment (described below) and extrapolated to include businesses that did not return a survey indicates employment of around 1,500 people.

A total of 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

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.

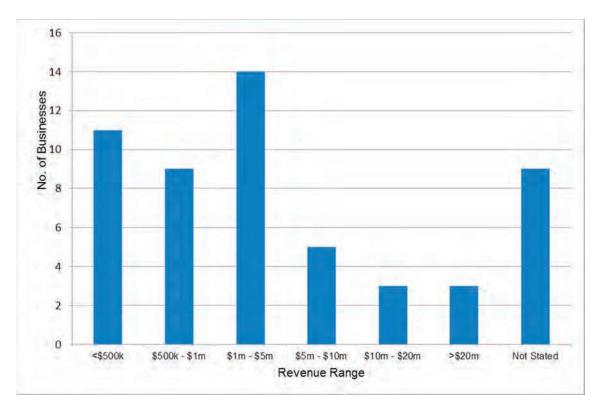


Figure 6-7 Annual business revenue, northern portal to southern portal precinct

Home based businesses

Australian Business Registration (ABR) data shows there are up to approximately 20 per cent of dwellings in the northern portal to southern portal precinct.

ABR data shows the 10 largest industry categories for home based businesses along the northern portal to southern portal alignment (in order of importance) include:

- 1. Construction Services (carpentry, electrical, plumbing and other construction services)
- 2. Computer System Design and Related Services
- 3. Management Advice and Related Consulting Services
- 4. Creative Artists, Musicians, Writers and Performers (includes music teachers)
- 5. Building and Other Industrial Cleaning Services
- 6. Accounting Services
- 7. Hairdressing and Beauty Services
- 8. Other Allied Health Services
- 9. Courier Pick-up and Delivery Services
- 10. Other Specialised Design Services.

Similar to the M80 Ring Road to northern portal precinct, construction services is the largest category in the northern portal to southern portal precinct.

6.3.2 The broader area around the northern to southern portal precinct

The northern portal to southern portal 'broader area' includes the area along Rosanna Road and west to Rosanna, Plenty River and the intersection of Manningham Road and Thompsons Road to the east, and to the Eastern Freeway. It includes the suburb of Rosanna, Northland Shopping Centre, Warringal Shopping Centre, the Austin Hospital and Bulleen Plaza as well as minor centres.

La Trobe National Employment and Innovation Cluster

La Trobe National Employment and Innovation Cluster (NEIC) is an emerging cluster with an expanding education, health and research role, home to approximately 28,500 jobs.

It includes La Trobe University and the Austin Biomedical Alliance Precinct as well as retail activities in and around the Northland Shopping Centre and Heidelberg Major Activity Centre. La Trobe University plans to grow its research activities at the NEIC and encourage the commercialisation of research and the growth of existing businesses.

Heidelberg West Industrial Estate

The Heidelberg West Industrial Estate is bound by Sheehan Road to the west, Dougharty Road to the south, Bamfield Road to the east, and Orr Street, Northern Road and Crissane Road to the north. The Heidelberg West Industrial Estate is home to approximately 600 businesses and supports a large workforce, mainly local residents.

According to the Banyule Business *Heidelberg West Industrial Estate Business Monitor Results* 2016, a diverse range of business types operate in this area with manufacturing accounting for the largest share at 39.5 per cent. Construction businesses made up 24 per cent and wholesale trade represented 14 per cent. Most businesses employ less than 10 people and 64 per cent of employees across the estate are FTEs.

Suppliers to these businesses are primarily located in the Melbourne's northern suburbs. Local suppliers within 10 kilometres of the industrial estate accounted for 21.8 per cent of customers and 29.9 per cent of business suppliers were sourced from within wider Victoria (2016). Anecdotally, proximity to suppliers and the Melbourne CBD and access to education and training facilities were the strongest factors influencing the location of business in the Heidelberg West Industrial Estate.

Heidelberg Major Activity Centre

The eastern part of the Heidelberg Major Activity Centre comprises the commercially-zoned land around the Heidelberg railway station. This area is home to the Warringal Shopping Centre (with over 500 undercover parking spaces), Heidelberg Police Station, Heidelberg Magistrates' Court, large-scale supermarkets and a number of other businesses that operate primarily in the health care and social assistance, retail trade and professional, scientific and technical services industries. A primary school and secondary school are also located in the Heidelberg Major Activity Centre.

The key access routes to the Heidelberg Major Activity Centre are Banksia Road and Burgundy Street running east-west and Rosanna Road running north-south. Bus and train services also service the Heidelberg Major Activity Centre.

Bulleen Plaza Neighbourhood Activity Centre

The Bulleen Plaza Neighbourhood Activity Centre is located on Manningham Road between Thompson Road and Bulleen Road. It includes over 60 shops offering a range of goods and services from cafes, eateries, specialty retail stores, a gym and medical centre. The Bulleen Plaza Neighbourhood Activity Centre is accessible from Manningham Road and Bourke Street by car and is also serviced by a number of bus routes. As a Neighbourhood Activity Centre it serves a local catchment (likely to Bulleen Road to the west) with everyday shopping and service needs.

Tunstall Neighbourhood Activity Centre

Turnstall Neighbourhood Activity Centre is located on Doncaster Road, west of the junction of Doncaster Road and Old Warrandyte Road in Doncaster East. Most businesses are located south of Doncaster Road around Tunstall Road, which also divides the centre into Tunstall East (anchored by a Coles supermarket) and Tunstall West (predominantly comprising single-storey shops including a butcher, greengrocer, bakeries, deli, florist, cafes, hairdressers, clothing retailers, a newsagent, pharmacy and a giftshop). The centre is accessible by car and serviced by a number of bus routes. Its focus is on serving a local catchment with everyday shopping and service needs but its village atmosphere also attracts visitors.

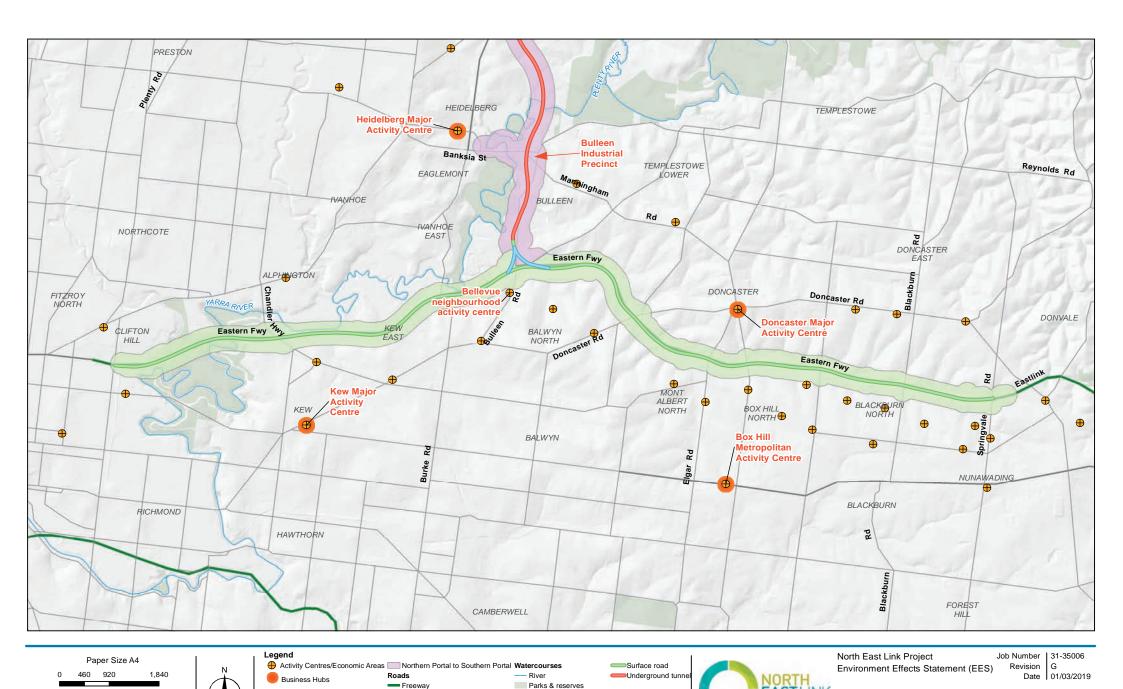
Minor activity centres

A network of minor activity centres are located throughout the broader area and these include McNamara Street, Macleod, Martins Lane, Viewbank, Lower Plenty Road, Rosanna, Station Road, Rosanna, Greville Road, Rosanna, St James Road, Rosanna and Thompsons Heights Shopping Centre, Bulleen. Businesses in these minor centres are predominantly retail and service businesses. Some service their local catchment while others are located on busy roads and benefit from exposure to passing traffic. In particular, the minor activity centre at Lower Plenty Road, Rosanna benefits from exposure to the traffic on the busy intersection between Rosanna Road and Lower Plenty Road (the north-south route from Greensborough Road to Banksia Road). These businesses include an automotive tyre retail and service business, take-away food business, a security service provider and a child care centre (under construction).

6.4 Eastern Freeway

The Eastern Freeway precinct spans the area from Fitzroy and Hoddle Street connections in the west through to Springvale Road in the east. It also includes freeway interchanges with Chandler Highway, Burke Road, Bulleen Road, Doncaster Road, Elgar Road, Tram Road/Station Street, Wetherby Road/Middleborough Road and Surrey Road/Blackburn Road. The entire Eastern Freeway section is shown in Figure 6-8.

The Eastern Freeway precinct includes a small part of the Bulleen Road connection to the Eastern Freeway and Thompson Road south of the project's southern portal, as shown in Figure 6-9.



Proposed reference project

Elevated ramp



Assessment Precincts

Eastern Freeway

Metres

Map Projection: Transverse Mercator

Horizontal Datum: GDA 1994

180 Lonsdale Street Melbourne VIC 3000 Australia T 61 3 8687 8000 F 61 3 8687 8111 E melmail@ghd.com W www.ghd.com

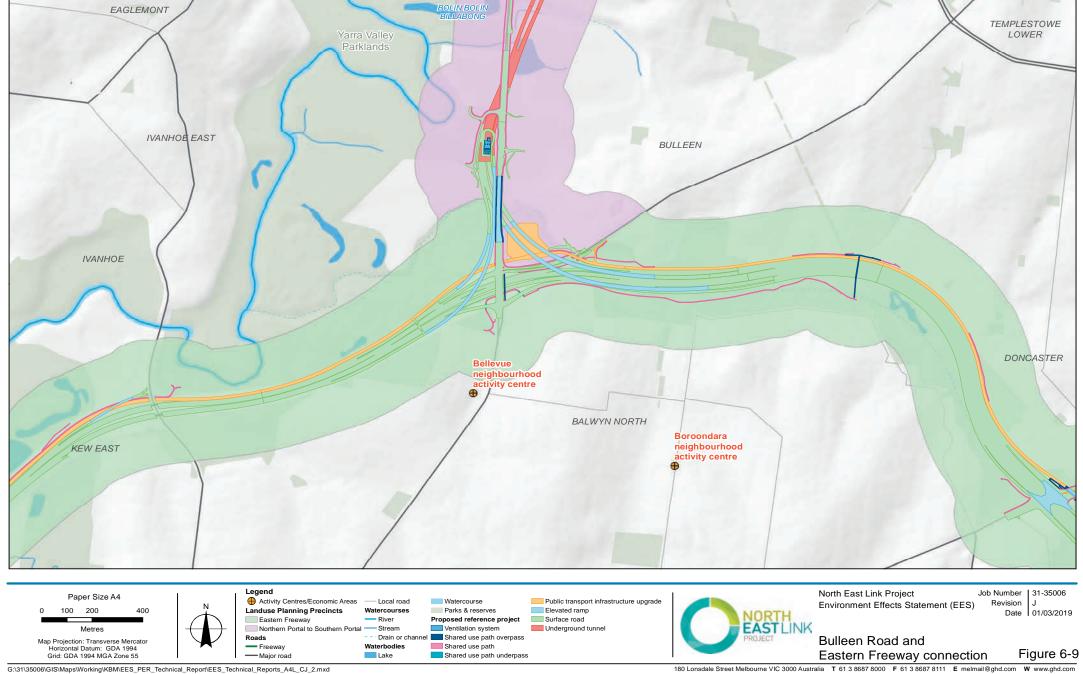
Eastern Freeway precinct and locations

of interest in the broader area

Figure 6-8

---- Highway

--- Major road



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Some 60 businesses have been identified in the precinct. Of these, five businesses have been identified near the proposed intersection of North East Link and the Eastern Freeway, four of which are located within the tennis centre (including the tennis centre). The other is a golf course with associated pro shop.

The Blackburn North industrial area is located in the precinct on Joseph Road near the Middleborough Road intersection. Fourteen businesses have been identified within the precinct, Industries include vehicle sale and service, retail and wholesale, and professional and technical services.

There is another business located adjacent to the Eastern Freeway, but it is located further to the east near Belford Road. This business is also a golf course and has extensive hospitality focus.

Businesses in the Eastern Freeway precinct generally operate with standard hours, although recreation businesses have extended hours depending on daylight hours.

Employment and revenue

Only two of the businesses surveyed along the Eastern Freeway provided employment figures. These have not been listed to respect business confidentiality.

Home based businesses

Using ABR data as an indicator of an active home based business, there appears to be a home based business in up to approximately 24 per cent of dwellings within the Eastern Freeway precinct based on ABR registrations in municipalities along the Eastern Freeway.

ABR data shows the 10 largest industry categories for home based businesses along the Eastern Freeway project alignment (in order of importance) include

- 1. Construction Services (carpentry, electrical, plumbing and other construction services)
- 2. Management Advice and Related Consulting Services
- 3. Computer System Design and Related Services
- 4. Creative Artists, Musicians, Writers and Performers (includes music teachers)
- 5. Building and Other Industrial Cleaning Services
- 6. Accounting Services
- 7. Other Allied Health Services
- 8. Hairdressing and Beauty Services
- 9. Courier Pick-up and Delivery Services
- 10. Other Specialised Design Services.

As for the other two precincts, construction services is the largest category. As noted in Section 6.2.1, these home based businesses rely on a well-functioning road network to attend to the building site or building that is their current place of work. A small proportion of their time is spent in a home office and only a small number of customers visit the home office.

The second largest category is Management Advice and Related Consulting Services.

This category relies on a well-functioning road network to enable client engagement as well as a high quality of local amenity to facilitate a productive home based office work environment.

6.4.1 The broader area around the Eastern Freeway

The Eastern Freeway 'broader area' captures the length of the Eastern Freeway. The northern boundary runs from Heidelberg Road in the west, along Lower Heidelberg Road, Thompsons Road in Bulleen, Manningham Road through to the corner with Williamsons Road in Doncaster, and then along a straight east-west line to Mullum Mullum Reserve in Donvale. The southern boundary of the 'broader area' runs in a straight line from the corner of Powlett Street and Gipps Street in East Melbourne, through to a site close to the corner of Mitcham Road and Canterbury Road in Vermont. The western boundary runs in a straight line from the corner of Powlett Street and Gipps Street in East Melbourne northwards to Queens Parade in Fitzroy North. The eastern boundary of the Eastern Freeway 'broader area' runs northward from a site close to the corner of Mitcham Road and Canterbury Road in Vermont through to the Mullum Mullum Reserve in Donvale.

Businesses in the broader area along the Eastern Freeway are located within the municipalities Yarra, Banyule, Boroondara, Manningham and Whitehorse. Most businesses are located in activity centres, but businesses in the broader area also include home based businesses, out-of-centre development and businesses in industrial areas.

Activity centres in the City of Yarra are mainly centred along retail streets. For the purpose of activity centre planning, the Yarra City Council identifies five Major Activity Centres and six Neighbourhood Activity Centres.

Three of the Major Activity Centres in the City of Yarra are located in the broader area at the western end of the Eastern Freeway. These Major Activity Centres are:

- Victoria Street Richmond
- 2. Smith Street Collingwood/Fitzroy
- Brunswick Street Fitzroy.

Five of the six Neighbourhood Activity Centres in the City of Yarra are located in the broader area at the western end of the Eastern Freeway. These Neighbourhood Activity Centres are:

- 1. Johnston Street Neighbourhood Activity Centre
- 2. Queens Parade Neighbourhood Activity Centre
- 3. Gertrude Street Neighbourhood Activity Centre
- 4. St Georges Road Neighbourhood Activity Centre
- 5. Heidelberg Road Neighbourhood Activity Centre.

The inner northern suburbs of Fitzroy, Collingwood and Richmond were established in the 1800s in the early phase of Melbourne's settlement, and businesses have clustered along important streets that have developed as retail streets and activity centres. This broader area includes extensive commercial uses (mix of uses) ranging from light industrial based on the heritage clothing and footwear manufacturing activity to repair and service businesses as well as import and sales. Commercial businesses are mainly small in scale due to limited land availability and tight controls on permitted uses and adaptations. The broader areas in the City of Yarra are serviced by several trams, bus routes and train lines. Tram routes run along retail streets and include bicycle lanes and some conveniently located railway stations improve accessibility by public and active transport, making businesses in these areas less dependent on vehicle traffic flow for customers and business.

The City of Boroondara located south of the Eastern Freeway has a network of 53 shopping centres which are a core component of the local economy and much valued by residents. This network of shopping centres includes Kew Junction, Balwyn North, Bellevue and Greythorn, as discussed below. Other neighbourhood centres in Boroondara include Willsmere Village, Harp Village and Boroondara Neighbourhood Activity Centres, located south of the Eastern Freeway. These Neighbourhood Activity Centres mainly service a local catchment and provide a limited range of convenience retail and office uses.

In the City of Whitehorse located south of the Eastern Freeway and east of Boroondara is the Box Hill Metropolitan Activity Centre, four Major Activity Centres and an extensive network of 59 Neighbourhood Activity Centres (including Kerrimuir, Blackburn North, Lindsay Avenue Shops) as well as some industrial areas (including Joseph Street industrial area). The Major Activity Centre the Nunawading MegaMile is also located in the broader area along Whitehorse Road near the intersection with Springvale Road. Further detail on these centres is provided in the sections below. Other Neighbourhood Activity Centres located throughout the broader area in the City of Whitehorse are generally on arterial roads to/from the Eastern Freeway and so are somewhat removed from potential traffic impacts from North East Link. These Neighbourhood Activity Centres including shops/businesses at Milne Road/Sewell Street, Trawool Street, Second Avenue shops, Caroline Crescent/Katrina Street, Carlton Street/Raymond Street, Diana Drive, Junction Road/Charles Street, Mountain View Road, Mitcham Road/Andover Avenue and McKeon/Quarry Road.

In the City of Manningham, north of the Eastern Freeway and the City of Whitehorse, the Major Activity Centres are Doncaster Hill and Doncaster East – The Pines. Doncaster Hill is located in the Eastern Freeway broader area and is described in the sections below. The City of Manningham identifies nine Neighbourhood Activity Centres and a network of smaller shopping strips or places with community facilities (local activity centres). There are three Neighbourhood Activity Centres in the broader area north of the Eastern Freeway (Jackson Court, Devon Plaza and Macedon Square), as described below.

Kew Junction

Approximately 1.7 kilometres south of the Eastern Freeway and Chandler Highway crossing, Kew Junction is a Major Activity Centre at the junction of six separate roads: Princess Street, High Street, Cotham Road, Denmark Street and Studley Park Road. Other modes of transport include the tram route 109, which travels along High Street with frequent services to the CBD.

Kew Junction includes retail, commercial and community activity. The traders' association identifies its attractions as the range of destination shops, gourmet food providers, high quality professional services and benefiting from a central location. The vision for Kew Junction is set out in the Kew Junction Structure Plan revised in 2011. The guiding principles include strengthening the role of Kew Junction as a focal point for the local community while balancing the dual roles of Kew Junction as a local and regional centre. Traffic and transport are a challenge in Kew Junction and transport-related principles of the Kew Junction Structure Plan include:

- Improving the connections between the north and south sides of Kew Junction
- Promoting greater use of sustainable transport modes
- Creating a pedestrian friendly environment
- Encouraging more people to access the centre on foot, cycling or public transport
- Improving traffic management and car parking in Kew Junction
- Focusing the main retail, community and cultural activities within the heart of Kew Junction for ease of access.

Balwyn North

The Village Balwyn North Neighbourhood Activity Centre is located at the intersection between Bulleen Road and Doncaster Road approximately 1.5 kilometres south of the Eastern Freeway. It is serviced by tram route 48 to the CBD and Docklands. The compact village provides convenience for local residents. Businesses include a gourmet deli, florist, fashion stores, butcher, cafés, a chemist, newsagent, banks and real estate agents. Boroondara City Council research indicates that 51 per cent of customers also live in Balwyn North and that visitors to the village appreciate the quality, variety and the availability of parking. The council plans to preserve Balwyn North's role as a convenience retail centre by providing for retail and/or office uses at ground level and office uses and/or residential on upper levels.

Bellevue

This Bellevue Neighbourhood Activity Centre is located on Bulleen Road and is bisected by Dorado Road about 300 metres south of the intersection between Bulleen Road and the Eastern Freeway.

The current role of this small centre is convenience retail, specialty retail and offices. Approximately 30 businesses are located in the centre, including cafés, takeaway food, hair and beauty, liquor store as well as a business providing allied health services and fitness training. The council plans to preserve Bellevue's role by providing for retail and/or office uses at ground level and office uses and/or residential on upper levels.

Greythorn

The Greythorn Neighbourhood Activity Centre is located on Doncaster Road in Balwyn North, between Harrington Avenue/Sylvander Street and Trentwood Avenue approximately 650 metres south of the Eastern Freeway. It includes almost 80 businesses and shops offering a range of goods and services from cafes, eateries, specialty retail stores, gyms, medical and dental services and two supermarkets. This activity centre is focused on serving a local catchment. Boroondara City Council research identified that 71 per cent of customers in Greythorn live in Balwyn North and the activity centre is valued for its variety of businesses and friendly community feel. The council plans to preserve Greythorn's role by providing for retail and/or office uses at ground level and office uses and/or residential on upper levels. The Greythorn Traders Association notes that businesses are sensitive to a major change in traffic levels. Members believe neither a major increase or decrease is desirable.

Box Hill

Box Hill is a Metropolitan Activity Centre located around Whitehorse Road and Station Street in Box Hill approximately two kilometres south of the Eastern Freeway. Metropolitan Activity Centres are higher-order centres intended to provide a diverse range of jobs, activities and housing for regional catchments that are well services by public transport. Box Hill plays a major service delivery role, including government (an Australian Taxation Office in Whitehorse Road), health (Box Hill Hospital, Epworth Eastern), justice and education services (Box Hill Institute) as well as retail and commercial opportunities. It is estimated the activity centre supports approximately 26,000 jobs (full time, part time and casual) as well as approximately 64,770 domestic students at Box Hill Institute. It is also a major transport hub in the eastern suburbs and includes two train lines, a tram route and 21 bus routes. The Box Hill Central shopping centre landlord, Vicinity, is planning extensive redevelopment to future-proof the centre. The plans will likely include apartments, hotel and office towers, with potential to add over 300,000 square metres of non-retail development in addition to a significant retail expansion. If this redevelopment occurs during the construction of North East Link, it has the potential to add to the cumulative impacts of construction in the broader area.

There are two Neighbourhood Activity Centres between the Eastern Freeway and Box Hill; Woodhouse Grove/Elgar Road, and Woodhouse Grove/Station. The Woodhouse Grove/Elgar Road activity centre offers fuel sales, take-away food, pet supplies, pet boarding and a vet. The Woodhouse Grove/Station Street activity centre offers take-away food, a bakery and a small grocery as well as medical services. These two Neighbourhood Activity Centres are approximately 950 meters apart, and 800 metres and 400 metres respectively south of the Eastern Freeway. Elgar Road provides access to/from Box Hill to the Eastern Freeway for traffic heading west or coming from the west and points north of it; Station Street does the same for traffic to/from the east on the Eastern Freeway and points north. In this location, fuel sales and convenience shopping would benefit from traffic flow and visibility to passing traffic.

Kerrimuir

The Kerrimuir Neighbourhood Activity Centre is located at the intersection between Springfield Road and Middleborough Road in Box Hill North approximately one-kilometre south of the Eastern Freeway. Middleborough Road is an arterial road that provides direct access to/from the Eastern Freeway. Kerrimuir is a busy centre with a range of convenience retailers (approximately 15 retailers), including a small supermarket, bakery, butcher, fruit and flowers, a newsagent, hairdresser, café and take-away food.

Due to its location on Middleborough Road, Kerrimuir also has a passing trade component with major convenience brands (Shell/Coles, Red Rooster, McDonalds and Subway) prominently located at the intersection between Springfield Road and Middleborough Road.

Blackburn North

The Blackburn North Neighbourhood Activity Centre is located on Springfield Road in Blackburn, approximately 1.3 kilometres south of the Eastern Freeway along Surrey Road. Blackburn North is configured as a covered shopping centre with approximately 45 tenancies including a Woolworths and an IGA supermarket, two fish mongers, café, take-away food, bakery and a medical centre. A 7-Eleven is located at Blackburn North separately from the shopping centre.

Surrey Road provides access to the Eastern Freeway but toward the CBD or coming from the CBD (half interchange). There is no tram or train, but three bus routes operate along Springfield Road and one bus route operates north-south along Surrey Road. Traffic modelling shows that Surrey Road between Whitehorse Road and the Eastern Freeway carries 10,000 – 13,000 vpd northbound and the same number southbound.

Nunawading MegaMile

The only Major Activity Centre in the City of Whitehorse is the Nunawading MegaMile. This is located along Whitehorse Road near the intersection with Springvale Road and extends for approximately 2.5 kilometres from around Eldar Street (west) to Peel Street (east). The MegaMile plays a regional role as a bulky goods retailing destination along Whitehorse Road. Some small businesses (office premises), generally at upper levels, have started to locate along Whitehorse Road as a secondary activity. The nature of bulky goods retailing relies partly on private vehicle access, and Whitehorse Road accommodates this with service lanes and through lanes for the daily traffic movement. The MegaMile relies on access by private vehicle for their customers so maintaining this during the upgrade of the Eastern Freeway would be important for these businesses.

Within the MegaMile, the area around the Nunawading railway station is known as Nunawading and functions as a minor or neighbourhood centre with convenience shops and some office use. Whitehorse City Council is also undertaking the development of a new sports, arts and community hub in Nunawading as well as a significant upgrade to the Whitehorse Centre (a regional venue for the performing arts).

The Belgrave and Lilydale rail lines run through Nunawading railway station. Bus routes 273, 901 and the orbital bus Springvale Road line 902—bus lines starting with 9 are SmartBus services with more frequent services, extended operating hours in the late evening on Sundays, improved timetable information at bus stops and some road space and traffic light priority.

Lindsay Avenue shops

This small strip of shops is designated as a Neighbourhood Activity Centre and is located Lindsey Avenue at the corner of Springvale Road between the Eastern Freeway and the Nunawading MegaMile approximately 700 metres from the Eastern Freeway. The retailers at the Lindsay Avenue shops depend on visibility to passing traffic on Springvale Road, so maintaining traffic flow on this arterial road would be important for these businesses.

Joseph Street industrial area

This small industrial area is located in Blackburn North off Middleborough Road close to the Eastern Freeway. The area is developed with a variety of building sizes suitable for businesses such as warehousing, showrooms, storage, services/repairs and small offices. Current tenants in the industrial area include wholesaling, engineering, a church and an online retailer with a showroom.

Doncaster Hill

As mentioned above, Doncaster Hill is a Major Activity Centre over 58 hectares anchored by the Westfield Doncaster Shopping Centre which has more than 120,000 square metres of retail floor space over several levels. The Westfield Doncaster Shopping Centre includes a range of shops, department stores, supermarkets, take-away food, restaurants and cinemas as well as over 4,500 car parking spaces. A development application to expand the centre by over 40,000 square meters is under consideration in the planning system. If approved, the construction activity has the potential to impact businesses in Doncaster Hill.

The City of Manningham identifies nine Neighbourhood Activity Centres and a network of smaller shopping strips or places with community facilities (local activity centres). There are three Neighbourhood Activity Centres in the broader area north of the Eastern Freeway, as described below.

Jackson Court

Jackson Court is a Neighbourhood Activity Centre located on Doncaster Road in Doncaster, approximately 1.7 kilometres from the Eastern Freeway. It includes a Dan Murphy liquor store, several restaurants and food outlets, cafes, hairdressers/barber, bank, pharmacy and other convenience-type retail as well as some offices. Near Jackson Court, Doncaster Road carries 12,000 to 16,000 vpd eastbound and 12,000 to 15,000 vpd westbound (between Wetherby Road and Blackburn Road). Dan Murphys is located in a prominent position and would benefit from exposure to traffic and other businesses in the centre would likewise be dependent on customers being able to easily access the centre. Maintaining traffic flows along Doncaster Road would be important for Jackson Court businesses.

Devon Plaza

The Devon Plaza Neighbourhood Activity Centre is located in Doncaster East along Doncaster Road west of the Blackburn Road intersection approximately 1.4 kilometres north of the Eastern Freeway. In a 2011 Structure Plan for the centre, Devon Plaza is referred to as the Doncaster East Village Activity Centre. The Neighbourhood Activity Centre is now named after the shopping centre with a supermarket located on the south side of Doncaster Road. Otherwise the centre includes some retail and commercial businesses along Doncaster Road and east towards Blackburn Road. The centre mainly serves a local catchment – its trade area as described in the Doncaster East Village Structure Plan (Manningham City Council, 2013) stretches north along Blackburn Road and south to the Eastern Freeway. Traffic modelling shows traffic volumes on Blackburn Road between the Eastern Freeway and Doncaster Road at 10,000 to 14,000 vpd northbound and 10,000 to 13,000 vpd southbound. Given its characteristic as a Neighbourhood Activity Centre serving a local population, accessibility for local residents along Blackburn Road and Doncaster Road to the centre would be important for businesses, particularly during the construction of North East Link.

Macedon Square

Macedon Square Neighbourhood Activity Centre is located in Lower Templestowe between Doncaster Hill and Bulleen at the intersection between High Street and Manningham Road approximately 1.9 kilometres north of the Eastern Freeway. With approximately 20 businesses, the Macedon Square Shopping Centre contains two supermarkets, a range of retail offers as well as offices and professional services. Opposite the shopping centre on Doncaster Road, Coles/Shell, Red Rooster and a car dealership benefit from exposure to passing traffic on Doncaster Road. Maintaining access for local traffic to this Neighbourhood Activity Centre would be important for businesses, particularly during the construction of North East Link.

6.5 Summary

The project alignment is located in a broader area that includes the Greensborough Major Activity Centre to the north, the Heidelberg Activity Centre and the Heidelberg West Industrial Estate to the west, and smaller centres at Watsonia Village and Bulleen Plaza. Business counts are not available for all centres, but the Greensborough Major Activity Centre is estimated to provide employment for approximately 3,000 people. There are approximately 600 businesses in the Heidelberg West Industrial Estate, some 60 businesses at Bulleen Plaza and approximately the same number (65) at Watsonia Village.

To complete the picture of the existing conditions for this business impact assessment, the businesses located within 200 metres from the project alignment are described. This estimate includes businesses that operate from the premises, and does not include site owners that lease their sites to other businesses or businesses that use premises within the area as an off-site storage facility. As noted earlier, the focus of this study has been on businesses that physically operate from the study area. Vacant premises (of which there are very few) have not been included.

Businesses within 200 metres of the alignment are predominantly service providers for consumers, and are largely focused on local markets. Breaking this down by precinct, the number of businesses within 200 metres of the alignment is:

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

For the 260 businesses identified, the nine largest sectors (as per the ANZSIC categorisation) account for 85 per cent of all businesses.

The major business types near the North East Link alignment are:

- Retail trade Approximately 90 businesses (figures rounded) close to the alignment are retail trade businesses comprising a variety of retail offerings including home building supply businesses and car dealerships.
- Other services accounts for approximately 55 businesses (figures rounded) close to the
 alignment. This category covers a diverse range of business types including automotive
 services, professional services, massage, beauty, and dry cleaning/laundromat
 service businesses.
- Construction businesses account for approximately 20 businesses (figures rounded) in the study area. This group incorporates builders, equipment hire, demolition companies, heating, ventilation and cooling (HVAC) businesses, and plumbing and electrical services.
- Health Care and Social Assistance businesses account for approximately 20 businesses (figures rounded). This category covers aged care facilities, medical centres and smaller medical, dental allied services practices.
- Arts and recreation services include approximately 20 businesses (figures rounded) in the study area. This is a diverse group of businesses. Five of these businesses are sporting clubs, there is a museum/gallery, as well as two private health clubs.
- Education and training has approximately 15 businesses (figures rounded) along the alignment.

The broader area includes one Metropolitan Activity Centre (Box Hill), several Major Activity Centres (Greensborough, Heidelberg, Victoria Street in Richmond, Smith Street in Collingwood/Fitzroy, Brunswick Street in Fitzroy, Kew Junction, Nunawading MegaMile and Doncaster) and an extensive network of Neighbourhood Activity Centres and minor activity centres. Most businesses in the broader area are located in the activity centres, with pockets of commercial/industrial businesses located in industrial areas. There are also a number of home based businesses in the broader area. Any home based businesses that would be displaced due to the project have been identified through consultation and communication activities.

7. Risk assessment

A risk assessment of project activities was performed in accordance with the methodology described in Section 5.5. The risk assessment has been used as a screening tool to prioritise the focus of the impact assessments and development of EPRs. The risk pathways link project activities (causes) to their potential effects on the environmental assets, values or uses that are considered in more detail in the impact assessment. Risks were assessed for the construction phase (which includes pre-construction and construction) and operation phase of the project.

The identified risks and associated residual risk ratings are listed in Table 7-1. The likelihood and consequence ratings determined during the risk assessment process and the adopted EPRs are presented in Appendix A.

Table 7-1 Business risks

Risk ID	Potential threat and effect on the environment	Risk rating					
Construction	Construction						
Risk BU01	Uncertainty for businesses about the future business environment may reduce business viability and therefore the availability of local jobs and services	Medium					
Risk BU02	Relocation of utilities cause interruption to availability of utilities and disrupt business operations	Low					
Risk BU03	Permanent acquisition of INZ1 land in Bulleen displaces businesses and reduces the number of jobs available for workers in this area	Planned (major consequence)					
Risk BU04	Permanent acquisition of INZ1 land in Bulleen displaces businesses and impacts on the viability of the remaining businesses in the area that have linkages with displaced businesses	Low					
Risk BU05	Full acquisition of land results in displacement of businesses along alignment and therefore reduces availability of local jobs and services	Medium					
Risk BU06	Partial acquisition of land cause disruption or reduced viability of businesses or commercial facilities	Low					
Risk BU07	Full acquisition of land results in business displacement which reduces the business viability	Medium					
Risk BU08	Temporary occupation of sites ⁵ for construction reduces the viability of businesses and commercial facilities	Medium					
Risk 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 including (but not limited to) businesses with outdoor serving areas, child care centres etc	Medium					
Risk 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	Medium					

⁵ Refer to EES Chapter 8 – Project Description for further detail.

Risk ID	Potential threat and effect on the environment	Risk rating
Risk BU11	Increased travel time from changed traffic patterns during construction reduce the attractiveness of businesses including (but not limited to) retail and service businesses, schools.	Medium
Risk 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	Medium

Risk ID	Potential threat and effect on the environment	Risk rating					
Operation	Operation						
Risk BU13	Noise and amenity impacts resulting from redistribution of traffic due to operation of North East Link may reduce the viability of businesses and commercial facilities whose operation is sensitive to noise and amenity impacts	Low					
Risk BU14	Business operational costs increase due to suppliers passing on the cost of North East Link tolls to access the business	Low					
Risk BU15	Potential travel costs increases caused by tolls or changes in travel time changes the shape of customer catchment of shopping precincts	Low					
Risk BU16	Road detours or other changed road and car parking conditions affecting businesses as a result of operation of North East Link cause reduced ease of access for deliveries, staff and customers	Low					
Risk BU17	Business properties temporarily occupied during construction not reinstated to a condition that is suitable for the resumption of prior activities and operation	Low					
Risk BU18	Changed traffic patterns can reduce passing trade (where more traffic is in the tunnel)	Low					

8. Impact assessment

This section considers the impacts of the construction and operation of North East Link as well as potential cumulative impacts. The construction phase has been further divided into preconstruction impacts and construction impacts.

Impacts are assessed for each of the precincts (refer Section 8.1) and are generally grouped by key themes (refer Section 8.2).

8.1 Key themes and concerns

Land acquisition is expected to permanently displace businesses for construction purposes. It is anticipated the majority of businesses within the Bulleen Industrial Precinct would be displaced and would need to relocate (if this is possible and viable). NELP is undertaking an assessment of available industrial and commercial land and precinct opportunities within 5–10 kilometres of the Bulleen Industrial Precinct which could be considered for as a potential relocation site for displaced businesses.

Business displacement cause the fragmentation of the Bulleen Industrial Precinct because the businesses within the precinct cooperate with each other, but not (particularly) with businesses beyond it. However, it is as yet unknown whether the displaced businesses would relocate together, or separately, depending on available land and the situation of individual businesses. The assumption in this study is that displaced businesses would separate (that is, become fragmented) and their business cooperation would cease or be diminished.

Desktop analysis and assessment of the information gathered through the business surveys provided important insights into the actual and perceived potential impacts of North East Link during its pre-construction, construction and operational phases. The major impacts identified included uncertainty, issues with maintaining customer base continuity, issues with maintaining access, investment opportunities, issues with loss of benefits of clustering and amenity issues.

The impacts have been categorised into key themes for assessment, which are listed in Table 8-1.

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 uncertainly 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.	Х		
	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		

Impact	Theme	Description	Pre-construction	Construction	Operation
	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	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

8.2 Construction impacts

8.2.1 Pre-construction impacts

Pre-construction impacts could include reduced business investment and expansion, and challenges with increased staff turnover and staff attrition (risk BU01).

The key factor driving pre-construction impacts is uncertainty about the final project design and project timing. This uncertainty can affect operational decisions and business investment. With regard to the final project design, it is possible that between now (the reference project) and when the final design was completed, the project footprint be refined. In particular, changes may occur to facilitate geometric or safety enhancements or to respond to identified effects. For example, the project footprint may be reduced to avoid or minimise property impacts. This uncertainty about the actual project footprint leaves businesses feeling unsure about the actual impacts, such as whether their access arrangements would change or whether the amenity of the area surrounding their business would be impacted.

Business investment and staff retention

Businesses are not able to commit to further investment in their enterprise without certainty about whether or not they would continue to operate from their current sites. The business survey revealed that a number of businesses had intended to physically expand or upgrade their business facilities over the next five years; four businesses in the M80 Ring Road to northern portal precinct, 17 in the northern portal to southern portal precinct and two out of the five businesses surveyed in the Eastern Freeway precinct. These plans have been put on hold for some businesses due to potential land acquisition and uncertainty about their future operations. This indicates the project may be adversely impacting employment growth during its pre-construction phase.

Another factor that could result from uncertainty about the future is increased staff turnover. While uncertainty remains about the future of businesses in this precinct, staff may seek alternative employment.

Staff retention may be more challenging as employees seek long-term employment certainty. While staff would not be directly impacted during the pre-construction phase, some businesses expressed concern that negative perceptions about the future among employees could increase staff turnover. This is a possibility. Furthermore, staff retention may become a more significant issue if land acquisition occurs and/or there are significant barriers to employee access during the project's construction.

Schools as businesses

Uncertainty about the project also affects schools. For schools, there is a risk the location of materials storage and stockpiling for the project in their vicinity would reduce the attractiveness of the school experience and impact the ability to attract and retain students (risk BU10). This risk was mentioned by one school that was surveyed (they commented that some prospective parents did not enrol their child due to the project and uncertainties associated with the project). In terms of business impact on this and other schools in the area, the impact on the financial viability of the schools is likely to be low. For example, the schools along Bulleen Road are highly regarded, have strong traditions that influence student school selection and there are waiting lists for students to enrol, ensuring the size of the enrolled student body does not decline.

Utilities

Pre-construction impacts also include potential risk of business disruption due to the relocation of utilities in preparation for construction (risk BU02).

Some utilities that businesses rely on would need to be moved to accommodate the project. Full details of utilities works are provided in EES Chapter 8 – Project description. In summary:

- M80 Ring Road to northern portal precinct telecommunication towers near Plenty Road, electricity transmission lines near Watsonia Village and water mains along Greensborough Road which would be upsized at the same time
- Northern portal to southern portal precinct telecommunication base station on Greenaway Street, Bulleen, the Yarra East main (a Melbourne Water sewer) and three Melbourne Water watermains
- Eastern Freeway precinct no utilities have been identified which would need to be moved.

It would be important that utility services to businesses would not be interrupted during the project's construction, particularly water and power supply. It is preferable the relocation of utility services are staged during early works and pre-construction to limit the impact on businesses, as most across the project operate standard (daytime) hours. However, night and weekend utility relocation works are preferable around the Bulleen Industrial Precinct to limit the impacts while maintaining services during peak operating times.

8.2.2 Land acquisition

Land would be acquired for the construction and operation of North East Link. Decisions to acquire land would be guided by supportive legislation and in accordance with the *Land Acquisition and Compensation Act* ('LAC Act') *1986* and the *Major Transport Projects Facilitation Act 2009*. Where possible, construction sites, infrastructure and other aspects of the project have been selected to minimise temporary occupation and permanent land acquisition impacts to businesses. Businesses would be consulted to understand individual circumstances relating to ongoing sustainability and the availability of replacement properties for businesses on land that would be acquired. Typically, this process would occur over more than 12 months for the types of businesses located along the North East Link alignment. This business impact assessment does not address business compensation due to land acquisition; this would be covered by the established process under LAC Act.

The reference project assessed in this report would require permanent land acquisition (full or partial) and the temporary occupation of properties affecting 102 businesses. Table 8-2 summarises the number of businesses that would be affected in each precinct, and whether they would be affected by full acquisition, partial acquisition or temporary occupation.

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

Employees working at the businesses affected by full land acquisition (in the M80 Ring Road to northern portal and the northern portal to southern portal precincts only) would be affected by the displacement. Table 8-3 summarises the businesses that would be displaced by the full acquisition of land and the number of employees that would be affected by this displacement. The table also shows the local employment at statistical area 2 level⁶ and the number of employees that would be affected by the displacement as a percentage of the local employment (2016 Census).

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	1,265 ¹	6%
Northern portal to southern portal	85	830	653	2,710 ²	31%

Source: Business surveys, 2018, ABS Census 2016 working population profiles Notes: (1) Watsonia Statistical Area (SA2 Level), (2) Bulleen Statistical Area (SA2 Level

The number of businesses that would be impacted by land acquisition in the M80 Ring Road to northern portal and Eastern Freeway precincts is relatively low compared with the total number of businesses in these precincts. For example, in the M80 Ring Road to northern portal precinct, one business (in Watsonia Village) would be displaced while the other displaced businesses are located along Greensborough Road outside Watsonia Village. This would displace an estimated 80 jobs (rounded) which accounts for approximately 6 per cent of local employment in the Watsonia Statistical A Level 2), as shown in Table 8-3.

The majority of business impacts would be businesses located in the northern portal to southern portal precinct. Here, displacement of businesses due to land acquisition would impact local availability of employment. The impact is particularly significant in the Bulleen Industrial Precinct where approximately 80 businesses would be displaced due to land acquisition, which would displace an estimated 770 jobs (rounded).

⁶ Statistical Areas Level 2 (SA2s) are designed to reflect functional areas that represent a community that interacts together socially and economically. They consider Suburb and Locality boundaries to improve the geographic coding of data to these areas and in major urban areas SA2s often reflect one or more related suburbs. The SA2 is the smallest area for the release of many ABS statistics.

Total business displacement in this precinct would account for approximately 31 per cent of the current local employment in the Bulleen statistical area (SA2). The Heidelberg Major Activity Centre to the west of the Bulleen Industrial Precinct currently provides employment approximately 13,570 people (ABS, WPP Heidelberg-Rosanna SA2) and there are strategies in place to grow this Major Activity Centre, increasing the demand for labour.

The anticipated displacement could potentially affect the viability of a few of the 30 or so remaining businesses in the area, particularly smaller food and coffee outlets that partly rely on custom from the Bulleen Industrial Precinct businesses. While the Bulleen Industrial Precinct is currently a local employment hub (and a number of businesses on the perimeter would remain as they are outside the area required for construction), its post-construction role is not yet known.

Of note in relation to employment opportunities during construction, the project has a commitment to facilitate opportunities for economic development and provide a skilled local workforce by employing and training local people. This is set out in the North East Link Sustainability Strategy.⁷

It is anticipated the construction workforce for the project would vary in size over its construction phase. It is expected to peak at around 2,800 people per shift. This is a substantial workforce spread across the project study area, as shown in Table 8-4, which would provide local employment opportunities and also generate customers for some surrounding businesses, such as food outlets.

Table 8-4 North East Link construction workforce

Precinct	Estimated construction workforce (peak per month)
M80 Ring Road to northern portal	675
Northern portal to southern portal*	1,000
Eastern Freeway	1,125

M80 Ring Road to northern portal precinct

It is expected that six commercial properties (excluding one home based business considered a residential property) would be fully acquired in the M80 Ring Road to northern portal precinct (risk BU05). Three of these commercial properties are owned by VicRoads and leased to the businesses occupying these sites (two in Macleod on Greensborough Road between Lenola Street and Yallambie Road, and the other near the intersection between Greensborough Road and Grimshaw Street). The business owners are aware their leases can be terminated at short notice. The remaining three properties are located near the Greensborough Bypass/Grimshaw Street intersection, and south near Yallambie. One home based business in a residential property would also be displaced in this precinct. Businesses affected on these sites include a petrol station, a fast food restaurant, a café, a paver and bricks retailer, and a building suppliers and hardware store.

⁷ http://northeastlink.vic.gov.au/ data/assets/pdf file/0003/328467/Sustainability-Sep-18.pdf

Each of the affected businesses occupy a niche in the supply of goods and services in the local area. For example, the building supplies and hardware store serves tradespeople who live locally, mainly in the early morning. It carries a greater range of goods than the other local hardware store. The petrol station is in a convenient location for traffic exiting from the M80 Ring Road and is the first on Greensborough Road (there are other petrol stations on Lower Plenty Road and Rosanna Road and in Watsonia). The displacement of these businesses would likely affect convenience for their typical customers. However, in the urban environment there are other businesses that can provide a similar offering within a 20-minute drive.

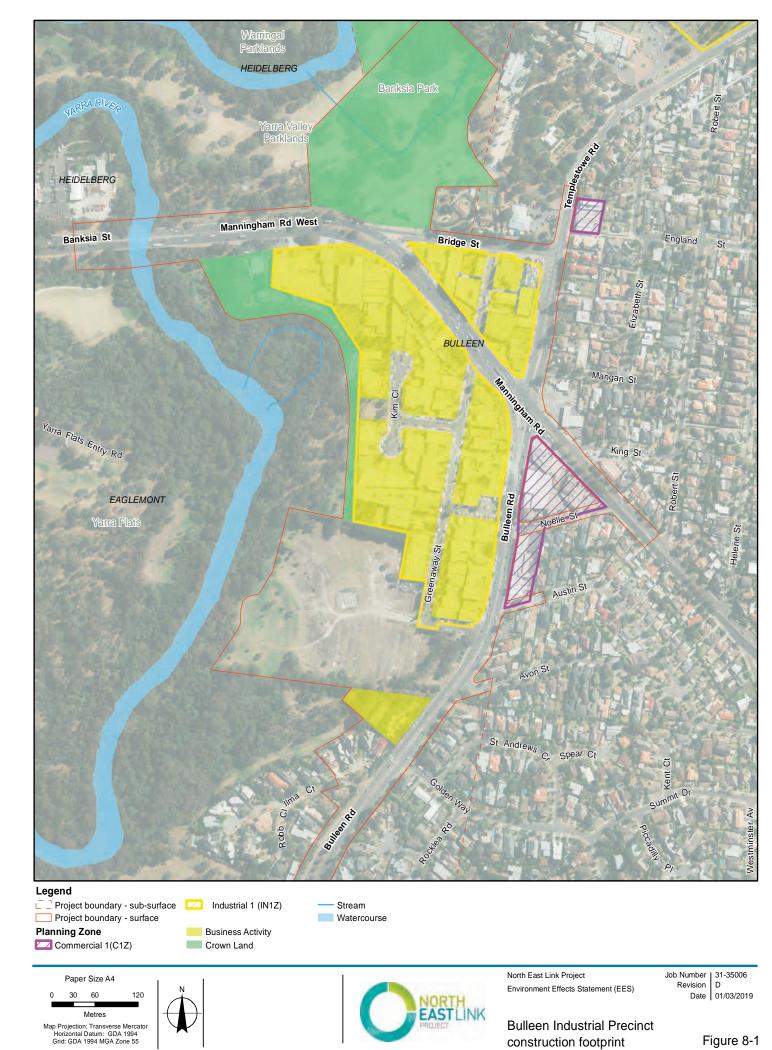
Northern portal to southern portal precinct

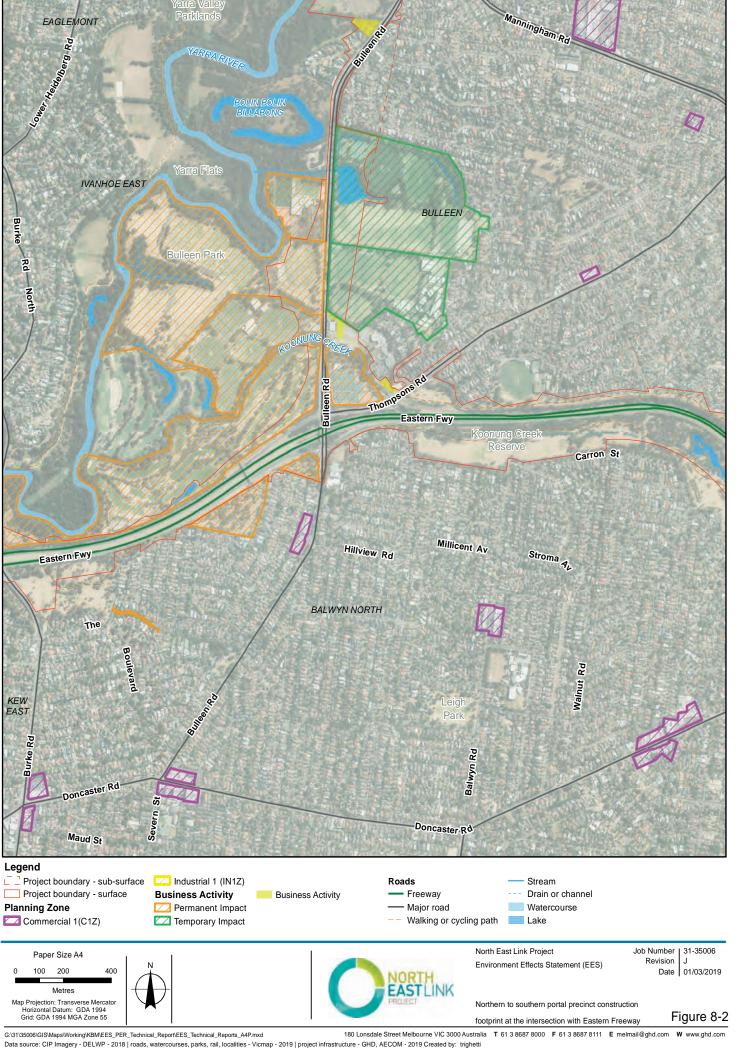
The Bulleen Industrial Precinct would be significantly impacted by land acquisition due to the large land requirements for the new interchange at Manningham Road as shown in Figure 8-1 and Figure 8-2 (risks BU03, BU04). Full and partial land acquisition would occur in the area close to the southern portal 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. Notwithstanding, it is noted the Bulleen Industrial Precinct is zoned INZ1, whereas 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. 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.

Partial acquisition would not displace any businesses, although it is noted that a hospitality venue located in Bulleen would lose part of their carpark. However, the car park would be reconfigured and the total number of car parks would be retained post-construction. During construction, the aim would be to maintain the same number of car parking spaces as currently provided.

Temporary occupation of land is also required for construction activities (risks BU08, BU17). Temporary occupation would partially impact the use of facilities during the project's construction. Sporting grounds have been identified for use as construction compounds required for construction purposes, and so alternative facilities would be required for sporting activities to continue during construction. The contractors would be required to minimise impacts on sporting, recreation and other facilities (EPR SC4) and NELP is working with sports clubs and schools to identify solutions for temporary occupation and permanent acquisition.





Acquisition of land within the precinct would displace businesses which can impact supply chains and customer sharing (risk BU05, BU06). Customers may choose to travel elsewhere, where business clustering offers a level of convenience they currently benefit from. In addition, remaining businesses would possibly need to source new suppliers in other locations if the businesses they have existing commercial relationships with relocate due to land acquisition. 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.

Temporary occupation is expected for a number of businesses in the precinct (risk BU08). However, no business displacement is expected due to temporary occupation.

Eastern Freeway precinct

Many of the impacts on businesses in the Eastern Freeway precinct would likely occur during the project's construction. Impacts would largely be due to land acquisition (risk BU05, BU06, and BU07), temporary occupation (risk BU08) as well as changes to access and amenity (risk BU09, BU10, and BU12). Effects associated with physical construction (dust, noise and vibration) and changes to traffic movement due to construction-related detours, road closures and access changes have potential to impact access and amenity.

Construction of the North East Link between North East Link and the Eastern Freeway would likely impact five businesses in this precinct (risk BU05, BU07), (four through displacement and one through necessary realignment of activities on the premises).

8.2.3 Amenity

M80 Ring Road to northern portal precinct

The level of amenity impacts would depend on the business type. Retail, accommodation and other businesses that provide on-site customer service have greater sensitivity to amenity impacts, such as noise dust and vibration compared with businesses offering automotive and manufacturing services. Construction sites would likely impact amenity with increased noise, dust and vibration and a suite of EPRs have been developed to minimise and manage these potential impacts. The loss of public greenspace and sporting grounds for any construction compounds required for construction purposes (risk BU09) also has the potential to impact amenity, with reduced access to recreational space as discussed in Technical report I – Social. Furthermore, increased numbers of construction-related heavy vehicles and other vehicles on the road network could diminish the attractiveness of the M80 Ring Road to northern portal precinct for customers due to changed traffic conditions (detours, road closures, lane restrictions) and congestion due to the presence of additional construction traffic. Congestion, closures and diversions and EPRs to address these potential impacts are discussed in Technical report A – Traffic and transport.

A number of surveyed businesses in this precinct expressed concerns about noise and vibration from the project's construction. These included retailers and businesses that provide on-site health services and other on-site services directly to customers.

Northern portal to southern portal precinct

For the businesses that would remain during construction, the degree of impact to amenity would depend on the business type. Businesses that provide on-site customer service have greater sensitivity to amenity impacts such as noise, dust and vibration compared with manufacturing businesses or those that provide automotive services.

There is a risk that businesses where views and amenity are part of the customer service would lose custom during the project's construction (risk BU09). These businesses are quite sensitive to reduced revenues. Museums, for example, are unable to significantly reduce the cost of providing the museum experience as staffing and exhibit costs are mainly fixed. In addition, private childcare centres operate in a competitive environment and could potentially lose customers if the facility is located in a construction zone where children would be affected by amenity impacts such as noise dust and vibration (risk BU10). The social aspects of these impacts are discussed in Technical report I – Social.

Construction sites and construction compounds would impact amenity with increased noise, dust and vibration and the loss of public green space and sporting grounds for laydown. Furthermore, increased numbers of construction-related heavy vehicles and other vehicles on the road network could diminish the attractiveness of the precinct to customers due to changed traffic conditions and increased traffic volumes. Thirty-six per cent of businesses surveyed for the business impact assessment expect to be impacted by noise, dust and vibration during the project's construction. These businesses provide on-site educational services, painting and technical services that require a highly stable operating environment. There is also a risk that deliveries to businesses in this area be delayed due to the changed traffic conditions and this would affect customer service (risk BU12).

Eastern Freeway precinct

Two businesses within this precinct identified in the business survey that reduced amenity would affect them. Businesses identified that dust would significantly impact operations as customers attend the businesses for outdoor sports and recreation. Furthermore, noise associated with construction works and increased heavy vehicles are anticipated to limit the activities of the businesses.

Technical report B – Air quality and Technical report C – Surface noise and vibration have been reviewed to provide a technical base and understanding of the actual and potential amenity impacts of the project.

Technical report B – Air Quality concludes that construction impacts (dust) could be adequately managed with the development and implementation of Construction Environmental Management Plans (CEMPS) and relevant EPRs (EPR EMF2, EPR AQ1). No sensitive receivers, including any businesses, require any particular treatment or management.

Technical report C – Surface noise and vibration concludes that construction activities would be undertaken in accordance with EPA Victoria Noise Control Guidelines (EPA 1254) during 'normal working hours' and that noise associated with increased traffic would create a significant acoustical impact. Where works were proposed outside standard construction hours, it would be a requirement to implement a site-specific Construction Noise and Vibration Management Plan (CNVMP). Measures in the CNVMP would be as per the requirements of the Roads and Maritime Services Construction Noise and Vibration Guideline (CNVG). Based on this, the noise effects could be appropriately managed during construction.

8.2.4 Traffic and transport

Changes in traffic patterns during construction

The risk assessment identified that increased travel times due to changed traffic patterns during the project's construction was a risk to the attractiveness of retail and services businesses (risk BU 11).

This risk is directed at circumstances where congestion due to construction activity would make it more difficult (so less attractive) to visit the shops at the local activity centre, and that businesses would lose revenue.

Technical report A – Traffic and transport states that some closures and diversions would be required to facilitate the project's construction and these closures and diversions would need to be undertaken to minimise impacts on the surrounding area. However, because a construction methodology has not been agreed by the contractor (this report assesses a reference project which outlines a possible construction methodology), guidance on closures can only be provided for the reference project.

Technical report A – Traffic and transport states that some roads would require short-term closure to allow for construction activity, but that short-term closure would normally occur overnight or possibly over long weekends. Short-term closures may impact local traffic flow and so Traffic Management Plans would need to be developed that provide alternative access arrangements and identify adverse impacts and suggest mitigating measures to address these. These are covered in Technical report A – Traffic and transport.

As discussed in Technical report A – Traffic and transport, longer-term closures may be required to allow for construction activities such as bridge construction, road widening or excavation works. Construction works that affect traffic and are in the vicinity of activity centres are listed in Table 8-5.

Technical report A – Traffic and transport addresses congestion, closures and diversions and provides EPRs to address these potential impacts.

Table 8-5 Possible business impacts due to traffic changes during construction

Project section	Element	Duration	Closure type	Business impact
M80 Ring Ro	oad to northern p	oortal		
Kempston Street	Demolition of bridge	One week	Road closure	This is a short-term closure and not a direct route to a business location, no significant business impacts expected.
Grimshaw Street to Watsonia Road	Greens- borough Bypass	52 weeks	Temporary detour on ramps with speed restrictions, 2 lanes in each direction	Likely slower traffic flow and congestion; modelling indicates reduced traffic on Greensborough Bypass and increased traffic on Watsonia Road. Traffic signal changes proposed on Watsonia Road to avoid this, Potential local impact on business on corner of Grimshaw Street and Macorna Street (car wash) if access to this business is compromised.
Grimshaw Street to Watsonia Road	Grimshaw Street – new rail bridge	26 weeks	Temporary diversion onto side track. 2 lanes in each direction	Likely slower traffic flow and congestion may reduce traffic volume through the area. Potential congestion in Watsonia Village due to increased traffic flow (up 1,000 vpd (twoway) as traffic avoids work zone. Mitigating measures proposed in Technical report A – Traffic and transport. Potential local impacts on businesses in Greensborough Road that are accessed from Grimshaw Street if access to these businesses is compromised.

Project section	Element	Duration	Closure type	Business impact					
Northern po	Northern portal to southern portal								
Manningha m Road interchange	Manningham Road – new bridge structures	26 weeks	Speed reductions as eastbound reduced to 1 lane, and westbound reduced to 2 lanes	Possible impacts on businesses that rely on passing trade (petrol stations, take-away food) as traffic avoids construction zone. However, the number of petrol stations would be reduced due to land acquisition so the net impact could be a benefit. Possible impact on attractions (Museum and café) if frequent visitors avoid area due to construction. Implementation of measures to support businesses during construction include a range of a range of marketing and promotional activities to encourage awareness and patronage of businesses located near construction sites.					
Manningha m Road interchange	Bridge Street – new bridge structures	6 weeks	Road closure, not concurrent with the above	As above.					
Eastern Free	eway								
Burke Road to Doncaster Road	Doncaster Road – demolition and reconstruction of bridge	52 weeks	Reduction in turn lane capacity, maintain 2 through lanes	Traffic modelling indicates there may be some distribution of traffic away from Doncaster Road at peak periods, but minimal redistribution outside peak periods. Greythorn Neighbourhood Activity Centre is located on Doncaster Road approximately 650 metres south of Eastern Freeway (and the bridge). Approximately 70 per cent of Greythorn's customers are from the local area but there is a risk of loss of non-local trade from redistribution of peak period traffic. Non-peak traffic is not expected to be redistributed. There is a risk of lost trade from the redistribution of peak period traffic.					

Source: Technical report A - Traffic and transport

M80 Ring Road to northern portal precinct

Increased travel times associated with construction activities (detours, road closures, delays) causing annoyance and difficulty for people would likely affect customers visiting businesses. In addition, the traffic changes could cause disruption, delays or require more careful planning (changes to travel patterns) for employees travelling to and from workplaces, deliveries to and from businesses, and business operations where movement is required to and from the business premises (risk BU11, BU12). Of the 21 businesses surveyed in the M80 Ring Road to northern portal precinct for the business impact assessment, over half expressed concern about changes to business access and travel delays due to traffic congestion and diversions during the project's construction. These concerns were also voiced by the Watsonia Traders Association and Greensborough Chamber of Commerce on behalf of their business membership.

The Greensborough Chamber of Commerce representatives were particularly concerned about their customers from west of Greensborough Road that might be inconvenienced in accessing the centre due to roadworks on Grimshaw Road and the intersection with Greensborough Road.

As mentioned in Section 6.2.2, the Greensborough Activity Centre has a trade area catchment that 'would therefore be expected to be primarily orientated toward servicing the immediate surrounding area and less densely populated areas to the north-east, so the area west of Greensborough Road is not part of its primary orientation. Discouraged customers may consider Northland Shopping Centre but this is approximately twice the distance measured from Watsonia than to Greensborough so travel distance could be a factor. According to the Greensborough Chamber of Commerce, the centres differ in regard to their retail focus, with Greensborough focusing on an extensive fresh food offer which also contributes to the centre maintaining its usual customer base.

Northern portal to southern portal precinct

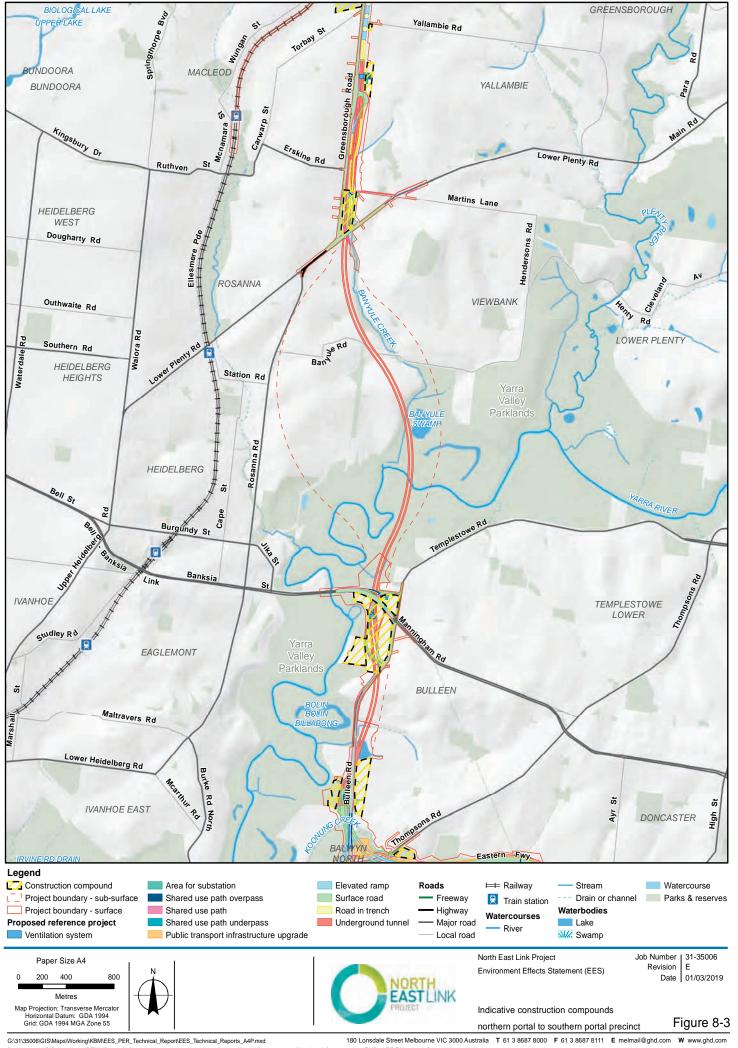
Technical report A – Traffic and transport identifies impacts to traffic and transport within the project construction areas. The report identifies impacts to access, increased presence of heavy vehicles and other construction vehicles along the alignment (risk BU11, BU12). Initial analysis indicates there would be up to 700 trucks per day on the roads at peak construction delivering materials and removing spoil from construction sites. Haulage would be via the M80 Ring Road and the Eastern Freeway, with some along Rosanna Road. Haulage of spoil would occur 20 hours a day, although truck numbers would be limited during peak times to avoid congestion.

Road closures for construction activities would likely occur overnight or during long weekends wherever possible. Short-term closures would likely occur during the delivery of large construction components such as beams and bridge sections. Lane closures would only be permitted outside peak periods while full closures would only occur overnight. Road closures and changed traffic conditions for the northern portal to southern portal precinct are summarised in Table 8-6.

Table 8-6 Road closures and changed traffic arrangements, northern portal to southern portal precinct

Existing road	Description	Modification	Reason for change
Bridge Street, Bulleen	Section of Bridge Street between Manningham Road and Greenaway Street	Closed between Manningham Road and Greenaway Street	Providing alternative route through the proposed interchange at Manningham Road
Greenaway Street, Bulleen	Between Manningham Road and Bulleen Road	Closed between Manningham Road and Bulleen Road	Due to the proposed interchange at Manningham road and construction of the cut and cover and mined tunnels for North East Link
Kim Close, Bulleen	Adjacent to Greenaway Street	Closed	Due to construction of the proposed Manningham Road interchange and construction of the cut and cover and mined tunnels for North East Link

A number of construction compounds would be required for construction purposes within the northern to southern portal precinct. The locations for these are being discussed with local councils, landowners and schools. Indicative construction compound areas are shown in Figure 8-3.



Construction compound and construction zones would require high frequency access/egress by construction machinery, trucks carrying spoil and materials to and from sites. Access/egress at these sites would likely be disrupt traffic along Bulleen Road, Manningham Road and Bridge Street because Greenaway Street is expected to be closed for the duration of the project's construction. An additional temporary signalised intersection is proposed for the site at the existing Bulleen Industrial Precinct which would slow traffic flow through the precinct.

In the instances where businesses are not acquired, approximately half of businesses surveyed for the impact assessment stated their operations would be impacted if construction activities changed or restricted access to their businesses (risk BU12). Businesses expect that increased travel times, congestion, road closures and diversions due to construction activities could impact operations (BU11). To mitigate this impact, businesses noted that maintaining clear access or access in its current form is a priority to allow relevant business dependencies and customers to easily move to and from the existing location. Furthermore, traffic management surrounding the precinct was deemed to be important to ensure the management of local congestion.

Changes to access during the project's construction may disrupt the continuity of the current customer base of businesses remaining in the northern portal to southern portal precinct. Reduced ease of access from increased heavy vehicles and other construction traffic accessing sites and construction compound may mean the long-term loss of established customers. Businesses with competitors in the local area are concerned that customers would seek alternatives, and potential new customer patronage that would usually be derived from passing trade may be lost. Businesses that remained during construction would likely be further impacted by the loss of nearby businesses which they have existing commercial relationships with or which share a common customer base. There is also a risk these businesses would lose passing trade through loss of exposure to traffic during the project's construction. Responses 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 for petrol and fast food businesses. However, since traffic flow along Bulleen Road is not expected to reduce during the project's construction, passing trade through the loss of exposure to traffic during is unlikely to be a significant risk. Maintaining the current availability of parking would be important so that shop trade was not affected.

Eastern Freeway precinct

The Eastern Freeway would be a major route for trucks coming to and from the project construction footprint and so increased heavy vehicle numbers and other construction vehicles would occur along the corridor.

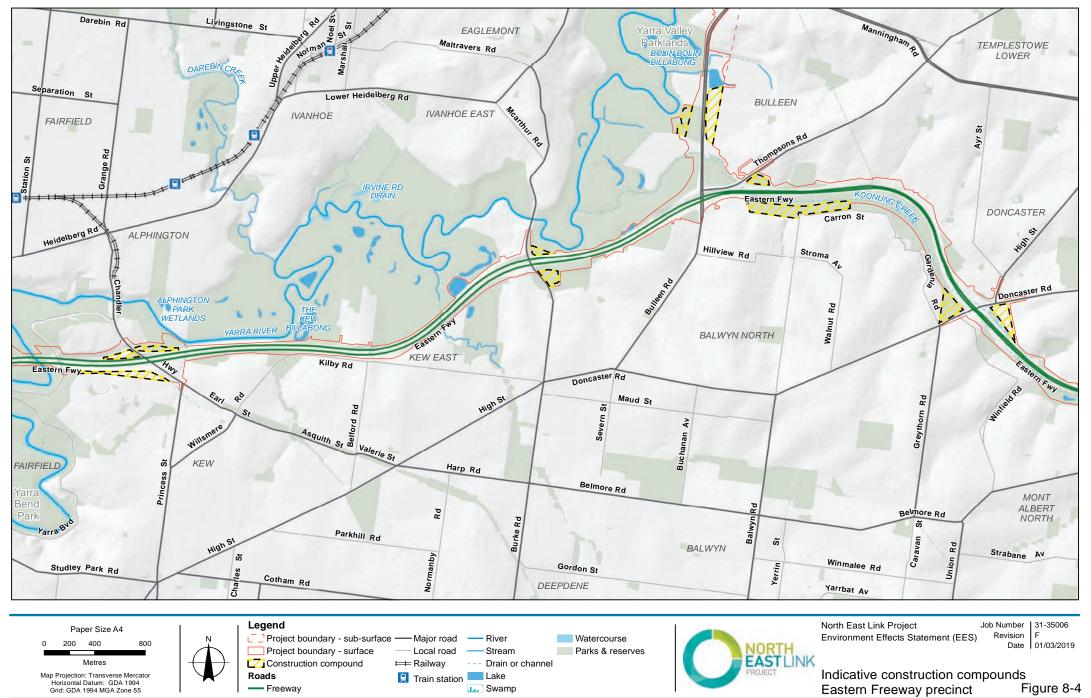
Technical report A – Traffic and transport provides estimates of likely transport movements, impacts to access, increased presence of heavy vehicles and other construction vehicles along the project alignment (risk BU11, BU12). In the Eastern Freeway precinct, the peak number of truck movements across the entire construction site would be 1,090 movements per day for the delivery of materials and removal of spoil from sites. Haulage of spoil would occur 20 hours a day with the bulk of the material moving north to the M80 Ring Road. This would reduce the number of trucks using Rosanna Road. Truck numbers would be limited during peak times to avoid congestion.

Road closures for construction activities would likely occur overnight or during long weekends where possible. Short-term closures would likely occur during the delivery of large construction materials such as beams and bridge sections. Lane closures would only be permitted outside peak periods while full closures would only occur overnight. Road closures and changed traffic conditions for the Eastern Freeway precinct are summarised in Table 8-7.

Table 8-7 Road closures and changed traffic arrangements,
Eastern Freeway precinct

Existing road	Description	Modification	Reason for change
Unnamed Road, Bulleen (linking to Carey Sports Complex)	Section of unnamed Road west of the new Bulleen Road to the T-junction adjacent to Carey Grammar Oval	Closed	Reconstructing Bulleen Road, which closes access to unnamed Road

In addition, a number of construction compound would be required for construction purposes in the Eastern Freeway precinct. The locations of these are being discussed with local councils. Indicative construction compound shown in Figure 8-4. Construction compound require additional access points for construction vehicles and workers and would likely indirectly impact traffic when vehicles were entering and exiting the areas.



The businesses within the Eastern Freeway precinct are mainly accessed by car and so the impact to the transport network would depend on how customers attend the businesses. Access would be maintained to all businesses during the project's construction. However, increased heavy vehicles and the significant works required at the Eastern Freeway interchange may deter customers visiting these businesses.

The Eastern Freeway interchange is bordered by education facilities, clubs and hospitality venues as well as sporting and leisure facilities and their associated businesses. Increased truck movements would likely impact the attractiveness of the area to patrons of the venues and to participants in leisure activities (risk BU11). This attractiveness would likely be further reduced due to the temporary occupation of some sporting fields and facilities in the area, resulting in demand necessarily being accommodated over a smaller number of facilities (and increased congestion as a result). Reduced attractiveness would possibly reduce patronage and business revenue.

8.2.5 Home based businesses

The precincts and broader areas include a number of home based businesses. A few have been identified along the alignment in the precincts, and these are small businesses mainly employing the home-occupants. One home based business would be displaced as a result of acquisition but it has been assumed the business would relocate to the occupants' new home.

Community consultations identified that a small number of home based businesses would be impacted by construction activity (noise, vibration) which could affect the ability of homeoccupants to work from their home office. The management and mitigation of impacts on identified home based businesses would be covered under the relevant business EPRs as discussed in Section 8.5.

8.3 Operation

8.3.1 Land reinstatement

Once the project's construction was complete, temporarily occupied sites would need to be reinstated to a condition suitable for the resumption of previous activities and operation, subject to consultation with the relevant landowner. There is a risk the properties would not be reinstated to a suitable condition (risk BU17). This risk is relevant for two businesses (educational facilities) where part of the playing fields/sporting grounds would be temporarily occupied. The reinstatement of playing fields requires attention to drainage, soil structure and quality of surface, and requires a timeframe that can accommodate the laying and growing of turf. However, the necessary skills to reinstate the sites are generally available in the Melbourne area and the likelihood that reinstatement would not be to a suitable condition is low.

A third business would lose parts of their existing carpark due to partial acquisition, however the car park would be reconfigured and the total number of car parks would be retained post-construction. Car parking at current levels would be maintained during construction of the project.

8.3.2 Amenity

M80 Ring Road to northern portal precinct

Diverting traffic into the North East Link tunnels would improve amenity along Greensborough Road. This would benefit a couple of businesses, particularly an aged care facility, a dental clinic and an accommodation business. Home based businesses located near Greensborough Road would also expect to benefit from improved amenity.

Northern portal to southern portal precinct

Diverting trucks from local and arterial roads in Melbourne's north-east onto North East Link, the connecting Western Ring Road and Eastern Freeway would improve amenity in the precinct. This would be a positive outcome for businesses that rely on positive amenity, such as restaurants, cafes and a number of retailers. Twenty-eight per cent of surveyed businesses within the northern portal to southern portal precinct expect access to improve their businesses, including customers and employees travelling to and from the business. Sixty per cent of surveyed businesses identified reduced traffic congestion as a positive outcome.

However, there is also the potential for the redistribution of traffic onto North East Link to reduce the viability of nearby businesses and commercial facilities whose operation is sensitive to noise and amenity impacts (risk BU13). For example, this may include nearby golf courses as well as any cafés with outdoor seating where a pleasant amenity is part of the customer attraction. The risk is minor, the modelled traffic levels on Manningham Road would be approximately 16 per cent lower in 2036 with North East Link than without the project (refer to Technical report A – Transport).

Golf courses along the Eastern Freeway are also businesses that are sensitive to noise and amenity impacts. The construction of new or replacement noise walls that comply with VicRoads requirements would mitigate any noise impacts from increased traffic along the Eastern Freeway.

In addition, a hotel (pub, gaming venue and function centre) is located in Thompsons Road close to the proposed bus station and Park and Ride facility at the corner of Bulleen Road and Thompsons Road. Traffic to access the Park and Ride would be limited and is not expected to generate noise or amenity impacts. There are also three cafés/take-away food outlets on Bulleen Road, but they do not have outdoor seating and mainly rely on convenience and location for customers so amenity impacts are not considered particularly relevant for these businesses.

Technical report B – Air quality and Technical report C – Surface noise and vibration have been reviewed to provide a technical base and understanding of the actual and potential amenity impacts (noise, dust vibration) of the project's operation.

Technical report B – Air quality concludes that relevant air quality objectives would generally be met during the operation of North East Link. The exception is where the ambient air quality already exceeds the objectives. No sensitive receivers, including any businesses, would require any particular treatment or management. EPRs include the requirement to design the tunnel ventilation system to meet EPA requirements for air quality (EPR AQ2) and to undertake an ambient air quality monitoring program to measure the air quality impacts of North East Link (EPR AQ4).

Technical report C – Surface noise and vibration concludes that a major benefit of the project would be a substantial reduction in the volume of trucks on the local road network to link the Eastern Freeway with the M80 Link Road. The reduced truck volumes along this section would also reduce engine brake noise. At other locations along the study corridor, the elimination of intersections and smoother traffic flows would be expected to reduce the frequency-of-use of engine brakes. In terms of the potential change in traffic noise on the wider road network (away from the study corridor), there are many roads where a reduction in the level of traffic noise is predicted once the project was operating. While it is predicted that some roads would experience a slight increase in traffic noise, the highest increase would be 1.4 dBA, which is considered minimal and generally unnoticeable. Technical report C – Surface noise and vibration that with implementation of EPRs (EPR NV1 and NV2), noise effects from the project would be within relevant guidelines.

8.3.3 Traffic and transport

Changed traffic patterns could reduce passing trade where traffic is diverted into the North East Link tunnels (risk BU18). This was particularly considered a risk for remaining businesses in Bulleen Road as these are mainly retailers (such as fuel, fast food, electrical supplies and plumbing supplies).

Consultation with trade associations and local councils indicated there was concern that changed traffic volumes would impact businesses in activity centres. These concerns and impacts are discussed below.

Bulleen Industrial Precinct

Traffic volumes in 2036 with are not forecast to reduce in Bulleen Road between Manningham Road to the Eastern Freeway with or without the project (refer to Technical report A – Traffic and transport.) Passing trade would therefore unlikely decrease.

Maintaining roadside car parking on the east side of Bulleen Road (in front of businesses) would be important.

Watsonia Village

Increased traffic volumes in the vicinity of Watsonia Village have been predicted due to the project (refer to Technical report A – Traffic and transport).

This means that passing trade would unlikely decrease. Traffic modelling predicts limited growth during peaks and Grimshaw Street and Watsonia Road are anticipated to operate without a material increase in congestion or delay in the peaks.

However, Watsonia Road would be markedly busier in 2036 than today with or without the project and it would be important to maintain customer amenity for businesses in Watsonia Village.

Centres within the broader area

Heidelberg Major Activity Centre

Major access routes to the Heidelberg Major Activity Centre includes Banksia Road, Rosanna Road and Manningham Road. Traffic volumes on Banksia Road are forecast to remain at approximately the same level with the project in 2036 (but increase significantly under the no project scenario). Current traffic volumes on Rosanna Road are forecast to reduce with the project. It is noted the Heidelberg Traders Association did not express any concerns with the project, nor centre management at the Warringal Shopping Centre (which backs onto Rosanna Road).

Bulleen Plaza Neighbourhood Activity Centre

This shopping centre mainly services local residents and is not expected to experience impacts during the project's operation.

Minor activity centres

The minor activity centre at Lower Plenty Road, Rosanna currently benefits from exposure to traffic at the busy intersection between Rosanna Road and Lower Plenty Road.

These businesses include an automotive tyre retail and service business, take-away food business, a security service provider and a child care centre (under construction). Current traffic volume on Rosanna Road are expected to reduce with the project. On balance, it is difficult to determine if the decrease in traffic would have a net impact on these businesses. The tyre retailer would rely on exposure to traffic and may experience reduced trade, whereas the child care centre under construction would likely benefit from reduced traffic due to a customer perception of improved amenity.

Kew Junction

Kew Junction Major Activity Centre is located approximately 1.7 kilometres south of the Eastern Freeway and Chandler Highway crossing at the junction of six separate roads: Princess Street, High Street, Cotham Road, Denmark Street and Studley Park Road. No significant operation impacts are anticipated, which is supported by the Kew Junction Traders Association.

Balwyn North

The Village Balwyn North Neighbourhood Activity Centre is located at the intersection between Bulleen Road and Doncaster Road approximately 1.5 kilometres south of the Eastern Freeway. Traffic on Doncaster Road is expected to increase eastbound and remain unchanged for westbound traffic. On balance, this is not expected to have a significant impact on businesses in Balwyn North.

Bellevue

This Bellevue Neighbourhood Activity Centre is located on Bulleen Road and is bisected by Dorado Road about 300 metres south of the intersection between Bulleen Road and the Eastern Freeway. With the project, traffic volumes on Bulleen Road (between Doncaster Road and the Eastern Freeway) are forecast to increase northbound and southbound. As Bellevue businesses are located on a service road off Bulleen Road and car parking is limited, the increase in traffic would unlikely increase passing trade unless car parking was increased. Bellevue mainly services a local catchment. It would be important to maintain local pedestrian and cyclist access to the businesses to maintain this role; that is, maintain the ability for these customers to easily cross Bulleen Road.

Greythorn

The Greythorn Neighbourhood Activity Centre is located on Doncaster Road in Balwyn North, between Harrington Avenue/Sylvander Street and Trentwood Avenue approximately 650 metres south of the Eastern Freeway. Traffic volumes are predicted to increase at this point of Doncaster Road. While consultation with Greythorn Traders Association indicated they prefer no major change to current traffic volumes, it is noted that under the 'no project' scenario there would be more significant increases to traffic than predicted under the 'with project' scenario.

Box Hill Metropolitan Activity Centre

Box Hill is located around Whitehorse Road and Station Street in Box Hill approximately two kilometres south of the Eastern Freeway. Traffic to and from Box Hill on Elgar Road and Station Street is forecast to increase in each direction from current levels to 2036 under the 'no project' scenario and further increase on Elgar Road in each direction under the 'with project' scenario (no significant increase on Station Street). This increase in traffic is not expected to have any detrimental effect on businesses in Box Hill, as this is a destination and slated for growth in business activity.

Kerrimuir

The Kerrimuir Neighbourhood Activity Centre is located at the intersection between Springfield Road and Middleborough Road in Box Hill North approximately 1 kilometre south of the Eastern Freeway. Traffic levels along Middleborough Road are forecast to increase under the 'with project' and 'no project' scenarios. This would be benefit businesses on the intersection between Middleborough Road and Springfield Road (fuel sales, take away food) with greater exposure to traffic. However, it would be important to maintain ease of access for local customers to the approximately 15 businesses in the Kerrimuir shopping centre to avoid business impacts from traffic congestion.

Joseph Street industrial area

This small Joseph Street industrial area is located in Blackburn North off Middleborough Road, close to the Eastern Freeway. The businesses in this industrial area would likely benefit from the project because of reduced travel times for any customers in their catchment located north of the Eastern Freeway.

Doncaster Hill

Doncaster Hill is a Major Activity Centre in the City of Manningham. It is a retail and business destination and so maintaining ease of access for customers to Doncaster Hill would be important for businesses. Traffic volumes on Doncaster Road are forecast to increase with the project. The overall increase is approximately the same under the 'with project' and 'no project' scenarios (a decrease eastbound offset by an increase westbound) so overall the project is not expected to adversely impact businesses at Doncaster Hill.

For Neighbourhood Activity Centres on Doncaster Road in the City of Manningham (Jackson Court, Devon Plaza), traffic volumes on Doncaster Road under the 'with project' scenario would be lower than the 'no project' scenario but would still be higher than current levels. The project would assist in maintaining ease of access for customers to businesses located in these activity centres compared with the 'no project' scenario.

8.3.4 Business and employment

M80 Ring Road to northern portal precinct

North East Link is expected to generate significant benefits for businesses located in the M80 Ring Road to northern portal precinct. Improved connectivity to key industrial and commercial precincts (such as Melbourne's south-east, Melbourne CBD) may improve the efficiency of business supply chains with faster journey times.

The risk of loss of passing trade is low for businesses in Watsonia Village (BU16) because through-traffic already uses Greensborough Road. Additionally, the upgrade to the area around Watsonia railway station may make Watsonia Village a more attractive place to stop and shop, potentially improving patronage for businesses there.

More broadly, North East Link would improve traffic flow and capacity in Melbourne's north-east, which could facilitate transport productivity improvements for many freight and logistics businesses due to reduced travel times and increased reliability of delivery and supply.

Diverting trucks from local and arterial roads in Melbourne's north-east onto North East Link and the connecting M80 Ring Road and Eastern Freeway would help improve amenity in the precinct. This would be a positive outcome for businesses that require a high level of amenity such as restaurants, cafes and a number of retailers. Eight of the surveyed businesses within the M80 Ring Road to northern portal precinct expected improvements in travel times to access their businesses, including for customers and employees.

North East Link would permanently change access to and from existing businesses because new service lanes are proposed along the road where these businesses are located. This would particularly affect one business and reduce its exposure to potential customers. The change in road type (from arterial road to service lane) is expected to impact business visibility and potentially reduce patronage (BU16, BU18). Businesses surveyed identified that employees and customers predominantly travel to the businesses by car and so adequate signage and parking would be required to reduce the impact of changes in access.

Northern portal to southern portal precinct

Any business affected by land acquisition would be covered by the *Land Acquisition and Compensation Act 1986* to address any financial implications to the businesses. This includes the businesses to be displaced by land acquisition in the northern portal to southern portal precinct. The remaining businesses around the Bulleen Industrial Precinct are predominantly retail-based. A couple of businesses such as a museum and retailers that service trades people in a wider area expect to benefit from North East Link. From the museum's perspective, improved access to Melbourne Airport and an interstate/international visitor base is regarded as a benefit. However, for smaller retailers remaining in Bulleen and Templestowe Road, there is a risk they would lose passing trade with the diverting of traffic into the North East Link tunnels reducing their exposure to traffic (risk BU18).

As noted above, 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 is a risk that business operational costs would increase due to suppliers passing on the cost of the North East Link tolls to access businesses (risk BU14). However, the results of the business surveys indicated that on balance, tolls are not a significant concern for most businesses. Tolls were only mentioned in five of the business surveys and did not emerge as an issue for the remainder. Three of the businesses that mentioned tolls recognised they represented an increase in cost but rated speed of delivery as more important. However, one business considered tolls to be a notable increased cost to business and one business considered tolls to be a notable increase to cost of commuting, the latter not being relevant to risk BU14.

It is expected that pedestrians and cyclists would benefit from improved infrastructure once the project was complete. Improvements include greater connectivity to local businesses and higher levels of safety with separated paths and overpasses.

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).

It is expected that North East Link would expand the 'feed zone' of potential customers for businesses in the northern portal to southern portal precinct as it would become faster and easier to access the precinct. Customers and staff travelling from the north and north-west would likely to see the greatest benefits in accessing the businesses in the area.

Eastern Freeway precinct

The project is expected to significantly benefit customers and staff travelling from the north along North East Link. Improved connectivity with the north and west of Melbourne would open up key industrial and commercial precincts and may improve the efficiency of business supply chains, mainly with faster journey times.

Improvements to shared use path infrastructure would also likely increase accessibility for some businesses via these transport modes and increase safety for pedestrians and cyclists. This has the potential to lead to more walking and cycling with the associated health benefits these generate.

Home based businesses

Home based businesses would be dispersed through the broader area and improved traffic movement through the north-east under the 'with project' scenario is forecast compared with the 'no project' scenario. While home based businesses would likely be less reliant on travel times, improved traffic conditions would facilitate any customer visitation to their home for business purposes.

8.4 Cumulative impacts

North East Link would be located within an urban environment characterised by ongoing construction including residential development, road upgrades and maintenance and street works. Projects generally have the potential to have a cumulative impact on businesses when construction works and locations for their projects coincide, increasing the demand on the road network and causing traffic delays, detours and reduced amenity.

Upcoming transport projects identified within Melbourne's north-east includes the M80 Ring Road upgrades, Yan Yean Road duplication, Fitzsimons Lane improvements and Hurstbridge rail line improvements – Stage 2. In addition to these, a number of smaller scale residential, commercial and road upgrade projects at the municipal level are planned within the municipalities of Banyule, Manningham, Whitehorse, Boroondara, Yarra and Nillumbik. While the exact timing and sequencing of construction for these projects is not yet known, like for North East Link, the implementation of mitigation and management measures would be required to address related impacts on the road network.

Cumulative impacts require ongoing evaluation to accurately identify impacts on businesses. The North East Link contractor would be required to maintain access for customers and for delivery and waste removal unless there was prior arrangement with affected businesses (EPR B4). In addition, a business liaison group would be established during the project's construction phase that would report on and monitor business community feedback, construction impacts and discuss mitigation measures and their effectiveness. This forum would provide an opportunity to identity and address cumulative impacts if they arose.

8.5 Managing impacts

M80 Ring Road to northern portal precinct

Environmental Performance Requirements (EPRs) define the environmental outcomes the project must achieve during its construction and operation. The impacts identified are of a type/nature and magnitude that is typical or expected for a project of this nature. Further, these impacts can be practicably managed by achieving the EPRs associated with each impact. With regard to land acquisition, it would be important to provide ample warning of acquisition to allow businesses to plan for relocation.

This can be done by informing and regularly updating affected businesses and commercial facilities of the project's planning and design progress and by inform them of business and owner rights and facilitating their business transition/relocation. This has the potential to minimise local job losses due to businesses not being able to successfully relocate (EPR B2 and EPR B1).

Watsonia Village traders may experience increased competition from Greensborough Major Activity Centre traders with improved access across Greensborough Road and benefits to traffic movement due to the project. There is currently a City of Banyule strategy and vision for strengthening trade at Watsonia Village. Implementation of this strategy combined with local population growth would likely counteract any negative impacts from the improved accessibility to the Greensborough Major Activity Centre.

Disruption to traffic and pedestrian movement from construction activity would need to be minimised. This can be done by implementing Traffic Management Plans and planning construction works (program/timing) to minimise disruption from road detours, increased numbers of trucks on the road, reduced car parking or road capacity changes. The contractor would need to liaise with the local business community to identify the most suitable arrangements for the area (EPR B6).

In addition, EPR LV2 requires construction works to be designed and carried out in general accordance with the Urban Design Strategy, which provides guidance on using design to help manage construction impacts. This may include measures such as temporary landscaping, features or structures (including viewing portals) during construction to minimise adverse visual impact of project works and provide visual appeal.

In terms of traffic impacts during the operation of North East Link, the contractor would be required to design the project taking into consideration travel times for all transport modes, including walking and cycling and Maintain, and where practicable, enhance the existing traffic movements at interchanges (EPR T1). Once, operational, traffic monitoring would be undertaken on selected roads (arterial and non-arterial) in accordance with EPR T5.

Northern portal to southern portal precinct

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).

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.

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 successful relocation of displaced businesses would potentially reduce the disruption of business-to-business linkages, depending on the distance that businesses would need to relocate to and whether there are alternative suppliers/customers closer to the remaining businesses. If businesses can be relocated to a location in the vicinity of their current location the disruption to business relationships and displacement of local jobs can be minimised.

Permanent acquisition (full and partial) and temporary occupation of land in the area near the Eastern Freeway interchange would displace or affect a number of sporting facilities and recreation businesses and organisations. The contractors would be required to minimise impacts on sporting, recreation and other facilities (EPR SC4) and NELP is working with sports clubs and schools to identify solutions for temporary occupation and permanent acquisition.

Partial acquisition of land has been minimised and the risk of significant impacts of this action is being managed by engagement with the businesses to aid with business planning to adjust to the change in circumstances (EPR B1 and B2). In one instance, while the project would result in the loss of car parking due to partial acquisition, the car park would be reconfigured and the total number of car parks would be retained post-construction.

Temporary occupation of sites for construction can reduce the viability of businesses and commercial facilities. One business is being displaced due to temporary occupation and alternative accommodation is being identified to enable its continued operation.

Other businesses that would experience temporary occupation would operate on a reduced area during the project's construction. The contractor would cooperate with businesses through the business liaison groups (EPR B6) which would provide regular updates to businesses and management of issues raised. To minimise pre-construction impacts, the contractor would undertake early discussions with impacted businesses to assist with the planning for alternative arrangements to offset the temporary occupation of part of their site (EPR B2).

To manage the risk of impacts amenity, there are EPRs requiring the preparation of traffic/dust/ noise management plans as required (EPR T2, AQ1, NV3 and NV4). This would reduce impacts on businesses close to the construction works and also in the broader area due to increased traffic congestion (heavy vehicle movements, construction worker movements), difficulty for customer access to retailers and other businesses, and reduced amenity (noise, dust) for businesses operating in the vicinity of construction works. Screening walls with attractive and informative displays could be considered as they would likely be in place for up to eight years and their visual amenity would be important to remaining businesses (and their customers). The contractor could engage with local schools impacted by the project with partial acquisition or temporary occupation to provide educational opportunities for students to learn about the engineering and other aspects of the project (EPR SC2). This could be regarded positively by the schools.

Eastern Freeway precinct

Partial acquisition of land in the Eastern Freeway precinct has been kept to a minimum (one business, a golf course) and the risk of significant impacts of this action would be managed by engagement with the business to aid with its planning to adjust to changed circumstances. Measures to mitigate the impacts are under discussion and would depend on the final project design.

The contractor would need to minimise construction impacts of noise/dust/vibration on businesses in this precinct. The Traffic Management Plan to be prepared and implemented by the contractor would need to allow for continuous access to the businesses to mitigate any risk of reduced patronage or delays with the delivery of goods and services (EPR T2 and EPR B4).

To manage the risk of impacts on views and other amenities an EPR requires that traffic/dust/noise management plans are implemented during the project's construction.

8.6 Alternative design options

Although the reference project for North East Link has largely been finalised, there are currently two design options being considered for the arrangement of the Manningham Road interchange, and two locations for the launch of the tunnel boring machine (TBM) being considered. For information on the design options, refer to EES Chapter 8 – Project description.

This section explains how the potential impacts associated with the alternative design options would differ from the impacts associated with the project design assessed in Section 8.1 and Section 8.2 above.

8.6.1 Manningham Road interchange alternative

The potential business impacts of the alternative design for the Manningham Road interchange have been reviewed.

This would result in minor changes to impacts on businesses, particularly because land acquisition requirements would not be affected, and construction activity would not materially change in the vicinity of businesses. It would not result in any changes to the risks or EPRs.

8.6.2 Northern Tunnel Boring Machine (TBM) launch and retrieval site

The potential impacts of the alternative TBM launch site have been reviewed and there would be no change to the business impacts (as described in these sections above) from the alternative northern launch site.

However, for the TBM retrieval site, there would be a minor change to the assessment provided above as the option would bring construction activities closer to a museum located north of Manningham Road, and this could have potential amenity impacts. A review of noise, vibration and air quality assessments (Technical report B – Air quality and Technical report C – Surface noise and vibration) indicate that the increased proximity would not decrease the amenity as it would be managed by the relevant EPRs. There is a risk of increased visual impact on the museum, but EPR LV2 requires construction works to be designed and carried out in general accordance with the Urban Design Strategy, which provides guidance on using design to help manage construction impacts. This may include measures such as temporary landscaping, features or structures (including viewing portals) during construction to minimise adverse visual impact of project works and provide visual appeal and provide potential to collaborate with local business.

There would be no change in business displacement due to land acquisition as a result of this launch and retrieval option. Therefore the same EPRs would be relevant as outlined in Section 8.6 to minimising the impacts.

8.7 Consistency of the project with business-related policies

On the basis of the impact assessment above and in accordance with the scoping requirements (Table 2-1 in Section 2.2) the consistency of the project with the business-related policies and provisions of relevant Victorian Government legislation are evaluated in Table 8-8.

These included Plan Melbourne (the overarching strategic planning strategy for metropolitan Melbourne), the Yarra, Banyule, Boroondara, Nillumbik, Manningham, Whitehorse and Whittlesea planning schemes, and any other relevant policy and strategy documents.

Table 8-8 Consistency with relevant legislation, strategies and policies

Legislation/strategy/policy	Relevance to impact assessment	Evaluation of consistency of the project with the legislation, policies and strategies
Transport Integration Act 2010	The processes and procedures set out in this legislation mean that business owners and employees can reasonably expect to be consulted and identified impacts on them considered during the EES/design process. The impact(s) of changes to access and movement patterns during construction and operation should be considered in the business impact assessment.	Consultation has occurred during the design process and ongoing assessments to identify available industrial and commercial land, and precinct options will be used to inform businesses. The impact(s) of changes to access and movement patterns during the project's construction and operation have been assessed and would be managed/minimised through EPRs.
Planning and Environment Act 1987	This legislation requires that impacts on businesses from temporary occupation and/or land acquisition are assessed and managed, including business displacement and/or changes to a landowner's ability to use and develop their land for business purposes. Temporary and permanent changes to the environment which affect amenity (such as pleasantness and safety of the environment) also requires consideration. Project-related disruption or relocation of utilities also requires consideration.	Impacts on businesses due to temporary occupation and/or land acquisition have been quantified and assessed. Consultation has occurred. Disruption to businesses (access, amenity) would be managed/minimised as much as practicable through EPRs. Utility assets would be protected or relocated through EPRs to the reasonable satisfaction of the service provider and/or asset owners.
Land Acquisition and Compensation Act 1986 and Valuation of Land Act 1960	This legislation provides a form of mitigation or management of land acquisition impacts. It provides certainty to affected landowners that they would be reasonable compensated for losses. This business impact assessment has relied on the legislative procedures set out in these two Acts to inform the assessment of impacts.	Impacts on potentially affected landowners and businesses have been assessed and quantified. Consultation is ongoing regarding the potential terms for possession of the land.
Major Transport Projects Facilitation Act 2009	Provisions under this Act relating to project delivery are relevant for businesses as they facilitate the land acquisition process under the Land Acquisition and Compensation Act.	N/A.

Legislation/strategy/policy	Relevance to impact assessment	Evaluation of consistency of the project with the legislation, policies and strategies			
Plan Melbourne (2017)	Plan Melbourne 2017–20150 provides the strategic context within which the business impacts of the project have been assessed. This business impact assessment has considered how business owners and employees would experience changes in transport access and efficiency in the context of the improvements anticipated by Plan Melbourne for access to existing and/or new employment precincts.	During operation, it is anticipated that access to existing and new employment precincts would improve. The project would improve connectivity between business areas and reduce travel times for freight transport and employees. This would improve business efficiency and the ease of doing business in Melbourne. While it is acknowledged there would be negative impacts during the project's construction including changes to access, reduced travel convenience as well as a significant amount of land acquisition, the overarching strategic objective of improved access would be achieved. The displacement of some 90 businesses in the Bulleen Industrial Precinct would displace jobs and services from the Bulleen area and reduce the availability of employment land. The precinct is not typical of those described in Plan Melbourne's Direction 4.1 of 20-minute neighbourhoods; instead the precinct is 'employment land'. Planning for availability of industrial land and employment land is covered in Plan Melbourne's Direction 1.2 regarding strengthening of the competitiveness of Melbourne's employment land, and industrial land acquisition for construction purposes resulting in displacement of businesses in Bulleen is contrary to this direction.			
Banyule planning scheme	Banyule has a prosperous local economy. The Watsonia Neighbourhood Centre is a mixed use commercial centre. Road access and active transport connections to Watsonia Neighbourhood Centre are important to ensure it remains an attractive commercial destination. The Greensborough Major Activity Centre is located on Grimshaw Street. It has potential 'to develop as one of Melbourne's most desirable urban centres, able to provide its community with a range of residential, leisure, recreational, retail, health and wellbeing, and commercial opportunities'. Maintaining access to the Greensborough Major Activity Centre is important to support the Banyule City Council's planning policy for Greensborough. Any business impacts from land acquisition and impacts on access (temporary and permanent), have been considered for this business impact assessment.	Impacts on businesses have been assessed and quantified. Five businesses are impacted by full acquisition (in the M80 Ring Road to northern portal precinct). The displacement of these businesses would likely affect the convenience for their typical customers to source their product or service. However, in the wider urban environment there are other businesses that can provide similar products and services within a 20-minute drive. Temporary traffic disruption, and temporary and permanent changes to access would be managed through the project EPRs. During operation, significant benefits would be realised with improved connectivity, including to the Watsonia Neighbourhood Centre and Greensborough Major Activity Centre. This would improve the efficiency of businesses with faster journey times.			

Legislation/strategy/policy	Relevance to impact assessment	Evaluation of consistency of the project with the legislation, policies and strategies
Boroondara planning scheme	The majority of the project's construction works in Boroondara would be contained within the Eastern Freeway reserved corridor. However, works around the interchange with North East Link would affect some businesses. Any business impacts due to land acquisition, temporary occupation and/or reduced vehicle flow along and access to/from the Eastern Freeway has been considered in this business impact assessment.	Impacts on businesses have been assessed and quantified. The identified impacts for businesses in Boroondara are associated with the Eastern Freeway precinct. The impacts result from land acquisition, temporary occupation, changes to access as well as amenity impacts. The number of businesses impacted in Boroondara is low (five, including the Boroondara Tennis Centre – which incorporates four businesses; and the Freeway Public Golf Course). Land acquisition has been minimised, access would be maintained and amenity would be mitigated with implementation of the projects EPRs. During operation, the project is expected to significantly benefit customers and staff travelling to Boroondara from the north. The project is also expected to improve connectivity with and between key industrial and commercial precincts, mainly with faster journey times.
Nillumbik planning scheme	The Shire of Nillumbik is a commuter area, with more than half the workforce travelling to other areas for employment. The Nillumbik Planning Scheme identifies the principal future focus for business in the Shire would be to strengthen existing small business enterprises and facilitate new business initiatives that are low impact in terms of the broader environmental and social outcomes desired by the community. At the same time, the Nillumbik Planning Scheme recognises the need to support larger commercial business development, and promotes the concentration of this business activity in the Eltham and Diamond Creek Major Activity Centres. Any business impacts due to access changes to/from Nillumbik have been considered for this business impact assessment.	Impacts on businesses have been assessed and quantified. No businesses in Nillumbik would be directly impacted by the project. During operation, significant benefits would be realised with improved connectivity which would improve business efficiency with faster journey times.

Legislation/strategy/policy	Relevance to impact assessment	Evaluation of consistency of the project with the legislation, policies and strategies
Manningham planning scheme	The City of Manningham is home to approximately 16,000 businesses, 80 per cent of them small businesses. Clause 22.16 of the Manningham Planning Scheme is an Industrial Areas Policy and applies to the Industrial 1 Zone land at Bulleen, Templestowe and Doncaster Hill. Clause 21.08 of the Municipal Strategic Statement recognises there are no further opportunities to develop new industrial centres within Manningham and so the Industrial Areas Policy aims to ensure the IZ1 land is developed for industrial uses. Clause 21.09 of the Manningham Planning Scheme applies to activity centres and commercial areas. It acknowledges that activity centres are integral to the local economy and local employment generation and are an important focal point for community life and interaction. The Manningham Economic Development Strategy 2011–2030 aims to create an attractive place to invest, personally and professionally. The strategy recognises that supporting an improved integrated transport network is central to delivering this vision. Any business impacts due to land acquisition and access changes to/from Manningham businesses has been considered for this business impact assessment.	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. 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. North East Link would generate significant improvements for other businesses in Manningham once it was operating with reduced travel times and congestion generally improving the ease of doing business.

Legislation/strategy/policy	Relevance to impact assessment	Evaluation of consistency of the project with the legislation, policies and strategies
Whittlesea planning scheme	The City of Whittlesea is experiencing rapid residential development and anticipates further growth in the future. The focus for Whittlesea going forward is to provide greater balance between housing supply and employment opportunities. The Whittlesea Planning Scheme supports continued employment growth in Thomastown, Epping, Bundoora and South Morang. The Whittlesea Planning Scheme acknowledges that easy access between residential areas and business and activity centres is essential to support employment growth in the area. Any business impacts resulting from land acquisition, access changes to/from Whittlesea businesses have been considered for this business impact assessment.	Impacts on businesses have been assessed and quantified. No businesses in Whittlesea would be directly impacted by the project. During operation, significant benefits would be realised with improved connectivity which would improve business efficiency with faster journey times.
Whitehorse planning scheme	Some of the project's construction works in the City of Whitehorse would require land acquisition, but no businesses would likely be displaced due to acquisition nor be directly affected by it. Any business impacts from reduced vehicle flow along and access to/from the Eastern Freeway has been considered for this business impact assessment.	Impacts on businesses have been assessed and quantified. No businesses in Whitehorse would be directly impacted by the project. During operation, significant benefits would be realised with improved connectivity which would improve business efficiency with faster journey times.
Yarra planning scheme	The Yarra Business and Industrial Land Strategy 2012 identifies industrial land adjacent to the project area on Hoddle Street, Trenerry Crescent and Alexander Parade East that have potential to be converted into mixed use land uses and which could accommodate alternative employment through commercial office conversions and new residential dwellings, all serviced by an efficient transport network. Any business impacts due to reduced vehicle flow along and access to/from the Eastern Freeway have been considered for this business impact assessment.	Impacts on businesses have been assessed and quantified. No businesses in the City of Yarra would be directly impacted by the project. During operation, significant benefits would be realised with improved connectivity with improved business efficiency with faster journey times.

9. Environmental Performance Requirements

Table 9-1 lists the recommended Environmental Performance Requirements (EPRs) relevant to the business impact assessment.

Table 9-1 Environmental Performance Requirements

Applicable legislation and policy	EPR code	Environmental Performance Requirements
Planning and Environment Act 1987 Land Acquisition and Compensation Act 1986	EPR B1	Business support Inform and regularly update affected businesses and commercial facilities of the planning and design progress for the project. Prior to construction, work with Councils to identify alternative location options for displaced businesses. Offer 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.
	EPR B2	Minimise disruption to business from land acquisition and occupation Minimise disruption to businesses from permanent acquisition or temporary occupation of land as much as 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.
	EPR 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 the project must be appropriately remedied in consultation with the property or asset owner.
	EPR 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. Potentially 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 prior arrangement with affected businesses.
		All permanent access to business and commercial facilities affected by the works is to be restored, or relocated as agreed with the relevant property owner, including associated landscaping and restoration works, and temporary access arrangements put in place for the duration of construction must be removed when construction has ceased.
	EPR B5	Minimise impacts on utility assets
		Protect or, where required, relocate utility assets to the reasonable satisfaction of the service provider and/or asset owners.

Applicable legislation and policy	EPR code	Environmental Performance Requirements
	EPR B6	Business Liaison Groups
		Establish and participate in Business Liaison Groups that includes representatives from acquired businesses (until the time that acquisition is complete) and non- acquired businesses within the immediate vicinity of construction works to facilitate business and stakeholder involvement for the construction phase of the project. Participation must include:
		Attendance at meetings
		Regular and timely reporting of design and construction activities and key project milestones
		Advance notice about changes to traffic and parking conditions and 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
		Agreement on a process for registering, and management and resolution of complaints from affected businesses consistent with Australian Standard AS/NSZ 10002:2014 Guidelines for Complaint Management in Organisations.

In addition to the above business EPRs, the following additional EPRs as listed in apply to the assessment of business impacts.

Table 9-2 Environmental Performance Requirements - other disciplines

EPR ID	Environmental Performance Requirement
EMF1	Deliver project in general accordance with an Environmental Management System
AQ1	Implement a Dust and Air Quality Management and Monitoring Plan to minimise air quality impacts during construction
AQ2	Design tunnel ventilation system to meet EPA requirements for air quality
LV2	Minimise landscape impacts during construction
NV1	Achieve traffic noise objectives
NV2	Monitor traffic noise
NV3	Minimise construction noise impacts to sensitive receptors
NV4	Implement a Construction Noise and Vibration Management Plan (CNVMP) to manage noise and vibration impacts
SC2	Implement a Communications and Community Engagement Plan
SC4	Minimise impacts on sporting, recreation and other facilities
T1	Optimise design performance
T2	Transport Management Plan(s) (TMP)
T5	Traffic monitoring

10. Conclusion

The purpose of this report is to provide business impact assessments to inform the preparation of the EES required for the project.

A summary of the key assets, values or uses potential affected by the project and the associated impacts assessment is provided below.

10.1 Existing conditions

Approximately 260 businesses are located in commercial areas within the study area for this business impact assessment. These businesses should be seen against a wider context of the business community in the seven municipalities where most businesses (98 per cent) are either non-employing businesses (63 per cent of total) or small businesses (35 per cent of total).

A large share of these businesses (90 businesses) are in the retail trade sector. The 'Other Services' sector is another large category, including 25 automotive services businesses. Approximately 20 businesses operating in the construction sector, which includes building businesses and hire companies. Over 20 businesses fell within the health and social care sector and almost 20 businesses were within the arts and recreation sector in the precincts. The remaining businesses are mainly in the education and training and rental, hiring, professional and technical services and real estate sectors. These businesses provide full-time, part-time and casual employment for local residents. They mainly provide goods and services to local communities and the north-east of Melbourne, although in some cases customers travel from other areas across Melbourne.

A number of home based businesses are also located along the project alignment, with construction-related businesses (carpentry, plumbing, electrical and other construction services) the largest category. These businesses rely on a well-functioning road network to access their place of work (usually visiting construction sites).

Consultation with key stakeholders, primarily business owners and operators, built an understanding of pre-construction, construction, operational and cumulative impacts in the three precincts of the study area.

The survey results identified the following key impacts for the pre-construction, construction and operation of the project.

Within the M80 Ring Road to northern portal precent, 81 businesses were identified, with many being in retail trade. 118 businesses are located in commercial areas in the northern portal to southern portal precinct, which includes approximately 40 businesses in retail, 20 businesses in the construction industry and a number of businesses involved in arts and recreation. The precinct includes a business park (Bulleen Industrial Precinct) on the corner of Bulleen Road and Manningham Road and a mix of mainly retail and services along Bulleen Road. The Bulleen Industrial Precinct has evolved over decades and consequently has resulted in a formation of clustered automotive and construction businesses. Within the Eastern Freeway precinct, 61 business were identified.

Residential areas along the project alignment also include some home based businesses. Community consultation identified residences with home based businesses and ABR data provided an indication of the proportion of residences with an ABR registration.

10.2 Impact assessment

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 pre-construction 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).

North East Link would generate create significant improvements for businesses once it was operating with reduced travel times and congestion improving ease of doing business.

Within the Eastern Freeway precinct two businesses were identified, both in the arts and recreation sector. Most impacts in this precinct would be experienced during the project's construction as businesses were affected by construction activities and one business would need to significantly adjust to partial land acquisition. Businesses in this precinct would benefit from the operation of North East Link with improved connectivity and reduced travel times.

The assessment of risks posed by the project aligned with survey responses from stakeholder consultations has enabled an assessment of the likelihood and severity of business impacts of North East Link. Impacts would be most severe during the project's construction phase as most businesses would face permanent land acquisition resulting in their displacement. For businesses that would remain, access would be a challenge during the project's construction and amenity issues caused by vibration and noise may impact staff and customer experiences. The significant pre-construction impacts related to uncertainty surrounding investment and business expansion decisions.

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).

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.

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EES Technical reports

Attachment III - Risk report

Technical report A – Traffic and transport

Technical report B - Air quality

Technical report C – Surface noise and vibration

Technical report E - Land use planning

Technical report I – Social

Other

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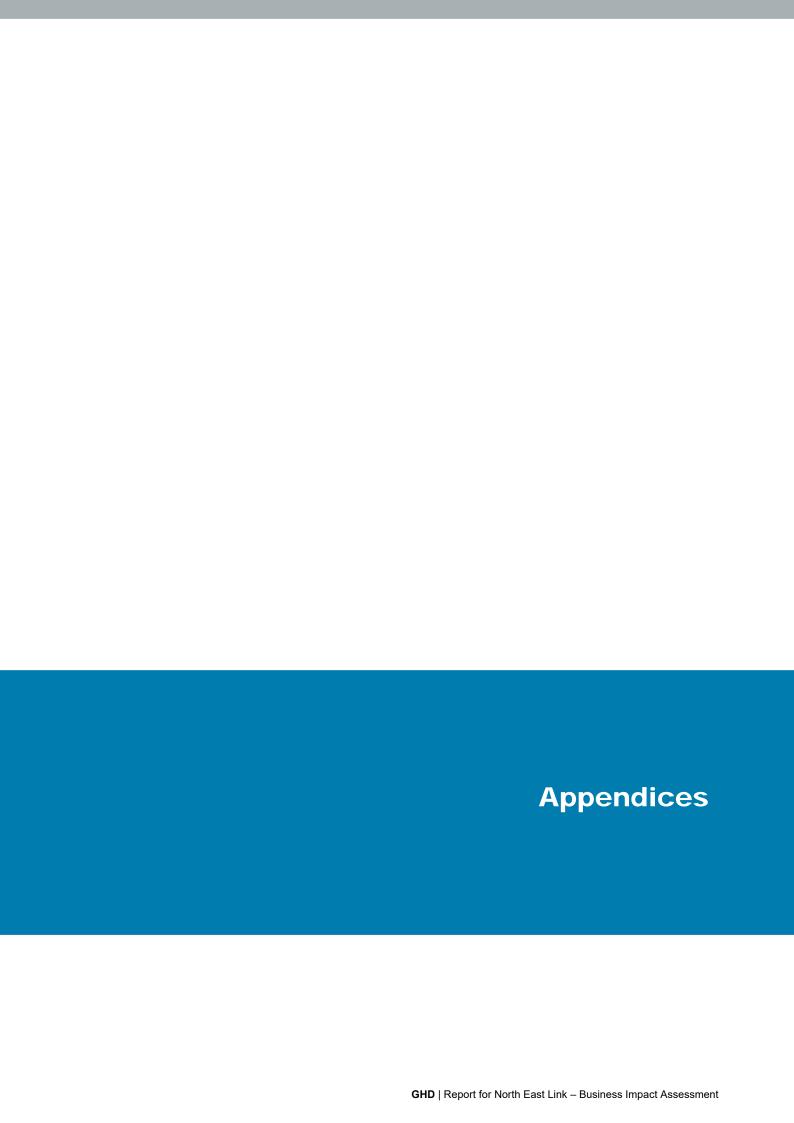
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Appendix A – Risk assessment

				Initial Risk				Residual Risk	
Risk ID	Potential threat and effect on the environment	Initial EPR	Overall consequence	Likelihood	Risk level	Final EPR	Overall consequence	Likelihood	Risk level
Pre-Cons	struction								
Risk BU01	Uncertainty for businesses about the future business environment may reduce business viability and therefore the availability of local jobs and services.	Inform and regularly update affected businesses and stakeholders of planning and design progress.	Minor	Almost certain	Medium	EPR B1	Minor	Almost certain	Medium
Construc	ction								
Risk BU02	Preparatory works such as the relocation of utilities may cause interruption to the availability of utilities and disrupt business operations.	Protect or, where required, relocate utility assets to reasonable satisfaction of the service provider and/or asset owners.	Minor	Possible	Low	EPR B5	Minor	Possible	Low
Risk BU03	Permanent acquisition of INZ1 land in Bulleen displaces businesses and reduces the number of jobs available for workers in this area.	Design and plan the project to minimise business displacement due to acquisition.	Moderate	Planned	Planned	EPR B1 and B2	Major	Planned	Planned
Risk 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.	Design and plan the project to minimise business displacement due to acquisition.	Minor	Likely	Medium	EPR B1, B2	Minor	Possible	Low

				Initial Risk	nitial Risk		Residual Risk		
Risk ID	Potential threat and effect on the environment	Initial EPR	Overall consequence	Likelihood	Risk level	Final EPR	Overall consequence	Likelihood	Risk level
Risk BU05	Full acquisition of land results in displacement of businesses along alignment and therefore reduces availability of local jobs and services.	Minimise business displacement due to full or partial acquisition.	Minor	Almost certain	Medium	EPR B1, B2	Minor	Almost Certain	Medium
Risk BU06	Partial acquisition of business land causes disruption or reduced viability of businesses or commercial facilities.	Design and plan the project, and consult with businesses, to minimise adverse impacts on businesses and commercial facilities due to partial acquisition.	Minor	Likely	Medium	EPR B2, B4	Minor	Unlikely	Low
Risk BU07	Full acquisition of business land results in business displacement which reduces business viability.	Design and plan the project, and consult with businesses, to minimise adverse impacts on employment due to full land acquisition.	Moderate	Likely	Medium	EPR B1, B2	Moderate	Likely	Medium
Risk BU08	Temporary occupation of sites for construction reduces the viability of neighbouring or occupied businesses and commercial facilities.	Minimise temporary occupation that has an impact on business operation and viability.	Moderate	Likely	Medium	EPR B2, B4	Minor	Almost certain	Medium

				Initial Risk				Residual Risk	
Risk ID	Potential threat and effect on the environment	Initial EPR	Overall consequence	Likelihood	Risk level	Final EPR	Overall consequence	Likelihood	Risk level
Risk 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 eg businesses with outdoor serving areas, child care centres.	Protect amenity for potentially affected businesses and commercial facilities and minimise adverse impacts on views and amenity to the extent practicable.	Moderate	Almost certain	High	EPR B4, B6 EPR LV2 Noise and vibration EPRs (EPR NV3 and NV4) Air quality EPR (EPR AQ1)	Minor	Almost Certain	Medium
Risk 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.	Minimise adverse impacts on views and amenity for businesses and commercial facilities.	Minor	Likely	Medium	EPR B4, B6 Noise and vibration EPRs (EPR NV3 and NV4) Air quality EPR (EPR AQ1)	Minor	Almost Certain	Medium
Risk BU11	Increased travel time from changed traffic patterns during construction reduce the attractiveness of retail and service businesses.	Minimise disruption to traffic and pedestrian movement caused by construction activity (truck movements or road capacity changes).	Moderate	Almost certain	Medium	EPR B4 Traffic EPR (EPR T2)	Minor	Almost Certain	Medium

				Initial Risk				Residual Risk	
Risk ID	Potential threat and effect on the environment	Initial EPR	Overall consequence	Likelihood	Risk level	Final EPR	Overall consequence	Likelihood	Risk level
Risk 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.	Plan construction works to minimise disruption to access caused by road detours, reduction in car parking or road capacity changes.	Moderate	Almost certain	High	EPR B4, B6 Traffic EPR (EPR T2)	Minor	Likely	Medium
Operatio	n								
Risk BU13	Noise and amenity impacts resulting from redistribution of traffic due to operation of North East Link may reduce the viability of businesses and commercial facilities whose operation is sensitive to noise and amenity impacts.	Ensure noise and amenity impacts are minimised eg through project design and noise attenuating structures.	Moderate	Possible	Medium	EPR B4 Noise and vibration EPRs (EPR NV1, NV2) Air quality EPR (EPR AQ2, AQ4)	Minor	Unlikely	Low
Risk BU14	Business operational costs increase due to suppliers passing on the cost of North East Link tolls to access the business.	Where practicable, provide early information to the business community about the operation of North East Link and forecast costs associated with its use to facilitate forward business planning.	Minor	Likely	Medium	Traffic EPRs (EPR T1 and T5)	Minor	Unlikely	Low

			Initial Risk			Residual Risk			
Risk ID	Potential threat and effect on the environment	Initial EPR	Overall consequence	Likelihood	Risk level	Final EPR	Overall consequence	Likelihood	Risk level
Risk BU15	Potential travel cost increases caused by tolls or changes in travel time changes the shape of customer catchment of shopping precincts.	Where practicable, provide early information to the business community about the operation of North East Link and forecast costs associated with its use to facilitate forward business planning.	Minor	Possible	Low	Traffic EPRs (EPR T1 and T5)	Minor	Possible	Low
Risk BU16	Road detours or other changed road and car parking conditions affecting businesses as a result of operation of North East Link cause reduced ease of access for deliveries, staff and customers.	Design the project to minimise disruption to access caused by road detours, reduction in car parking or road capacity changes.	Moderate	Likely	Medium	Traffic EPRs (EPR T1 and T5)	Minor	Possible	Low
Risk BU17	Business properties temporarily occupied during construction not reinstated to a condition that is suitable for the resumption of prior activities and operation.	Ensure temporarily occupied sites are returned in a suitable and agreed condition.	Moderate	Unlikely	Low	EPR B3 and B4	Moderate	Unlikely	Low

			Initial Risk				Residual Risk		
Risk ID	Potential threat and effect on the environment	Initial EPR	Overall consequence	Likelihood	Risk level	Final EPR	Overall consequence	Likelihood	Risk level
Risk BU18	Changed traffic patterns can reduce passing trade (where more traffic is in the tunnel).	Provide early information to the business community about the operation of North East Link to facilitate forward business planning.	Minor	Possible	Low	EPR B1	Minor	Possible	Low

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 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 businesses 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

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:	
 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	Allswei
over the next 5 years?	Answer
	Allswei
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

- Tonotraction 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?	
- Changed road access	
- Benefits that may be realised	
Travel time impactsCustomer 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

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?	
- 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

GHD

180 Lonsdale Street

Melbourne Victoria 3000 T: (03) 8687 8000 F: (03) 8687 8111 E: melmail@ghd.com

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Document Status

Revision	Author	Reviewer		Approved for Issue		
		Name	Signature	Name	Signature	Date
FINAL	M. Stoettrup	E. Lichkus	F.	M. Roser	uxeser	April 2019

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