Melbourne Metro Rail Project

MMR-AJM-PWAA-RP-NN-000817

Social and Community Impact Assessment

Melbourne Metro Rail Authority

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Glossary and Abbreviations

Term	Definition	Abbreviation
ABS	Australian Bureau of Statistics	ABS
CALD	Culturally and Linguistically Diverse	CALD
DDA	Disability Discrimination Act	DDA
DEDJTR	Department of Economic Development, Jobs, Transport and Resources	DEDJTR
Dislocation	The removal of a household or community from their environment	N/A
DPCD	Department of Planning and Community Development (now the Department of Environment, Land, Water and Planning)	DPCD
Family	Two or more persons, one of whom is at least 15 years of age, related by blood, marriage, adoption, step or fostering, and who are usually resident in the same household.	N/A
Household	One or more persons, at least one of whom is at least 15 years of age, usually resident in the same private dwelling'.	N/A
MSS	Municipal Strategic Statement	MSS
PMC	Prime Minister and Cabinet	PMC
RRL	Regional Rail Link Project	RRL
SEIFA	Socio-economic Index for Areas	SEIFA
Severance	A diminishment or cessation of a social network resulting from the introduction of a barrier that deters the movement of people	N/A
SPPF	State Policy Planning Framework	SPPF

Executive Summary

This report assesses the social impacts and opportunities of the Melbourne Metro Rail Project (Melbourne Metro) Concept Design. These include changes to the social fabric of the community such as potential impacts on:

- Private residential property owners and occupiers
- Social infrastructure such as educational, health, religious and sporting facilities
- Community accessibility and social networks
- Community values
- Amenity for residents and the community
- Perceptions of safety
- Valued places, including public open space and recreation reserves.

Project Context

The proposed Melbourne Metro comprises two nine-kilometre long rail tunnels from Kensington to South Yarra, travelling underneath Swanston Street in the CBD, as part of a new Sunbury to Cranbourne/Pakenham line to form the new Sunshine-Dandenong Line.

The proposed Melbourne Metro would benefit users of the wider transport network and enable the community to continue accessing employment, social infrastructure, valued places and wider social networks. Without this and other projects intended to increase the capacity of the transport network, it is likely that community social opportunities would diminish, with projected population growth outstripping road and rail capacity. Potential adverse impacts associated with the construction and operations of the proposed Melbourne Metro are likely to be more localised.

This impact assessment focuses on the local government areas and suburbs surrounding each proposed Concept Design precinct. This allows identification of local benefits and opportunities and enables mitigation and performance requirements to focus on activities likely to result in a potential adverse impact. This includes the interface communities of Carlton, Kensington, Melbourne, North Melbourne, Parkville, South Melbourne, South Yarra and West Footscray.

Methodology

This impact assessment involved:

- Review of government policy and legislation
- Development of a social profile with information about the communities surrounding the precincts, their values, existing issues, valued places and key social infrastructure
- Administration of a social survey with 2,979 people across Victoria, including 564 people from the Concept Design precincts
- Site investigations
- Community engagement including participation in nine information sessions, meetings with key stakeholders, and interviews with residential landholders and a review of feedback received via online and in-person consultation processes.

Benefits

The Concept Design would benefit the wider Melbourne community as well as several of the most impacted communities. The table below summarises key Concept Design benefits.

Precinct	Benefits
All	• Increase in the frequency, capacity, reliability and resilience of train services. This would meet future demand and maintain levels of access and connectivity across the community.
Arden station	• The new station would enable future residential and commercial development in the area to be integrated with the transport network with easy access to employment, services and wider social networks. • The station would be the catalyst for redevelopment of the Arden precinct. This should in turn be the catalyst for an increase in the range of services and facilities available to the community. • Ongoing improvement in the amenity of the surrounding residential area.
Parkville station	• Improve access to the Parkville medical and educational precinct for staff, students, visitors and patients from across Melbourne.
CBD North station	• Enhance access to the CBD North station precinct including RMIT and Queen Victoria Market. • Improve access for the large number of current and future residents in the northern CBD to the rest of Melbourne. • Easier interchange between rail lines by linking with Melbourne Central Station, improving access to the wider network. • Improve pedestrian safety with a grade separated crossing of La Trobe Street.
CBD South station	• Enhance access to the CBD South station precinct including valued places such as Federation Square and St Paul's Cathedral. • Easier interchange between rail lines by linking with Flinders Street Station and improving access to the wider network. • Improve safety with a grade separated crossing of Flinders Street.
Domain station	• Improve access for the wider community to the Shrine of Remembrance, Albert Park, Domain Parklands and the wider employment area on St Kilda Road • Improve pedestrian safety with a grade separated crossing of St Kilda Road.

Opportunities

The Concept Design and the improved connectivity with social infrastructure, valued places and wider social networks present a number of opportunities for the community. The table below summarises the opportunities.

Precinct	Opportunities
All	• Involve local communities in reinstatement planning for streetscapes, open space and other valued public land. • Engage the community on the proposed treatments for surface level infrastructure like entrances, reinstatement design approach and landscaping. • Partner with training providers to identify opportunities to integrate construction activities with existing or future courses enhancing the opportunities available to students. • Link station design and surrounds to the unique social context of each precinct. • Enhance Royal Parade and St Kilda Road as the 'gateways' to Melbourne.
CBD North station	• Activate Swanston Street north of La Trobe Street. • Create recreational spaces for the community during the reinstatement of Franklin and A'Beckett Streets. • Create a new entrance on Franklin Street to improve access to the Queen Victoria Market and other

Precinct	Opportunities
	attractors in the north of the CBD.
CBD South station	• Redesign the City Square to offset any change in function driven by the placement of the station entrance. • Improve the north western corner of the Flinders and Swanston streets intersection, enhancing its sense of place as the southern entry point to Melbourne's CBD.
Domain station	• Improve the pedestrian link between the Shrine of Remembrance Reserve and Albert Park. • Improve the utility of the Albert Road Reserve for the surrounding community. • Improve the setting of the South African Soldiers War Memorial. • Improve the linkages from the Domain precinct to the Royal Botanic Gardens and other attractors within the Domain Parklands.
Eastern portal	• Improve the pedestrian linkage between Toorak Road and South Yarra Siding Reserve. • Enhance the operation and lay out of South Yarra Siding Reserve during reinstatement. • Improve Osborne Street Reserve and install infrastructure that better reflects community needs. • Improve the perceived safety of Lovers Walk with passive surveillance and the interface with adjoining streets and buildings.

Activities with the Potential to Trigger Adverse Social Impacts

While the Concept Design would benefit the wider community, there are a number of activities that require management. With mitigation there are two project activities that present a high residual social risk acquisition of the dwellings in Kensington and construction activities that alter valued streetscapes (see table below).

The acquisition of dwellings in Kensington presents a high social risk largely due to the limited numbers of alternative dwellings available for households in the precinct and the disruption to the local community the displacement of these households would likely cause. The impact on valued streetscapes remains high due to the length of time it would take to reinstate these streetscapes and the large cross-section of the community likely to be concerned about this change.

Category	Event	Precinct
Construction and Operation		
Acquisition of nine (9) dwellings in Kensington	Displacement of households with strong ties to their community.	2 - Western portal
Construction activities alters valued streetscapes	Changes to valued streetscapes or the loss of trees on St Kilda Road, Grattan Street, Royal Parade and elsewhere on the project is of concern to a wide cross section of the community.	4 - Parkville station 7 - Domain station

Following mitigation, there are a number of other activities that would still present a medium residual social risk.

Category	Event	Precinct
Design		
Possible construction activities inhibit future planning for households	Residential property owners subject to acquisition or in proximity to construction areas put on hold or reconsider their plans for their properties.	All
Project varies from Concept Design	Community opposition to the final design due to differences from the Concept Design on which they were consulted.	All
Construction		
Residential strata acquisition – Tunnels	Strata acquisition creates concern and anxiety about vibration and subsidence amongst affected property owners.	1 - Tunnels
Construction activities inhibit access to residences	Reduced or loss of access to residences due to traffic management.	8 - Eastern portal
Construction activities alter existing community access patterns	Construction activities act as a barrier to social infrastructure, recreational assets or cause social severance diminishing community networks.	4 - Parkville station
		7 - Domain station
Construction activities result in a loss of amenity for residents	Construction activities impact on the amenity of households diminishing their ability to enjoy their property or use it as they do currently.	1 - Tunnels
		2 - Western portal
		4 - Parkville station
		5 - CBD North station
		6 - CBD South station
		7 - Domain station
		8 - Eastern portal
Construction activities impacting on the amenity of health, educational, commercial, recreational and other facilities	Sustained amenity impacts affects the ability of staff or users to use facilities.	4 - Parkville station
		5 - CBD North station
		6 - CBD South station
		7 - Domain station
Truck movements alter existing community access patterns	Truck movements and changes to local access sever existing community networks and disrupt access patterns particularly for families with young children, those with mobility impairments or the elderly.	7 - Domain station
		8 - Eastern portal
Construction activities located within open spaces or recreation areas used for passive recreation	Construction activities displace passive recreation in an area with limited alternatives, reducing recreational opportunities for the community and potentially severing social networks.	8 - Eastern portal
Construction activities located within open spaces or recreation areas used for active recreation	Construction activities displace organised sports with limited local alternatives for reducing recreational opportunities for the community.	7 - Domain station

Category	Event	Precinct
Construction workforce demand for parking could result in a reduction in parking available for residents, workers or other visitors to the area.	Loss of access to community facilities, recreational spaces or severance of social networks.	All
Truck movements in proximity to residential areas	Truck movements impact on residential amenity	All
Acquisition of 49 dwellings in CBD North	Displacement of 49 mostly tenanted dwellings and diminishment of networks within the surrounding community.	5 - CBD North station
Acquisition of seven dwellings in the eastern portal precinct	Displacement of two (2) households (the remaining five (5) households are vacant or proposed for multi-unit developments) and diminishment of networks within the surrounding community.	8 - Eastern portal
Construction and operation		
Construction activities would take place within the Shrine of Remembrance Reserve permanently changing it with ongoing infrastructure retained	Works within the Shrine of Remembrance Reserve have the potential to create distress for veterans and other members of the community who value the site.	1 - Tunnels 7 - Domain
Construction and operation of the potential Fawkner Park Tunnel Boring Machine launch site	Community concern about works within the park, particularly the impact on trees, paths and amenity.	1 - Tunnels
Construction activities alters valued streetscapes	Changes to valued streetscapes creates community concern.	6 - CBD South station 8 - Eastern portal
Construction activities require the temporary movement of the South African Soldiers War Memorial and other monuments	Impacts on the South African Soldiers War Memorial and other monuments are of concern to the local community.	7 - Domain
Ground improvement works in the Domain Parklands result in the permanent loss of trees along the alignment between Birdwood and Linlithgow Avenues	Community concern about the impact on this valued place and ongoing diminishment in the perceived value of this wooded parkland.	1 - Tunnels
Queen Victoria Gardens emergency access shaft	Placement of the emergency access shaft in Queen Victoria Gardens is inconsistent with community expectations on the uses of this park.	1 - Tunnels

Category	Event	Precinct
Placement of the Tom's Block emergency access shaft	The placement of this infrastructure is inconsistent with community aspirations for Domain Parklands. Parts of the community likely impacted include those traveling on St Kilda Road in trams or by foot who value this part of the landscape.	1 - Tunnels
Design and construction of acoustic treatments	Acoustic treatments such as noise walls impact on visual amenity or are considered to reduce safety through a loss of passive surveillance.	8 - Eastern portal
Operation		
Placement of above ground infrastructure impacts on the ongoing amenity for residents	The placement of project infrastructure such as ventilation shafts in the Osborne Street Reserve or noise walls on Childers Street has an ongoing impact on the amenity of households, diminishing their ability to enjoy their property.	2 - Western portal
		7 - Domain station
		8 - Eastern portal

Impact Assessment

The main social impacts requiring management to ensure consistency with the relevant draft EES objectives are:

Acquisition

The acquisition of up 64 dwellings needs to be managed to avoid the potential displacement of households, particularly in the Western Portal precinct.

The Concept Design largely minimises impacts to private residential property owners and occupiers, however it would necessitate strata acquisition under approximately 3,000 dwellings. The strata acquisition would not directly result in dislocation of affected dwellings but may trigger concerns about vibration and subsidence during and after the passing of the TBMs.

Social Infrastructure

The project would minimise direct impacts on the social infrastructure across the alignment, however it would directly impact on the Fawkner Park Tennis Centre and Edmund Herring Oval via temporary occupation.

Community Accessibility

While the project would largely maintain existing community accessibility, it has the potential to affect existing community access patterns and networks via:

- Truck movements through residential areas in such as the eastern portal and in proximity to social infrastructure such as the Fawkner Park Child Care Centre, Kindergarten and South Yarra Senior Citizens Centre
- Changes to the road network and driving conditions in Domain and Parkville during construction with flow on impacts on access to the hospitals, University of Melbourne and Shrine of Remembrance Reserve
- Construction workforce demand for parking across the precincts
- Impacts on pedestrian movements across RMIT and University of Melbourne campuses.

Community Values

While the project is largely consistent with community values, there are some inconsistencies at the precinct level, these include:

- Local community aspirations for a direct connection to the new tunnels at South Kensington and South Yarra
- The loss of trees across the project precincts, particularly on valued streetscapes such as Royal Parade, Grattan Street or St Kilda Road
- The construction and ongoing maintenance of project infrastructure in park lands such as Fawkner Park, Domain Parklands, Osborne Street Reserve and South Yarra Siding Reserve
- Construction in and modification of City Square, Shrine of Remembrance Reserve and Albert Road Reserve
- Concerns about community safety associated with truck movements and construction activities
- Changes in access to emergency facilities in Parkville
- Over site development, particularly in CBD South.

Amenity and Perceptions of Safety

The project would impact amenity impact in most precincts during construction due to noise, vibration and dust as well as changes to the landscape. The most sensitive to changes would be dwellings subject to sustained construction noise or out of hours works in the eastern portal, Domain, CBD and western portal.

Amenity changes would also affect social infrastructure across the alignment in:

- Parkville (University of Melbourne, Victorian Comprehensive Cancer Centre, Royal Melbourne Hospital, Peter Doherty Institute, Royal Women's Hospital)
- CBD North (RMIT, Melbourne City Baths, State Library)
- Domain (Melbourne Grammar)
- Impacts on valued places, including public open space and recreation reserves
- The Concept Design largely avoids valued places along the alignment but would have impact in:
- Tunnels (Tom's Block and Fawkner Park)
- Parkville (northern end of University Square)
- CBD South (City Square)
- Domain (Shrine of Remembrance Reserve and Albert Road Reserve)
- Eastern portal (South Yarra Siding, Lovers Walk and Osborne Street Reserve).

Mitigation Measures

A number of mitigation measures are proposed to manage these impacts. Key measures include:

- Development of a relocation management framework for highly impacted residents across the project
- Managing truck movements to reduce the impact on amenity or perceptions of community safety
- Engage landholders during the planning, design and implementation stages on the construction method, project design and how this would affect their property
- Demonstrating how community feedback is incorporated in the design of the project
- Traffic management complimented by the appropriate communication mechanisms which allows for existing pedestrian access patterns and considers the needs of vulnerable people such as children and those with mobility impairments
- Target of no net loss of public parking outside the construction zones
- Early consultation with open space users on project timelines and likely impacts

- A relocation strategy for the Fawkner Park Tennis Centre and Edmund Herring Oval
- Avoiding ground improvement techniques that would preclude the reestablishment of trees
- Utilising a case management approach for all households subject to surface or strata acquisition and considering early purchase
- Utilising a complaints management system for responding to all community complaints or enquiries
- Consulting with managers of key facilities so that impacts on their operations and wellbeing of their users are minimised and notification timeframes agreed
- Providing advance warning of out of hours works and consult closely with the institutional stakeholders during their planning to determine times that must be avoided
- Consulting with landholders adjoining construction zones on the treatments applied to noise walls, sheds and others structures
- Providing alternative open space in proximity to City Square that can be used for similar activities for the duration of construction
- Ensuring the Shrine of Remembrance Trustees are consulted on the construction and reinstatement approach and are satisfied it represents an appropriate outcome for the Shrine or Remembrance and its stakeholders.

Conclusion

With the application of the mitigation and Environmental Performance Requirements recommended in this assessment, the project would manage the potential effect on community cohesion and access to services and facilities, especially during the construction phase. It would also minimise the adverse effects on recreational values as far as is practicable.

1 Introduction

This report provides an assessment of the social impacts on the proposed Melbourne Metro Rail Project (Melbourne Metro).

1.1 Project Description

The proposed Melbourne Metro comprises two nine-kilometre long rail tunnels from Kensington to South Yarra, travelling underneath Swanston Street in the CBD, as part of a new Sunbury to Cranbourne/Pakenham line (see Figure 1-1).

The infrastructure proposed to be constructed as part of Melbourne Metro broadly comprises:

- Twin nine-kilometre rail tunnels from Kensington to South Yarra connecting the Sunbury and Cranbourne/ Pakenham railway lines to form the new Sunshine-Dandenong Line (with the tunnels to be used by electric trains)
- Rail tunnel portals (entrances) at Kensington and South Yarra
- New underground stations at Arden, Parkville, CBD North, CBD South and Domain with longer platforms to accommodate longer High Capacity Metro Trains (HCMTs). The stations at CBD North and CBD South would feature direct interchange with the existing Melbourne Central and Flinders Street Stations respectively
- Train/tram interchange at Domain station.

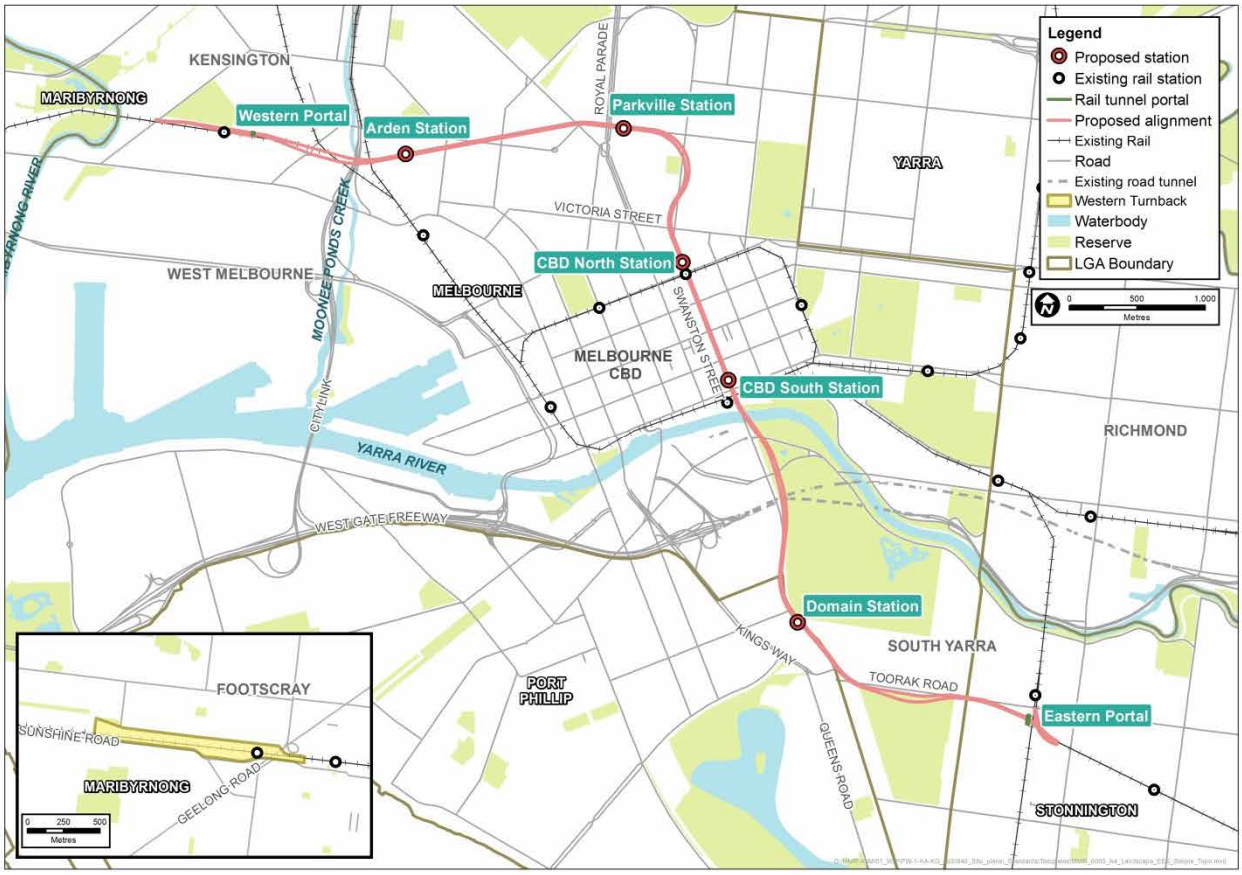


Figure 1-1 Map of the proposed Melbourne Metro alignment and five proposed underground stations

Proposed construction methods involve bored and mined tunnels, cut- and- cover construction of station boxes at Arden, Parkville and Domain and portals, and cavern construction at CBD North and South. The Melbourne Metro would require planning, environmental and land tenure related approvals to proceed.

1.2 Purpose of this Report

The purpose of this report is to assess the potential positive and adverse social impacts of the Concept Design during construction and operation including consideration of both direction and indirect impacts. The report also identifies measures to manage adverse impacts and potential opportunities. Key considerations relate to changes to the social fabric of the community such as impacts on:

- Property owners and occupiers
- Social infrastructure such as educational, health, religious and sporting facilities
- Community accessibility and social networks
- Community values
- Amenity for residents
- Perceptions of safety
- Valued places, including public open space and recreation reserves.

1.3 Project Precincts

For assessment purposes, the proposed project boundary is divided into precincts as outlined below. The precincts are defined based on the location of project components and required construction works, the potential impacts on local areas and the character of surrounding communities.

The proposed precincts are:

- Precinct 1: Tunnels (outside other precincts)
- Precinct 2: Western Portal (Kensington)
- Precinct 3: Arden Station (including substations)
- Precinct 4: Parkville Station
- Precinct 5: CBD North Station
- Precinct 6: CBD South Station
- Precinct 7: Domain Station
- Precinct 8: Eastern Portal (South Yarra)
- Precinct 9: Western Turnback (West Footscray).

Figure 1-2 shows the nine precincts.

1.4 Study Area

The study area for the social impact assessment includes the Cities of Melbourne, Port Phillip, Stonnington and Maribyrnong with a focus on the suburbs interfacing with the proposed alignment (see Figure 1-3 and Figure 1-4).

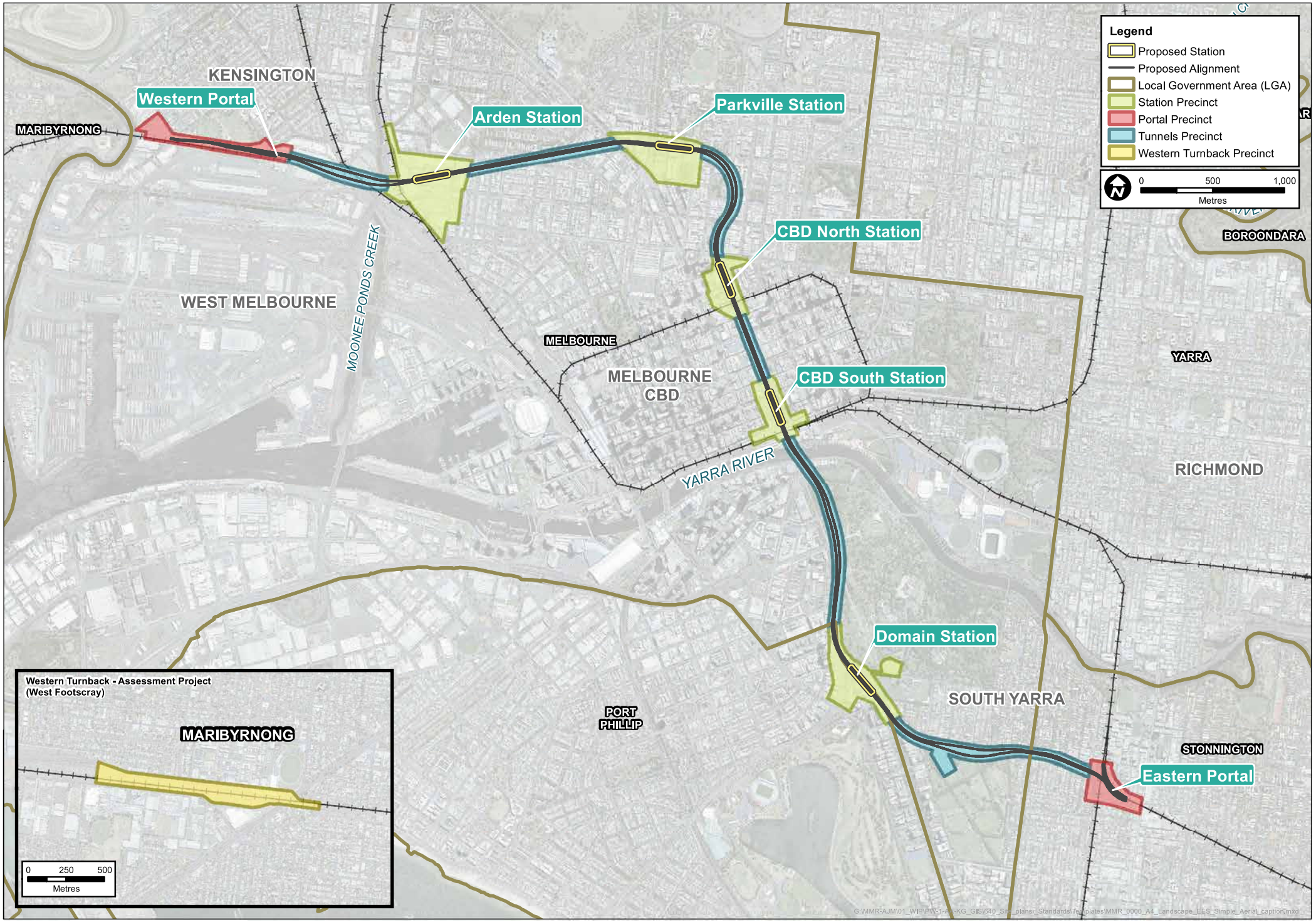


Figure 1-2 Melbourne Metro precincts

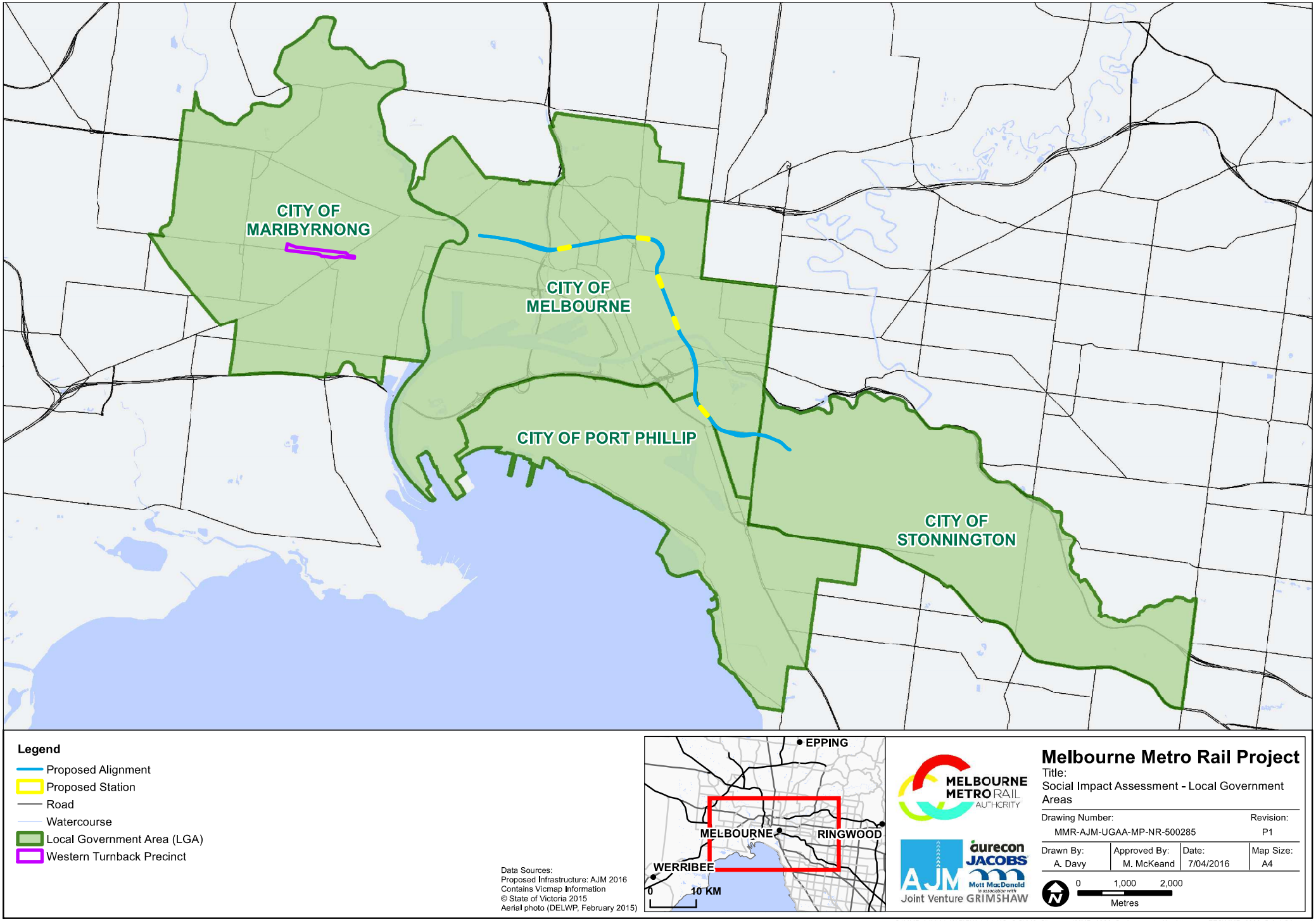


Figure 1-3 Proposed Melbourne Metro study area by municipality

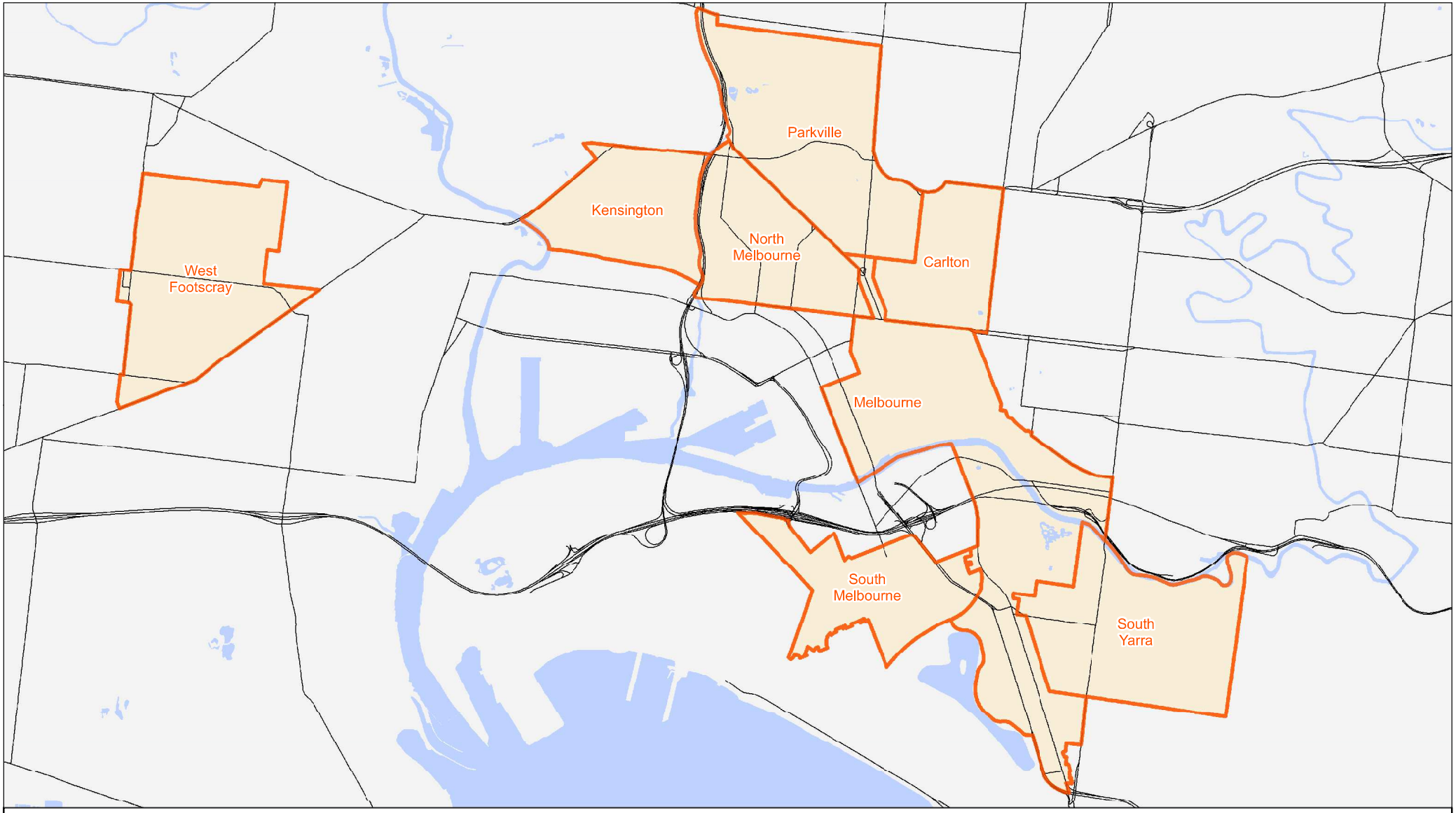


Figure 1-4 Proposed Melbourne Metro study area by suburbs

2 Scoping Requirements

The following draft evaluation objectives set out in Table 2-1 and Table 2-2 are relevant to the social and community impact assessment and identify the desired social outcomes in the context of potential project effects. The draft evaluation objectives provide a framework to guide an integrated assessment of environmental effects of the project, in accordance with the *Ministerial guidelines for assessment of environmental effects under the Environment Effects Act 1978*.

Table 2-1 Social and community draft EES evaluation objective

Draft EES evaluation objective	Key legislation
Social, community, land use and business: To manage effects on the social fabric of the community in the area of the project, including with regard to land use changes, community cohesion, business functionality and access to services and facilities, especially during the construction phase.	*Planning and Environment Act 1987*

Table 2-2 Landscape, visual and recreational values draft evaluation objective

Draft ESS evaluation objective	Key legislation
Landscape, visual and recreational values: To avoid or minimise adverse effects on landscape, visual amenity and recreational values as far as practicable.	*Planning and Environment Act 1987*

2.1 EES Scoping Requirements

The extracts from the Scoping Requirements issued by the Minister for Planning relevant to the social and community objectives are set out in Table 2-3.

Table 2-3 Scoping requirements for social and community

Aspect	Relevant responses
Key Issues	• Maintenance of community linkages and social cohesion within both the immediate neighbourhood of proposed works and the broader area which may be affected by the project • Potential for changed accessibility for residents, including to community services or facilities resulting from construction works or from operation of the project • Potential acquisitions of private property for project purposes • Maintaining amenity in the CBD and other key areas for residents, businesses and visitors during construction.
Priorities for characterising the existing environment	• Describe the communities which may be affected by the project at all relevant levels, and with regard to their exposure to the project. The description should address both physical components, such as community service facilities used by community members, and intangible elements such as values shared by particular groups, to the extent relevant to the project • Describe the land which may be required permanently or temporarily for the delivery of the project, including its current uses and sensitivities • Describe in broad terms land uses in the area neighbouring the alignment, and particularly in the neighbourhood of stations, portals and construction works compounds • Describe the relevant infrastructure, networks and other elements that provide for connectivity within and between communities, to the extent that such features may be disrupted or additionally loaded due to project works or activities.

Aspect	Relevant responses
Design and mitigation measures	• Describe measures to be put in place to maintain community linkages or replace linkages which may be disrupted by the project.
Assessment of likely effects	• Analyse the residual (mitigated) effects on communities, community cohesion and business operations, categorising the severity of residual effects and identifying further measures which may be taken to manage residual effects • Analyse indirect effects which might result from the project (e.g. on catchments for community facilities or other land uses) and propose measures for addressing such effects, including both temporary and permanent effects.

The extracts from the Scoping Requirements issued by the Minister for Planning relevant to the landscape, visual and recreational values objectives are set out in Table 2-4.

Table 2-4 Scoping requirements for landscape, visual and recreational values

Aspect	Relevant responses
Key Issues	• Potential temporary or permanent effects on public open space and recreational areas, affecting access to or enjoyment of recreational opportunities, especially during the construction phase.
Priorities for characterising the existing environment	• Identify condition and uses of public open space and facilities which could be occupied or otherwise adversely affected by Project construction works.
Design and mitigation measures	• Identify Project design and management measures to avoid or minimise adverse effects on recreational values resulting from the project, including during construction, and opportunities for recreational uses to be redirected to alternative sites (if relevant).
Assessment of likely effects	• Identify and assess likely residual effects on recreational activities, including with regard to public land to be used or occupied for project works.
Approach to manage performance	• Describe the approach to identifying proposed methods to monitor effects on recreational opportunities and the effectiveness of mitigation measures that have been put in place.

3 Legislation, Policy and Guidelines

Table 3-1 summarises the relevant primary legislation and policies that apply to the Concept Design as well as the implications, enquired approvals and interdependencies and information requirements associated with obtaining approvals. Descriptions of other relevant policies are contained in Appendix A of this report.

Table 3-1 Primary legislation and associated information

Legislation / policy	Key policies / strategies	Implications for this project	Approvals required	Timing / interdependencies
Commonwealth				
The Social Inclusion Agenda: A Stronger, Fairer Australia (PMC, 2009)	Access to public transport is a key resource to support social inclusion (p3) and access to services (p8).	The social impact assessment assesses whether the Concept Design would improve access to key social infrastructure.	NA	NA
State				
Environment Effects Act 1978 and Ministerial guidelines for assessment of environmental effects under the Environment Effects Act 1978	A social impact assessment should consider the potential for changes to: • Local population and demographic profile • Social structure and networks • Residential amenity and social well-being • Social vulnerability and differential effects on parts of the community • Housing and social	These factors inform the risk assessment and assessment criteria used for the impact assessment.	NA	NA

Legislation / policy	Key policies / strategies	Implications for this project	Approvals required	Timing / interdependencies
	infrastructure needs • Perceptions of aesthetic, recreational and other social values of landscape or locality • Attitudes to proposed development.			
Transport Integration Act 2010	Transport planning should consider social and economic inclusion by: • Minimising barriers to access so that so far as is possible the transport system is available to as many persons as wish to use it (Section 8 b) • Providing for the effective integration of transport and land use and facilitate access to social and economic opportunities (Section 11.1). • Maximising access to residences, employment, markets, services and recreation (Section 11.2 a).	The social impact assessment considers access and severance in relation to dwellings, social infrastructure, valued places and recreational infrastructure.	NA	NA
Planning and Environment Act 1987	A key objective of the act is (Section 4.2): (d) to ensure that the effects on the environment are considered and provide for explicit	The social impact assessment identifies social effects for consideration in the EES which would inform the development of the planning scheme amendment.	NA	NA

Legislation / policy	Key policies / strategies	Implications for this project	Approvals required	Timing / interdependencies
	consideration of social and economic effects when decisions are made about the use and development of land; In preparing a planning scheme or amendment, a planning authority Section 12.2): (c) may take into account its social effects and economic effects.			

4 Methodology

4.1 Scope

This assessment considers effects on the social fabric of the community, with the exception of land use change and business impacts, which are considered in:

- Technical Appendix E *Land Use and Planning*
- Technical Appendix G *Business.*

The social impact assessment also considers recreational values, while landscape and visual values are considered separately in Technical Appendix L *Landscape and Visual*.

4.2 Existing Conditions

4.2.1 Definition of the Study Area

The proposed Melbourne Metro would benefit users of the wider transport network and enable the community to continue accessing employment, social infrastructure, valued places and wider social networks. Without this and other projects that increase the capacity of the transport network, it is likely the community would face a diminishment of social opportunities with projected population growth outstripping road and rail capacity. Adverse impacts associated with the construction and operation of the Concept Design are likely to be felt more locally.

This impact assessment focuses on the local government areas and suburbs surrounding each of the proposed Concept Design precincts to identify the local benefits and opportunities and to enable mitigation and performance requirements to focus on the social activities likely to result in an adverse impact.

Table 4-1 outlines the extent of the study area.

Table 4-1 Project study area

Precinct	Study area	
	Local Government Area	Suburbs
1: Tunnels	City of Melbourne, City of Port Phillip, City of Stonnington	Carlton, Kensington, Melbourne, North Melbourne, Parkville, South Melbourne and South Yarra
2: Western Portal	City of Melbourne	Kensington
3: Arden station	City of Melbourne	North Melbourne
4: Parkville station	City of Melbourne	Parkville
5: CBD North station	City of Melbourne	Melbourne
6: CBD South station	City of Melbourne	Melbourne
7: Domain station	City of Melbourne, City of Port Phillip	Melbourne, South Yarra and South Melbourne
8: Eastern Portal	City of Stonnington	South Yarra
9: Western Turnback	City of Maribyrnong	West Footscray

4.2.2 Review of Government Policy and Legislation

A review of Commonwealth, State and Local government policy and legislation informs this social impact assessment (see Section 3 and Appendix A) of this report.

4.2.3 Data Review and Social Profile

The social profile in this impact assessment provides a baseline to assess potential social impacts and opportunities. It contains information about the communities surrounding the precincts, their values, existing issues and valued places. This assessment uses two social profiles, one to provide regional context to the assessment (see Section 5) and a series of profiles focused on the communities immediately adjoining the project precincts (see Section 7).

These social profiles use information from a number of data sources including:

- Victoria in Future 2015
- Census (2001, 2006 and 2011)
- Council websites
- Aerial imagery
- Melway Street Directory of Greater Melbourne
- Small area labour markets
- Socio-economic Indices for Areas
- Council plans and polices available online
- Facility websites.

4.2.4 Social Survey

The results of a social survey conducted by Ipsos between 28 July and 25 August 2015 inform this social impact assessment. In total 2,979 people participated in the survey (see Appendix D of this report).

The survey contained both a random sample and a self-selected sample. In total, 1,922 people participated in the random survey. They included:

- 564 people from the project precincts
- 957 from across broader Melbourne
- 322 from regional Victoria.

Table 4-2 shows the number of randomly selected surveys collected from each project precinct.

Table 4-2 Surveys from each project precinct

Locations	Residents
Kensington	132
North Melbourne	94
Parkville	49
CBD	141
Domain	57
South Yarra	91
Total	564

In total, 1,057 people completed the self-selected survey. This was accessed via the project website and promoted via social media, at engagement events and via other government channels including a media release from the Premier.

The purpose of the social survey was to inform the engagement strategy for the project as well as inform the social impact assessment. The survey coverage was broader than the immediate study area in order to assess the levels of knowledge and understanding about the project among the wider Melbourne community. It collected information on:

- Project awareness
- Project understanding
- Levels of support
- Perceived benefits and issues
- Preferred methods of communication.

For this assessment, data from the survey was used to:

- Gauge the level of wider public support for the project
- Understand the likely level of awareness respondents had about the project and its proposed construction
- Generate a list key issues of interest for discussion during stakeholder interviews.

4.2.5 Site Investigations

Two walk through inspections of the alignment inform this assessment. These took place on 2 June 2015 and 7 October 2015. Several additional precinct specific site inspections also inform this assessment.

4.2.6 Peer Review

This assessment has been independently peer reviewed by Mr Tim Offer of Pax Republic. The peer reviewer reviewed and provided feedback on drafts of this report. The peer reviewer's methodology is set out in his report, but in general terms, it included a review of the assumptions, methodology, assessment criteria and scope applied in this report. It also addressed whether there were any additional matters which should be considered as part of the impact assessment in order to address the EES Scoping Requirements that are relevant to social and community impacts or management. The peer reviewer was also required to consider whether there are any gaps or matters where they disagreed with this assessment. The final peer review report is attached at Appendix B of this report, which sets out the peer reviewer's conclusions in relation to this report, and whether or not all of their recommendations were adopted.

4.3 Risk and Impact Assessment

4.3.1 Overview

An Environmental Risk Assessment has been completed for impacts of the proposed Melbourne Metro. The risk-based approach is integral to the EES as required by Section 3.1 of the Scoping Requirements for the EES. Importantly, an environmental risk is different from an environmental impact. Risk is a function of the likelihood of an adverse event occurring and the consequence of the event. Impact relates to the outcome of an action in relation to values of a resource or sensitivity of a receptor. Benefits are considered in impact assessment but not in risk assessment. Impact assessment must be informed by risk assessment so that the level of action to manage an impact relates to the likelihood of an adverse impact occurring.

The overall risk assessment process adopted was based on AS/NZS ISO 31000:2009, as illustrated in Figure 4-1.

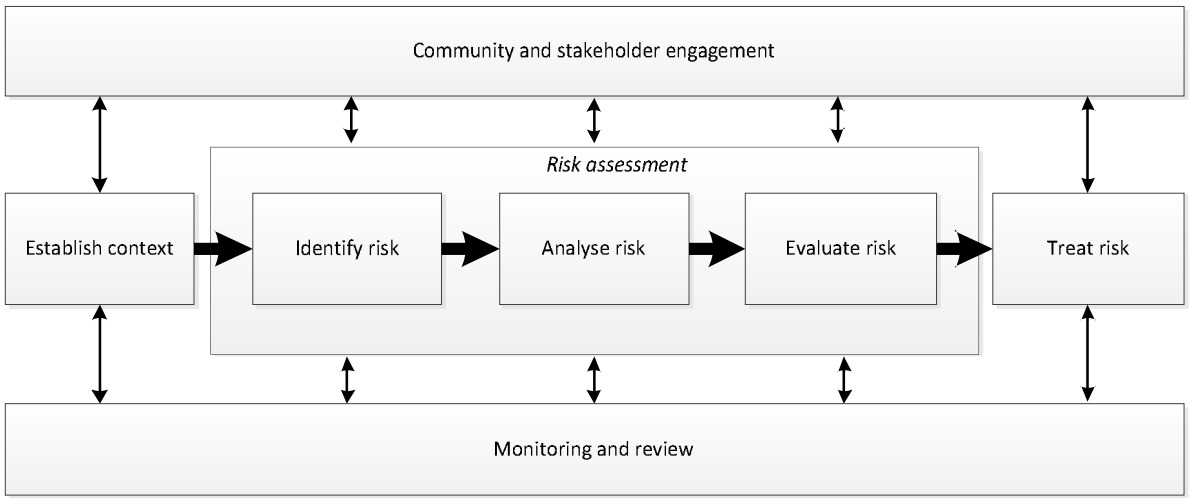


Figure 4-1 Overview of AS/NZS ISO 31000-2009 risk process

The following tasks were undertaken to determine the impact pathways and assess the risks:

- Setting of the context for the environmental risk assessment
- Development of consequence and likelihood frameworks and the risk assessment matrix
- Review of project description and identification of impact assessment pathways by specialists in each relevant discipline area
- Allocation of consequence and likelihood categories and determination of preliminary initial risks
- Workshops with specialist team members from different yet related discipline areas and focusing on very high, high and moderate initial risks to ensure a consistent approach to risk assessment and to identify possible interactions between discipline areas
- Follow-up liaison with specialist team members and consolidation of the risk register.

A more detailed description of each step in the risk assessment process is provided in Technical Appendix B *Environmental Risk Assessment Report* of the EES.

4.3.2 Context

The overall context for the risk assessment and a specific context for each specialist study is described in Technical Appendix B *Environmental Risk Assessment Report*. The context describes the setting for evaluation of risks arising from the proposed Melbourne Metro. The specific context for the social and community impact assessment is provided below.

> *Melbourne Metro is proposed in localities containing a range of communities with varying socio-economic characteristics including Carlton, Kensington, Melbourne, North Melbourne, Parkville, South Melbourne, South Yarra and West Footscray. Stakeholders for a project of such scale and significance include residents, businesses, workers, students, sportspeople, visitors and tourists. The project would not only be of significance to the local community but to communities throughout the Melbourne metropolitan area and beyond, especially to current and future residents along the corridors serviced by the Cranbourne/Pakenham and Sunbury rail lines, which would run through the new tunnels.*
>
> *Social aspects associated with the construction and operation of Melbourne Metro include property acquisition, temporary and longer-term land use changes and temporary transport diversions.*

The likelihood rating criteria used in the risk assessment by all specialists are described in Table 4-3.

Table 4-3 Likelihood rating criteria

Level	Description
Rare	The event is very unlikely to occur but may occur in exceptional circumstances.
Unlikely	The event may occur under unusual circumstances but is not expected.
Possible	The event may occur once within a five-year timeframe.
Likely	The event is likely to occur several times within a five-year timeframe.
Almost Certain	The event would occur one or more times a year.

The consequence criteria framework used in the risk assessment is set out in Table 4-4. Each specialist applied this framework to develop criteria specifically for their assessment.

Table 4-4 Consequence framework

Level	Qualitative description of biophysical / environmental consequence	Qualitative description of socio-economic consequence
Negligible	No detectable change in a local environmental setting.	No detectable impact on economic, cultural, recreational, aesthetic or social values.
Minor	Short term, reversible changes, within natural variability range, in a local environmental setting.	Short term, localised impact on economic, cultural, recreational, aesthetic or social values.
Moderate	Long term but limited changes to local environmental setting that are able to be managed.	Significant and/or long-term change in quality of economic, cultural, recreational, aesthetic or social values in local setting. Limited impacts at regional level.
Major	Long term, significant changes resulting in risks to human health and/or the environment beyond the local environmental setting.	Significant, long-term change in quality of economic, cultural, recreational, aesthetic or social values at local, regional and state levels. Limited impacts at national level.
Severe	Irreversible, significant changes resulting in widespread risks to human health and/or the environment at a regional scale or broader.	Significant, permanent impact on regional economy and/or irreversible changes to cultural, recreational, aesthetic or social values at regional, state and national levels.

The consequence rating criteria used in the social risk assessment are described in Table 4-5.

Table 4-5 Consequence rating criteria

Level of consequence	Consequence criteria
Access	
Negligible	Local, small-scale, easily reversible change in access to residences, social infrastructure or social networks and the communities of interest can easily adapt or cope with change.
Minor	Short-term (less than 1 year), recoverable changes to in access to residences, social infrastructure or social networks and community has substantial capacity to adapt and cope with change.
Moderate	Medium-term (1-5 years), recoverable changes in access to residences, social infrastructure or social networks and community has substantial capacity to adapt and cope with change.
Major	Long-term (5-25 years), recoverable changes in access to residences, social infrastructure or social networks and community has limited capacity to adapt and cope with change.

Level of consequence	Consequence criteria
Severe	Irreversible changes in access to residences, social infrastructure or social networks and community has no capacity to adapt and cope with change.
Activities in proximity to social infrastructure and recreational assets	
Negligible	Local, small-scale, easily reversible change to social infrastructure or recreational assets and the communities of interest can easily adapt or cope with change.
Minor	Short-term (less than 1 year), recoverable change to social infrastructure or recreational assets and community has substantial capacity to adapt and cope with change.
Moderate	Medium-term (1-5 years), recoverable changes to social infrastructure or recreational assets and community has substantial capacity to adapt and cope with change.
Major	Long-term (5-25 years), recoverable change to social infrastructure or recreational assets and community has limited capacity to adapt and cope with change.
Severe	Irreversible change to social infrastructure or recreational assets and community has no capacity to adapt and cope with change.
Acquisition of residential property or social infrastructure	
Negligible	No displacement of residents or no displacement of social infrastructure.
Minor	Temporary localised displacement of tenanted dwellings in an area with sufficient alternative accommodation available or acquisition of social infrastructure with an alternative available within the precinct.
Moderate	Permanent displacement of tenanted dwellings or displacement of owner occupier households with the ability to source alternative equivalent accommodation in the precinct or acquisition of important social infrastructure with an alternative reasonably accessible to current users.
Major	Displacement of owner / occupier households with constrained ability to source alternative equivalent accommodation in the precinct or acquisition of important social infrastructure with an alternative difficult to access for current users.
Severe	Displacement of owner / occupier households with almost no ability to source alternative equivalent accommodation in the precinct or loss of access to important social infrastructure.
Activities in proximity to valued places	
Negligible	Local, small-scale, easily reversible actual or perceived change to a site valued by the wider community.
Minor	Short-term (less than 1 year), recoverable actual or perceived changes to a site valued by the wider community and community has substantial capacity to adapt and cope with change.
Moderate	Medium-term (1-5 years), recoverable actual or perceived changes to a site valued by the wider community and community has some capacity to adapt and cope with change.
Major	Long-term (5-25 years), recoverable actual or perceived changes to a site valued by the wider community and community has limited capacity to adapt and cope with change.
Severe	Irreversible actual or perceived changes to a site valued by the wider community.
Changes in amenity for residences	
Negligible	Local, small-scale, easily reversible change in amenity for an area and the communities of interest can easily adapt or cope with change.
Minor	Short-term (less than 1 year), recoverable change in amenity for an area and community has substantial capacity to adapt and cope with change.

Level of consequence	Consequence criteria
Moderate	Medium-term (1-5 years), recoverable change in amenity for an area and community has some capacity to adapt and cope with change.
Major	Long-term (5-25 years), recoverable change in amenity for an area and community has limited capacity to adapt and cope with change.
Severe	Irreversible changes amenity for an area.
Activities inconsistent with community values	
Negligible	Local, small-scale, easily reversible change to the perceived health and safety or locally inconsistent with community expectations or values and communities can easily adapt or cope with change.
Minor	Short-term (less than 1 year), recoverable changes to the perceived health and safety or short-term inconsistency with community expectations or values and the community has substantial capacity to adapt and cope with change.
Moderate	Medium-term (1-5 years), recoverable changes to the perceived health and safety or medium-term inconsistency with community expectations or values and the community has some capacity to adapt and cope with change.
Major	Long-term (5-25 years), recoverable changes to the perceived health and safety or long-term inconsistency with community expectations or values and the community has limited capacity to adapt and cope with change.
Severe	Irreversible changes to the perceived health and safety or permanent inconsistency with community expectations or values and the community has no capacity to adapt and cope with change.

The environmental risk assessment matrix used by all specialists to determine levels of risk from the likelihood and consequence ratings is shown in Table 4-6.

Table 4-6 Risk assessment matrix

		Consequence rating				
		Negligible	**Minor**	**Moderate**	**Major**	**Severe**
Likelihood rating	**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

4.3.3 Identification of Risks

The identification of risks used the following approach:

- An initial risk meeting held with other specialists to detail the risk assessment process
- Initial identification of social risks for design, construction and operation, using the Concept Design
- Determination of the impact pathway, project phase, relevant precinct, existing performance requirements, initial risk rating and data availability columns in risk register

- Review/feedback by Planning team prior to risk workshops.

4.3.4 Impact Assessment

To assess the performance of the project against each EES draft evaluation objective, a series of criteria were applied which are set out in Table 4-7. These criteria reflect the advice provided in the *Ministerial guidelines for assessment of environmental effects under the Environment Effects Act 1978*. The indicators used to assess the performance of the project against each criterion are also provided in Table 4-7.

Table 4-7 Draft EES evaluation objectives and assessment criteria

Draft EES evaluation objectives	Assessment criteria	Criteria indicators
Social, community, land use and business: To manage effects on the social fabric of the community in the area of the project, including with regard to land use changes, community cohesion, business functionality and access to services and facilities, especially during the construction phase. **Landscape, visual and recreational values**: To avoid or minimise adverse effects on landscape, visual amenity and recreational values as far as practicable.	Minimise impacts to private residential property owners and occupiers.	• Property acquisition / dislocation. • Change to property access.
	Minimise impacts on social infrastructure such as educational, health, religious and sporting facilities.	• Loss of buildings, restricted operations, loss of users.
	Maintain community accessibility and avoid social severance.	• Impacts on accessibility of social infrastructure (includes direct impacts and indirect delays). • Severance of social networks.
	Achieve consistency with community values.	• Consistency with views expressed during engagement.
	Minimise impacts on, and enhance amenity for residents and the community and maintain perceptions of safety during the construction phase.	• Changes in acoustic, visual, air quality or other aspects of amenity for residences, social infrastructure and valued spaces.
	Minimise impacts on valued places, including public open space and recreation reserves.	• Changes to places and activities of special interest, attraction and value to the community, including public open spaces and recreation reserves. • Amenity impacts on social infrastructure.

The impact assessment was also informed by a review of other assessments including:

- Technical Appendix D *Transport*
- Technical Appendix E *Land Use and Planning*
- Technical Appendix G *Business*
- Technical Appendix H *Air Quality*
- Technical Appendix I *Noise and Vibration*
- Technical Appendix L *Landscape and Visual*
- Technical Appendix R *Arboriculture*.

4.4 Assumptions

Key assumptions underpinning this assessment are summarised in Table 4-8.

Table 4-8 Assumptions table

Assumption	Description
Transport network	By 2026, the first year of operation of Melbourne Metro, the transport network would be more congested than today. This would lead to a reduction in accessibility to key social infrastructure, value places and wider social networks.
Business impacts	Technical Appendix G to the EES addresses the implications of the project on businesses including displacement and severance effects. As such, these are not considered in this assessment. Assessment of impacts of a given project on staff is not typically within the scope of social impact assessment and outside the scoping requirements of the EES, therefore neither the business nor social impact assessments consider the impact of the project on staff within affected businesses. This assessment does however, consider the potential effects on the staff of social infrastructure or recreational assets as this has a direct link with the ability of these facilities to function as intended.

4.5 Stakeholder Engagement

4.5.1 Stakeholder Mapping

Stakeholder mapping utilised information from the social profile and site investigations to identify key stakeholders with an interest in the project who could inform this assessment. Key stakeholders include those who could provide insight to the affected community or managed social infrastructure and recreational facilities likely to be impacted by the works.

Participants in community discussions were also selected based on their proximity to anticipated project impacts. This included residents of dwellings that could be acquired, those who would be newly exposed to the project as a result of the acquisition of neighbouring properties and those who were expected to be located in proximity to high impact project activities.

Stakeholder engagement is summarised in Table 4-9. More details are provided in Appendix D of this report.

Table 4-9 Summary of stakeholder engagement

Meetings	When	Matters discussed / issues raised	Consultation outcomes
City of Maribyrnong	26/03/2016	Western turnback and the implications for the adjoining community	Understanding of local community and confirmation of the likely potential impacts and mitigation
City of Melbourne	30/07/2015	Current uses and future plans; Domain Parklands, Shrine of Remembrance Reserve, Fawkner Park and Edmund Herring Oval	Understanding of current and future uses, community and user views
City of Melbourne	30/09/2015	Community attitudes, confirmation of valued places and key social infrastructure in proximity to the alignment, social impacts and opportunities	Input to social profile
City of Melbourne	5/11/ 2015	High level social impacts and opportunities, specific to Edmund Herring Oval, Domain Parklands, Fawkner Park	Confirmation of potential impacts and potential mitigation approaches
City of Melbourne	9/11/2015	High level social impacts and opportunities specific to CBD North and South	Confirmation of potential impacts and potential mitigation approaches
City of Melbourne	12/11/2015	High level social impacts and opportunities specific to Kensington, Arden and Parkville	Confirmation of potential impacts and potential mitigation approaches

Meetings	When	Matters discussed / issues raised	Consultation outcomes
City of Melbourne	17/12/2015	Current operations and future plans for the South Yarra Senior Citizens Centre, potential social impacts associated with works in Fawkner Park	Confirmation of potential impacts
City of Stonnington	28/09/2015	Community attitudes, valued places, social infrastructure, likely community perceptions, previous projects, mitigation, specific to the eastern portal	Input to social profile
City of Stonnington	29/10/2015	High level social impacts and opportunities in relation to the eastern portal	Confirmation of potential impacts and potential mitigation approaches
City of Port Phillip	17/09/2015	Community attitudes, valued places, social infrastructure, likely community perceptions, previous projects, mitigation	Input to social profile
City of Port Phillip	30/10/2015	High level social impacts and opportunities specific to the Domain precinct	Confirmation of potential impacts
Federation Square	15/09/2015	Operations, potential high level impacts and opportunities	Input to social profile, confirmation of potential impacts
Fawkner Park Children's Centre and Kindergarten	14/12/2015	Current operations and future plans for the facility, potential impacts on operations and users associated with the southern Tunnel Boring Machine launch site	Input to social profile, confirmation of potential impacts
Fawkner Park Tennis Centre	14/12/2015	Current operations and future plans for the facility, potential impacts on operations and users associated with the southern Tunnel Boring Machine launch site	Input to social profile, confirmation of potential impacts
Inner City Christian Church	01/02/2016	Current operations and future plans, implications of the project for the Church	Input to social profile, confirmation of potential impacts
Kensington Community and Recreation Centre	29/10/2015	Current operations and future plans, catchment, experience with previous projects anticipated impacts and opportunities	Input to social profile, confirmation of potential impacts
Kensington Community Children's Co-Operative	06/11/2015	Current operations and future plans, catchment, experience with previous projects anticipated social impacts and opportunities	Input to social profile, confirmation of potential impacts
Melbourne Grammar School	26/10/2015	Current operations and future plans, catchment, experience with previous projects anticipated social impacts and opportunities	Input to social profile, confirmation of potential impacts
Parks Victoria	15/09/2015	High level social impacts and opportunities associated with the Yarra Crossing	Confirmation of potential impacts
RMIT	11/11/2015	RMIT operations, high level issues associated with major projects	Input to social profile, confirmation of potential impacts
Royal Melbourne Hospital	04/11/2015	Operations, construction related social impacts and opportunities	Input to social profile, confirmation of potential impacts
Royal Women's Hospital	26/03/2016	Operations, construction related social impacts and opportunities	Input to social profile, confirmation of potential impacts
Shrine of Remembrance	23/09/2015	Operations, community values, potential high level impacts and opportunities	Input to social profile

Meetings	When	Matters discussed / issues raised	Consultation outcomes
Shrine of Remembrance	26/11/015	Construction scenarios for the Domain and southern TBM Launch Site, potential high level social impacts and opportunities	Confirmation of potential impacts
State Library	11/09/2015	Operations, users, potential high level social impacts and opportunities	Input to social profile
State Library	16/09/2015	Operations, users, potential high level social impacts and opportunities	Input to social profile, confirmation of potential impacts
University of Melbourne	27/11/2015	Current operations and future plans, experience with previous projects anticipated social impacts and opportunities	Input to social profile, confirmation of potential impacts

This assessment also undertook a series of meetings with directly and indirectly affected landholders and tenants between 26 October 2015 and 18 February 2016 (Table 4-10). The impact and risk assessments consider the outcomes of these discussions.

A number of people approached to participate in the study elected not to do so, particularly those living in proximity to the proposed CBD North and South stations. This may be in part attributable to the transient nature of segments of the CBD community and lower level of interest in the project following the decision to adopt a mined tunnel method for construction.

Table 4-10 Landholder interviews

Precinct	Interviewed	Total approached
Western Portal	11	20
CBD	23	320+
Domain	28	50
Eastern Portal	11	12
Total	73	402+

This impact assessment also draws on the outcomes of the activities outlined in Technical Appendix C *Community and Stakeholder Feedback Summary Report* to the EES. This includes a series of community information sessions held in October and November 2015 (Table 4-11). Authors of the social impact assessment team attended the majority of these sessions and were available to discuss social issues of concern to attendees.

The results of these and follow up discussions are considered in this assessment. The issues raised by the community in these sessions and discussions are summarised under community attitudes and values in each precinct chapter.

Table 4-11 Community information sessions

Suburb	Location	Date
Kensington	Kensington Community Recreation Centre	Saturday 24 October 2015
Melbourne (CBD)	State Library of Victoria	Monday 26 October 2015
South Yarra	Punt Hill South Yarra Grand	Tuesday 27 October 2015, Wednesday 18 November 2015
North Melbourne	North Melbourne Community Centre	Wednesday 28 October 2015
Parkville	Doherty Institute	Thursday 29 October 2015
Melbourne (Domain)	Seasons Botanic Gardens	Tuesday 10 November 2015
Melbourne (CBD)	Melbourne Town Hall	Saturday 14 November 2015, Friday 20 November 2015

The study team also accompanied MMRA representatives notifying residents of 200 La Trobe Street that the property would likely be required for the project. The inspection of the building and discussions with residents at this time also informed this assessment.

The results of online forums hosted on Melbourne Metro website also informed this assessment. These included a social pinpointing tool, a 'have your say' forum and a survey open from 23 October 2015 to December 10 2015 (Refer to Technical Appendix C *Community and Stakeholder Feedback Summary Report* for more information).

The wider engagement program for the project is ongoing with the outcomes of this and other assessments informing its scope, approach and content.

4.6 Limitations

The limitations associated with this assessment are:

- The low levels of wider community awareness about the project mean that trade-offs between options are not well understood. For example, would the wider community accept a greater impact on Fawkner Park if this reduced the duration and degree of disruption on St Kilda Road?

5 Regional Context

The following sections provide regional context for the Concept Design outlining demographic trends and historic and current land uses.

5.1 Population Drivers and the Transport Network

The population growth in wider Melbourne is driving the need for Melbourne Metro and a number of other transport projects. Table 5-1 shows that the current estimated population of Greater Melbourne is 4.4 million people (ABS 2015). The Victorian Government projects the population to grow to 5,982,778 people by 2031, significantly increasing demand on the transport network.

Table 5-1 Population projections and growth for Greater Melbourne

Year	2016	2021	2026	2031
Population	4,623,137	5,078,373	5,530,922	5,982,778

Source Victoria in Future 2015

Population growth and the shift from manufacturing towards knowledge-based services are creating increased demand for travel across the city and into central Melbourne. Growing travel demand is leading to more cars, trucks and commercial vehicles on Melbourne's roads and more people using public transport, especially to commute to jobs in or near the central city. This is discussed further in Technical Appendix D *Transport*. Public transport demand is forecast to grow at a compounded 4.4 per cent per annum to 2021 (PTV 2012). This rate of growth would exceed the current capacity of the transport network limiting access to wider Melbourne for the community. This would affect access to employment and social infrastructure such as hospitals and schools as well as diminish community access to their wider social networks.

5.2 Demographic Profile

5.2.1 The Project

The Concept Design would travel through four local government areas and eight suburbs. Travelling from west to east, the suburbs include West Footscray, Kensington, North Melbourne, Parkville, Carlton, Melbourne, South Melbourne and South Yarra. The following section provides a summary of demographic trends specific to these suburbs. A summary of the key demographic data sourced from the 2011 census is included in Appendix B of this report.

5.2.2 Kensington

The western portal is proposed to be located in Kensington in the rail reserve adjacent to Childers Street. Kensington was originally an industrial working class area, laid out as terraced houses in the 1800s (City of Melbourne 2013c). It includes a mix of extensive transport infrastructure, industry and commerce, arterial roads such as Macaulay and Kensington Roads, the Sunbury, Werribee and Regional Rail Link lines and West Melbourne terminal station.

The Western Portal precinct is bound by JJ Holland Park (Figure 5-1) to the north, the railway line to the south, the 50 Lloyd Street Business Estate to the east and the Maribyrnong River to the west. Most residential areas are located away from the rail reserve to the north, east and west of JJ Holland Park (Figure 8-3). This includes Kensington Banks and public housing between Altona and Derby Streets. There is a small pocket of dwellings located on Ormond Street and Childers Street adjacent to the rail corridor. South of the rail line there are warehouses, storage facilities and other transport infrastructure.

Figure 5-1 Aerial overview of JJ Holland Park

Source City of Melbourne 2015d

In 2011, Kensington had a population of 9,719. This figure is projected to reach 11,840 by 2016 (City of Melbourne 2015c). This follows a 29 per cent increase in the number of dwellings between the 2001 and 2011 census years. Historically, a large part of the population growth in Kensington came from redevelopments such as Kensington Banks and the Kensington Estate Redevelopment.

Approximately one-third of Kensington residents were born overseas with a quarter speaking a language other than English at home (Figure 5-2). Unemployment, at 6.3 per cent, was lower than Greater Melbourne (6.7 per cent). Within Kensington there was a high level of population mobility with a quarter of residents reported to have moved in the 12 months previous, compared with 14 per cent for Greater Melbourne.

Household structure	Cultural diversity	Labour force and income	Mobility
• 54% family households • 30% lone person • 12% group	• 32% born overseas • 26% speak a language other than English at home (Top 5: Mandarin 3.9%, Cantonese 3.9%, Vietnamese 3.4%, Italian 2.0%, Somali 1.5%)	• 6.3% unemployed • $1720 median household weekly income	• 26% moved last 12 months • 59% moved last 5 years

Figure 5-2 Select demographic data for the western portal precinct

Source City of Melbourne 2013; Department of Employment 2015; ABS 2012

While Kensington had the second highest median household weekly income of all the precincts, there is likely to be some financial disadvantage with 480 households (11 per cent of the total) renting from a state housing authority.

There are three train stations and a bus route in proximity to the western portal precinct (Figure 5-3).

The method of transport to access work has also changed over time with the proportion of people travelling to work by car declining 9 per cent since 2001 to 4 per cent. This decline was matched by an increase in the number of people walking or using the train to travel to work (an increase of 8 percentage points). A degree of mode change is common to all precincts and likely partly linked to the change in employment distribution

across Melbourne. The concentration of job creation is shifting towards central Melbourne, where the majority of professional services firms and other service-based businesses are now located (discussed further in Technical Appendix D *Transport*). This movement towards the central city makes alternative modes of transport such as cycling or public transport more attractive.

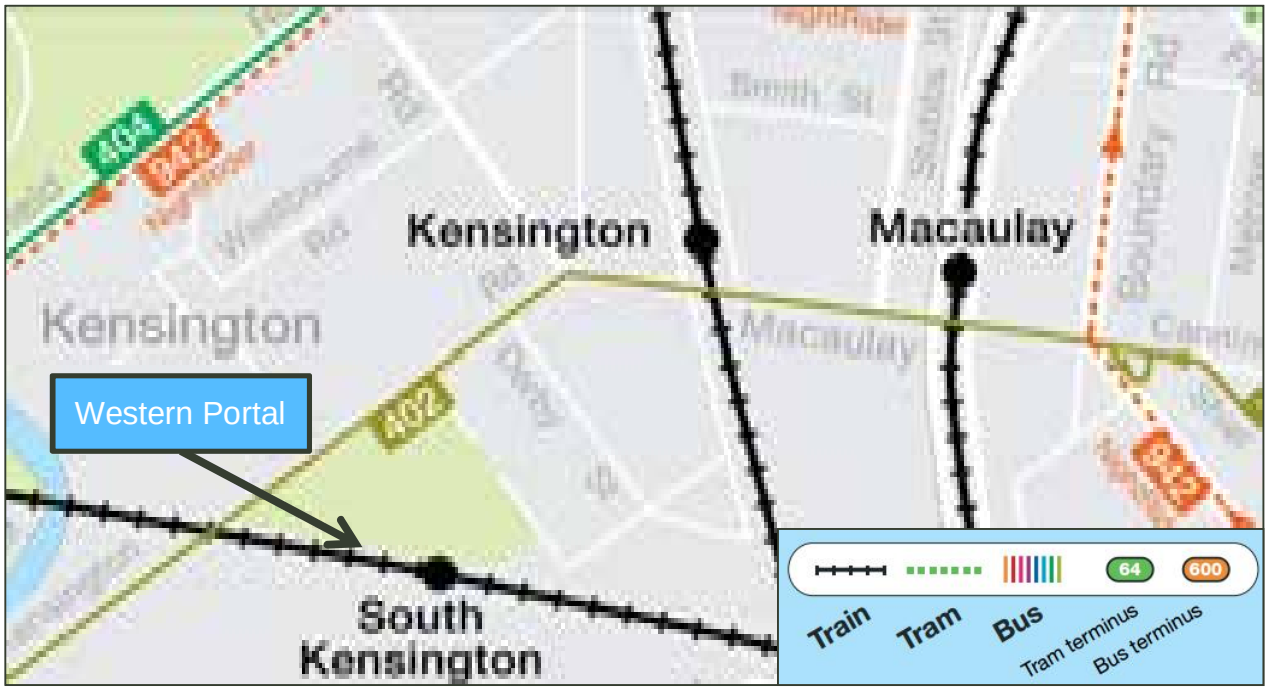


Figure 5-3 Public transport in Kensington (Source PTV 2014)

As of the 2011 Census, Kensington ranked highly on all Socio-Economic Indexes for Areas (SEIFA[1]) (Appendix C of the report) indices except economic resources, suggesting that while pockets of disadvantage exist within the suburb, overall the population in 2011 was relatively advantaged compared with other parts of Melbourne.

Implications

- Kensington is experiencing strong growth in public transport and active transport use, suggesting the community would benefit from improvements to the transport network in their area
- The high rate of languages other than English spoken at home suggests the project would need to consider alternative languages and communication methods to engage this community
- The presence of younger people (20 per cent aged five to 24 years) suggests a degree of vulnerability to impacts on recreational infrastructure such as parks
- The high rate of population mobility suggests it may be difficult to remain in contact with existing residents or to contact new arrivals during the project's planning and delivery; a high rate of population mobility also increases the chance that new residents may have differing attitudes towards the project, affecting community sentiment over time.

5.2.3 North Melbourne

The proposed Arden station is located in the Arden-Macaulay area, a largely industrial area in North Melbourne. To the east across Laurens Street is a mixed-use area with residential, commercial and industrial

[1] SEIFA indices are a composite of census data that give a relative estimation of the levels of advantage and disadvantage within a given area, see Appendix C of this report.

activities (Figure 5-4). North-east of the site, across Arden Street, is a residential area and to the west, the CityLink viaduct, Moonee Ponds Creek, the Craigieburn railway lines, West Melbourne terminal station and other light manufacturing and industrial sites. The City of Melbourne considers the area under-utilised given its proximity to the City and plans to encourage residential and commercial redevelopment in the area (City of Melbourne 2012d).

The proposed Arden station is located on land owned by VicTrack, a Victorian Government enterprise that manages railway land. The site is used for a variety of industrial uses. CityLink and Moonee Ponds Creek border the site to the west (Figure 5-5 and Figure 5-6).

Mixed commercial and industrial uses give way to residential areas east of Dryburgh Street, including an area of public housing north of Arden Street. This area is undergoing rejuvenation with new medium density multi-storey housing replacing some of the older housing stock.

Due to its history as an industrial area, there is limited community infrastructure in proximity to the proposed Arden station site (Figure 9-4). However, this would change with implementation of the Arden-Macaulay Structure Plan, adopted by the City of Melbourne in 2012. This plan would guide redevelopment of the area including the provision of new public amenities and streetscapes to attract 'significantly more residents and employment growth over the next 30 years (City of Melbourne 2015b).

Figure 5-4 Laurens Street, looking west into the proposed Arden site and station location

Figure 5-5 Moonee Ponds Creek, Capital City Trail and CityLink - west of the Arden precinct

Figure 5-6 North-west edge of the proposed Arden station site

Compared with other inner city areas, the precinct has limited public transport in proximity to the proposed station site with the existing bus and tram network catering to the community east of Dryburgh Street (Figure 5-7).

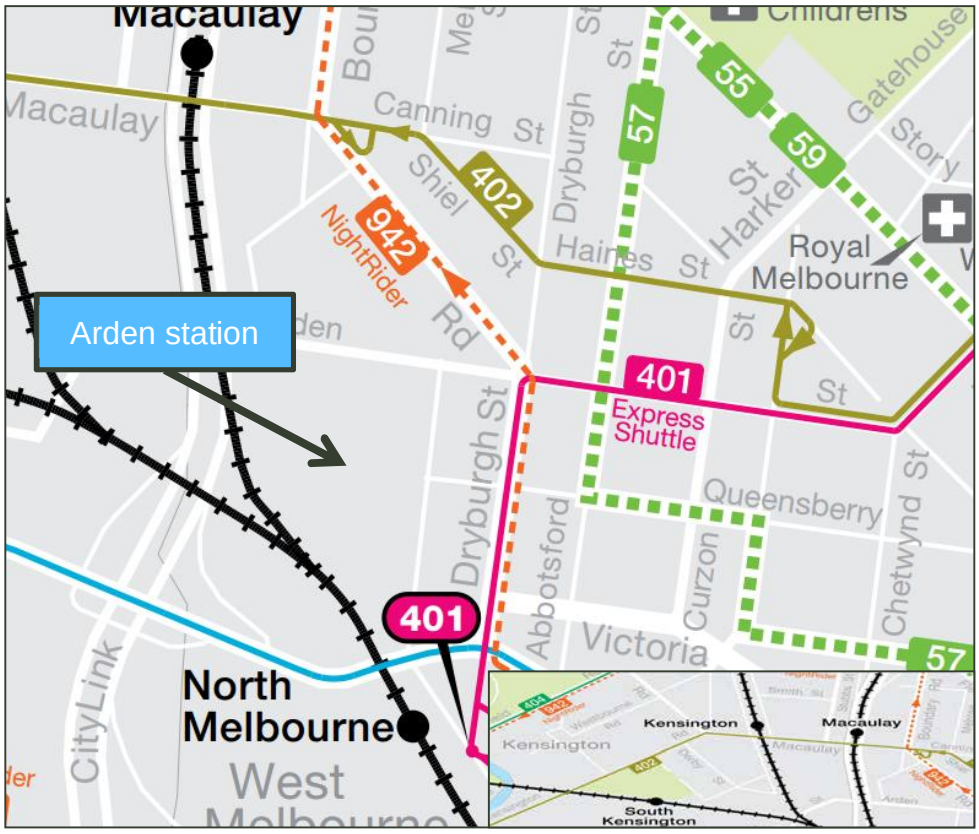


Figure 5-7 Public transport in Arden (Source PTV 2014)

The 2015 population of North Melbourne is estimated at 14,723, an increase of approximately 3,000 people since 2011 (City of Melbourne, 2015b). The suburb experienced 21 per cent population growth from 2001 to 2011, partly from steady redevelopment of the suburb. The redevelopment of Central Arden is projected to

facilitate a large increase in the population of North Melbourne with 4,000 more residents (City of Melbourne, 2012d). Despite this strong population growth, North Melbourne has a high level of unemployment (9.7 per cent); with a third of residents earning less than $300 a week in 2011 (Appendix C of this report).

The low levels of income may be partly due to the proximity of tertiary educational facilities and the presence of students in the area. However, the level of unemployment indicates further disadvantage in the area.

North Melbourne ranked low on the SEIFA indices for socio-economic disadvantage and economic resources while high on education and occupation, further indicating there is a mixture of advantaged and disadvantaged people in the community (Appendix B of this report). Part of the disadvantage is explained by the presence of public housing, including a large public housing estate on Sutton Street in the north of the suburb.

While there was a high proportion of group households (15 per cent) indicating the presence of students, most households were either families (44 per cent) or lone persons (32 per cent, Figure 5-8).

Household structure[1]	Diversity	Labour force and Income	Mobility
• 44% family households • 32% lone person • 15% group	• 41% born overseas • 37% language other than English at home (Top 5: Mandarin 8.1%, Cantonese 5.2%, Somali 3.9%, Vietnamese 2.4%, Arabic 2.0%)	• 9.7% unemployment rate • $1229 median household weekly income	• 40.6% moved last 12 months • 70% moved last 5 years

Figure 5-8 Select demographic data the proposed Arden station precinct

Source City of Melbourne, 2013; Department of Employment, 2015; ABS, 2011

Public transport, walking and cycling accounted for over half of the trips to work as of the 2011 census, while the use of private motor vehicle declined by 7 per cent from 2001 levels (Appendix C of this report).

Implications

- The future redevelopment of the area would lead to an increase in the number of people who could use the station to access employment, services and wider social networks. As more people are attracted to the area, there is also the potential for workers to generate additional demand for services such as childcare and healthcare, increasing the range of services available to residents (City of Melbourne, 2012d). This redevelopment would benefit from the proposed Melbourne Metro and, through the provision of increased employment opportunities and services may benefit currently disadvantaged households
- The high levels of disadvantage and the presence of a high proportion of people who speak a language other than English at home indicates a degree of vulnerability in the community. This would need to be considered when engaging with the community and planning how to address construction impacts
- The high rate of population mobility suggests it may be difficult to remain in contact with existing residents or to contact new arrivals during the project's planning and delivery. A high rate of population mobility also increases the chance that new residents may have differing attitudes towards the project, affecting community sentiment over time.

5.2.4 Parkville

East of the proposed Arden station, the proposed alignment passes beneath North Melbourne until it reaches the proposed Parkville station. The proposed Parkville station would be located beneath Grattan

Street to the east of Royal Parade (Figure 5-9) within a major health, research and educational precinct hosting several large institutions including the University of Melbourne and Royal Melbourne Hospital, Royal Women's Hospital and Victorian Comprehensive Cancer Centre.

The Royal Melbourne Hospital (Figure 5-10) is the oldest hospital in Melbourne and provides a wide range of services including general medical and surgical as well as emergency and infectious diseases. It provides tertiary and quaternary care, increasing its importance to wider Melbourne. The hospital is connected to the Victorian Comprehensive Cancer Centre located on the southern side of Grattan Street via an elevated walkway (Figure 5-11). This facility is currently under construction but when complete would have capacity for 202 inpatients and 110 outpatients. It would also house over 1,200 researchers (VCCC 2015). The Royal Women's Hospital is co-located with the Royal Melbourne Hospital and provides maternity, gynaecology, neonatal care, treatment for women's cancers and women's health services. All vehicular access to the Royal Women's Hospital is via Flemington Road. The Royal Children's Hospital specialises in paediatric care and is located nearby on Flemington Road. The specialist nature of the services offered at these hospitals means they have a catchment that extends across Victoria and interstate.

The University of Melbourne is the oldest university in Victoria and is ranked as one of the leading universities in the world (Times Higher 2015). Its main campus is located in the precinct and caters for domestic and international students.

These facilities make Parkville a major employment centre and a significant contributor to the culture and economy of the city. The facilities also generate travel demand across all modes of transport through people accessing employment and services.

Graduate house is the only identified residential building in proximity to the proposed Parkville station site. The nearest residential neighbourhood, located north of University High School and west of Royal Parade has a strong heritage character and limited capacity for growth. However, the extension of the capital city zone south of Grattan Street would allow further residential development to the south and east of the precinct. Opposite the southern entrance to the University of Melbourne is University Square (Figure 5-12). The City of Melbourne is developing a master plan for University Square that could increase its importance as a community asset with opportunities to increase the number of activities the site can host (City of Melbourne 2015g).

The precinct has a wide range of bus and tram options facilitating access to and from the precinct (Figure 5-13).

Figure 5-9 Grattan Street, looking west towards the proposed station site and Royal Parade

Figure 5-10 Royal Melbourne Hospital

Figure 5-11 Victorian Comprehensive Cancer Centre

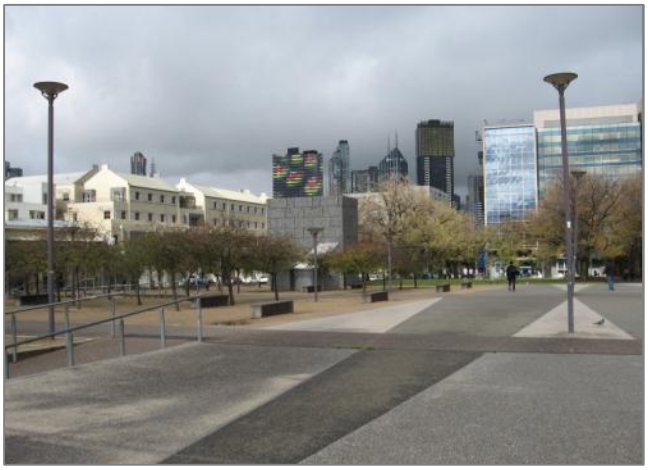


Figure 5-12 University Square, looking south towards the CBD

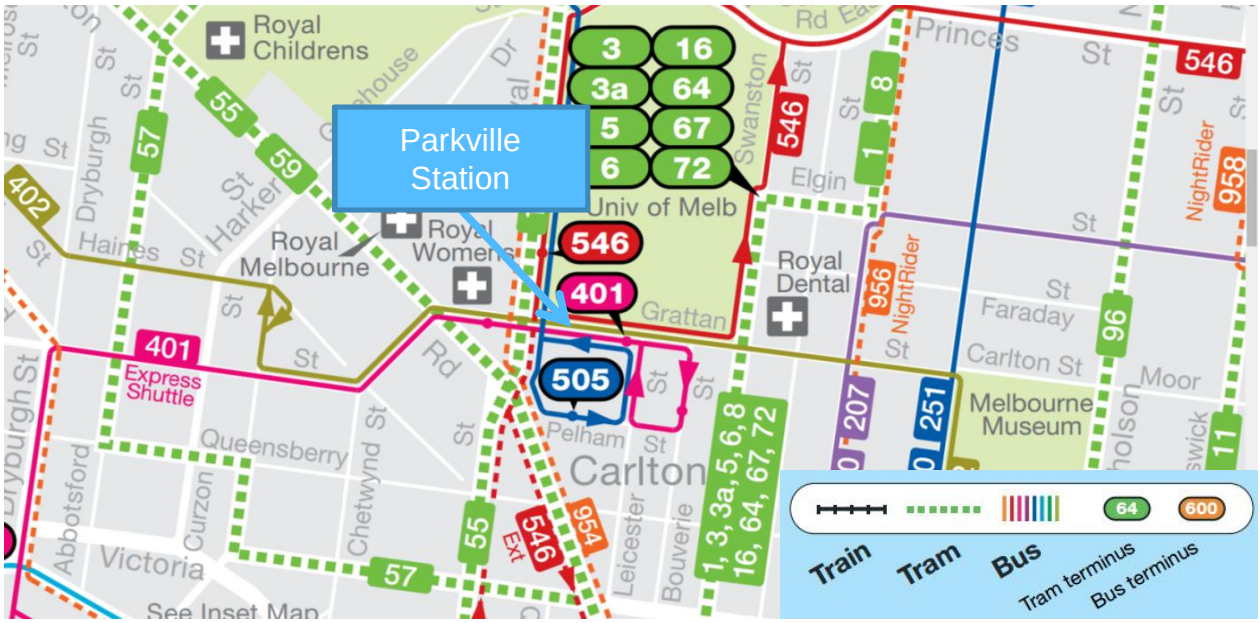


Figure 5-13 Public transport in Parkville (Source PTV 2014)

Parkville's 2015 population is estimated at 7,199 (City of Melbourne 2015b). This is an increase of approximately 1,000 over 2011, and follows a 10-year period of limited population growth. This most recent population increase is potentially partly the result of the Parkville Gardens development further north of the precinct. It is likely further population growth in the precinct would be limited with much of the land occupied by educational and health facilities as well as parkland.

Walking, cycling and public transport use for commuting steadily increased between the 2001 and 2011 census (refer to Appendix B of this report) with these modes accounting for over half of all journeys to work. Car and motorbikes account for approximately a quarter of all journeys to work.

Figure 5-14 shows that family households accounted for half of all household types, with a high rate of lone person households (27 per cent) and group households (20 per cent). The high rates of single person and group households likely reflect the presence of students and young professionals in the precinct.

Household structure	Diversity	Labour force and income	Mobility
• 53% families • 27% lone person • 20% group	• 36% born overseas • 27% language other than English at home (Top 5: Mandarin 7.8%, Cantonese 3.9%, Italian 1.6%, Malay 1.2%, French 0.7%)	• 4.5% unemployed (December 2014) • $1487 median household weekly income	• 33% moved in the last 12 months • 71.6% moved in the last 5 years

Figure 5-14 Parkville – select demographic characteristics Source City of Melbourne, 2013; Department of Employment, 2015; ABS, 2011

Parkville ranked highly on all SEIFA indices except for economic resources (ABS, 2013). This ranking suggests a highly educated, younger population with lower levels of income (Appendix C). However, approximately one quarter of all persons spoke a language other than English at home suggesting a need to consult in several languages for the project. There was also a high level of population mobility in the areas, with a third of people reporting to have changed address in the last 12 months.

Implications

- To maximise the benefits of the project for wider Melbourne, access to the proposed Melbourne Metro needs to integrate with the educational and medical facilities in precinct
- While the population of the precinct is advantaged, consideration needs to be given to engaging in several languages
- The high rate of population mobility suggests it may be difficult to remain in contact with existing residents or to contact new arrivals during the project's planning and delivery. A high rate of population mobility also increases the chance that new residents may have differing attitudes towards the project, affecting community sentiment over time.

5.2.5 Carlton

The tunnels would travel under Carlton but avoid the placement of any surface infrastructure in the suburb.

As of 2011, Carlton's population was 14,104 people. With 70 per cent of its residents born overseas, Carlton is one of the most diverse suburbs in Melbourne (Figure 5-15). Carlton has a high level of population mobility, group households and low median household weekly income. This combined with the presence of University of Melbourne and RMIT nearby suggest the this may in part be due to the presence of students, who would typically stay for the duration of their studies and live in group households before leaving to pursue full time employment. The presence of international students may also in part account for the high proportion of migrants in the area with 21 per cent of residents speaking Mandarin or Cantonese at home (Figure 5-15).

Household structure	Cultural diversity	Labour force and income	Mobility
• 32.6 % family households • 47.5% lone person • 19.9% group	• 67.5% born overseas • 59.9% speak a language other than English at home (Top 5: Mandarin 15%, Cantonese %6.3 , Indonesian 2.8%, Somali 2.8% and Arabic 2.4%)	• 14% unemployed • $598 median total household weekly income	• 44.6% moved last 12 months • 77.1 % moved last 5 years

Figure 5-15 Select demographic data for Carlton (Source ABS 2012)

Carlton ranked lower on the SEIFA measures of disadvantage and economic resources, indicating a degree of vulnerability in the community.

Implications

- Consideration needs to be given to engaging in several languages
- Engaging with a mobile population would also necessitate a flexible engagement approach that can effectively capture new residents and provide them with the opportunity to be informed about the project.
- Consideration also needs to be given to how to best facilitate the involvement of the large number of people born overseas who may not understand they can participate in the planning process
- The high rate of population mobility also suggests it may be difficult to remain in contact with existing residents or to contact new arrivals during the project's planning and delivery. A high rate of population mobility also increases the chance that new residents may have differing attitudes towards the project, affecting community sentiment over time.

5.2.6 Melbourne

5.2.6.1 CBD North

South-east of Parkville, the proposed alignment passes beneath Swanston Street with a new underground station proposed in the CBD North station precinct largely between Victoria and La Trobe streets (Figure 5-16).

Together with CBD South, this precinct forms one of the busiest parts of the CBD with thousands of people travelling through it every day to access employment, education, retail or services. It has several key attractors, including Melbourne Central, Melbourne City Baths (Figure 5-18), RMIT University, the State Library of Victoria, Chinatown, QV Shopping Centre and the retail strip on each side of Swanston Street.

These facilities host an array of activities that take place in this precinct, including:

- Recreational – shopping and dining, swimming, sports and fitness
- Cultural – exhibitions in museums and galleries
- Educational – universities and colleges.

This precinct is heavily used by people from across Melbourne. Swanston Street is closed to most cars and trucks between Franklin and Flinders Streets with the road space given over to trams, pedestrians and cyclists. This potentially makes it more attractive as a public space than adjoining north-south roads such as Russell or Elizabeth Streets for pedestrians.

Figure 5-16 Looking south on Swanston Street, past RMIT, towards the proposed CBD North station

The precinct, together with CBD South, is crossed by tram, bus and cycling routes. Swanston Street, which runs through the CBD North and South precincts, is the busiest part of Melbourne's tram network (Figure 5-17).

The precinct has been subject to progressive commercial renewal, most recently with the construction of the QV shopping complex. Several upgrades to the streetscape have also occurred, with most recent upgrade of Swanston Street completed in 2012. This involved enlarging existing footpaths, improving pedestrian access to and from the tramway, incorporating public art, landscaping and street furniture. The aim was to create a 'pre-eminent civic space for all Melbournians, providing enhanced experiences and access for shoppers, visitors, workers and tram patrons' (City of Melbourne 2010).

There has also been an increase in the number of residential developments in the precinct, with many of the buildings on and in proximity to Swanston Street used as apartment blocks. The number of apartments blocks in the precinct would continue to increase with several more proposed or under construction.

The State Library forecourt acts as one of the few open spaces in the north of the CBD and is heavily utilised throughout the day by tourists, workers and students as a point to meet friends, eat lunch, rest, assemble or take advantage of the free Wi-Fi (Figure 5-19).

Melbourne Central is located on the west side of Swanston Street and is one of the few railway stations in Melbourne that is fully integrated with an office, shopping and entertainment complex. The site attracts people from across Melbourne and following its redevelopment in early 2000, has become a highly trafficked retail space throughout the day and late into the evening.

While the area to the south of La Trobe Street is a busy, pedestrian oriented environment, north of La Trobe Street is often quieter but subject to periodic pulses of pedestrian associated with class changeover times at RMIT. RMIT, which operates on both sides of Swanston Street, is a university of technology and design attracting students from across Victoria and internationally. Owing to the presence of the University, there is less retail space in this part of the precinct.

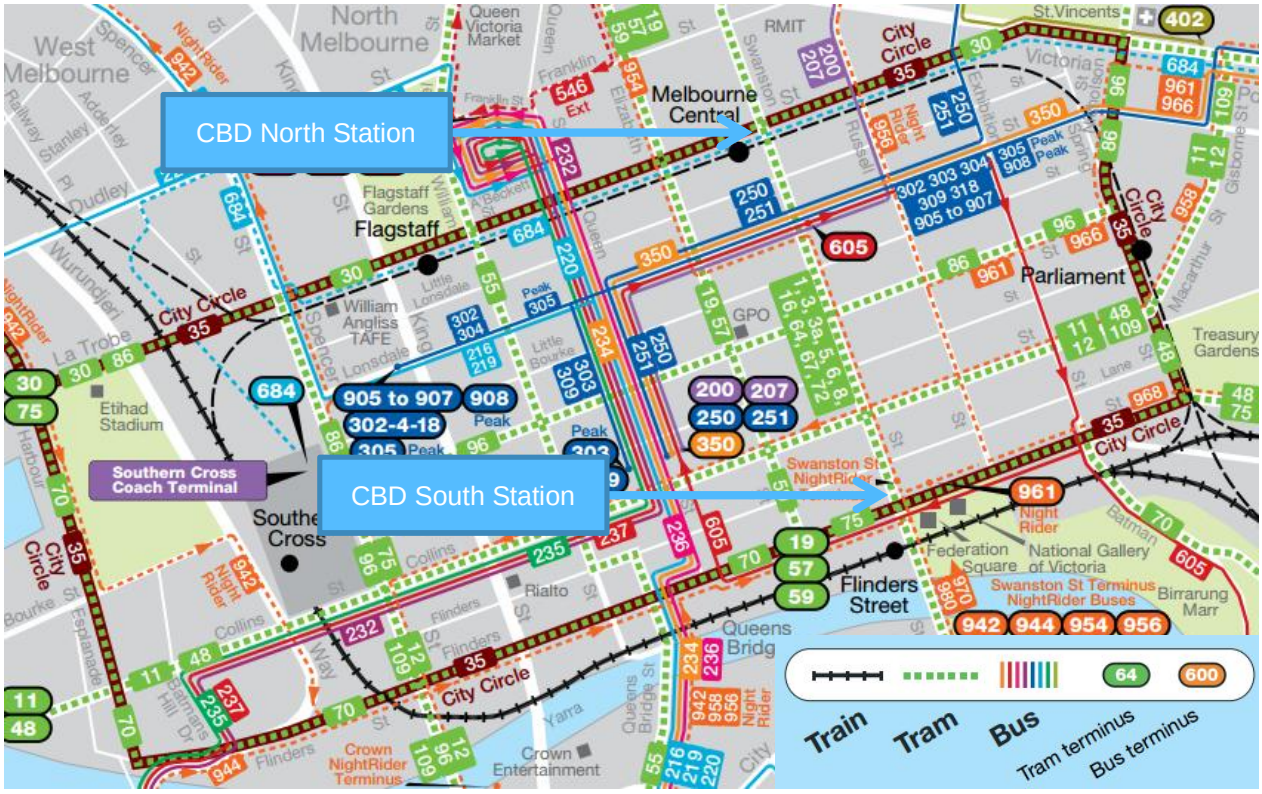


Figure 5-17 Public transport in the CBD (Source PTV 2014)

Figure 5-18 Melbourne City Baths, Swanston Street

Figure 5-19 State Library of Victoria, Swanston Street

5.2.6.2 CBD South

Like CBD North, this precinct forms one of the busiest parts of the CBD with thousands of people traveling through it every day to access employment, education, entertainment, retail or services.

The CBD South station would be located beneath Swanston Street, between Collins and Flinders Streets (Figure 5-20). The precinct hosts a number of heritage buildings and open spaces. The main open spaces include the grounds of St Paul's Cathedral, City Square and Federation Square.

Swanston Street also acts as a site for parades as it is the centre of the CBD and a focus of much of the retail and cultural facilities. Key annual parades in the precinct include the ANZAC Day March, Melbourne Cup Parade and Christmas Parade.

Swanston Street and the adjoining streets host retailers, restaurants, hotels, performance venues and other facilities that attract people from across the city, regionally and even interstate.

The precinct is criss-crossed by tram, bus and cycling routes, with Swanston Street the busiest part of Melbourne's tram network.

The Swanston and Flinders Street intersection acts as a gateway to Melbourne with four prominent buildings on each corner, namely; St Paul's Cathedral, Young and Jacksons, Federation Square and Flinders Street Station.

Figure 5-20 Junction of Swanston Street and Flinders Street, looking north

5.2.6.3 Yarra River and Surrounds

From the CBD South station, the proposed tunnels pass underneath the Yarra River, upstream of Princes Bridge, as shown in Figure 5-21. A summary of the key features that contribute to the social value of the Yarra River and surrounds is presented in Table 11-1.

On the northern bank is Birrarung Marr, a park opened in 2002 on the site of former rail yards upstream of Federation Square (Figure 5-21). This site is used for mooring ferries and cruises and hosting festivals. These are diverse ranging from Night Noodle Markets and Octoberfest to Moomba, a large community festival. The riverbank also provides an attractive and popular pedestrian access route to major sporting venues, including MCG, AAMI Park and Rod Laver Arena. It also provides alternative access for cyclists traveling along the Yarra River into the city. Immediately under Federation Square, two bars occupy the Federation Wharf Vaults.

On the southern bank, just upstream of Princes Bridge, are several boatyards and historic rowing sheds managed by:

- Yarra Yarra Rowing Club
- Richmond Rowing Club
- Mercantile Rowing Club
- Banks Rowing Club
- Melbourne Rowing Club
- Melbourne University Boat Club
- Power House Rowing Club.

Boatsheds have existed on or near this site since the beginning of the 20th century and are heavily used by rowers all year round. They are also the base for rowing regattas, events and other competitions.

Figure 5-21 Yarra River, upstream of Princes Bridge towards Federation Square and Birrarung Marr

The river is valued for its perceived environmental values with community groups such as the Yarra Riverkeeper's Association taking an ongoing interest in improving its health. It is also valued for its visual and recreational values, providing a backdrop for a range of activities including walking, running and cycling.

Downstream of Princes Bridge is Southbank, which has a variety of bars and restaurants along the waterfront and connects to the city's arts and theatre precinct. This includes facilities such as National Gallery of Victoria, Melbourne Theatre Company, Arts Centre Melbourne, Hamer Hall and the Australian Ballet.

5.2.6.4 Domain and Surrounds

The Domain station precinct would be located on the border of the Cities of Melbourne and Port Phillip within the suburbs of Melbourne, South Melbourne and South Yarra.

The precinct stretches from the Shrine of Remembrance in the north-west to Toorak Road in the south-east. The proposed station would be located beneath St Kilda Road close to the junction with Domain Road (Figure 12-4).

The Domain station precinct is located on St Kilda Road, a tree-lined boulevard that extends south of Princes Bridge. The Domain station site would lie beneath the intersection of St Kilda Road, Domain Road and Albert Road. The trees on St. Kilda Road gives the road a park-like setting (Figure 5-22) and likely to be valued by a wide cross section of the community.

The proposed station would be adjacent to the Domain Parklands, which host a series of parks and memorials visited by people from across Melbourne as well as tourists. These parks include the Royal Botanic Gardens, the Sidney Myer Music Bowl, Queen Victoria Gardens and the Shrine of Remembrance Reserve (Figure 5-23). Albert Park is located to the south-west of the proposed station and Fawkner Park to the south-east. There is also a smaller reserve (Albert Road Reserve) on the western side of the proposed station, which hosts the South African Soldiers War Memorial (Figure 5-24).

Several educational institutions are located in proximity to St Kilda Road, including Melbourne Grammar School (the closest), Mac Robertson Girls' High School and the Victorian College of the Arts.

Within the precinct, adjoining St Kilda Road is a mixture of residential and commercial buildings. Currently, the number of office-based jobs in the precinct is estimated at 20,000 (City of Port Phillip 2013a). The majority of housing along St Kilda Road and in the immediate vicinity of the Domain station site is high-density apartment buildings.

The nearest train stations to the Domain station precinct (South Yarra and Flinders Street) are approximately two kilometres away. This means most people are likely to access the area via tram, bicycle or private vehicle.

Figure 5-22 St Kilda Road

Figure 5-23 Shrine of Remembrance

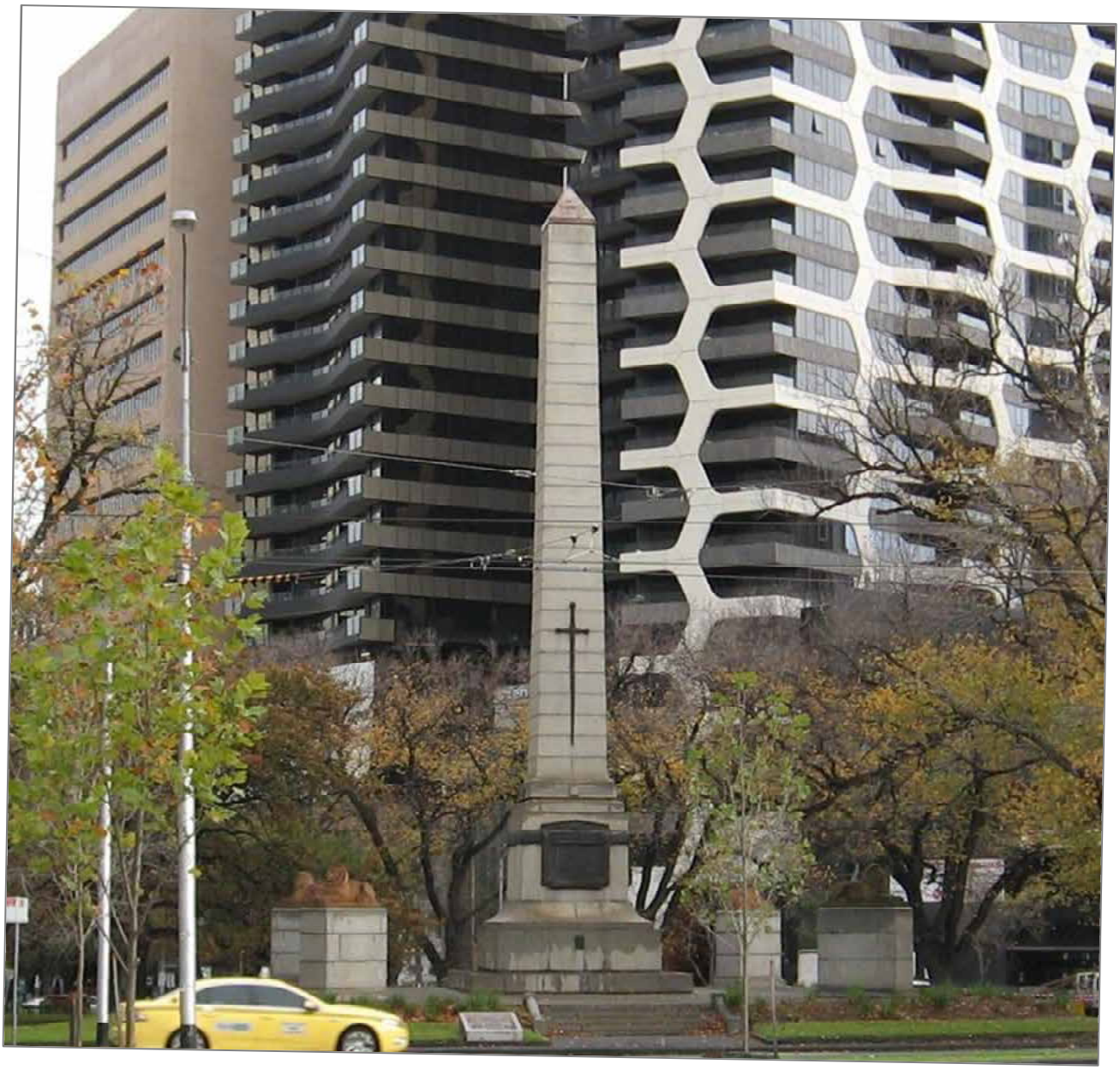


Figure 5-24 South African Soldiers War Memorial

5.2.6.5 Melbourne - Key Demographics

The suburb of Melbourne experienced significant housing growth over the decade from 2001 to 2011, with high-rise apartment developments adding 10,000 new dwellings, from 8,103 to 18,030 dwellings (ABS 2012). The 2015 population of Melbourne was estimated at 29,825 people, a growth rate of 7.9 per cent per annum (City of Melbourne 2015e). This level of residential development within the CBD is likely to continue, with planning approval recently granted for several more high-density apartment blocks.

Most population growth since 2001 has been in the 15-34 years age bracket, which by 2011 was 67 per cent of the total (refer Appendix C of this report). In contrast, the proportion of residents aged 75 years and over declined from 5 per cent to 2 per cent by 2011. The number of children in the suburb was also low, with 5 per cent of residents under 18 years by 2011.

Use of public transport to travel to work increased from 14 per cent to 30 per cent from 2001 to 2011. The share of car/motorbike use dropped 20 per cent (ABS 2012). The underlying reasons for this trend are unknown but could include improvements in public transport provision and operation, increased co-location

of dwellings and employment opportunities or lifestyle factors. The cost of securing ongoing parking for a private vehicle may also be a disincentive, with relatively few new apartments in the city sold with car parks.

Other demographic features of note are shown in Figure 5-25 and discussed below.

Household structure	Diversity	Labour force and income	Mobility
• 35% family households • 36% lone person • 17% group	• 79% born overseas • 55% language other than English at home (Top 5 Mandarin 14.9%, Cantonese 6.1%, Indonesian 4.7%, Korean 2.4%, Hindi 2.1%)	• 3.4% unemployed • $1352 median household weekly income	• 36% moved in the last 12 months • 70% moved in the last 5 years

Figure 5-25 Select demographic data - Suburb of Melbourne

Source: City of Melbourne, 2013; Department of Employment, 2015; ABS, 2011

The Melbourne CBD is culturally diverse with 79 per cent of residents born overseas and 55 per cent speaking a language other than English at home.

Melbourne also scored highly on SEIFA indices with the exception of economic resources, indicating that despite the presence of low-income households, the precinct is overall advantaged (refer to Appendix C of this report). The low score on the economic resources index would also be consistent with the presence of a high number of students in the precinct.

Implications

- The suburb of Melbourne constitutes one of the busiest areas in Greater Melbourne. It hosts a range of social infrastructure, employment, residences, entertainment and retail areas, valued spaces and other attractors. The variety of attractors and the wide cross section of the community using them mean impacts on and around Swanston Street would affect a large cross section of the community
- Several open spaces and facilities perform functions not replicated elsewhere, so consideration needs to be given to managing the displacement of these activities and the alternatives available in the vicinity
- The high rate of population mobility also suggests it may be difficult to remain in contact with existing residents or to contact new arrivals during the project's planning and delivery. A high rate of population mobility also increases the chance that new residents may have differing attitudes towards the project, affecting community sentiment over time
- The level of cultural diversity in the precincts could present a barrier to communications written in English. The prevalence of lone person households (36 per cent) also suggests it may be more difficult to contact tenants of properties than households where multiple people are present. The high rate of population mobility also suggests it may be difficult to remain in contact with existing residents or to contact new arrivals during the project's planning and delivery. A high rate of population mobility also increases the chance that new residents may have differing attitudes towards the project, affecting community sentiment over time
- The Yarra River precinct is valued as environmental asset for its passive and active recreational infrastructure and as a site for festival and events. The nature of the facilities within the precinct mean it is in operation across a large part of the day with rowers in the early morning, commuters in the morning and afternoon peak, tourists and other users during the day and people attracted to the arts, events or bars in the evening
- There are no residences in proximity to the banks of the river reducing the sensitivity to activities that may be disruptive during the evenings. Many of the activities that make this area popular are also

outdoor and therefore seasonal meaning disruptions during the winter months may be more acceptable with less people visiting the precinct

- A number of facilities in proximity to the proposed Domain station are of interest to a large cross section of the community. The presence of sites such as the Shrine of Remembrance suggest that even where people do not travel regularly to the area, they are still likely to feel strongly about changes to the ongoing operation and appearance of the precinct.

5.2.7 South Melbourne

South Melbourne borders the western edge of the Domain precinct with responsibility for the Albert Road Reserve.

South Melbourne's population was 9,317 in 2011, an increase of 20 per cent since 2001. A large part of this population growth has come from new residential developments and the redevelopment of a number of former commercial buildings.

Walking, cycling and public transport use steadily increased between the 2001 and 2011 census (Appendix C) with these modes accounting for 43 per cent of all journeys to work. Car and motorbikes account for 38 per cent of all journeys to work.

Family households accounted for just over half of all household types in South Melbourne (Figure 5-26). A third of all residents were born overseas, with almost a fifth speaking a language other than English at home. There was also a degree of population mobility in the area, with a fifth of people reporting to have changed address in the last 12 months.

Household structure	Diversity	Labour force and income	Mobility
• 54% family households • 36.7% lone person • 9.2% group	• 33% born overseas • 19% language other than English at home (Greek 3.4%, Mandarin 2.9%, Russian 2.9%, Indonesian 2.0%, Cantonese 1.4%)	• 6.6% unemployed • $1,375 median household weekly income	• 20% moved in the last 12 months • 49% moved in the last 5 years

Figure 5-26 Select demographic data – South Melbourne

Source City of Melbourne, 2013; Department of Employment, 2015; ABS, 2011

Overall South Melbourne ranked highly on all SEIFA indices except for Economic resources (ABS 2013). This suggests that overall the community has higher levels of human capital and income but lower levels of wealth, potentially indicating a greater degree of resilience. However, the presence of public housing in the suburb also suggests there are still areas of disadvantage and vulnerability in South Melbourne.

Implications

- There are residences close to the proposed Domain station and schools nearby, meaning amenity and accessed impacts may be of greater interest to the precinct.
- The strong growth in public transport and active transport use, suggests the community would benefit from improvements to the transport network in their area.
- While the population of the precinct is largely advantaged, consideration needs to be given to engaging in several languages. Engaging with a mobile population would also necessitate a flexible engagement approach that can effectively capture new residents and inform them about the project. Consideration also needs to be given to how best facilitate the involvement of the large number of people born

overseas (33 per cent) or vulnerable groups who may not understand they can participate in the planning process.

- The high rate of population mobility also suggests it may be difficult to remain in contact with existing residents or to contact new arrivals during planning and delivery of the project. A high rate of population mobility also increases the chance that new residents may have differing attitudes towards the project, affecting community sentiment over time.

5.2.8 South Yarra

The eastern portal precinct is located in the City of Stonnington within the suburb of South Yarra. The suburb of South Yarra crosses two municipalities; the Cities of Melbourne and Stonnington. South Yarra is characterised by a mix of older terraced housing and medium density dwellings to the west of the railway line. The population of South Yarra was 19,137 in 2011, an increase of 1,022 since 2001. This and more recent population growth is driven by infill developments and newer, higher-density housing in the Forrest Hill Precinct (east of South Yarra station). The precinct would eventually accommodate over 2,500 dwellings, 22,000 square metres of office space and 9,000 sqm of retail (City of Stonnington, nd).

There are a high proportion of small (one or two bedroom) dwellings in the area, a reflection of the high proportion of single person households in the area (41 per cent).

The precinct is a well-established retail and entertainment area, with shops and restaurants adjoining Toorak Road and Chapel Street complemented by facilities like Chapel off Chapel, Como Cinemas and the Jam Factory. The area is also popular at night with many bars and nightclubs catering to a variety of customers.

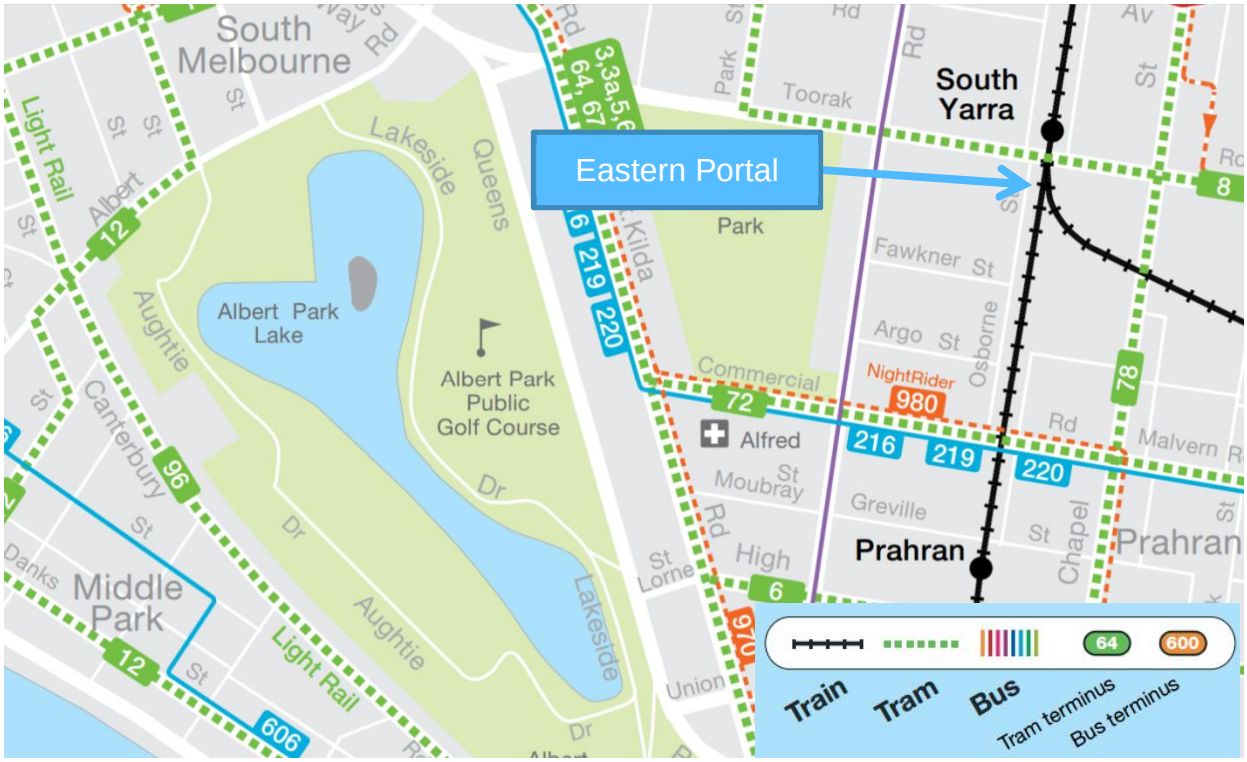
Open space within the precinct is limited to the south of Toorak Road, although small reserves and squares are found throughout the area. These include the South Yarra Siding Reserve, located between the Sandringham and Cranbourne Pakenham railway lines. This open space is bordered by housing and the railway line and accessible via William Street. Figure 5-27 shows its mixture of newer plantings (foreground), and grassy areas that run down to the rail reserve used for rail related activities.

Figure 5-27 South Yarra Siding Reserve, looking north to South Yarra station

On the opposite side of the Sandringham line from South Yarra Siding Reserve is the Osborne Street Reserve. Lovers Walk, a pathway that connects Toorak Road to Chapel Street is located on the northern side of the Cranbourne/Pakenham line.

Access in and around South Yarra Siding Reserve is constrained with the presence of the Frankston and Cranbourne/Pakenham lines funnelling much of the local vehicular and pedestrian access over the William Street Bridge adjacent to the park. The Sandringham line also restricts vehicular and pedestrian movements to the Argo Street Bridge and a pedestrian bridge west of the reserve.

The precinct has three railway lines traveling through South Yarra station, complemented by a number of bus and tram routes (Figure 5-28).



Source PTV 2014

Figure 5-28 Public transport in the eastern portal precinct

As of the 2011 census, there was a large increase in walking and bicycle trips as well as public transport use since 2001 with these modes accounting for 53 per cent of all trips to work versus 35 per cent in 2001. This increase was at the cost of car and motorbike use, which declined to 36 per cent of all trips to work.

Select data on diversity, household structure and incomes is shown in Figure 5-29.

Household structure	Diversity	Labour force and income	Mobility
• 46% family households • 41% lone person • 13% group	• 30% born overseas • 16% language other than English at home (top 5: Mandarin 2.5%, Greek 2.1%, Cantonese 1.7%, Russian 1.6%, Italian 1.0%)	• 2.7% unemployed • $1,871 median household weekly income	• 34% moved in the last 12 months • 66.5% moved in the last 5 years

Figure 5-29 Select demographic data for South Yarra

Source: City of Melbourne, 2013; Department of Employment, 2015; ABS, 2011

The community in this precinct is still relatively mobile with 34 per cent of households having moved in the 12 months prior before the 2011 census. However, unlike the Melbourne CBD, relatively few people (16 per cent) spoke a language other than English at home.

The unemployment rate in South Yarra West (2.7 per cent) is very low relative to other suburbs in the study area, and the median household income is greater than other precincts.

Implications

- There is limited open space within the precinct so any impacts on parks or recreation has the potential to be of concern to the community. Ongoing, there is likely to be an expectation that any open space would be returned.
- The density of residential properties mean there is likely to be a greater degree of sensitivity in the area to works that impact on residential amenity, particularly outside normal working hours.
- Any impacts to Toorak Road and Chapel Street are likely to be of interest to a wide cross section of the community who come to the area to shop and recreate.
- The high rate of population mobility also suggests it may be difficult to remain in contact with existing residents or to contact new arrivals during planning and delivery of the project. A high rate of population mobility also increases the chance that new residents may have differing attitudes towards the project, affecting community sentiment over time.

5.2.9 West Footscray

The proposed western turnback would be located in West Footscray. This would include a third platform and track at West Footscray station, and modifications to the existing concourse.

The western turnback precinct is located on both sides of West Footscray station within the existing rail reserve. The precinct would be bounded by Sunshine Road to the south and just over Cross Street to the north. Until the 1960s and 1970s, West Footscray was an industrial area but a decline in manufacturing has seen land use change to encompass industrial, commercial and residential uses.

As of 2011, West Footscray had a population of 10,222. Around half (46.6 per cent) were born overseas and almost half (40 per cent) spoke a language other than English at home (Figure 5-27).

Household structure	Cultural diversity	Labour force and income	Mobility
• 61.3 % family households • 28.5% lone person • 10.2% group	• 46.6% born overseas • 48.3% speak a language other than English at home (Top 5: Vietnamese 10.4%, Italian 3.2%, Greek 2%, Cantonese 1.8% and Telugu 1.6%)	• 7.4% unemployed • $1,129 median total household weekly income	• 22.4% moved last 12 months • 46.3% moved last 5 years

Figure 5-30 Select demographic data for the western turnback - West Footscray **Source ABS 2012**

West Footscray ranked poorly on all SEIFA[2] (Appendix B of this report) indices except educational attainment, suggesting disadvantage and vulnerability in the area.

[2] SEIFA indices are a composite of census data that give a relative estimation of the levels of advantage and disadvantage within a given area, see Appendix C of this report.

Key social infrastructure in the precinct includes Whitten Oval, Potters house Christian Church, the Central Australian College and a shared pedestrian and bike path to the north of West Footscray station on Cross Street.

Implications

- Consideration needs to be given to engaging in several languages
- Engaging with a mobile population would also necessitate a flexible engagement approach that can effectively capture new residents and provide them with the opportunity to be informed about the project
- Consideration also needs to be given to how to best facilitate the involvement of the large number of people born overseas (46.6 per cent) who may not understand they can participate in the planning process.

5.3 Community Attitudes and Values

As of August 2015 over half of Melbournians were aware of Melbourne Metro by name (Figure 5-31). However, 58 per cent of Melbournians noted they had very little knowledge of the project (Figure 5-32, Ipsos 2015a).

Despite the low level of project knowledge, over half of Melbourne support the project (59 per cent) with 13 per cent opposed (see Appendix D of this report). This is based on a belief that the project would benefit the wider Victorian community (65 per cent) even though a lesser percentage of people identified that their household (45 per cent) or community (46 per cent) would benefit (Ipsos 2015a).

After prompting, the key perceived benefits of the project identified by the community include better access to public transport (46 per cent), reduced congestion on roads (47 per cent) and more trains across the day (40 per cent).

The low level of project knowledge captured in the survey suggests the wider community is unaware of the construction impacts associated with the project. To date, discussions in the media about the project have largely focused on surface level impacts in the CBD and not the impacts likely to be experienced in project precincts such as Domain, Arden or Parkville. Within the survey, 42 per cent of Melbournians noted they were concerned about temporary changes in road access and traffic management and a further 35 per cent noted they were concerned about changes to train scheduling.

The project would temporarily disrupt current travel patterns and train scheduling during construction, suggesting that while there is a high level of public support there may not be a wide level of understanding as to what impacts are likely to accrue from the project.

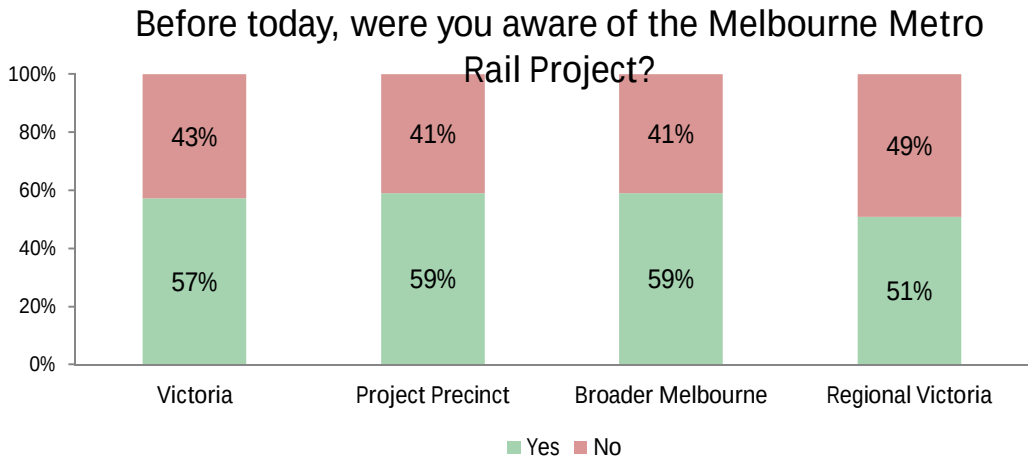


Figure 5-31 Unaided Awareness of Melbourne Metro **Source Ipsos 2015a**

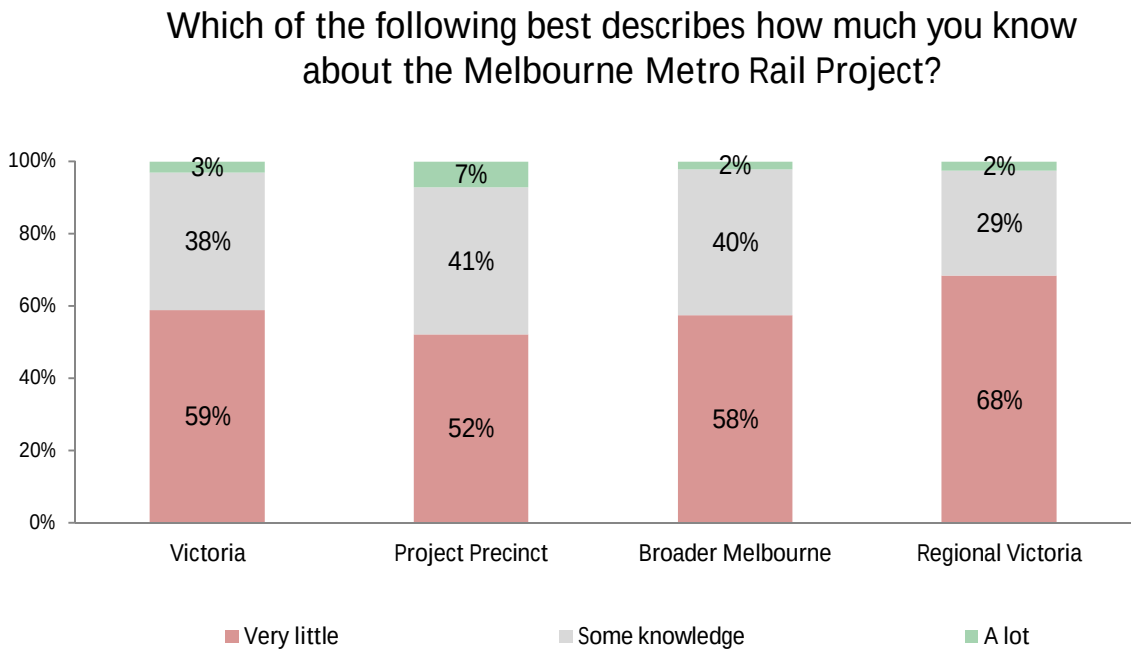


Figure 5-32 Self-reported knowledge of Melbourne Metro

Table 5-2 what disruptions and impacts are you most concerned about?

Concerns	Victoria	Project precinct	Broader Melbourne	Regional Victoria
Temporary changes in road access/ traffic management	41%	39%	42%	39%
Changes to current train scheduling	33%	25%	35%	30%
Business impacts	20%	17%	20%	20%
Changes to parks and gardens	18%	26%	17%	16%
Noise during works	13%	24%	12%	9%
Access to where I work	12%	12%	14%	5%
Access to places where I shop	11%	15%	11%	10%
Vibration during works	9%	14%	9%	7%
Access to where I live	9%	23%	7%	2%

6 Risk Assessment

Table 6-1 presents the social and community risks associated with the project on a precinct basis. The environmental risk assessment methodology is outlined in Section 4.3.

These risks, along with the scoping requirements and relevant legislation frame the criteria used in the impact assessment for each precinct. The results of the impact assessment inform the assessment of the initial risks outlined below. In each assessment chapter, mitigation measures are proposed to address each social and community risk and are aligned against environmental performance requirements These measures are applied to each risk identified in Table 6-1 to produce the Residual Risk Rating.

Despite the application of mitigation, some residual risks remain at medium and others high. For many of the social risks this is due to the duration of the activity, for example amenity impacts on dwellings or changes to valued streetscapes. Other risks have remained at medium due to the likely limited ability to change community perceptions about major transport work within valued parks and gardens. Acquisition risks have also remained medium and high as it is difficult to avoid social impacts with residential acquisition as the process can create the risk of social dislocation for households, particularly in areas with limited alternative equivalent housing options

All Environmental Performance Requirements are incorporated into the Environmental Management Framework for the Project (Chapter 24).

For further details refer to Technical Appendix B *Environmental Risk Assessment Report* which includes the full Risk Register, with existing performance requirements and recommended Environmental Performance Requirements assigned to each risk.

Table 6-1 Risk Register for Impact Assessment

Impact pathway		Precinct	Initial risk			Residual risk			Risk no.
Category	Event		C	L	Risk level	C	L	Risk level	
Design									
Planned construction within residential areas	Residential property owners subject to acquisition or in proximity to construction areas postpone or reconsider their plans for their properties.	All	Moderate	Likely	Medium	Moderate	Possible	Medium	SC001
Project varies from Concept Design	Community opposition to the final design due to differences from the Concept Design on which the community were consulted.	All	Major	Possible	High	Major	Unlikely	Medium	SC002
Construction									
Residential strata acquisition - Tunnels	Strata acquisition creates concern and anxiety about vibration and subsidence amongst affected property owners.	1 – Tunnels	Moderate	Almost Certain	High	Moderate	Likely	Medium	SC003
Construction activities in residential areas	Reduced or loss of access to residences due to traffic management.	5 – CBD North Station	Moderate	Possible	Medium	Moderate	Unlikely	Low	SC004
		6 – CBD South Station							SC004
		8 – Eastern Portal	Moderate	Likely	Medium	Moderate	Possible	Medium	SC005

Impact pathway			Initial risk			Residual risk			
Category	Event	Precinct	C	L	Risk level	C	L	Risk level	Risk no.
Construction activities alter existing community access patterns	Construction activities act as a barrier to social infrastructure, recreational assets or cause social severance diminishing community networks.	1 –Tunnels	Major	Possible	High	Moderate	Unlikely	Low	SC007
		2 – Western Portal	Major	Unlikely	Medium	Moderate	Unlikely	Low	SC008
		3 – Arden Station			Medium			Low	SC008
		4 – Parkville Station	Major	Likely	High	Moderate	Possible	Medium	SC006
		5 – CBD North Station	Major	Possible	High	Moderate	Unlikely	Low	SC007
		6 – CBD South Station							SC007
		7 – Domain Station	Major	Likely	High	Moderate	Possible	Medium	SC006
		8 – Eastern Portal	Major	Possible	High	Moderate	Unlikely	Low	SC007

Impact pathway		Precinct	Initial risk			Residual risk			Risk no.
Category	Event		C	L	Risk level	C	L	Risk level	
		9 – Western Turnback	Major	Unlikely	Low	Moderate	Unlikely	Low	SC008
Construction activities in residential areas	Construction activities impact on the amenity of households diminishing their ability to enjoy their property or use it as they do currently.	1 – Tunnels	Major	Likely	High	Moderate	Likely	Medium	SC009
		2 – Western Portal							SC009
		4 – Parkville Station							SC009
		5 – CBD North Station							SC009
		6 – CBD South Station							SC009
		7 – Domain Station							SC009
		8 – Eastern Portal							SC009
Construction activities in proximity to health, educational, commercial, recreational and other facilities	Sustained amenity impacts on Fawkner Park Child Care Centre, Kindergarten and South Yarra Senior Citizens Centre affects staff or users of these facilities.	1 – Tunnels	Moderate	Likely	Medium	Moderate	Unlikely	Low	SC010
	Sustained amenity impacts on JJ Holland Park and North Melbourne Recreation Centre and Football Club.	2 – Western Portal 3 – Arden Station	Minor	Possible	Low	Minor	Unlikely	Low	SC011
	Sustained amenity impacts on the University of Melbourne, Royal Melbourne Hospital and Peter Doherty Institute affects staff or users of these facilities.	4 – Parkville Station	Moderate	Almost Certain	High	Moderate	Likely	Medium	SC012

Impact pathway			Initial risk			Residual risk			
Category	Event	Precinct	C	L	Risk level	C	L	Risk level	Risk no.
	Sustained amenity impacts on RMIT and Melbourne City Baths affects staff or users of these facilities.	5 – CBD North Station	Moderate	Almost Certain	High	Moderate	Likely	Medium	SC013
	Sustained amenity impacts on St Paul's Cathedral and Federation Square affects staff or users of these facilities.	6 – CBD South Station	Moderate	Likely	Medium	Moderate	Possible	Medium	SC014
	Sustained amenity impacts on the Shrine of Remembrance Reserve and Melbourne Grammar affects staff or users of these facilities.	7 – Domain Station	Moderate	Likely	Medium	Moderate	Possible	Medium	SC015
Construction activities in proximity to Fawkner Park Child Care Centre, Kindergarten and Senior Citizens Centre	Construction activities in proximity to areas frequented by children such as the Fawkner Park Fawkner Park Child Care Centre and Kindergarten or in proximity to Melbourne Grammar could result in a perceived diminishment in public safety.	1 – Tunnels 7 – Domain Station	Moderate	Likely	Medium	Moderate	Unlikely	Low	SC016
Truck movements in residential areas	Truck movements and changes to local access sever existing community networks and disrupt access patterns particularly for families with young children, those with mobility impairments or the elderly.	1 – Tunnels	Moderate	Possible	Medium	Moderate	Unlikely	Low	SC018
		2 – Western Portal							SC018
		3 – Arden Station							SC018
		4 – Parkville Station							SC018
		5 – CBD North Station							SC018
		6 – CBD South Station							SC018

Impact pathway		Precinct	Initial risk			Residual risk			Risk no.
Category	Event		C	L	Risk level	C	L	Risk level	
		7 – Domain Station	Moderate	Likely	Medium	Moderate	Possible	Medium	SC017
		8 – Eastern Portal							SC017
		9 – Western Turnback	Moderate	Likely	Medium	Moderate	Unlikely	Low	SC018
Construction activities located within open spaces or recreation areas used for passive recreation	Construction activities displace passive recreation in an area with limited alternatives, reducing recreational opportunities for the community and potentially severing social networks.	1 – Tunnels	Minor	Possible	Low	Minor	Unlikely	Low	SC019
		4 – Parkville	Minor	Almost Certain	Medium	Minor	Possible	Low	SC021
		6 – CBD South Station	Moderate	Almost Certain	High	Moderate	Unlikely	Low	SC020
		7 – Domain Station	Minor	Almost Certain	Medium	Minor	Possible	Low	SC022
		8 – Eastern Portal	Moderate	Almost Certain	High	Moderate	Likely	Medium	SC023

Impact pathway		Precinct	Initial risk			Residual risk			Risk no.
Category	Event		C	L	Risk level	C	L	Risk level	
Construction activities located within open spaces or recreation areas used for active recreation	Construction activities displace organised sports with limited local alternatives for reducing recreational opportunities for the community.	1 – Tunnels	Moderate	Likely	Medium	Moderate	Unlikely	Low	SC024
		7 – Domain Station	Moderate	Almost Certain	High	Moderate	Likely	Medium	SC025
Construction workforce use of public parking	Reduction in parking available for residents, workers or other visitors to the area resulting in a loss of access to community facilities, recreational spaces or severance of social networks.	All	Major	Likely	High	Major	Unlikely	Medium	SC026
Truck movements in proximity to residential areas	Truck movements impact on residential amenity.	All	Moderate	Almost Certain	High	Moderate	Possible	Medium	SC027
Acquisition of nine dwellings in Kensington	Displacement of households and diminishment of networks within the surrounding community due to the limited availability of equivalent housing in Kensington.	2 – Western Portal	Major	Almost Certain	Very High	Major	Possible	High	SC028
Acquisition of one dwelling in Kensington	Displacement of a household and diminishment of networks within the surrounding community due to the limited availability of equivalent housing in Kensington.	2 – Western Portal	Moderate	Possible	Medium	Moderate	Unlikely	Low	SC029
Acquisition of 49 dwellings in CBD North	Displacement of 49 mostly tenanted dwellings and diminishment of networks within the surrounding community due to a limited immediate availability of this number of equivalent dwellings in the locality	5 – CBD North Station	Moderate	Likely	Medium	Moderate	Possible	Medium	SC030

Impact pathway			Initial risk			Residual risk			
Category	Event	Precinct	C	L	Risk level	C	L	Risk level	Risk no.
Acquisition of seven dwellings in the eastern portal precinct	Displacement of two (2) households (the remaining five (5) households are vacant or proposed for multi-unit developments) and diminishment of networks within the surrounding community due to the limited availability of equivalent housing in Kensington.	8 – Eastern Portal	Moderate	Likely	Medium	Moderate	Possible	Medium	SC031
Construction and operation									
Construction activities would take place within the Shrine of Remembrance Reserve permanently changing it with ongoing infrastructure retained	Works within the Shrine of Remembrance Reserve have the potential to create distress for veterans and other members of the community who value the site.	1 – Tunnels 7 – Domain	Moderate	Almost Certain	High	Moderate	Possible	Medium	SC032
Construction and operation of the potential Fawkner Park Tunnel Boring Machine launch site	Community concern about works within the park, particularly the impact on trees, paths and amenity.	1 – Tunnels	Major	Likely	High	Moderate	Possible	Medium	SC033
Fawkner Park emergency access shaft	Construction of the intervention shaft results in loss of an area used for passive recreation. Construction of the emergency access shaft in Fawkner Park is inconsistent with community expectations the placement of transport infrastructure in the park.	1 – Tunnels	Minor	Likely	Medium	Minor	Possible	Low	SC034
Loss of street trees	Changes to valued streetscapes creates community concern.	4 – Parkville Station	Major	Likely	High	Major	Possible	High	SC035

Impact pathway		Precinct	Initial risk			Residual risk			Risk no.
Category	Event		C	L	Risk level	C	L	Risk level	
		5 – CBD North Station	Moderate	Possible	Medium	Moderate	Unlikely	Low	SC036
		6 – CBD South Station	Moderate	Possible	Medium	Moderate	Possible	Medium	SC037
		7 – Domain Station	Major	Likely	High	Major	Possible	High	SC035
Construction activities require the temporary movement of the South African Soldiers War Memorial and other monuments	Impacts on the South African Soldiers War Memorial and other monuments are of concern to the local community.	7 – Domain	Moderate	Likely	Medium	Moderate	Possible	Medium	SC038
Ground improvement works in the Domain Parklands result in the permanent loss of trees along the alignment between Birdwood and Linlithgow Avenues	Community concern about the impact on this valued place and ongoing diminishment in the perceived value of this wooded parkland.	1 – Tunnels	Moderate	Likely	Medium	Minor	Possible	Low	SC039
Queen Victoria Gardens emergency access shaft	Placement of the emergency access shaft in Queen Victoria Gardens is inconsistent with community expectations on the uses of this park.	1 – Tunnels	Moderate	Possible	Medium	Moderate	Unlikely	Low	SC040

Impact pathway			Initial risk			Residual risk			
Category	Event	Precinct	C	L	Risk level	C	L	Risk level	Risk no.
Placement of the Tom's Block emergency access shaft	The placement of this infrastructure is inconsistent with community aspirations for Domain Parklands. Parts of the community likely to be particularly impacted include those traveling on St Kilda Road in trams or by foot who value this part of the landscape.	1 – Tunnels	Moderate	Likely	Medium	Moderate	Possible	Medium	SC041
Design and construction of acoustic treatments	Acoustic treatments such as noise walls impact on visual amenity.	2 – Western Portal	Moderate	Likely	Medium	Moderate	Unlikely	Low	SC043
Operation									
Placement of above ground infrastructure in proximity to residences	The placement of project infrastructure such as ventilation shafts in the Osborne Street Reserve, or noise walls on Childers Street has an ongoing impact on the amenity of households, diminishing their ability to enjoy their property.	2 – Western Portal 8 – Eastern Portal	Moderate	Likely	Medium	Moderate	Possible	Medium	SC044
	Acoustic treatments such as noise walls discourage people from using Lovers Walk or result in a perceived reduction of safety for users of the walkway.	8 – Eastern Portal	Moderate	Likely	Medium	Moderate	Unlikely	Low	SC045

7 Precinct 1: Tunnels

This section describes the Concept Design components, existing conditions, the key issues, benefits and opportunities and findings of the impact assessment.

7.1 Project Components

The majority of works associated with the tunnels are located underground, and consequently would have minimal impact at the surface level. The following Concept Design components are of relevance to this assessment.

7.1.1 Emergency Access Shaft

Emergency access shafts would be required in Fawkner Park and Linlithgow Avenue. The proposed Fawkner Park shaft would be located on the north-eastern boundary of the park adjacent to Walsh Street. The proposed Linlithgow Avenue shaft would be located in Queen Victoria Gardens on the site of an existing toilet block.

The structures would be expected to be approximately 2.5 times as wide as the existing toilet block on Linlithgow Avenue and double the height. Parking and access for emergency services would be retained adjacent to each access shaft. The emergency access shafts provide access to the tunnels for emergency services only.

Construction would generate 20 truck movements a day for 12 months in Linlithgow Avenue. Construction works in Fawkner Park would be expected to generate 20 average truck movements a day for 12 months (Fawkner Park). Truck access and movement would occur 24 hours a day, seven days per week (upon placement of acoustic sheds).

The construction of the Linlithgow Avenue emergency access shaft would require the temporary use of part of Queen Victoria Gardens and Birdwood Avenue for construction staging. Construction of the Linlithgow shaft would be expected to begin in early 2019 for completion by the end of 2021.

7.1.2 Vertical Alignment

Underground tunnelling works would generally occur 24 hours a day, 7 days a week (includes TBM servicing and maintenance), along with above ground sites that support tunnelling and fit-out activities at Arden, Parkville (alternative design option), Domain and Fawkner Park. At locations where sensitive noise receptors are close to the proposed construction works, some specific noise-intensive activities would likely be restricted during evening and night-time periods.

The vertical alignment would require strata acquisition under approximately 3,000 dwellings[3].

7.1.3 Yarra River Crossing – TBM Under the River

The Yarra River crossing would utilise a Tunnel Boring Machine reducing the need for surface level activities.

7.1.4 CityLink Tunnels Crossing – Above CityLink Tunnels

The CityLink tunnels crossing would potentially require ground improvement works above the length of the tunnels travelling through Tom's Block. These works would likely require the injection of concrete grout into the ground to reduce the risk of subsidence when constructing the tunnels. If used, the injection and ongoing presence of the grout would require the removal of all trees in the affected area, with no reinstatement of equivalent vegetation possible.

[3] Subject to change pending the final design of the tunnels

7.1.5 TBM Southern Launch Site

There are two options for the TBM Southern launch site:

- Domain Station or
- Domain and Fawkner Park

The description below applies to the Fawkner Park launch site only. Section 12.1 in the Domain station precinct provides a description of the Domain launch site.

The TBM southern launch sites at Fawkner Park would occupy a 19,800m^2 site covering the tennis courts at the north-western end of Fawkner Park. The launch site would require the placement of several surface level and sub level construction structures and machinery.

Spoil removal would generally occur 24 hours a day, seven days a week. Spoil removal and major deliveries to site are also expected 9.5 hours / day – in time blocks of 05:30 – 07:30, 09:30 –16:00 and 1900 – 2200. In total an average of 140 daily truck round trips area expected for 24 months.

Acoustic containment structures, such as noise walls and acoustic enclosures, may be applied to reduce the noise impacts out of normal working hours (discussed further in Technical Appendix I *Noise and Vibration*).

The Fawkner Park site would operate from mid-2018 to mid-2023.

7.1.6 Alternative Design Options

7.1.6.1 Emergency access shaft

Emergency access shafts would be required in Fawkner Park and Linlithgow Avenue. The Fawkner Park shaft would be located on the site of the Fawkner Park tennis courts. The emergency access shafts provide access to the twin tunnels for emergency services only. Parking and access for emergency services would need to be retained adjacent to each access shaft.

The Linlithgow Avenue shaft would be located in Tom's Block in an area currently used for passive recreation. The construction of the Linlithgow Avenue emergency access shaft would require the temporary use of part of Tom's Block and Birdwood Avenue for construction staging.

Construction of the alternative design option for the emergency access shaft would begin in early 2019 with completion by the end of 2021.

7.1.6.2 CityLink Tunnels crossing – Below CityLink tunnels

The CityLink tunnels crossing would avoid the need for ground improvement works and in turn avoid the needs to disturb the trees at surface level within Tom's Block.

7.2 Existing Conditions

The proposed tunnels travel east from Kensington under industrial land until they pass the proposed Arden station and Dryburgh Street where they travel under houses and apartments in North Melbourne before reaching the proposed Parkville station. In Parkville, the tunnels travel under apartment blocks, a park and commercial areas before reaching Swanston Street, one of Melbourne's busiest shopping and entertainment streets (see Table 7-1). The tunnels then travel south under Swanston Street before crossing the Yarra River immediately after the proposed CBD South station. The tunnels continue under the Domain Parklands before exiting and travelling south in line with St Kilda Road and meeting the proposed Domain station. Following Domain station, the tunnels travel east under Toorak Road before travelling under the northern extent of Fawkner Park and back under Toorak Road. The tunnels then travel east under the residential Macfarlan Street and Davis Avenue before linking in with the eastern portal.

7.2.1 Community Attitudes and Values

Fawkner Park

During consultation, the City of Melbourne noted the strong sense of ownership the adjoining community, particularly those in apartments, have over Fawkner Park, with many people valuing it the same way they would their own backyard. This view was reiterated in several of the landholder interviews and community information sessions with residents stating a major reason to live in the area is its proximity to parks and gardens. Interviewees valued the park for its trees, amenity or ability to use it for both active recreation such as jogging and organised sports and passive recreation such as picnics, walking or using the play equipment. Some interviewees also reported that residents living near the western boundary of the park use it as a short cut to access services and shops on Chapel Street or Commercial Road.

The Fawkner Park Master Plan (City of Melbourne 2006) reflects the value the community places on the park and a desire to protect its landscape character by avoiding new structures or expansion of existing structures. The protection of the landscape character of the park is consistent with community feedback received by the City of Melbourne in the formulation of the master plan, which noted the community's desire for the following:

- Keep the northern extent of the park dedicated to picnic and play; any activities supporting children and families are great
- Maintain, preserve and replace tree avenues
- Enjoy the straight avenue style planting
- Keep sports grounds away from residences.

During the consultation process for the masterplan, the community also noted concerns about:

- Noise from sports when out of hours and use of the park before 7:00 am
- Safety of the park at night
- The importance of the northern toilets that complement the passive recreation area.

Several attendees at the information sessions for Melbourne Metro and local residents interviewed for the social impact assessment were concerned about the potential impact the project would have on Fawkner Park. A number of interviewees also noted that while they would prefer no works occur in the park, they understood why the park was required. They also noted that they expected the project would minimise the impacts on trees in the park, users and the adjoining community.

Key concerns raised during interviews with residents who live near Fawkner Park regarding the impacts of construction included:

- Noise and vibration, in particular the structural damage to properties
- Traffic, given the existing congestion on Toorak Road
- The need to coordinate traffic management with other developments in the precinct
- Encroachment on Fawkner Park
- Parking on Toorak Road
- Activity in proximity to the Shrine and the need for it to be managed sensitively
- Pedestrian and car access along and across St Kilda Road.

Shrine of Remembrance

The Shrine of Remembrance and Shrine of Remembrance Reserve constitute one of Melbourne's most valued places, hosting the Anzac and Remembrance Day memorials each year. The Shrine of Remembrance and Reserve are highly valued by veterans and their families, tourists, schools and other visitors. There has been a large increase in visitors in recent years. Part of this increase is attributable to

2014 being the centenary of the commencement of the First World War. The redevelopment of the Shrine has also attracted new visitors with an expanded range of activities on offer to visitors. The Shrine of Remembrance expects that attendance would increase again in 2018 to commemorate the centenary of the end of the First World War.

Peak periods for the Shrine include Anzac Day (25 April) and Remembrance Day (11 November) with Anzac Day busy from midnight (the night before) until 2:00 pm the following day. December and January are quiet months for ceremonies but there are many visitors during these months.

Visitors to the Shrine generally get there via Birdwood Avenue, Domain Road or walk from the CBD. While visitors predominantly visit via public transport, charter buses or private vehicle drop off, access for people with mobility impairments is constrained to Birdwood Avenue. The topography of the Shrine site means that people with mobility impairments cannot easily use the western pathways.

Shrine representatives noted the community has a strong sense of connection with the Shrine and the Reserve and even incidental visitors can be emotionally attached. Any change to the grounds triggers community enquiries if not properly communicated to the relevant stakeholders.

During the wider community engagement for the project, there has been a lower level of interest shown in the Shrine of Remembrance Reserve and potential impacts on it. This is, however, likely the result of a lack of awareness of the activities proposed within and adjoining the reserve.

Yarra River

During consultation, Parks Victoria noted that the Yarra River continues to be highly valued by the community despite ongoing community concerns about the health of the river, discharge and rubbish. Of relevance to this impact assessment, is the ongoing concern some members of the community have about subsidence in proximity to the Hoddle Bridge and the flow on effect on the Main Yarra Trail. A previous project that caused subsidence and a partial realignment of part of the Main Yarra Trail is the cause of this concern.

7.2.2 Key Social Assets/Attractors in the Tunnels Precinct

Table 7-1 describes a number of important social assets within the Tunnels precinct.

Table 7-1 Key social assets/attractors in the Tunnels precinct

Asset	Details
Domain Parklands **Ref 52, Figure 12-3**	The Domain Parklands consists of a series of parklands stretching from the Yarra River in the north to Domain Road in the south. It contains a number of major attractors and valued places including the Shrine of Remembrance, Royal Botanic Gardens, Sidney Myer Music Bowl, Tom's Block, Queen Victoria and Alexandra Gardens (see Figure 7-2).
Fawkner Park **Ref 64, Figure 12-4**	Fawkner Park was a favoured place for camping by Indigenous people. Historically, the park was used for cattle grazing, greyhound training, gambling, home to the Women's Army barracks and emergency accommodation for immigrants in the post-war period (City of Melbourne 2015a). Fawkner Park is characterised by its wooded boulevards, with established elms and Moreton Bay Fig trees that are highly valued by the community (City of Melbourne). Part of the value ascribed to these trees is the uniqueness of the boulevards, given the loss of significant boulevards of Dutch elms overseas and the relatively good health of those within Fawkner Park. Today it is primarily used for recreation and sporting pursuits including touch football, cricket, tennis and softball. Fawkner Park is also unique in that is has been able to avoid the placement of significant surface infrastructure compared with other parks such as Albert Park. The northern part of the park, closest to the Concept Design alignment is a passive recreation area and hosts a children's centre and kindergarten as well as a senior citizens centre (Figure

Asset	Details
	7-3). There is a bus drop-off point west of the childcare centre which is used by schools that come to the park for sporting competitions. Christchurch Grammar and South Yarra Primary Schools also use the eastern edge of the park daily. These schools have limited space available on campus and Fawkner Park provides a space and equipment for the children to play at lunch times.
Fawkner Park Tennis Centre **Ref 65, Figure 12-4**	The Fawkner Park Tennis Centre leases six courts and the adjoining facility from the City of Melbourne. It hosts casual court hire, tennis coaching and competitions for people from the ages of two and up. The facility operates from 7:00 am to 10:30 pm during the week and from 8:00 am to 8:00 pm on weekends. Peak demand for the centre is between 3:00 pm and 10:00 pm on Wednesday to Fridays during summer. During consultation, the tennis centre management noted that demand for tennis courts in the area, especially from private schools, consistently exceeds supply. Users of the centre usually access it by private vehicle on their way to or from work, parking on Toorak Road.
Fawkner Park Children's Centre and Kindergarten **Ref 66, Figure 12-4**	The children's centre and kindergarten is licensed for up to 76 children. It is open from 7:30 am to 6:00 pm and managed as a cooperative. The facility operates throughout the year closing only for public holidays, Christmas and three non-contact days. There are 350 children on the waiting list for the centre. Most centre staff and the students access the centre by car. The centre reported that it can be difficult to secure a car park at peak times. During consultation with the centre, they noted that a number of children could be vulnerable to changes in air quality such as dust. The centre uses an outdoor play for children during the day adjacent to the proposed Tunnel Boring Machine launch site. Centre management also noted during consultation that noise and vibration from construction could adversely affect the centre and its students.
Lincoln Square **Ref 23, Figure 10-4**	City of Melbourne manages Lincoln Square (Figure 10-3). It contains a playground and the Bali Memorial, commemorating the victims of the 2002 Bali Bombings.
Main Yarra Trail **Ref 46, Figure 11-5**	A shared path that follows the Yarra River on its southern bank, it is one of the main cycling routes into Melbourne from the eastern suburbs.
Queen Victoria Gardens **Ref 48, Figure 12-3**	The Queen Victoria Gardens are located within the Domain (Figure 7-2). The gardens include ponds, monuments, flowers and a rotunda and the floral clock adjacent to St. Kilda Road (see Figure 7-2). The gardens have hosted MPavilion since 2014. The City of Melbourne rebuilds MPavilion every year under the direction of a new architect. It operates from October through to February and hosts free talks, workshops and performances.
The Shrine of Remembrance Reserve **Ref 55, Figure 12-4**	The Shrine of Remembrance is Victoria's war memorial, commemorating the service men and women who fought in the First World War and subsequent conflicts and peacekeeping efforts. The Shrine's significance is reflected in its formal design and direct line of sight into the CBD along Swanston Street (Culture Victoria, 2015). In 2014, 800,000 people visited the Shrine of Remembrance building; one hundred thousand of these visitors were schoolchildren. The Shrine is the fourth most popular tourist destination in Melbourne and hosted 167 services in 2014-15. Popular activities within the Shrine of Remembrance Reserve include visiting plaques, lunching on the lawn (families and people on their lunch break, weather dependent) walking (particularly on the western side) and other forms of passive recreation (see Figure 7-2).
South Yarra Senior Citizens Centre **Ref 67, Figure 12-4**	Co-located with the Fawkner Park Children's Centre and Kindergarten. The South Yarra Senior Citizens Centre operates from 10 am-3 pm, Monday to Friday and hosts formal activities as wells as operating as a drop in. On average 10 to 20 people attend the centre each day but in peak periods up to 30 people

Asset	Details
	may visit predominately coming from South Yarra, Southbank and St Kilda. There are limited alternative facilities available in the region. The closest is the Boyd Centre in Southbank. However, the Boyd Centre does not host programs or activities targeted at senior citizens. A number of the attendees at the centre have mobility impairments. This includes people with walking frames and sticks, as well as people with mental impairments such as mild dementia. While a number of the attendees walk and one cycles to the centre. Others tend to drive or are dropped off.
Tom's Block **Ref 51, Figure 12-3**	Part of the Domain Parklands, Tom's Block is elevated parkland that hosts a series of statues and memorials including the Police Memorial, and the Sir John Monash and Sir Edward 'Weary' Dunlop statues. The topography of the site is a potential barrier to people entering the Domain Parklands at this point (Figure 7-1). It is primarily used for passive recreation although it periodically hosts events such as the long walk fun walk.
Yarra River **Ref 45, Figure 11-5**	The Yarra River is a backdrop to the Moomba Festival and a venue for various activities including water-skiing, which occurs yearly on Labour Day bank holiday weekend. The river hosts rowing clubs run by private schools, universities and community-based organisations and provides a base for rowing regattas and dragon boat training and competitions. There are also several businesses offering river cruises, water taxis and ferry services.

Figure 7-1 Tom's Block with the Victoria Police Memorial in the background

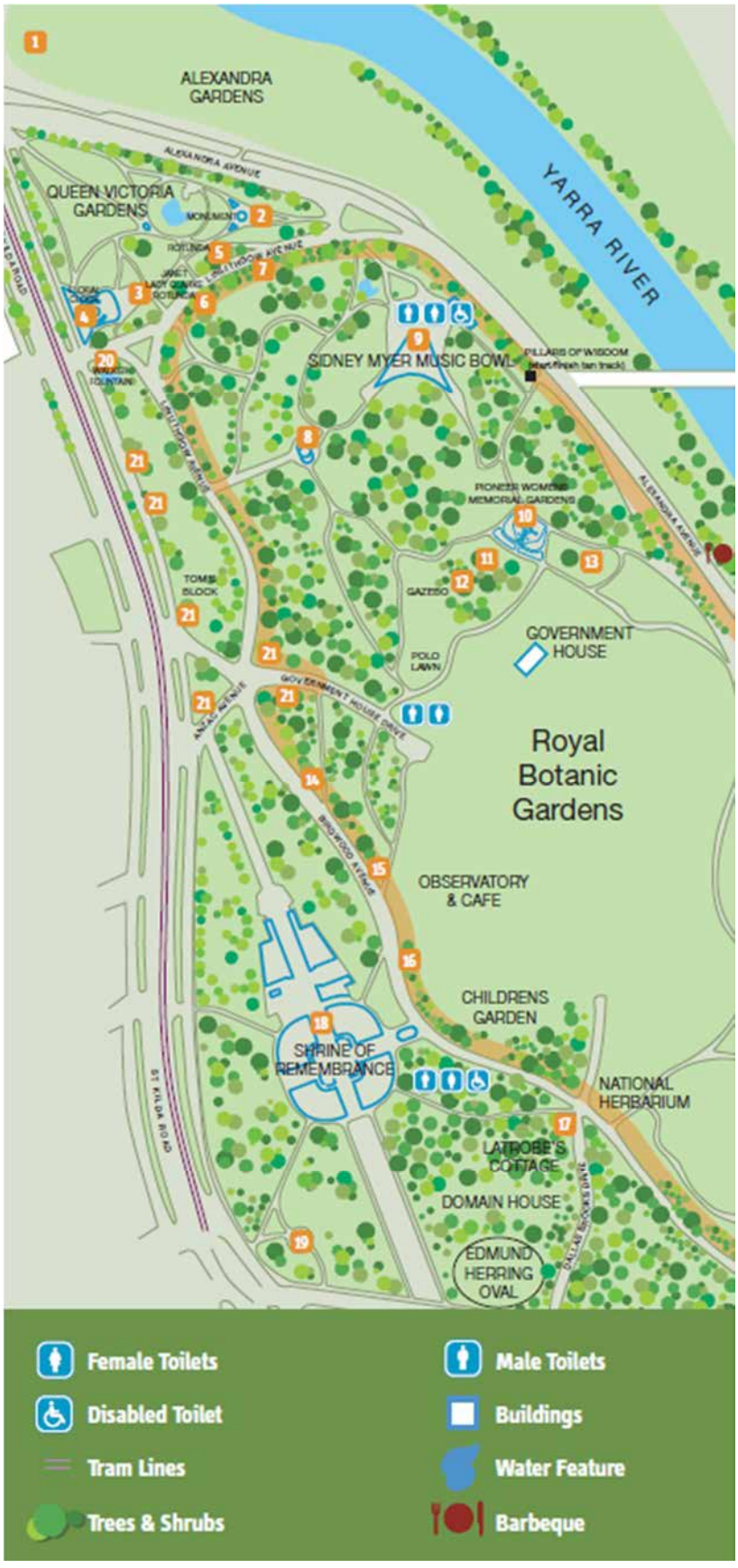


Figure 7-2 Domain Parklands **Source City of Melbourne 2015d**

Figure 7-3 Fawkner Park **Source City of Melbourne 2015f**

7.3 Key Issues

The use of the TBM would avoid many of the social impacts associated with other construction methods that require a greater interface with the surface. However, the precinct would interface with a number of sites of social significance during construction and leave in place infrastructure that would have an ongoing impact on the community.

As identified in the risk assessment (Table 6-1), the key issues associated with this precinct are listed in Table 7-2.

7.3.1 Concept Design

Table 7-2 Key issues associated with the Concept Design

Issue	Description	Risk no.
Design		
Possible construction activities inhibit future planning for households	Residential property owners in proximity to construction areas put on hold or reconsider their plans for their properties.	SC001
Project varies from Concept Design	Community opposition to the final design due to differences from the Concept Design on which the community were consulted.	SC002
Construction		
Residential strata acquisition	Strata acquisition creates concern and anxiety about vibration and subsidence amongst affected property owners and tenants.	SC003
Construction activities alter existing community access patterns	Construction activities act as a barrier to social infrastructure, recreational assets or cause social severance diminishing community networks.	SC007
Construction activities result in a loss of amenity for residents	Construction activities impact on the amenity of households diminishing their ability to enjoy their dwelling or use it as they do currently	SC009
Construction activities impacting on the amenity of health, educational, commercial, recreational and other facilities	Sustained amenity impacts on Fawkner Park Child Care Centre, Kindergarten and South Yarra Senior Citizens Centre affects the ability of staff or users to continue to use these facilities.	SC010
Construction activities in proximity to Fawkner Park Child Care Centre, Kindergarten and Senior Citizens Centre	Construction activities in proximity to areas frequented by children such as the Fawkner Park Child Care Centre and Kindergarten or in proximity to Melbourne Grammar could result in a perceived diminishment in public safety.	SC016
Truck movements in proximity to residential areas	Truck movements impact on residential amenity	SC017
Construction activities located within open spaces or recreation areas used for passive recreation	Construction activities in Fawkner Park displace passive recreation in an area with limited alternatives, reducing recreational opportunities for the community.	SC027
Construction activities located within open spaces or recreation areas used for active recreation	Construction activities displace organised sports at the Fawkner Park Tennis Centre. Limited local alternatives for these facilities reduces recreational opportunities for the community.	SC019
Construction workforce demand for parking could	Loss of access to community facilities, recreational	SC026

Issue	Description	Risk no.
result in a reduction in parking available for residents, workers or other visitors to the area.	spaces or severance of social networks.	
Construction and operation of the Fawkner Park TBM launch Site	Community concern about works within the park, particularly the impact on trees, paths and amenity.	SC033
Construction and operation		
Fawkner Park emergency access shaft	Construction of the emergency access shaft results in loss of an area used for passive recreation. Construction of the intervention shaft in Fawkner Park is inconsistent with community expectations the placement of transport infrastructure in the park.	SC034
Ground improvement works in the Domain parklands result in the permanent loss of trees along the alignment between Birdwood and Linlithgow Avenues	Community concern about the impact on this valued place and ongoing diminishment in the perceived value of this wooded parkland.	SC039
Queen Victoria Gardens emergency access shaft	Placement of the emergency access shaft in Queen Victoria Gardens is inconsistent with community expectations on the uses of this park.	SC040

7.3.2 Alternative Design Options

Table 7-3 outlines the key issues associated with the alternative design options.

Table 7-3 Key issues associated with the alternative design options

Issue	Description	Risk no.
Design		
Project varies from Concept Design	Community opposition to the final design due to differences from the Concept Design on which the community were consulted.	SC002
Construction		
Construction activities alter existing community access patterns	Construction activities act as a barrier to social infrastructure, recreational assets or cause social severance diminishing community networks.	SC007
Construction activities result in a loss of amenity for residents	Construction activities impact on the amenity of households diminishing their ability to enjoy their dwelling or use it as they do currently.	SC009
Truck movements in proximity to residential areas	Truck movements impact on residential amenity	SC027
Construction activities located within open spaces or recreation areas used for passive recreation	Construction activities in Fawkner Park displace passive recreation in an area with limited alternatives, reducing recreational opportunities for the community.	SC019
Construction workforce demand for parking could result in a reduction in parking available for residents, workers or other visitors to the area	Loss of access to community facilities, recreational spaces or severance of social networks.	SC026
Construction and operation		

Issue	Description	Risk no.
Fawkner Park emergency access shaft	Construction of the emergency access shaft results in loss of an area used for passive recreation Construction of the emergency access shaft in Fawkner Park is inconsistent with community expectations the placement of transport infrastructure in the park.	SC034
Placement of the Tom's Block emergency access shaft	The placement of this infrastructure is inconsistent with community aspirations for Domain Parklands. Those likely to be most impacted include users of the Domain Parklands and people travelling on St Kilda Road who value this part of the landscape.	SC041

7.4 Benefits and Opportunities

Table 7-4 provides the benefits and opportunities associated with the Tunnels precinct.

Table 7-4 Benefits and opportunities associated with the Tunnels precinct

Benefits	Opportunities
Would provide an increase in the capacity of the network providing people in Greater Melbourne with greater access to the wider city	• Upgrade the reinstated tennis courts and facilities • Consider a redesign of the tennis facility to better meet current community recreational needs for example the introduction of multi-use courts • Integrate the emergency access shaft with the existing toilet block to provide a more consolidated structure that would generate less impact • Treatments that integrate the emergency access shaft and other infrastructure with the parkland setting.

7.5 Impact Assessment

The draft EES draft evaluation objectives and assessment criteria relevant to this assessment are set out in Table 7-5.

Table 7-5 EES evaluation objectives and assessment criteria

Draft EES Evaluation Objectives	Assessment Criteria	Chapter reference
Social, community, land use and business: To manage effects on the social fabric of the community in the area of the project, including with regard to land use changes, community cohesion, business functionality and access to services and facilities, especially during the construction phase.	Minimise impacts to private residential property owners and occupiers	7.5.1
	Minimise impacts on social infrastructure such as educational, health, religious and sporting facilities	7.5.4 7.5.6
	Maintain community accessibility and avoid social severance	7.5.4
	Achieve consistency with community values	7.5.1, 7.5.2, 7.5.3, 7.5.4, 7.5.5, 7.5.6, 7.5.7, 7.5.8, 7.5.9

Draft EES Evaluation Objectives	Assessment Criteria	Chapter reference
Landscape, visual and recreational values: To avoid or minimise adverse effects on landscape, visual amenity and recreational values as far as practicable.	Minimise impacts on, and enhance amenity for residents and the community and maintain perceptions of safety during the construction phase	7.5.1, 7.5.4, 7.5.5, 7.5.6, 7.5.7, 7.5.8, 7.5.9
	Minimise impacts on valued places, including public open space and recreation reserves.	7.5.1, 7.5.4, 7.5.5, 7.5.6, 7.5.7, 7.5.8, 7.5.9

7.5.1 Vertical alignment

7.5.1.1 Minimise impacts to private residential property owners and occupiers

The vertical alignment would require strata acquisition under approximately 3,000 dwellings. This would not directly result in dislocation of affected dwellings but may trigger concerns about vibration and subsidence during and after the passing of the TBM (up to 10 days for each TBM).

Uncertainty during the planning and initial construction stages would likely result in some households in proximity to construction areas putting on hold or reconsidering their plans for their properties. The Concept Design could address these concerns for most households by providing appropriate information, demonstrating condition survey results and by relocating people where appropriate. However, it is likely to be a source of more sustained concern for some affected households.

7.5.1.2 Minimise impacts on, and enhance amenity for residents and the community and maintain perceptions of safety during the construction phase

The Concept Design may result in short-term acoustic or vibration impacts on residences, valued spaces or social infrastructure while the TBM travel along the alignment (discussed further in Technical Appendix I *Noise and Vibration*). It may also generate wider concern where the tunnel travels under structures perceived to be more vulnerable to vibration, for example Christ Church. This impact could be managed for most households with the provision of appropriate information, demonstration of condition survey results and relocation where appropriate.

7.5.2 The Yarra River Crossing

7.5.2.1 Achieve consistency with community values

Users of the Main Yarra Trail may have concerns about the project triggering subsidence in proximity to the Yarra River. It is unlikely the Concept Design would trigger subsidence at this point or require large volumes of water to manage impacts to the water table so this concern would likely be addressed through the provision of appropriate information to concerned individuals.

7.5.2.2 Minimise impacts on valued places, including public open space and recreation reserves

There may be temporary disruptions to activities on the Yarra River (e.g. geotechnical investigations) but these are likely to be localised and short term.

7.5.3 The CityLink Tunnels Crossing

7.5.3.1 Achieve consistency with community values

The CityLink tunnels crossing would likely require ground improvement works in the Domain Parklands. These would likely result in a permanent loss of trees along the alignment between Birdwood and Linlithgow Avenues. This is unlikely to be consistent with community aspirations for the Domain Parklands. This impact would be reduced if ground improvement works do not preclude the reinstatement of vegetation.

7.5.3.2 Minimise impacts on valued places, including public open space and recreation reserves

Ground improvement works in Tom's Block could lead to a permanent diminishment of the value people place on this space if the tunnel crossing creates an approximately 21 m wide path through the trees.

7.5.4 The TBM Launch Site in Fawkner Park

7.5.4.1 Minimise impacts on social infrastructure such as educational, health, religious and sporting facilities

The TBM launch site would impact on formal recreation through the occupation of the Fawkner Park Tennis Centre and their six tennis courts for five years. Children and adults use this facility. Potentially reducing the impact of this loss is the presence of several other tennis facilities in the wider region available to users. The duration of this impact could be extended if the Concept Design does not reinstate the tennis courts following feedback from the City of Melbourne or other users. This impact can be managed if alternative facilities can be made available for users.

7.5.4.2 Maintain community accessibility and avoid social severance

The placement of the TBM launch site across any pathways within the park would likely interfere with existing access patterns. However, the size of the launch site means it may be possible to avoid most of the existing pathways.

Truck movements to and from the site would potentially impact on access to the Fawkner Park Child Care Centre, Kindergarten and South Yarra Senior Citizens Centre. The scheduling of truck movements would likely reduce impacts on access to the childcare centre during peak periods.

Truck movements and changes to local access would likely have a cumulative impact on residents' access, particularly people living between Domain Road and Toorak Road West. These residents would be surrounded by construction activities to the north (Edmund Herring Oval), south (Fawkner Park) and west (Domain).

The loss of the tennis courts, impacts on the childcare, kindergarten and South Yarra Senior Citizens Centre could impact on social networks as people seek alternative facilities or withdraw from these activities. Those most vulnerable to this impact would be families, people with mobility impairments or the elderly. However, this impact could be reduced if alternative facilities are made available for users.

Construction workforce demand for parking could result in reduced parking available for residents, workers or other visitors to the area unless managed.

The cumulative impact of these activities has the potential to increase when considered both against the likely level of private development in the area and the activities underway in both the eastern portal and Domain station precincts.

7.5.4.3 Achieve consistency with community values

Placement of the TBM launch site within Fawkner Park adjacent to the building containing a childcare centre, kindergarten and South Yarra Senior Citizens Centre is likely to generate concerns about health and safety, particularly for children and those with existing health problems. Air quality modelling that notes there is the potential for air quality exceedances at this facility (discussed further in Technical Appendix H *Air Quality*) would support these concerns. The noise generated by the TBM launch site is likely to create concerns about the ability of the kindergarten to run classes and programs while it passes. These concerns are likely to be shared by families with children in attendance at the centre as well as the families of the 350 children on the waiting list. This impact could be reduced through the temporary relocation of the facility locally and engagement with the community. Even with appropriate mitigation, the users of these facilities are likely to have ongoing concerns during construction.

Parts of the local community would be concerned about the location of the construction work site within this highly valued park and the perceived impact this could have on trees, existing access paths and the general amenity.

7.5.4.4 Minimise impacts on valued places, including public open space and recreation reserves

The Concept Design would result in the loss of 19,800 m2 for five years within Fawkner Park. Most of this space is currently restricted to members or users of the Fawkner Park Tennis Club reducing the extent of this impact. While the Concept Design is likely to avoid most trees within the park, if those bounding the paths within the park are impacted this is likely to be considered a negative impact on these valued boulevards.

7.5.4.5 Minimise impacts on, and enhance amenity for residents and the community and maintain perceptions of safety during the construction phase

Activities on site are likely to have an amenity (noise and air quality) impact on residents living on Toorak Road West and St Kilda Road, alongside the northern extent of Fawkner Park. Increasing the significance of this impact would be the five-year duration of works on site and the 24-hour operations. The amenity impact is likely to be greatest for owner-occupiers as tenants would be able to move to alternative accommodation should they find the amenity impact unacceptable.

This amenity impact could be reduced by acoustic attenuation but for some residents this is still likely to result in an observable diminishment of amenity particular outside of peak periods on Toorak Road (discussed further in Technical Appendix I *Noise and Vibration*). The sustained nature of these impacts has the potential to increase the severity of this impact. The acoustic treatments proposed for the park may also impact on the amenity of properties that currently look out on a park setting.

Appropriate engagement with affected dwellings and the offer of temporary relocation for those subject to disruptions outside of normal working hours would reduce this impact.

7.5.5 The Domain launch Site

The discussion of the Domain launch site is included in Section 12.5 of this report given it is adjacent to the Domain precinct.

7.5.6 Fawkner Park Emergency Access Shaft

7.5.6.1 Minimise impacts on social infrastructure such as educational, health, religious and sporting facilities

The construction of the emergency access shaft would result in the temporary loss of a public toilet block during construction, with the nearest alternative approximately 350 m away in the centre of Fawkner Park.

7.5.6.2 Achieve consistency with community values

The placement of this structure may not be consistent with community expectations around the placement of transport infrastructure in the park. The sensitivity towards this impact is likely to be reduced by the presence of an existing toilet block on site and the recent construction of the water main in proximity to the site. Appropriate treatments to the structure and minimisation of its profile would reduce this impact.

7.5.6.3 Minimise impacts on valued places, including public open space and recreation reserves

The emergency access shaft would result in limited loss of an area used for passive recreation but the impact of this would be diminished, as the shaft would be integrated with the existing toilet block and require a relatively small land take.

7.5.6.4 Minimise impacts on and enhance amenity for residents and the community and maintain perceptions of safety during the construction phase

The construction of the emergency access shaft would result in an amenity (noise and dust) impact on the park and Christ Church Grammar School during construction but this could be managed with appropriate mitigation (discussed further in Technical Appendix I *Nosie and Vibration* and technical appendix H *Air Quality)*.

While the emergency access shaft avoids the mature trees that provide recreational open space areas with a high level of landscape amenity, discussed further in Technical Appendix L *Landscape and Visual*, it may still be of concern to the community given it would be one of the more significant structures in the park but is unrelated to the activities for which the community values it.

7.5.7 Queen Victoria Gardens Emergency Access Shaft

7.5.7.1 Achieve consistency with community values

The placement of the emergency access shaft may not be consistent with community expectations on the uses of Queen Victoria Gardens. However, the presence of the MPavilion suggests that the community may be less sensitive to change in this park than had it remained purely an ornamental garden. Appropriate treatments to the structure and minimisation of its profile would also reduce this impact.

7.5.7.2 Minimise impacts on valued places, including public open space and recreation reserves

The placement of the emergency access shaft would result in the limited loss of an area used for passive recreation, the impact of this would at least be partly diminished due to the existence of toilet block and relatively small land take within the park. However, the structure has the potential to be one of the tallest in the park, potentially affecting the sense of place. Appropriate treatments to the structure and minimisation of its profile would reduce this impact.

7.5.7.3 Minimise impacts on, and enhance amenity for residents and the community and maintain perceptions of safety during the construction phase

The construction of the shaft would disrupt the amenity of the park for its users (noise and dust) but would not exceed the existing noise levels for residences on St Kilda Road (discussed further in Technical Appendix H *Air Quality* Technical Appendix I *Noise and Vibration*). For park users, the loss of amenity may be of concern especially if it disrupts events or the quiet enjoyment of the park.

7.5.8 Alternative Design Option - Fawkner Park Emergency Access Shaft

7.5.8.1 Minimise impacts on social infrastructure such as educational, health, religious and sporting facilities

The alternative design option of the Fawkner Park emergency access shaft would require a change to the existing layout of the tennis courts during reinstatement to allow for the placement of the structure. However, following construction the tennis courts would be able to return to their current function and capacity.

7.5.8.2 Achieve consistency with community values

While the placement of the structure may not be consistent with community expectations about appropriate infrastructure for the park, the placement of the facility in proximity to the existing tennis courts would help screen any change, increasing the likelihood this would be an acceptable outcome for the community.

7.5.8.3 Minimise impacts on valued places, including public open space and recreation reserves

The alternative design option would result in a limited loss of an area used for passive recreation. The impact of this would be diminished as the facility would be integrated with the tennis courts and require a relatively small land take within the park.

7.5.8.4 Minimise impacts on, and enhance amenity for residents and the community and maintain perceptions of safety during the construction phase

The alternative design option is unlikely to result in a much greater impact on amenity than the Tunnel Boring Machine launch site in which it would be located.

7.5.9 Alternative Design Option – Tom's Block Emergency Access Shaft

7.5.9.1 Achieve consistency with community values

The Tom's Block emergency access shaft (alternative design option location) may be inconsistent with community aspirations for Domain Parklands. Those most likely to be affected include park users and people traveling on St Kilda Road either in trams or on foot who value this part of the landscape. Increasing the likelihood of this impact, the emergency access shaft would be the only surface level infrastructure in the park that is neither a memorial or park infrastructure. However, the lower levels of pedestrian traffic in the area may diminish this sensitivity. Appropriate treatments to the structure and minimisation of its profile may reduce this impact.

7.5.9.2 Minimise impacts on valued places, including public open space and recreation reserves

The construction of the emergency access shaft would result in a limited loss of an area used for passive recreation within the park, however, the small footprint of the structure should diminish this impact.

7.5.9.3 Minimise impacts on, and enhance amenity for residents and the community and maintain perceptions of safety during the construction phase

The construction of the shaft has the potential to disrupt the amenity of the park for its users through generation of noise and dust (discussed further in Technical Appendix H *Air Quality* and Technical Appendix I *Noise and Vibration*). The loss of amenity may be of concern especially if it disrupts events or the quiet enjoyment of the park.

7.5.10 Residual Risks

With the mitigation proposed in Section 7.6 the residual risks associated with the impacts identified above are of medium significance or lower (see Section 6).

7.6 Environmental Performance Requirements

Table 7-6 provides the recommended Environmental Performance Requirements and proposed mitigation measures to address the social impacts specific to this precinct. In some instances, individual performance requirements and mitigation measures have been used manage multiple impacts. Where feasible these are consolidated in the table below, however, there are instances where requirements or mitigation need to be repeated for different impacts.

The risk assessment in Section 6 applies the mitigation detailed below to the initial risks to determine the residual risks for the project.

Table 7-6 Environmental Performance Requirements for the Tunnels Precinct

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no.
Dwellings	Construction activities impact on the amenity of households diminishing their ability to enjoy their dwelling or use it as they do currently	Prior to main works or shaft construction in areas affected, develop a relocation management framework that allows for a uniform approach across the project for the voluntary (temporary) relocation of households subject to: • Construction activities likely to unduly affect their amenity (e.g. out of hours works or sustained loss of amenity during the day for shift workers) • Loss of access. Develop and implement a traffic management plan(s) in consultation with the relevant road management authorities to minimise disruption to traffic, car parking, pedestrian and bicycle movements during construction Prior to main works or shaft construction, develop and implement a community and business involvement plan to engage potentially affected stakeholders and advise them of the planned construction activities and project progress. Develop and implement measures	• Develop a relocation management framework that allows for a uniform approach across the project. Consider and incorporate the following into this framework: – Provision for the voluntary relocation of households subject to: ▪ Construction activities likely to unduly affect their amenity (e.g. out of hours works or sustained loss of amenity during the day for shift workers) ▪ Loss of access – Providing options suitable to the duration of relocation, for example: ▪ Use of hotels / motels for short term disruptions ▪ Use of equivalent housing for longer term relocations • Utilise truck routes that reduce the number of dwellings impacted by truck movements • Design construction work sites in proximity to residential areas to minimise the number of trucks that need to reverse • Avoid parking or idling construction vehicles in proximity to dwellings outside of normal working hours • Use reversing beepers that minimise disturbance on adjoining properties • Utilise a complaints management system for responding to all community complaints or enquiries • Engage landholders during the planning, design and implementation stages on the construction method, project design and how this would affect their property.	SC009
	Truck movements impact on residential amenity			SC027
	Residential property owners in proximity to construction areas put on hold or reconsider their plans for their properties			SC001

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no.
		to minimise light spillage during construction to protect the amenity of adjacent neighbourhoods, parks and community facilities.		
Dwellings	Strata acquisition creates concern and anxiety about vibration and subsidence amongst affected property owners and tenants	Prior to main works or shaft construction, develop and implement a community and business involvement plan to engage potentially affected stakeholders and advise them of the planned construction activities and project progress.	• Engage landholders adjoining the project alignment during the planning, design and implementation stages on the construction method, project design and how this would affect their property • Undertake pre-tunnelling condition surveys and make the results available to affected property owners on request.	SC003
Community	Community opposition to the final design due to differences from the Concept Design on which the community were consulted		• Demonstrate that community feedback is incorporated in the design and the design requirements have been made clear to the community • Demonstrate to the community and key stakeholders how the design aligns with the Concept Design and community feedback • Where the design is potentially inconsistent with community feedback, explain the rationale and anticipated outcomes of the design change • Consult with affected communities on design changes likely to be of public interest prior to finalisation.	SC002
Social infrastructure	Construction activities act as a barrier to social infrastructure, recreational assets or cause social severance diminishing community networks	Prior to main works or shaft construction in areas affected, develop a relocation management framework that allows for a uniform approach across the project for the voluntary (temporary) relocation of households subject to: • Construction activities likely to unduly affect their amenity (e.g. out of hours works or sustained loss of amenity during the day for shift workers) • Loss of access.	• Communicate alternative access methods to the community in advance of works in a manner consistent with MMRA's Community and Stakeholder Engagement Plan • Ensure that the relevant sub plan allows for existing pedestrian access patterns and considers the needs of vulnerable people such as children and those with mobility impairments • Develop appropriate community information tools – website, on site boards, brochures etc. to update community on changed access arrangements.	SC006

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no.
Fawkner Park Tennis Centre	Construction activities displace organised sports at the Fawkner Park Tennis Centre. Limited local alternatives for these facilities reduces recreational opportunities for the community	Develop a relocation strategy for sports clubs and other formal users of directly impacted recreational facilities	• Consult early with open space users on project timelines and likely impacts • Develop a relocation strategy to help users of the Fawkner Park tennis centre identify alternative facilities (where available) they could use during construction.	SC024
Fawkner Park Child Care Centre, Kindergarten, South Yarra Senior Citizens and Melbourne Grammar	Sustained amenity impacts affects the ability of staff or users to continue to use these facilities	Prior to main works or shaft construction, develop and implement a community and business involvement plan to engage potentially affected stakeholders and advise them of the planned construction activities and project progress.	• Avoid locating construction activities likely to cause community concern such as spoil management adjacent to the Child Care Centre, Kindergarten and the South Yarra Senior Citizens Centre • Relocate the Fawkner Park Childcare Centre, kindergarten and Senior Citizens Centre locally for the duration of the works • Avoid truck movements during peak pick up and drop off times for these facilities.	SC010
	Construction activities in proximity to areas frequented by children could result in a perceived diminishment in public safety			SC016
Carparks	Construction workforce demand for parking could result in a reduction in parking available for residents, workers or other visitors to the area	Develop and implement a transport management plan(s) in consultation with the relevant road management authorities to minimise disruption to traffic, car parking, pedestrian and bicycle movements during construction.	• Consider and incorporate the following into the traffic management plan: – Target of no net loss of public parking outside the construction zone – Management of workforce car parking to include subcontractors.	SC026
Fawkner Park	Construction activities in Fawkner Park displace passive recreation in an area with limited	Prior to main works or shaft construction, develop and implement a community and business involvement plan to	• Consult early with open space users on project timelines and likely impacts • Provide a mechanism within the sub plan governing reinstatement to consider community feedback in consultation with the land manager.	SC019

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no.
	alternatives, reducing recreational opportunities for the community	engage potentially affected stakeholders and advise them of the planned construction activities and project progress. Work with relevant local councils to plan for and coordinate with key stakeholders during major public events In consultation with key stakeholders and in accordance with the Urban Design Strategy, relevant statutory approvals and other relevant requirements, re-establish sites impacted by construction works Develop and implement measures for construction and operation of Melbourne Metro that aim to minimise impacts to the development and/or operation of existing land uses Design permanent and temporary works in consultation with local councils and the Office of Victorian Government Architect to comply with the MMRA Urban Design Strategy. The design shall avoid or minimise visual impacts on sensitive receptors and maintain broader landscape character values	• Demonstrate to the satisfaction of MMRA that construction compounds and other footprints are optimised to reduce their footprint across the corridor • Design access shafts so that they respect they respect their park settings.	
	Community concern about works within the park, particularly the impact on trees, paths and amenity			SC033
	Construction of the intervention shaft results in loss of an area used for passive recreation Construction of the intervention shaft in Fawkner Park is inconsistent with community expectations the placement of transport infrastructure in the park			SC034
Tom's Block	Community concern about the impact on this valued place and ongoing diminishment	Reinstate quality soils to sufficient volumes to support long-term viable growth of replacement trees	• Demonstrate to the satisfaction of MMRA that ground improvement works are optimised to reduce their footprint • Avoid ground improvement techniques that would preclude the reestablishment of	SC039

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no.
	in the perceived value of this wooded parkland	In consultation with key stakeholders and in accordance with the Urban Design Strategy, relevant statutory approvals and other relevant requirements, re-establish sites impacted by construction works Prior to main works or shaft construction, develop and implement a community and business involvement plan to engage potentially affected stakeholders and advise them of the planned construction activities and project progress. Develop and implement measures for construction and operation of Melbourne Metro that aim to minimise impacts to the development and/or operation of existing land uses Design permanent and temporary works in consultation with local councils and the Office of Victorian Government Architect to comply with the MMRA Urban Design Strategy. The design shall avoid or minimise visual impacts on sensitive receptors and maintain broader landscape character values	trees • Provide a mechanism within the sub plan governing reinstatement to consider community feedback in consultation with the land manager • Demonstrate to the satisfaction of MMRA that construction compounds and other footprints are optimised to reduce their footprint across the corridor • Minimise the footprint and height of the access shaft and provide architectural treatments that enable it to better reflect the park setting.	
	The placement and design of emergency access shaft is inconsistent with community aspirations for Domain Parklands. Parts of the community likely to be most impacted include those traveling on St Kilda Road in trams or by foot who value this part of the landscape			SC041
Queen Victoria Gardens	Placement of the emergency shaft in Queen Victoria Gardens is inconsistent with community expectations on the uses of this park		• Provide a mechanism within the sub plan governing reinstatement to consider community feedback in consultation with the land manager. • Demonstrate to the satisfaction of MMRA that construction compounds and other footprints are optimised to reduce their footprint across the corridor. • Minimise the footprint and height of the access shaft and provide architectural treatments that enable it to better reflect the park setting.	SC040

8 Precinct 2: Western Portal (Kensington)

8.1 Project Components

The following project components are of relevance to this assessment.

8.1.1 Infrastructure

The Concept Design would widen the rail corridor with two additional rail lines connecting the existing Sunbury Tracks to the future Melbourne Metro tracks. The decline structure and new retaining wall along Childers Street would lead to the permanent loss of the shared path.

The portal would be located adjacent to the 50 Lloyd Street Business Estate with the decline structure.

Ongoing, the proposed Melbourne Metro would allow for an increased number of trains to travel on the rail lines adjacent to Childers Street.

8.1.2 Alternative Design Option

The alternative design option for the western portal would require the construction of an additional rail bridge over Kensington Road. This would be located immediately north of the existing rail lines. This option would also involve the placement of the TBM Retrieval Box opposite the pavilion on Childers Street.

Construction activity would occur in proximity to JJ Holland Park on the corner of Ormond and Childers Streets. This work would be minimised to avoid any impact on the park.

8.1.3 Construction

The Concept Design would require the acquisition of nine residences. The alternative design option would reduce the number of acquired properties to one.

In addition to the track works and construction of the retaining wall on Childers Street, the Concept Design would:

- Permanently relocate one high voltage transmission tower in Childers Street
- Temporarily relocate another high voltage transmission tower in Childers Street
- Establish a major construction work site at 1 - 39 Hobsons Road, adjoining the Maribyrnong River
- Tunnel excavation and TBM retrieval
- Remove of trees on Childers Street
- Occupy the car park at South Kensington station
- Create traffic disruptions to Childers Street in various stages of construction
- Restrict work to normal working hours with the exception of track occupations, which would go for 24 hours a day
- Generate 50 average daily truck movements for 30 months.

Site working hours would be Monday to Friday, 7am to 6pm, Saturday, 8am to 3pm (excluding rail and bridge night works).

Construction would be expected to begin mid-2018 before finishing in mid-2023.

8.1.4 Early Works

A number of early works are required in the Western Portal precinct. These include the relocation or replacement of a number of electrical, gas, water, sewage, telecommunications, water and storm water drainage assets.

The early works of most interest to this assessment include:

- The replacement of three existing HV Transmission towers
- The relocation of the existing Gas Transmission Main that currently runs under the proposed rail alignment northwards outside station box.

8.2 Existing Conditions

The western portal would be located between the 50 Lloyd Street Business Estate, JJ Holland Park and a residential area.

8.2.1 Community Attitudes and Values

As of August 2015, there was a high degree of support for the project in Kensington with 75 per cent of survey respondents in favour (Ipsos 2015a). The in-principle support for the project was confirmed in interviews with local residents, including some of the landowners whose properties would be acquired. In the Kensington information sessions many attendees also noted their support for the project concept and investment in public transport improvements.

However, there was a low level of self-reported project knowledge in the area with 15 per cent of survey respondents noting they were well informed about the project (Ipsos 2015). Many of the attendees at the information sessions and participants in the online forums were also uncertain as why the portals needed to be located in Kensington and what its construction would involve. Key issues raised included:

- Why the project can't avoid acquiring residential properties
- The duration of the construction phase and why it would take so long for it to become operational
- The Kensington community would be disadvantaged by construction impacts but would not receive any benefits from the project (i.e. residents wouldn't be able to access the rail tunnels via South Kensington station)
- Concern that South Kensington station would not be rebuilt or improved as part of the project
- Concern about increased truck and construction traffic, operational hours and noise
- Loss of parking during construction
- The need for noise walls on the rail corridor.

Attendees at the sessions also noted that JJ Holland Park is highly valued by the community and should be protected during construction and operation. This view was consistent with the feedback received from the City of Melbourne and several of the landholders consulted. It was also thought that the loss of car parks on Childers Street potentially impact on the use of JJ Holland Park.

During consultation, the City of Melbourne also noted the community highly valued JJ Holland Park and that demand for car parking in and around Kensington often exceeds capacity.

8.2.2 The Adjoining Community

The community adjoining the western portal predominantly live in detached and semi-detached houses and townhouses.

Throughout consultation undertaken for the social impact assessment, several landholders noted that older housing stock in proximity to the train line rarely comes onto the market and that when it does it is quickly purchased[4].

[4] As of 21/10/2015 of the 46 properties currently for sale in Kensington, only 8 had three bedrooms or more. The rental market for larger houses also appears to be constrained with nine of the 59 properties available for rent having three bedrooms or more (REALESTATE 2015a, 2015b)

The majority of landholders interviewed in Kensington are owner-occupiers and several have lived there for 10 years or more. Several of the households are young families-with school-aged children of similar ages and shared child caring arrangements. A number of people interviewed either work or study from home part or full time and play sport locally. In the interviews, several of the landholders noted their involvement in local community groups, organised sports or school activities. Most of the landholders know their neighbours well, and parties or other social gatherings are held regularly.

While some of the households chose to live in the area for its good transport links, others noted the sense of community, heritage feel, proximity to services and JJ Holland Park and access to employment as key reasons to live in the area. It was also noted that the proximity of the station to these dwellings (Figure 8-1) was an advantage for some as it enabled people with mobility impairments easy access to and from these dwellings.

Prior to the project, all landholders interviewed noted they had intended to stay on their properties with several recently renovating or with aspirations to do so. The aim of several of these renovations was to improve their use of open space, in particular backyards. Currently many properties on Altona Street and Ormond Street have their view of the rail line obscured by the houses and trees in the properties behind. This, with the provision of the laneway, provides a sense of place to the area which several of the residents referred to as a village feel.

JJ Holland Park is a multi-use park that features formal and informal recreation facilities. Residents in the area reported valuing the parks facilities and using them regularly. These facilities include the playgrounds, off leash dog areas and community facilities such as the Kensington YMCA. Many families stated that they had met friends while attending parents' groups at the Maternal Child Health Centre at JJ Holland. Site inspections to the park on different days and times as well as discussions with the City of Melbourne confirm this high use and value reflected in the interviews.

With the exception of a town house development, there has been limited development in the residential block adjoining the rail corridor but there has been a history of construction in the area with a large-scale social housing development nearby (east of JJ Holland Park) and the construction of Regional Rail Link.

Most landholders noted their support for public transport in general but also identified a number of key concerns about the project including:

- Increased traffic on local streets such as Altona and Ormond Streets from trucks, contractors' cars, and 'rat runners', congestion, residential parking availability, and the safety of children or parents with prams and dogs
- Impacts on property values during construction and operation as well as the ability to rent out affected properties
- Noise, dust and vibration both during early works, construction and operation
- Loss of access to South Kensington station and JJ Holland Park during construction
- Acquisition
- Displacement of families from the community
- Use of acquired land following construction
- How the compensation process works
- Uncertainty about the construction method and potential impacts putting household planning on hold.

8.2.3 Residents of the Properties Potentially Subject to Acquisition

The project would acquire nine dwellings in Kensington for the project. Five of the properties are owner occupied, with the shortest term of tenure reported to be approximately 13 years. The remaining four dwellings are part of a newer development and composed of a vacant dwelling, two rentals and one occupier. A mixture of family and lone person households occupies the dwellings. At least two of the dwelling

occupants were reported to be subject to mobility impairments increasing their dependency on public transport.

8.2.4 Key Social Assets and Attractors

Table 8-1 Key social assets and attractors[5] in the western portal precinct study area

Asset	Description
Childers Street shared path, Ref 5, Figure 8-3	A well-utilised shared path that runs along the rail corridor on Childers Street (Figure 8-2).
Inner City Church, Ref 10, Figure 8-3	Located on Hobsons Road, the Inner City Church is part of the Australian Christian Churches. The building is used on Friday nights and Sunday mornings for services. The multicultural congregation come from across the region and is composed of 50 to 60 people. While the church has leased the site since 2002 it is intending to move to an alternative location by mid-2016.
JJ Holland Park, Ref 6, Figure 8-3	The City of Melbourne manages the park. It is a large multi-use park hosting a BMX track, skate park, picnic and barbecue areas, a children's playground, and sports facilities, synthetic and grassed ovals and the Kensington Community and Recreation Centre (City of Melbourne 2015a). The City of Melbourne considers the park a key social asset, valued and heavily used by the wider Kensington community. Throughout the year, the park is used during the day and in the evenings for practice. The presence of a synthetic playing field in the park also increases how often sports clubs can play or practice at the oval.
Kensington Community Recreation Centre, Ref 7, Figure 8-3	The centre is managed by the City of Melbourne and is located in the JJ Holland Park. The centre features three swimming pools, a stadium, and community hall and meeting room. The centre is located on the corner of Kensington Road and Altona Street (YMCA 2015).
Kensington Maternal and Child Health Centre, Ref 9, Figure 8-3	Offers community healthcare services including maternal and child health (State Government of Victoria 2015).
Kensington Community Children's Co-Operative, Ref 8, Figure 8-3	The centre is managed by the City of Melbourne and is accessed off Altona Street, adjacent to JJ Holland Park (City of Melbourne 2015a). Current demand for childcare places at the centre exceeds capacity, with a long waiting list for prospective parents. Most families who use the centre live locally and access it on foot while most staff live further afield and drive.

[5] This includes social, recreational and community infrastructure as well as known valued places.

Figure 8-1 The northern entrance to South Kensington station from Childers Street

Figure 8-2 Childers Street shared path

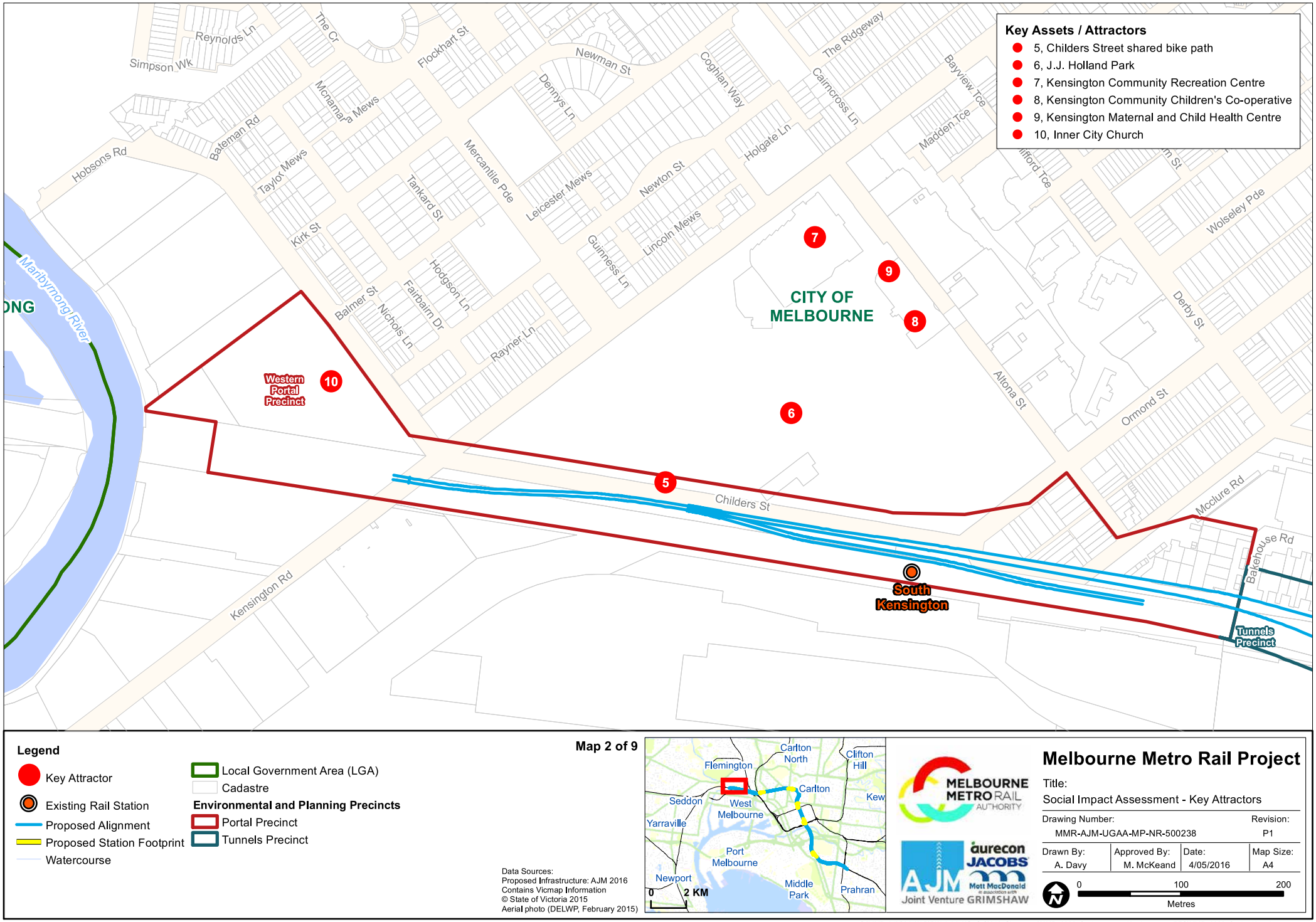


Figure 8-3 Western portal (Kensington) precinct key attractors

8.3 Key Issues

As identified in the risk assessment (Table 6-1), the key issues associated with the Concept Design are identified in Table 8-2.

Table 8-2 Key issues associated with the Concept Design

Issue	Description	Risk no.
Design		
Possible construction activities inhibit future planning for households	Residential property owners subject to acquisition or in proximity to construction areas put on hold or reconsider their plans for their properties.	SC001
Project varies from Concept Design	Community opposition to the final design due to differences from the Concept Design on which the community were consulted.	SC002
Construction		
Construction activities alter existing community access patterns	Construction activities act as a barrier to social infrastructure, recreational assets or cause social severance diminishing community networks.	SC008
Construction activities result in a loss of amenity for residents	Construction activities impact on the amenity of households diminishing their ability to enjoy their dwelling or use it as they do currently.	SC009
Construction activities impacting on the amenity of health, educational, commercial, recreational and other facilities	Sustained amenity impacts on JJ Holland Park.	SC011
Truck movements alter local travel patterns	Truck movements and changes to local access sever existing community networks and disrupt access patterns particularly for families with young children, those with mobility impairments or the elderly.	SC018
Construction workforce demand for parking could result in a reduction in parking available for residents, workers or other visitors to the area.	Loss of access to community facilities, recreational spaces or severance of social networks.	SC026
Truck movements in proximity to residential areas	Truck movements impact on residential amenity.	SC027
Acquisition of nine (9) dwellings in Kensington	Displacement of households with strong ties to their community.	SC028
Construction and operation		
Design and construction of acoustic treatments	Acoustic treatments at the western portal such as noise walls impact on visual amenity or are otherwise inconsistent with community preferences.	SC043

8.3.1 Alternative Design Option

Table 8-3 outlines the key issues associated with the alternative design option.

Table 8-3 Key issues associated with the alternative design option

Issue	Description	No.
Design		
Possible construction activities inhibit future planning for households	Residential property owners subject to acquisition or in proximity to construction areas put on hold or reconsider their plans for their properties.	SC001
Project varies from Concept Design	Community opposition to the final design due to differences from the Concept Design on which the community were consulted.	SC002
Construction		
Construction activities alter existing community access patterns	Construction activities act as a barrier to social infrastructure, recreational assets or cause social severance diminishing community networks.	SC008
Construction activities result in a loss of amenity for residents	Construction activities impact on the amenity of households diminishing their ability to enjoy their dwelling or use it as they do currently.	SC009
Construction activities impacting on the amenity of health, educational, commercial, recreational and other facilities	Sustained amenity impacts on JJ Holland Park.	SC010
Truck movements alter local travel patterns	Truck movements and changes to local access sever existing community networks and disrupt access patterns particularly for families with young children, those with mobility impairments or the elderly.	SC018
Construction workforce demand for parking could result in a reduction in parking available for residents, workers or other visitors to the area.	Loss of access to community facilities, recreational spaces or severance of social networks.	SC026
Truck movements in proximity to residential areas	Truck movements impact on residential amenity.	SC027
Acquisition of one dwelling in Kensington	Displacement of a household with strong ties to their community.	SC029
Construction and operation		
Design and construction of acoustic treatments	Acoustic treatments at the western portal such as noise walls impact on visual amenity or are otherwise inconsistent with community preferences.	SC043

8.4 Benefits and Opportunities

Table 8-4 provides the benefits and opportunities associated with each part of the Concept Design.

Table 8-4 Benefits and opportunities associated with the western portal

Benefits	Opportunities
• The project would relocate a transmission tower further away from the community improving the	• Reinstatement of acquired land as a park or a community facility post construction

Benefits	Opportunities
amenity of JJ Holland Park • Improvements in reliability and the increase in the capacity of services stopping at South Kensington station would improve accessibility for Kensington residents to the wider network, their social network and key social infrastructure.	• Involve the local community in the reinstatement planning for Childers Street and any acoustic treatments on the rail corridor • Opportunity to improve the Childers Street streetscape with appropriate treatments, providing a benefit for all JJ Holland Park users • Acoustic treatments such as noise walls could enhance the visual amenity of the properties looking towards the rail corridor (Figure 8-4) if appropriately designed.

Figure 8-4 South Kensington station rail reserve from Childers Street and JJ Holland Park facing north from the corner of Childers Street and Ormond Street

8.5 Impact Assessment

The following draft EES evaluation objectives and assessment criteria are relevant to this assessment.

Table 8-5 EES evaluation objectives and assessment criteria

Draft EES evaluation objectives	Assessment Criteria	Chapter reference
Social, community, land use and business: To manage effects on the social fabric of the community in the area of the project, including with regard to land use changes, community cohesion, business functionality and access to services and facilities, especially during the construction phase.	Minimise impacts to private residential property owners and occupiers.	8.5.1, 8.5.2
	Minimise impacts on social infrastructure such as educational, health, religious and sporting facilities.	N/A
	Maintain community accessibility and avoid social severance.	8.5.1, 8.5.2
Landscape, visual and recreational values: To avoid or minimise adverse	Achieve consistency with community values.	8.5.1, 8.5.2

Draft EES evaluation objectives	Assessment Criteria	Chapter reference
effects on landscape, visual amenity and recreational values as far as practicable.	Minimise impacts on, and enhance amenity for residents and the community and maintain perceptions of safety during the construction phase.	N/A
	Minimise impacts on valued places, including public open space and recreation reserves.	8.5.1, 8.5.2

8.5.1 Western Portal

8.5.1.1 Minimise impacts to private residential property owners and occupiers

The western portal would have major local impacts due to the acquisition of nine residences adjacent to the rail corridor (mixture of owner-occupiers and tenants with one unoccupied). Several of these properties are vulnerable with school-aged children, residents with mobility impairments or other circumstances that make them less able to adapt to change.

The acquisition of these properties is likely to result in displacement of some of these households. The high level of amenity impact these properties currently experience from rail operations means the market value of these properties could be less than in other parts of Kensington. The level of compensation they would receive could mean households are unable to buy back into the suburb. The limited level of housing available currently in the suburb and the anecdotal evidence provided by landholders also suggests that for households wishing to remain in Kensington, it could take a long period of time to secure a three-bedroom dwelling locally.

The acquisition of dwellings, if it displaces households, could sever existing social networks as children change schools, move to different community organisations located elsewhere, change sport clubs or activities and are generally less able to participate in regular social events with their neighbours.

The impact of this acquisition would be reduced by taking a case management approach to each household, the provision of support to assist with the transition and the offer of early purchase for affected households.

Uncertainty during the planning and initial construction stages would also likely result in some households in proximity to the construction area putting on hold or reconsidering their plans for their properties.

8.5.1.2 Minimise impacts on social infrastructure such as educational, health, religious and sporting facilities

The Inner City Church would have left its current site by the time construction begins, avoiding any impact on the church or its congregation.

8.5.1.3 Maintain community accessibility and avoid social severance

The social impacts associated with the loss of the Childers Street shared path would be reduced by the presence of an alternative path located on the southern extent of JJ Holland Park. With an upgrade, this path could provide the same level of utility as the current shared path while maintaining existing community access patterns along Childers Street

The temporary occupation of the Childers Street car parks during construction would likely to impact commuters who currently use the parks as well as people visiting the precinct to access facilities, or visiting family and friends. Construction workforce demand for parking could also result in a reduction in parking available for residents, workers or other visitors to the area if not managed appropriately.

8.5.1.4 Achieve consistency with community values

The Concept Design is likely to be inconsistent with local community aspirations for a connection to the new rail line to be provided in Kensington. The lack of an upgrade to South Kensington station is also likely to be

inconsistent with community expectations, with the station currently considered by the community to be of a poor standard when compared with other stations recently upgraded as part of Regional Rail Link Project.

Although the Concept Design is likely to have high visual impacts on JJ Holland Park, discussed further in Technical Appendix L *Landscape and Visual*, the avoidance of direct impacts on the park such as on playing fields and other facilities is likely to be consistent with community values.

8.5.1.5 Minimise impacts on, and enhance, amenity for residents and maintain community amenity and safety during the construction phase

During construction, the project is likely to affect the amenity of JJ Holland Park as well as residences on Hobsons Road and Ormond and Altona Streets (discussed further in Technical Appendix I *Noise and Vibration* and Technical Appendix L *Landscape and Visual*). Users of JJ Holland Park are likely to be less sensitive given the areas of the park most exposed to amenity impacts are playing fields and a skate park valued primarily for their ability to host sports rather than their amenity value such as an ornamental park.

Acoustic treatments such as a noise wall could enhance the visual amenity of the properties looking towards the rail corridor if appropriately designed. However, several properties on Altona and Ormond Streets would likely have their current views of trees and terrace houses replaced by a noise wall, which would have a negative impact on in their amenity from the rear of their properties and potentially alter the sense of place. Engagement with affected landholders on the design and appearance of the acoustic treatments could reduce this impact.

Community concerns about the safety of truck movements may lead to changes in local access patterns. However, the small number of truck movements likely generated by the project combined with appropriate traffic management and communication with the community would minimise the likelihood of that occurring.

8.5.2 Alternative Design Option - Western Portal

8.5.2.1 Minimise impacts to private residential property owners and occupiers

The project would acquire one residence, possibly resulting in displacement of this household. The high level of amenity impact it currently experiences from rail operations means the market value of the property could be less than in other parts of Kensington. The level of compensation received could mean the household is unable to buy a similar dwelling elsewhere in the suburb.

8.5.2.2 Maintain community accessibility and avoid social severance

Refer to 8.5.1.3. The alternative design option would also result in increased truck traffic and local road disruption from the construction of a new rail bridge over Kensington Road. This could lead to temporary disruptions in access to JJ Holland Park and other facilities but this could be minimised through appropriate traffic management and communication.

8.5.2.3 Achieve consistency with community values

Refer to 8.5.1.4.

8.5.2.4 Minimise impacts on, and enhance, amenity for residents and maintain community amenity and safety during the construction phase

Refer to 8.5.1.5.

8.5.3 Early Works

The early works required would likely have temporary impacts on local access and residential amenity. The impact of these works could be reduced to minimise the impact on the local community through appropriate management and communication.

8.5.4 Residual Risks

With the mitigation proposed in Section 8.6 most of the residual risks associated with the impacts identified above are of medium significance or lower (see Section 6). However, the residual risk associated with the acquisition of nine residences in Kensington remains high.

8.6 Environmental Performance Requirements

Table 8-6 provides the recommended Environmental Performance Requirements and proposed mitigation measures to address the social impacts specific to this precinct. In some instances, individual performance requirements and mitigation measures have been used manage multiple impacts. Where feasible these are consolidated in the table below, however, there are instances where requirements or mitigation need to be repeated for different impacts.

The risk assessment in Section 6 applies the mitigation detailed below to the initial risks to determine the residual risks for the project.

Table 8-6 Environmental Performance Requirements for the precinct

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no.
Dwellings	Community opposition to the final design due to differences from the Concept Design on which the community were consulted.	Prior to main works or shaft construction, develop and implement a community and business involvement plan to engage potentially affected stakeholders and advise them of the planned construction activities and project progress.	• Demonstrate that community feedback is incorporated in the design with design requirements have been made clear to the community • Where the design is potentially inconsistent with community feedback, explain the rationale and anticipated outcomes of the design change • Consult with affected communities on design changes likely to be of public interest prior to finalisation • Engage landholders during the planning, design and implementation stages on the construction method, project design and how this would affect their property.	SC002
	Residential property owners subject to acquisition or in proximity to construction areas put on hold or reconsider their plans for their properties.			SC001

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no.
Dwellings	Displacement of households with strong ties to their community	Reduce the disruption to residences from direct acquisition or temporary occupation.	• Utilise a case management approach to manage all Project interactions with affected landholders • Appoint a social worker or equivalent to assist households make the transition • Provide a central point of contact for all affected landholders and tenants • Consider the relative vulnerability of households (e.g. young families, those with mobility impairments or the elderly) and consider what additional assistance is needed to assist with relocation • Purchase properties early, where possible and requested by the landowner • Acquire part of properties, where possible and requested by the landowner.	SC0028 SC0029
	Construction activities impact on the amenity of households diminishing their ability to enjoy their dwelling or use it as they do currently.	Develop and implement measures to minimise light spillage during construction to protect the amenity of adjacent neighbourhoods, parks and community facilities.	• Develop a relocation management framework that allows for a uniform approach across the project. Consider and incorporate the following into this framework:	SC009

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no.
Dwellings	Truck movements impact on residential amenity	Prior to main works or shaft construction in areas affected, develop a relocation management framework that allows for a uniform approach across the project for the voluntary (temporary) relocation of households subject to: • Construction activities likely to unduly affect their amenity (e.g. out of hours works or sustained loss of amenity during the day for shift workers) • Loss of access Develop and implement a transport management plan(s) in consultation with the relevant road management authorities to minimise disruption to traffic, car parking, pedestrian and bicycle movements during construction. Prior to main works or shaft construction, develop and implement a community and business involvement plan to engage potentially affected stakeholders and advise them of the planned construction activities and project progress.	– Provision for the voluntary relocation of households subject to: ▪ Construction activities likely to unduly affect their amenity (e.g. out of hours works or sustained loss of amenity during the day for shift workers) ▪ Loss of access – Providing options suitable to the duration of relocation, for example: ▪ Use of hotels / motels for short term disruptions ▪ Use of equivalent housing for longer term relocations. • Utilise truck routes that reduce the number of dwellings impacted by truck movements • Design construction work sites in proximity to residential areas to minimise the number of trucks that need to reverse • Avoid parking or idling construction vehicles in proximity to dwellings outside of normal working hours • Use reversing beepers that minimise disturbance on adjoining properties • Utilise a complaints management system for responding to all community complaints or enquiries • Engage landholders during the planning, design and implementation stages on the construction method, project design and how this would affect their property.	SC027

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no.
Social infrastructure	Construction activities act as a barrier to social infrastructure, recreational assets or cause social severance diminishing community networks.	Prior to main works or shaft construction, develop and implement a community and business involvement plan to engage potentially affected stakeholders and advise them of the planned construction activities and project progress. Develop and implement a traffic management plan(s) in consultation with the relevant road management authorities to minimise disruption to traffic, car parking, pedestrian and bicycle movements during construction.	• Consult with managers of key facilities so that impacts on their operations and wellbeing of their users are minimised and notification timeframes agreed • Provide advance warning of out of hours works and consult closely with the institutional stakeholders during their planning to determine times that must be avoided • Provide a forum in which key facilities can provide feedback on the construction approach • Communicate alternative access methods to the community in advance of works in a manner consistent with MMRA's Community and Stakeholder Engagement Plan • Ensure existing pedestrian access patterns are allowed for the needs of vulnerable people such as children and those with mobility impairments are considered • Develop appropriate community information tools – website, on site boards, brochures etc. to update community on changed access arrangements • Utilise a complaints management system for responding to all community complaints or enquiries.	SC008

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no.
J.J. Holland Park	Sustained amenity impacts on JJ. Holland Park	Prior to main works or shaft construction, develop and implement a community and business involvement plan to engage potentially affected stakeholders and advise them of the planned construction activities and project progress. Work with relevant local councils to plan for and coordinate with key stakeholders during major public events Develop and implement measures for construction and operation of Melbourne Metro that aim to minimise impacts to the development and/or operation of existing land uses Design permanent and temporary works in consultation with local councils and the Office of Victorian Government Architect to comply with the MMRA Urban Design Strategy. The design shall avoid or minimise visual impacts on sensitive receptors and maintain broader landscape character values	• Consult with managers of key facilities so that impacts on their operations and wellbeing of their users are minimised and notification timeframes agreed • Provide advance warning of out of hours works and consult closely with the institutional stakeholders during their planning to determine times that must be avoided • Provide a forum in which key facilities can provide feedback on the construction approach.	SC011
Community access patterns	Truck movements and changes to local access sever existing community networks and disrupt access patterns particularly for families with young children, those with mobility impairments or the elderly	Prior to main works or shaft construction, develop and implement a community and business involvement plan to engage potentially affected stakeholders and advise them of the planned construction activities and project progress. Develop and implement a traffic management plan(s) in consultation with the relevant road management authorities to minimise disruption to traffic, car parking, pedestrian and bicycle movements during construction	• Communicate alternative access methods to the community in advance of works in a manner consistent with MMRA's Community and Stakeholder Engagement Plan • Ensure that the relevant sub plan allows for existing pedestrian access patterns and considers the needs of vulnerable people such as children and those with mobility impairments • Develop appropriate community information tools – website, on site boards, brochures etc. to update community on changed access arrangements • Target of no net loss of public parking outside the construction	SC018

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no.
Parking	Loss of access to community facilities, recreational spaces or severance of social networks.		zone • Management of workforce car parking to include subcontractors.	SC026
Amenity	Acoustic treatments at the western portal such as noise walls impact on visual amenity or are otherwise inconsistent with community preferences.	Prior to main works or shaft construction, develop and implement a community and business involvement plan to engage potentially affected stakeholders and advise them of the planned construction activities and project progress. In consultation with key stakeholders and in accordance with the Urban Design Strategy, relevant statutory approvals and other relevant requirements, re-establish sites impacted by construction works.	• Consult with landholders adjoining construction zones on the treatments applied to noise walls, sheds and others structures.	SC043

9 Precinct 3: Arden Station

9.1 Project Components

The following Concept Design components are of relevance to this assessment.

9.1.1 Infrastructure

Arden station would be located underground within an industrial site owned by VicTrack. It would include an entrance approximately 120 m south of Arden Street. Provision would be made for a future second entrance in the centre of the site currently owned by VicTrack to service future development.

A substation is required for Melbourne Metro to provide power for the operation of the tunnels and stations. The Concept Design would locate the substation north of Arden Street, between City Link to the west and Langford Street to the east. Two alternative locations for the substation are also being considered: co-location at Melbourne Metro Trains Melbourne Traction Substation; and in the southern section of the Arden precinct, between the rail line to the west and Laurens Street to the east.

9.1.2 Construction

The Arden station site and surrounds would be the major staging area for the proposed Melbourne Metro western section works and would include site offices and staff amenities, fabrication sheds, major storage areas, concrete batching plant and spoil extraction and handling facilities.

Construction activities would largely be contained to the Arden site with:

- Loss of up to 121 trees
- Tunnel excavation and TBM launch
- Station structural works, architectural, mechanical and electrical fit-out.

Other key activities of interest to this assessment are:

- 260 average daily truck movements each day for 48 months
- Truck access and movement would occur 24 hours a day, seven days per week
- Most traffic would use CityLink avoiding local roads but Arden Street and Victoria Street would be used by trucks to access the Parkville site
- The site may be used for parking trucks until relevant CBD worksites are ready to receive them.

Construction would begin in the middle of 2018 before completion by the end of 2023. On completion of the works the land adjoining the station would be released for mixed-use development.

9.1.3 Early Works

A number of early works are required in the Arden station precinct. These would involve the relocation or replacement of a number of electrical, telecommunications, storm water and drainage assets. The majority of these would be contained to site.

9.2 Existing Conditions

Arden station would be located in the suburb of North Melbourne in the City of Melbourne.

Figure 9-1 Proposed Arden redovelopment site facing south from Arden Street

Figure 9-2 Proposed Arden redovelopment site facing south from Arden Street

9.2.1 Community Attitudes and Values

During consultation, the City of Melbourne noted the legacy of industrial activities in the area. Historic levels of truck traffic generated by the former Four and Twenty and Arnotts factories had generated a degree of concern amongst residents at the time and there is still continuing sensitivity about truck traffic in the area. It was also noted that there is a desire in the community for additional public space.

The City of Melbourne also noted that the streets between North Melbourne station and the North Melbourne Football Club, Recreation Reserve and Centre experience low levels of pedestrian traffic and are poorly lit at night, creating a perception it is unsafe to walk in the area at night. Macaulay station is also perceived to be less secure for users creating a disincentive for people to access the area by public transport and encouraging people to drive.

Information Sessions

During the information sessions, concerns about traffic were not raised but this may have been due to limited information being available on this aspect of the Concept Design. Attendees and participants in the online forums were supportive of the project seeing it as an opportunity to improve public transport in the area. This level of support was replicated in the survey undertaken for the project with 74 per cent of respondents from North Melbourne noting their support (Ipsos 2015a). Key benefits identified by North Melbourne respondents included:

- Better access to public transport 57 per cent
- Reduce congestion on roads 56 per cent
- More trains across the day 34 per cent
- Creating jobs during construction 34 per cent.

There were concerns raised at the information session and in the online forums. These included:

- The impact of strata acquisition on properties and values
- Noise and vibration during construction
- Changes to the bus network, in particular the 401 bus.

9.2.2 The Adjoining Community

The Arden station precinct is largely surrounded by industrial facilities (Figure 9-1 and Figure 9-2), however many properties on and to the east of Laurens Street are residential.

9.2.3 Key Social Assets and Attractors

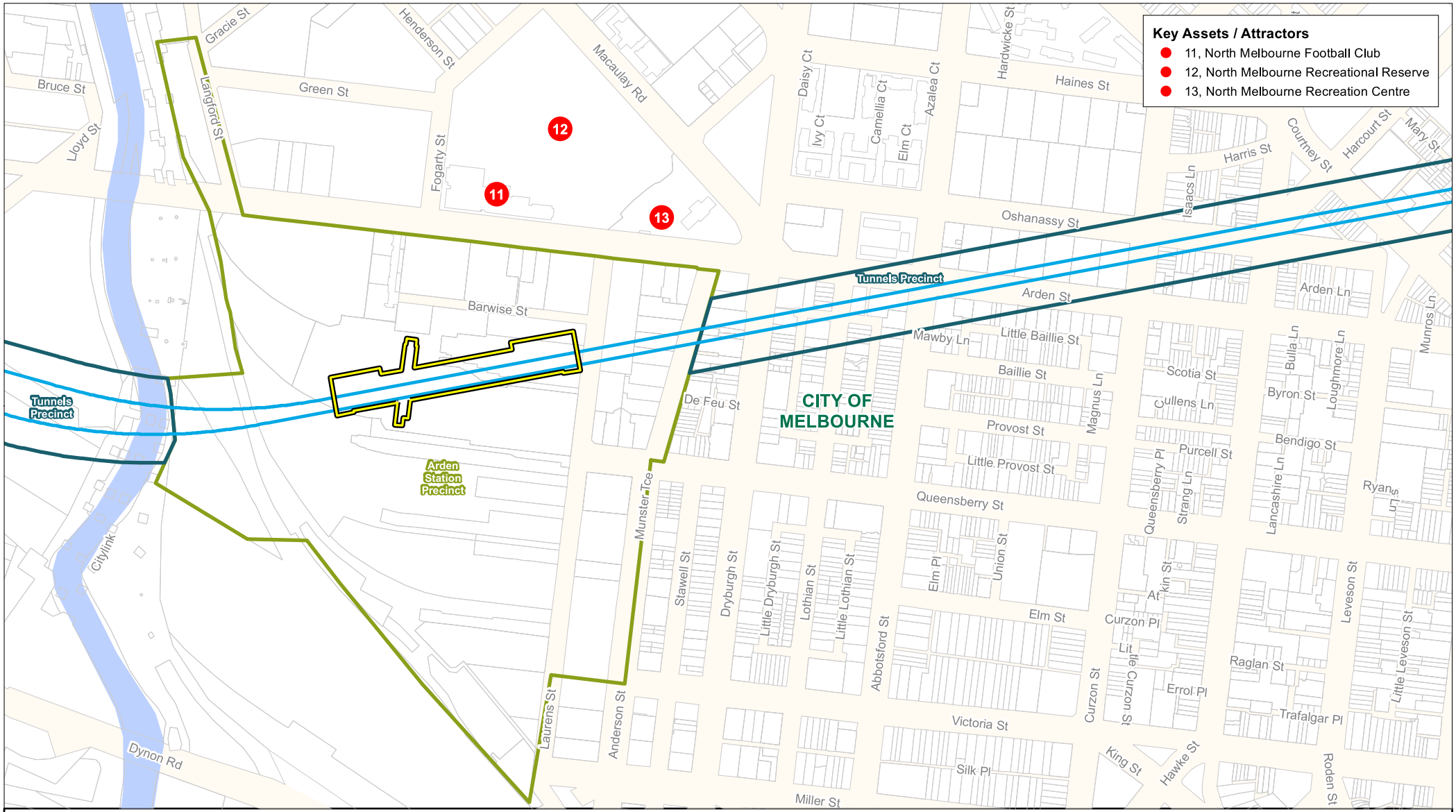
Table 9-1 provides a snapshot of the key assets and attractors in the proposed Arden station precinct. Figure 9-4 shows the location of the precinct along with key features of the precinct.

Table 9-1 Key social assets and attractors in the proposed Arden station precinct study area

Asset	Description
North Melbourne Football Club, Ref 11, Figure 9-4	Home to the North Melbourne Football Club (Figure 9-3), located on the northern side of Arden Street within the North Melbourne Recreation Reserve. The club has a regional catchment with over 40,000 members[6] and regularly trains at the ground attracting fans from around Melbourne. The facility also hosts The Huddle. The Huddle is a youth program that aims to improve social cohesion amongst young people. The Huddle's programs target young migrants and refugees from the inner North and West of Melbourne. In 2014, 6,000 young people were involved in the program at NMFC or at events held elsewhere such as schools.
North Melbourne Recreation Reserve Ref 12, Figure 9-4	The public reserve, also known as the Arden Street Oval, is managed by the City of Melbourne and hosts the North Melbourne Football Club.
North Melbourne Recreation Centre Ref 13, Figure 9-4	The North Melbourne Recreation Centre hosts a number of facilities including a gymnasium, stadium, aquatic centre, function rooms and a café. The facility is open between 6:00am and 9:00pm each weekday and 8:00am to 6:00pm on weekends. A wide cross section of the community from children and school groups to seniors use the facilities. People visit these facilities primarily by car although a number travel on foot and in the case of some younger people by public transport via North Melbourne or Macaulay railway stations.

Figure 9-3 North Melbourne Football Club Oval (panorama)

[6] http://www.nmfc.com.au/news/2015-06-11/north-breaks-40000-member-mark accessed 7 December 2015



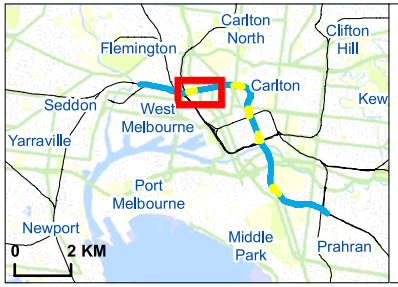
Legend

- Key Attractor
- Existing Rail Station
- Proposed Alignment
- Proposed Station Footprint
- Watercourse
- Local Government Area (LGA)
- Cadastre

Environmental and Planning Precincts

- Station Precinct
- Tunnels Precinct

Map 3 of 9



Data Sources:
Proposed Infrastructure: AJM 2016
Contains Vicmap Information
© State of Victoria 2015
Aerial photo (DELWP, February 2015)

MELBOURNE METRO RAIL AUTHORITY

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AJM Joint Venture GRIMSHAW

Melbourne Metro Rail Project

Title:
Social Impact Assessment - Key Attractors

Drawing Number:			Revision:
MMR-AJM-UGAA-MP-NR-500238			P1
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Figure 9-4 Arden station precinct key attractors

9.3 Key Issues

As identified in the risk assessment (Table 6-1), the key issues associated with the Concept Design are identified in Table 9-2.

Table 9-2 Key issues associated with the Concept Design

Issue	Description	Risk no.
Design		
Possible construction activities inhibit future planning for households	Residential property owners subject to acquisition or in proximity to construction areas put on hold or reconsider their plans for their properties.	SC001
Project varies from Concept Design	Community opposition to the final design due to differences from the Concept Design on which the community were consulted.	SC002
Construction		
Construction activities alter existing community access patterns	Construction activities act as a barrier to social infrastructure, recreational assets or cause social severance diminishing community networks.	SC008
Construction activities impacting on the amenity of health, educational, commercial, recreational and other facilities	Sustained amenity impacts on North Melbourne Recreation Centre and Football Club.	SC011
Truck movements alter local travel patterns	Truck movements and changes to local access sever existing community networks and disrupt access patterns particularly for families with young children, those with mobility impairments or the elderly.	SC018
Construction workforce demand for parking could result in a reduction in parking available for residents, workers or other visitors to the area	Loss of access to community facilities, recreational spaces or severance of social networks.	SC026

9.4 Benefits and Opportunities

Table 9-3 provides the benefits and opportunities associated with each part of the Concept Design.

Table 9-3 Benefits and opportunities associated with Arden station

Benefits	Opportunities
• The station would provide a catalyst for redevelopment of the Arden site. This should in turn be the catalyst for an increase in the range of services and facilities available to the community • Provision of the station would ensure future residential development in the area is integrated with the rest of the transport network with easy access to employment, services and wider social networks • Once operational, the provision of a train station at Arden would enhance access to the North Melbourne	• Opportunity to link the station and its surrounds to the North Melbourne community and its history. • Involve the community in reinstatement planning for the site. • Provide enhanced pedestrian linkages between existing stations and the North Melbourne Recreation Reserve during construction.

Benefits	Opportunities
Recreation Reserve and Football Club by reducing the distance to the nearest train station (North Melbourne) from approximately 850 metres through an industrial area to less than 200 metres. This is likely to be of most benefit to younger people or other vulnerable groups traveling at night who do not have access to private vehicles • It would also improve access to wider Melbourne for residents currently living to the northeast and east of the Arden • Ongoing the Concept Design would improve the amenity of the surrounding residential area by moving industrial activities such as concrete batching to another more suitable area. This improvement in amenity is likely to come both from a cessation of industrial activities at the station site and from a reduction in heavy vehicle movements supporting these industrial activities • During construction, the introduction of the project workforce into the neighbourhood would improve passive surveillance and enhance public safety through the provision of better lighting, screening and monitoring around the Arden site • Project could allow for tram and bus route changes to better serve new and existing communities in Arden-Maculay.	

9.5 Impact Assessment

The following draft EES evaluation objectives and assessment criteria are relevant to this assessment.

Table 9-4 EES evaluation objectives and assessment criteria

Draft EES evaluation objectives	Assessment Criteria	Chapter reference
Social, community, land use and business: To manage effects on the social fabric of the community in the area of the project, including with regard to land use changes, community cohesion, business functionality and access to services and facilities, especially during the construction phase. **Landscape, visual and recreational values:** To avoid or minimise adverse effects on landscape, visual amenity and recreational values as far as practicable.	Minimise impacts to private residential property owners and occupiers.	N/A
	Minimise impacts on social infrastructure such as educational, health, religious and sporting facilities.	N/A
	Maintain community accessibility and avoid social severance.	9.5.1
	Achieve consistency with community values.	9.5.1
	Minimise impacts on, and enhance amenity for residents and the community and maintain perceptions of safety during the construction phase.	9.5.1
	Minimise impacts on valued places, including public open space and recreation reserves.	9.5.1, 9.5.2

9.5.1 Arden Precinct

9.5.1.1 Maintain community accessibility and avoid social severance

The increased traffic on Arden Street and Laurens Street during construction could impact on access to the North Melbourne Recreation Reserve, Centre and football club for current users that travel to the site by private vehicle. It could also act as a barrier for younger people who currently walk to these facilities from North Melbourne or Macaulay stations if it is perceived as negatively impacting the safety of crossing Arden Street. This would affect daytime and evening activities. This impact could be managed through appropriate traffic management and engagement with these facilities and their users.

Construction workforce demand for parking could also result in a reduction in parking available for residents, workers or other visitors to the area if not managed appropriately.

9.5.1.2 Achieve consistency with community values

During construction, truck movements, particularly those out of normal working hours, may be a source of concern to the community, especially where trucks are travelling to and from Parkville and other station sites or where they cannot use CityLink. This level of concern may extend to sites such as North Melbourne Recreation Centre, where the existing uncovered pool is close to Arden Street. However, with appropriate mitigation such as traffic management and communication this could be managed.

The increased traffic on Arden and Laurens Streets during construction may be of concern to the community leading to changes in local access patterns. However, the project in this precinct would have a minimal impact on pedestrian and cycling safety (discussed further in Technical Appendix D *Transport*).

9.5.1.3 Minimise impacts on valued places, including public open space and recreation reserves

Increases in truck traffic on Arden and Macaulay Roads could have an amenity impact on the North Melbourne Reserve and associated facilities. The swimming pools within the North Melbourne Recreation Reserve may be perceived to be impacted by the noise or dust generated by the truck traffic in proximity to both sides of the facility. The levels of truck traffic could also be perceived to impact on the safety of users, particularly vulnerable groups such as children and the elderly. Reducing the sensitivity to this impact are the existing levels of truck traffic in the precinct. This impact could be reduced further through appropriate traffic management and engagement with these facilities and their users.

9.5.1.4 Minimise impacts on, and enhance amenity for residents and the community and maintain perceptions of safety during the construction phase

With mitigation, construction is not expected to exceed existing background noise levels in the precinct (discussed further in Technical Appendix I *Noise and Vibration*). However, during construction the Concept Design would diminish the amenity of households particularly out of hours with truck movements on Macaulay Road and Wreckyn Street. Partially offsetting this impact would be Concept Design's displacement of truck movements generated during the day by current Arden tenants such as the concrete batching plant. This impact could be reduced further through proactive communication with affected households, particularly for out of hours works.

9.5.2 Substation Alternative Design Option 1

Substation alternative design option 1 would have negligible social impacts due to its location in an industrial area away from the community and facilities.

9.5.3 Substation Alternative Design Option 2

Substation alternative design option 2 would have negligible social impacts due to its location in an industrial area away from the community and facilities.

9.5.4 Substation Alternative Design Option 3

9.5.4.1 Minimise impacts on, and enhance amenity for residents and the community and maintain perceptions of safety during the construction phase

Substation alternative design option 3 would be located in proximity to an apartment block at 5 Anderson Street, which may be of concern to its residents. Reducing the potential sensitivity to this impact would be early communication with residences to explain what is proposed. This impact would be further reduced given the industrial nature of the site and the lower level of amenity users of the building likely already experience when on their balconies facing Laurens Street.

9.5.5 Early Works

The social impact of the required early works would likely be minimised given most would be located on site. However, some may have temporary impacts on local access and residential amenity. With appropriate management and communication, the impact of these works could be reduced to minimise the impact on the local community.

9.5.6 Residual Risks

With the mitigation proposed in Section 9.6 the residual risks associated with the impacts identified above are of medium significance or lower (see Section 6).

9.6 Environmental Performance Requirements

Table 9-5 provides the recommended Environmental Performance Requirements and proposed mitigation measures to address the social impacts specific to this precinct. In some instances, individual performance requirements and mitigation measures have been used manage multiple impacts. Where feasible these are consolidated in Table 9-5, however, there are instances where requirements or mitigation need to be repeated for different impacts.

The risk assessment in Section 6 applies the mitigation detailed below to the initial risks to determine the residual risks for the project.

Table 9-5 Environmental Performance Requirements for the precinct

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no.
Dwellings	Residential property owners subject to acquisition or in proximity to construction areas put on hold or reconsider their plans for their properties.	Prior to main works or shaft construction, develop and implement a community and business involvement plan to engage potentially affected stakeholders and advise them of the planned construction activities and project progress.	• Engage landholders during the planning, design and implementation stages on the construction method, project design and how this would affect their property	SC001
Community values	Community opposition to the final design due to differences from the Concept Design on which the community were consulted.		• Demonstrate that community feedback is incorporated in the design and the design requirements have been made clear to the community • Demonstrate to the community and key stakeholders how the design aligns with the Concept Design and community feedback • Where the design is potentially inconsistent with community feedback, explain the rationale and anticipated outcomes of the design change • Consult with affected communities on design changes likely to be of public interest prior to finalisation.	SC002

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no.
Social infrastructure	Construction activities act as a barrier to social infrastructure, recreational assets or cause social severance diminishing community networks.	Develop and implement a transport management plan(s) in consultation with the relevant road management authorities to minimise disruption to traffic, car parking, pedestrian and bicycle movements during construction.	• Communicate alternative access methods to the community in advance of works in a manner consistent with MMRA's Community and Stakeholder Engagement Plan • Ensure that the relevant sub plan allows for existing pedestrian access patterns and considers the needs of vulnerable people such as children and those with mobility impairments • Develop appropriate community information tools – website, on site boards, brochures etc. to update community on changed access arrangements.	SC008
North Melbourne Recreation Centre and Football Club	Sustained amenity impacts on North Melbourne Recreation Centre and Football Club	Prior to main works or shaft construction, develop and implement a community and business involvement plan to engage potentially affected stakeholders and advise them of the planned construction activities and project progress.	• Consult with managers of key facilities so that impacts on their operations and wellbeing of their users are minimised and notification timeframes agreed • Provide advance warning of out of hours works and consult closely with the institutional stakeholders during their planning to determine times that must be avoided • Provide a forum in which key facilities can provide feedback on the construction approach.	SC011
Public parking	Construction workforce demand for parking could result in a reduction in parking available for residents, workers or other visitors to the area	Develop and implement a traffic management plan(s) in consultation with the relevant road management authorities to minimise disruption to traffic, car parking, pedestrian and bicycle movements during construction	• Target of no net loss of public parking outside the construction zone • Management of workforce car parking to include subcontractors.	SC026

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no.
Access patterns	Truck movements and changes to local access sever existing community networks and disrupt access patterns particularly for families with young children, those with mobility impairments or the elderly	Prior to main works or shaft construction, develop and implement a community and business involvement plan to engage potentially affected stakeholders and advise them of the planned construction activities and project progress	• Communicate alternative access methods to the community in advance of works in a manner consistent with MMRA's Community and Stakeholder Engagement Plan • Ensure that the relevant sub plan allows for existing pedestrian access patterns and considers the needs of vulnerable people such as children and those with mobility impairments • Develop appropriate community information tools – website, on site boards, brochures etc. to update community on changed access arrangements.	SC018

10 Precinct 4: Parkville Station

10.1 Project Components

The following components of the Concept Design are of relevance to this impact assessment.

10.1.1 Infrastructure

- Parkville station would be located under the Grattan Street road reserve, to the east of Royal Parade
- The station footprint would occupy the full width of Grattan Street and extend from the intersection of Grattan Street and Royal Parade to University Square
- The key features of Parkville station design include:
  - Two entrances, the first located at the University of Melbourne at the corner of Royal Parade and north of Grattan Street (adjacent to Gatekeepers Cottage); and one entrance located outside the Victorian Comprehensive Cancer Centre (near corner of Royal Parade)
  - Unpaid pedestrian crossing beneath Royal Parade
- Construction of a Disability Discrimination Act (DDA) compliant tram stop on Royal Parade.

10.1.2 Construction

Construction activities would mostly be contained to Grattan Street, Royal Parade, Berkeley Street and Barry Street with:

- One partial acquisition and one partial strata acquisition from the University of Melbourne as well as temporary occupation of the City Ford site and University Square
- Changes to the local traffic network including:
  - Diversion of bus routes through Grattan Street to east of Royal Parade
  - Closure of Grattan Street between Royal Parade and Leicester Street for private vehicles. This section is bordered by the University of Melbourne for its entirety
  - Maintenance of pedestrian and cycle access around construction zones
- 100 average daily truck movements each day for 48 months
- Truck access and movement would occur 24 hours a day, seven days per week (upon placement of roof)
- Potential loss of up to 145 trees on Grattan Street, Royal Parade and the surrounding streets within the construction zone (discussed further in Technical Appendix R *Arboriculture*)
- Construction of the station using a top down or bottom up cut and cover construction method
- Activities restricted to normal working hours, until the roof slab is completed at which point they would potentially operate 24 hours a day
- Construction from the middle of 2018 to the middle of 2022
- Protection or relocation of major underground utilities
- Construction of temporary construction work sites at 750 Elizabeth Street and the northern section of University Square. These sites would be used for five years
- Reinstatement of the affected areas following construction.

10.1.3 Early Works

A number of early works are required in the Parkville precinct. These would involve the relocation or replacement of a number of electrical, gas, telecommunications, water, sewage and storm water drainage assets.

The early works of most interest to this assessment include the relocation of telecommunication cables and a water main on Royal parade.

10.2 Existing Conditions

The proposed Parkville station precinct is located within the City of Melbourne in the suburb of Parkville.

10.2.1 Community Attitudes and Values

The community survey found 80 per cent of respondents in Parkville were aware of Melbourne Metro (Ipsos 2015a) and that the majority (80 per cent) believed the project would benefit them or someone in their household, the highest rate of all project precincts. Key benefits identified included reduced congestion on roads (80 per cent) and better access to public transport (59 per cent). This high level of support for the project was replicated at the Parkville information session. The Royal Melbourne Hospital, the City of Melbourne and The University of Melbourne also confirmed this high level of support for the project noting that the community would accept some disruption in light of the benefits. It was also noted that the project would provide improved access from the western suburbs.

Parkville survey respondents had a more diverse range of concerns than other precincts with the three highest relating to access to where I shop (29 per cent), changes to parks and gardens (24 per cent) and access to where I work (21 per cent). At the information session and in the online forums, members of the community also raised concerns in respect to:

- Noise and vibration impacts on properties (construction and operation)
- Existing congestion on Grattan Street and the impact of construction on the local road network
- Pedestrian access in the precinct and station connectivity with trams
- Avoiding any impacts to the trees on Grattan Street.

Attendees also noted a desire to include a Barry Street and Royal Melbourne Hospital entrance to the station. A smaller number of people also suggested the project consider pedestrianizing Grattan Street by permanently closing it to private vehicles.

While not raised in the information sessions, or in the online forums community concern about parks and gardens has been reflected in the City North Structure Plan 2012 (City of Melbourne 2012b) which notes the importance of protecting and enhancing the quality of existing open spaces such as Lincoln and University Squares.

10.2.2 The Adjoining Community

The Parkville precinct is largely surrounded by the University of Melbourne, Royal Melbourne Hospital and other institutions. There is one residential building in proximity the proposed station; Graduate House. Graduate house, located on Leicester Street is a residential college offering accommodation from less than one week to twelve months or more. While there are a number of residential areas in Parkville and residential facilities in the University of Melbourne, these do not interface directly with the precinct.

10.2.3 Key Social Assets and Attractors

Table 10-1 Key social assets and attractors in the Parkville station precinct study area

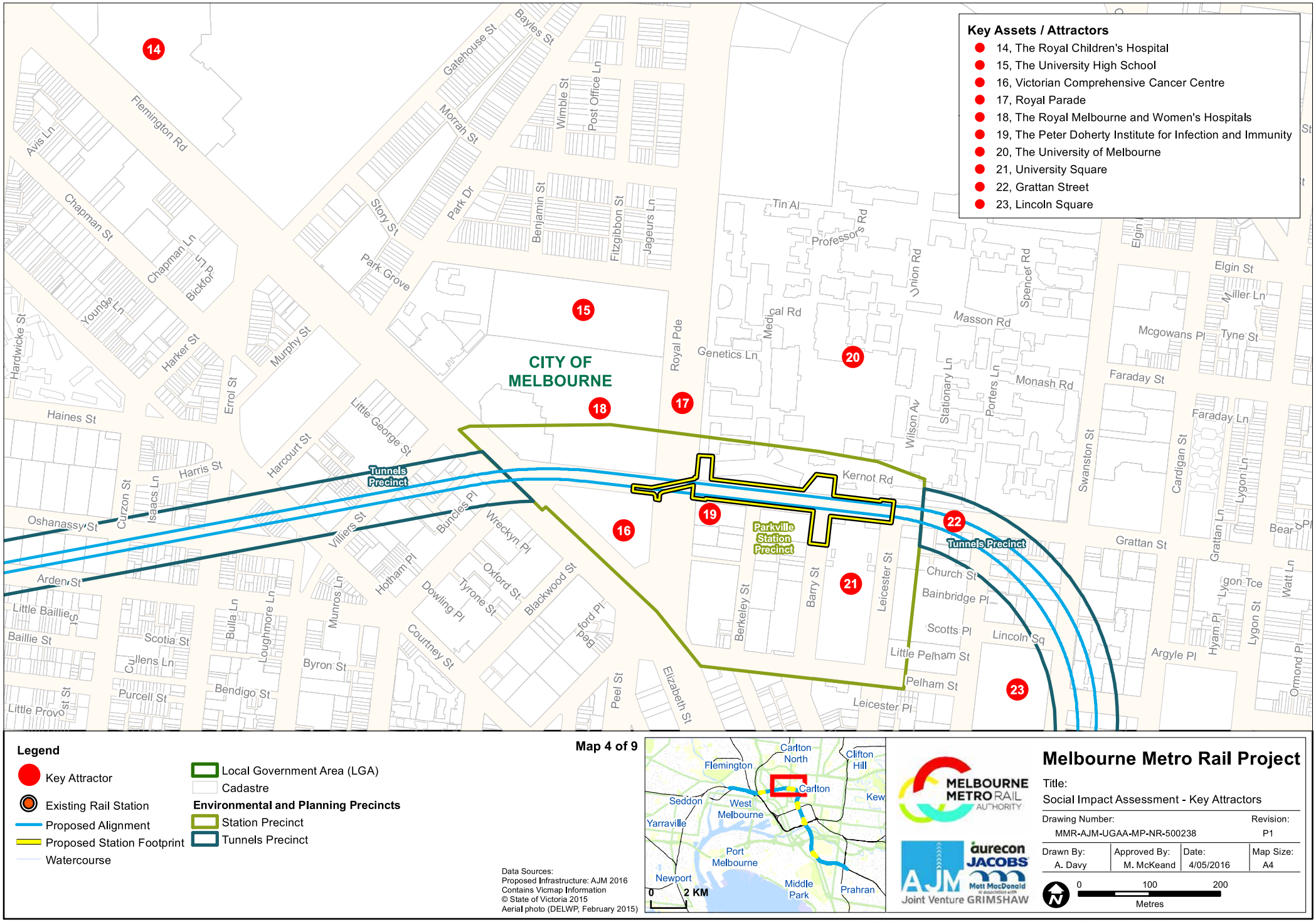
Asset	Description
Grattan Street Ref 22, Figure 10-4	Grattan Street is a tree-lined street that intersects The University of Melbourne (Figure 10-1). Between Royal Parade and Swanston Street it has a shared path on the northern side and a bus stop on the southern side.
Lincoln Square Ref 23, Figure 10-4	Lincoln Square is managed by the City of Melbourne and is located off Grattan Street (Figure 10-3). It contains a playground and the Bali Memorial, commemorating the victims of the 2002 Bali Bombings.
The University of Melbourne, Ref 20, Figure 10-4	The University of Melbourne was established in 1853 and has over 35,000 students and 7,000 staff (University of Melbourne, 2010). It is bound by College Crescent to the north, Swanston Street to the east and Royal Parade to the west. It extends north and south across Grattan Street. The University grounds host a mix of university buildings (including libraries and research institutions), terraces, exhibition spaces and retail outlets. The northern section of the campus houses residential colleges providing student accommodation. The university has multiple entrances on each side of the campus but the primary 'front door' is Gate 10 on Grattan Street north of University Square. The refurbishment and redevelopment of campus buildings are an ongoing process for the university and discussions with them reflected a level of resilience to both on campus and off campus construction (such as the Victorian Comprehensive Cancer Centre) in the precinct. While there is a lot of student movement across the campus, classes are predominantly based in localised 'clusters', especially for postgraduate students. During consultation, the University expressed concerns about Melbourne Metro construction increasing 'transfer times' as students move between learning spaces north and South across Grattan Street. If transfer times are significantly changed, they predict that they may have to alter the university's timetable to accommodate increased travel times. Another key concern expressed by the university was the ability of some researchers to continue their work if Melbourne Metro construction or operations affect the functioning of highly specialised research spaces.
Royal Children's Hospital, Ref 14, Figure 10-4	The Royal Children's Hospital is located on Flemington Road. It is used by families from across the state. The hospital has almost 4,000 staff and in 2012–13 more than 77,695 children attended the Emergency Department. A further 241,822 specialist clinic appointments were held, 11,833 surgeries were performed and more than 36,242 children stayed overnight (RCH 2015). The hospital recently completed the construction of a new playground in Royal Park, which attracts people from across Melbourne.
Royal Parade, Ref 17, Figure 10-4	Royal Parade is a major arterial road that provides access to the CBD. It extends between Brunswick Road in Brunswick and the Haymarket Roundabout. The roundabout forms the junction of Flemington Road and Peel and Elizabeth Streets. The parade is a tree lined boulevard and listed on the Victorian Heritage Register.
Royal Women's Hospital, Ref 18, Figure 10-4 **The Royal Melbourne Hospital, Ref 18, Figure 10-4**	The Royal Women's Hospital and Royal Melbourne Hospital treated over 156,267 patients from April 2011-June 2012 (Department of Health 2012) and are located to the west of the University of Melbourne University. These hospitals are bound by Royal Parade, Grattan Street and Flemington Road. The Royal Women's hospital has over 1,300 staff (RMH 2014) and the Royal Melbourne Hospital over 6,000 (RMH 2014). During consultation, the Royal Melbourne Hospital noted that the high demand for parking in the precinct affects the ability of staff, patients and visitors to access the hospital. The cost of parking is considered prohibitive for some casual workers constraining the hospital's ability to

Asset	Description
	attract and retain these staff. The Hospital is one of few places that offers tertiary and quaternary care, meaning some patients stay in the hospital for long periods, attracting more visitors and increasing demand for the limited parking available. New legislation also prohibits the Royal Melbourne Hospital from 'bypassing' patients and directing them to other hospitals during times of peak demand. This means the hospital needs to continue to accept patients even when impacted by Melbourne Metro construction. The hospital raised a number of concerns in relation to construction including: • The impact of noise, vibration and dust on equipment and patients • The potential need to move magnetic resonance imaging (MRI) services due to potential interference from construction. The construction of the Victorian Comprehensive Cancer Centre previously required this be done with both operational and financial impacts for the hospital • Maintaining access to the RMH including but not limited to pedestrian access, informal drop off zones and emergency service access. Melbourne Metro must have the flexibility to change works if a situation arises where the hospital has to respond and Grattan Street is needed for an emergency laydown. The Royal Women's Hospital and co-located Frances Perry House cater to over 120,000 patients visits per year accounting for approximately one in seven births in Victoria. Most patients travel to hospital via private vehicle and use the hospital's on site car park accessible via Flemington Road. While the Royal Women's Hospital does provide emergency services, the majority of emergency visits are via private vehicle. Frances Perry House and the Royal Women's hospital have facilities on either side of Flemington Road. The hospitals are busiest between 8am and 8pm and during staff shift changes. During consultation with the hospitals, it was noted that current traffic congestion on Flemington Road is affecting vehicular access to and from the hospital. This was resulting in specialists' practices relocating closer to the hospital so that they were better able to attend the hospital at short notice. It also reported to make it more difficult for the hospital to attract and retain staff for whom the traffic is a disincentive.
University High School, Ref 15, Figure 10-4	University High School is located on Royal Parade opposite the western edge of the University of Melbourne. The school caters for up to 1,175 students; mostly form the local area, although some travel from further afield to access special programs such as music (UHS 2015).
University Square, Ref 21, Figure 10-4	University Square is an open space adjoining Grattan Street (Figure 10-1). The northern end of the site hosts an underground car park. The area on top of the car park is paved, with some stone benches and limited levels of vegetation. The southern end of the square is used for passive recreation, with a large lawn and natural shade provided by trees. The City of Melbourne is currently running a community engagement program to inform the redevelopment of the square.
Victorian Comprehensive Cancer Centre (VCCC), Ref 16, Figure 10-4	The Victorian Comprehensive Cancer Centre will house the Peter MacCallum Cancer Centre and have capacity for 202 inpatients and 110 outpatients. Over 1,200 researchers and a number of specialist treatment, research and training facilities will be based on site (previously the location of the Royal Dental Hospital (VCCC, 2012).
The Peter Doherty Institute for Infection and Immunity, Ref 19, Figure 10-4	The Doherty Institute is "a joint venture between the University of Melbourne and the Royal Melbourne Hospital, combining research, teaching, public health and reference laboratory services, diagnostic services and clinical care in infection diseases and immunity" (Peter Doherty 2016). The institute is made up of research and educational facilities as well as event spaces (Figure 10-2).

Figure 10-1 University Square (North) facing West and Grattan Street facing east

Figure 10-2 Peter Doherty Institute (Corner of Royal Parade and Grattan St) facing south-east

Figure 10-3 Lincoln Square



Legend

- Key Attractor
- Existing Rail Station
- Proposed Alignment
- Proposed Station Footprint
- Watercourse
- Local Government Area (LGA)
- Cadastre

Environmental and Planning Precincts

- Station Precinct
- Tunnels Precinct

Map 4 of 9

Data Sources:
Proposed Infrastructure: AJM 2016
Contains Vicmap Information
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MELBOURNE METRO RAIL AUTHORITY

AJM Joint Venture GRIMSHAW

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Melbourne Metro Rail Project

Title:
Social Impact Assessment - Key Attractors

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Figure 10-4 Parkville station precinct key attractors

10.3 Key Issues

As identified in the risk assessment (Table 6-1), the key issues associated with the Concept Design are identified in Table 10-2.

Table 10-2 Key issues associated with the Concept Design

Issue	Description	Risk no.
Design		
Project varies from Concept Design	Community opposition to the final design due to differences from the Concept Design on which the community were consulted.	SC002
Construction activities alter existing community access patterns	Construction activities act as a barrier to social infrastructure, recreational assets or cause social severance diminishing community networks.	SC006
Construction		
Construction activities impacting on the amenity of health, educational, commercial, recreational and other facilities	Sustained amenity impacts on the University of Melbourne, Royal Melbourne Hospital and Peter Doherty Institute affects the ability of staff or users to continue to use these facilities	SC012
Truck movements alter local travel patterns	Truck movements and changes to local access sever existing community networks and disrupt access patterns particularly for families with young children, those with mobility impairments or the elderly	SC018
Construction activities located within open spaces or recreation areas used for passive recreation	Construction activities in University Square displace passive recreation in an area with limited alternatives, reducing recreational opportunities for the community.	SC019
Construction workforce demand for parking could result in a reduction in parking available for residents, workers or other visitors to the area	Loss of access to community facilities, recreational spaces or severance of social networks.	SC026
Construction and operation		
Construction activities alters valued streetscapes	Changes to valued streetscapes or the loss of trees on St Kilda Road, Grattan Street, Royal Parade is of concern to a wide cross section of the community.	SC035

10.4 Benefits and Opportunities

Table 10-3 provides the benefits and opportunities associated with the Concept Design.

Table 10-3 Benefits and opportunities associated with the Parkville station precinct

Benefits	Opportunities
• The Concept Design would improve access to the Parkville medical and educational precinct for wider Melbourne; this includes facilities such as the University of Melbourne, Royal Melbourne Hospital, University High School, Victorian Comprehensive Cancer Centre, the Royal Children's Hospital and Royal Park. The benefit is likely to be greatest for those accessing educational facilities and for staff at medical facilities. Patients at the hospitals could benefit from improved access but many are likely to continue using private transport or emergency vehicles to access the medical facilities • Would provide an unpaid, grade separated crossing of Royal Parade, improving pedestrian safety • Entrances provide improved access to education and health organisations in the precinct • Easier interchange between tram and bus stops • Consistent with community demand for improved access to tram stops on Royal Parade.	• Opportunity to enhance Royal Parade as the Northern entrance to Melbourne • Opportunity to better integrate trains and trams and provide improved access to the wider transport network in the northern suburbs of Melbourne • Opportunity to thematically link the station with the function of the precinct, enhancing the sense of place • Partner with The University of Melbourne to identify opportunities to integrate construction activities with existing or future courses enhancing the opportunities available to students • Engage the community on the reinstatement approach and landscaping.

10.5 Impact Assessment

The following draft EES evaluation objectives and assessment criteria are relevant to this assessment.

Table 10-4 EES evaluation objectives and assessment criteria

Draft EES evaluation objectives	Assessment Criteria	Chapter reference
Social, community, land use and business: To manage effects on the social fabric of the community in the area of the project, including with regard to land use changes, community cohesion, business functionality and access to services and facilities, especially during the construction phase. **Landscape, visual and recreational values:** To avoid or minimise adverse effects on landscape, visual amenity and recreational values as far as practicable.	Minimise impacts to private residential property owners and occupiers.	N/A
	Minimise impacts on social infrastructure such as educational, health, religious and sporting facilities.	10.5.1
	Maintain community accessibility and avoid social severance.	10.5.1
	Achieve consistency with community values.	10.5.1
	Minimise impacts on, and enhance amenity for residents and the community and maintain perceptions of safety during the construction phase.	10.5.1
	Minimise impacts on valued places, including public open space and recreation reserves.	10.5.1

10.5.1 Parkville Station

10.5.1.1 Minimise impacts on social infrastructure such as educational, health, religious and sporting facilities

No buildings within the University of Melbourne, Victorian Comprehensive Cancer Centre or Royal Melbourne hospital are required for the project.

10.5.1.2 Maintain community accessibility and avoid social severance

During construction, the Concept Design would impact access to the University of Melbourne, Victorian Comprehensive Cancer Centre, Royal Melbourne Hospital, Peter Doherty Institute, Royal Women's Hospital and other medical facilities in the precinct with Grattan Street blocked and buses diverted. Pedestrian access across Grattan Street to access either campus of The University of Melbourne would be maintained but there may be delays for people traveling across campus accruing from construction activities. Delays in travel times across campus could require adjustments to timetabling and an extension of normal operating hours to accommodate classes. This could also result in changes to the range of classes being offered by the university during the peak of construction disruption.

Access to medical facilities, particularly emergency facilities, needs to be maintained throughout construction. However, there may be periods in which access would be affected due to traffic congestion in the precinct resulting from the closure of Grattan Street (discussed further in Technical Appendix D *Transport*). Delays associated with traffic congestion are likely to be most serious for emergency vehicles and people accessing the emergency departments at the Royal Melbourne and Royal Women's Hospitals. However, with appropriate lead times for notification and collaboration with the facilities in the precinct on traffic management and the timing of activities, the severity of this impact could be reduced.

Construction workforce demand for parking could also result in a reduction in parking available for residents, workers or other visitors to the area if not managed appropriately. This would potentially impact on access and the ability of staff to find parking. However, with appropriate management this impact could be reduced.

10.5.1.3 Achieve consistency with community values

During construction, any impact on access to the hospital precinct or Royal Parade associated with the construction of the entrance linking to the Victorian Comprehensive Cancer Centre is likely to be of concern to a wide community. The loss of the northern end of University Square during construction may also be of concern to current users and the community. Limiting this impact is the recognition this space is not currently well utilised.

The loss of trees along Grattan Street and on Royal Parade is also likely to be of concern for the community, especially those who value the current streetscape. Increasing the severity of this impact is the length of time it would take for the replacement trees to grow and return the streetscape to one approximate to that which was lost during construction. Following construction, the replacement trees could be considered insufficient to restore the sense of place on Grattan Street and Royal Parade until they have time to mature.

10.5.1.4 Minimise impacts on valued places, including public open space and recreation reserves

During construction, the Concept Design would require the use of the northern end of University Square for approximately five years. The southern end of the square would remain open but be subject to amenity impacts potentially affecting the use of this site (discussed further in Technical Appendix I *Noise and Vibration* and Technical Appendix L *Landscape and Visual)*. Reducing the severity of this impact, the northern end of the site is poorly utilised and subject to a master planning process that aims to improve its utility. Ongoing the City of Melbourne would make the site available for preferred uses captured in the master planning process.

10.5.1.5 Minimise impacts on and enhance amenity for residents and the community and maintain perceptions of safety during the construction phase

Construction would likely have a sustained amenity impact on the University of Melbourne, Victorian Comprehensive Cancer Centre, Royal Melbourne Hospital and the Peter Doherty Institute. The sensitivity of the Royal Melbourne Hospital and Royal Women's Hospital to amenity impacts associated with construction is potentially reduced by their recent exposure to the construction of the Victorian Comprehensive Cancer Centre that would have also generated sustained noise, dust and vibration.

However, construction would have a larger amenity impact on the University of Melbourne and Peter Doherty Institute, particularly for facilities facing Barry, Berkley and Grattan Street. This would impact on the amenity of these facilities for staff, researchers and students. While it is likely that with appropriate treatment, these impacts could be reduced, the sustained impact associated with the noise of works would still impact people within these facilities.

The interface between users of the precinct and construction activities could be perceived to impact safety. Vulnerable to this would be people attending the hospitals for medical treatment, pedestrians under the influence of alcohol or other drugs leaving licenced entertainment venues such as bars or special events at the University of Melbourne, those with mobility impairments or children. Community concerns about the safety of truck movements that may lead to changes in local access patterns. However, appropriate traffic management and communication would reduce this impact.

This impact would be reduced through proactive engagement with these facilities and their users in the planning of the project and development of traffic management plans for the construction.

10.5.2 Early Works

Early works could have a short-term impact on local access and the amenity of the precinct. If they require the removal of established trees on Royal Parade and Grattan Street, this has the potential to be of concern to the community. With appropriate management and communication and the avoidance of established trees where possible, these impacts could be reduced.

10.5.3 Residual Risks

With the mitigation proposed in Section 10.6 most of the residual risks associated with the impacts identified above are of medium significance or lower (see Section 6). However, the residual risk associated with the loss of tress and resulting modification of the Grattan Street and Royal Parade streetscapes remains high.

10.6 Environmental Performance Requirements

Table 10-5 provides the recommended Environmental Performance Requirements and proposed mitigation measures to address the social impacts specific to this precinct. In some instances, individual performance requirements and mitigation measures have been used manage multiple impacts. Where feasible these are consolidated in Table 10-5, however, there are instances where requirements or mitigation need to be repeated for different impacts.

The risk assessment in Section 6 applies the mitigation detailed in Table 10-5 to the initial risks to determine the residual risks for the project.

Table 10-5 Environmental Performance Requirements for the precinct

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no.
Community values	Community opposition to the final design due to differences from the Concept Design on which the community were consulted	Prior to main works or shaft construction, develop and implement a community and business involvement plan to engage potentially affected stakeholders and advise them of the planned construction activities and project progress.	• Demonstrate that community feedback is incorporated in the design and the design requirements have been made clear to the community • Demonstrate to the community and key stakeholders how the design aligns with the Concept Design and community feedback • Where the design is potentially inconsistent with community feedback, explain the rationale and anticipated outcomes of the design change • Consult with affected communities on design changes likely to be of public interest prior to finalisation.	SC002
Access patterns	Truck movements and changes to local access sever existing community networks and disrupt access patterns particularly for families with young children, those with mobility impairments or the elderly	Develop and implement a transport management plan(s) in consultation with the relevant road management authorities to minimise disruption to traffic, car parking, pedestrian and bicycle movements during construction.	• Communicate alternative access methods to the community in advance of works in a manner consistent with MMRA's Community and Stakeholder Engagement Plan • Ensure that the relevant sub plan allows for existing pedestrian access patterns and considers the needs of vulnerable people such as children and those with mobility impairments • Develop appropriate community information tools – website, on site boards, brochures etc. to update community on changed access arrangements.	SC018

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no.
Social infrastructure	Construction activities act as a barrier to social infrastructure or recreational assets	Prior to main works or shaft construction, develop and implement a community and business involvement plan to engage potentially affected stakeholders and advise them of the planned construction activities and project progress Develop and implement a transport management plan(s) in consultation with the relevant road management authorities to minimise disruption to traffic, car parking, pedestrian and bicycle movements during construction.	• Consult with managers of key facilities so that impacts on their operations and wellbeing of their users are minimised and notification timeframes agreed • Provide advance warning of out of hours works and consult closely with the institutional stakeholders during their planning to determine times that must be avoided • Provide a forum in which key facilities can provide feedback on the construction approach • Communicate alternative access methods to the community in advance of works in a manner consistent with MMRA's Community and Stakeholder Engagement Plan • Ensure that the relevant plan allows for existing pedestrian access patterns and considers the needs of vulnerable people such as children and those with mobility impairments • Develop appropriate community information tools – website, on site boards, brochures etc. to update community on changed access arrangements • Utilise a complaints management system for responding to all community complaints or enquiries.	SC006

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no.
University of Melbourne, Royal Melbourne Hospital and Peter Doherty	Sustained amenity impacts on the University of Melbourne, Royal Melbourne Hospital and Peter Doherty Institute affects the ability of staff or users to continue to use these facilities	Prior to main works or shaft construction, develop and implement a community and business involvement plan to engage potentially affected stakeholders and advise them of the planned construction activities and project progress Design permanent and temporary works in consultation with local councils and the Office of Victorian Government Architect to comply with the MMRA Urban Design Strategy. The design shall avoid or minimise visual impacts on sensitive receptors and maintain broader landscape character values	• Consult with managers of key facilities during the drafting of the CEMP and sub plans so that impacts on their operations and wellbeing of their users are minimised and notification timeframes agreed • Provide advance warning of out of hours works and consult closely with the institutional stakeholders during their planning to determine times that must be avoided • Provide a forum in which key facilities can provide feedback on the construction approach. • Communicate alternative access methods to the community in advance of works in a manner consistent with MMRA's Community and Stakeholder Engagement Plan.	SC012
University Square	Construction activities in University Square displace passive recreation in an area with limited alternatives, reducing recreational opportunities for the community	Prior to main works or shaft construction commencing, work with the City of Melbourne to identify possible alternative areas of public open space for community use during the construction phase to minimise the impacts of loss of existing public open space that are to be utilised as construction worksites Work with relevant local councils to plan for and coordinate with key stakeholders during major public events Prior to main works or shaft construction, develop and	• Consult early with open space users on project timelines and likely impacts • Develop a relocation strategy to help users identify alternative facilities (where available) they could use during construction.	SC019
Public parking	Construction workforce demand for parking could result in a reduction in parking available for residents, workers or other visitors to the area.		• Target of no net loss of public parking outside the construction zone • Management of workforce car parking to include subcontractors.	SC026

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no.
Grattan Street and Royal Parade	Changes to valued streetscapes or the loss of trees on St Kilda Road, Grattan Street, Royal Parade is of concern to a wide cross section of the community	implement a community and business involvement plan to engage potentially affected stakeholders and advise them of the planned construction activities and project progress Develop and implement a transport management plan(s) in consultation with the relevant road management authorities to minimise disruption to traffic, car parking, pedestrian and bicycle movements during construction In consultation with key stakeholders and in accordance with the Urban Design Strategy, relevant statutory approvals and other relevant requirements, re-establish sites impacted by construction works Develop and implement measures for construction and operation of Melbourne Metro that aim to minimise impacts to the development and/or operation of existing land uses	• Provide a mechanism within the sub plan governing reinstatement to incorporate community feedback in consultation with the land manager.	SC035

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no.
Dwellings	Construction activities impact on the amenity of households diminishing their ability to enjoy their dwelling or use it as they do currently.	Prior to main works or shaft construction in areas affected, develop a relocation management framework that allows for a uniform approach across the project for the voluntary (temporary) relocation of households subject to: • Construction activities likely to unduly affect their amenity (e.g. out of hours works or sustained loss of amenity during the day for shift workers) • Loss of access. Prior to main works or shaft construction, develop and implement a community and business involvement plan to engage potentially affected stakeholders and advise them of the planned construction activities and project progress. Develop and implement measures to minimise light spillage during construction to protect the amenity of adjacent neighbourhoods, parks and community facilities.	• Develop a relocation management framework that allows for a uniform approach across the project. Consider and incorporate the following into this framework: – Provision for the voluntary relocation of households subject to: ▪ Construction activities likely to unduly affect their amenity (e.g. out of hours works or sustained loss of amenity during the day for shift workers) ▪ Loss of access – Providing options suitable to the duration of relocation, for example: ▪ Use of hotels / motels for short term disruptions ▪ Use of equivalent housing for longer term relocations. • Design construction work sites in proximity to residential areas to minimise the number of trucks that need to reverse • Avoid parking or idling construction vehicles in proximity to dwellings outside of normal working hours • Use reversing beepers that minimise disturbance on adjoining properties • Utilise a complaints management system for responding to all community complaints or enquiries • Engage landholders during the planning, design and implementation stages on the construction method, project design and how this would affect their property	SC009

11 Precincts 5 and 6: CBD North and South Stations

11.1 Project Components

11.1.1 CBD North

The CBD North station would be located directly beneath Swanston Street stretching from La Trobe Street to north of Franklin Street.

The station would have three entrances of relevance to this impact assessment:

- On the east side of Franklin Street
- The corner of Swanston and La Trobe Streets
- An underground connection to Melbourne Central station.

The entrance on the corner of Swanston and La Trobe Streets would have sufficient space to allow for provision of possible future over-site development opportunities.

Construction elements of relevance to the social impact assessment include:

- The acquisition of a residential block on La Trobe Street with 49 apartments
- Increased construction traffic for the duration of CBD construction works with an average of 150 truck trips each day for 48 months
- Constrained access for pedestrians alongside station entrance construction work sites
- Mostly 24-hour works; construction from 2018 to 2023
- Loss of up to 46 trees within the construction area
- Underground excavation of the station box
- Restoration of Franklin and A'Beckett Streets
- Several other commercial premises on La Trobe Street and Swanston Street would be acquired and used as construction work sites. These buildings would be demolished prior to construction commencing.

11.1.2 CBD South

The CBD South station would be located directly beneath Swanston Street running between and partially under Flinders and Collins Streets.

The station would have three entrances of relevance to this impact assessment:

- On Collins Street at the northern end of the City Square
- On Flinders Street and including Port Phillip Arcade with an underground connection to Flinders Street station; this connection would allow for future over site development
- An underground connection to Federation Square.

Construction elements of relevance to the impact assessment include:

- Acquisition of the Port Phillip Arcade, associated businesses within the arcade and several others required for the CBD South entrance
- Establishment of construction work sites at City Square and in the Port Phillip Arcade
- Minor tram disruptions on Flinders Street
- 150 average truck movements each day for 48 months

- Truck access and movement would occur 24 hours a day, seven days per week (upon placement of acoustic sheds)
- Constrained access for pedestrians alongside station entrance construction work sites
- Construction of the cavern and mined tunnels would be 24-hour works from 2017 to 2021
- Construction of the City Square shaft and entrance and Port Phillip Arcade shaft and entrance would begin in 2017 before completion in 2020. Works at these sites would be Monday to Friday 7am to 12am and Saturday 8am to 3pm
- Loss of up to 24 trees within the construction area.

11.1.3 Early Works

A number of early works are required in the CBD North station and CBD South station precincts. These include the establishment, relocation and replacement of a number of water, gas, sewage, telecommunications and electrical assets. The early works of most interest to this assessment include:

- The relocation of storm water drainage on Swanston Street
- The relocation of high and low voltage electrical cables
- The replacement and relocation of water mains
- The establishment of a new sewer on Flinders Street
- The establishment of a new gas connection on the northern side of Finders Street.

11.2 Existing Conditions

The proposed CBD North station and CBD South station precincts would be located in the suburb of Melbourne within the City of Melbourne.

Figure 11-1 Corner La Trobe and Swanston Streets facing south

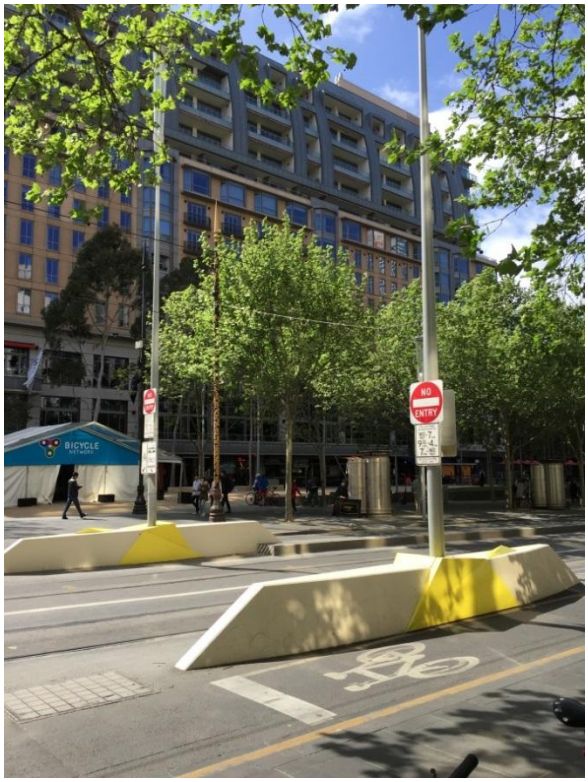

Figure 11-2 City Square (corner Swanston and Collins Streets facing southeast)

A large number of residential developments are underway or proposed for the area north of La Trobe Street within the CBD. Residential development is likely to continue with sites such as the former CUB brewery expected to host several new apartment developments.

The City of Melbourne noted this growth is generating a need and desire amongst new residents for open space in the area. RMIT has responded with the provision of a temporary urban square on A'Beckett Street. The urban square has an active multi-use court space (basketball, netball, volleyball, badminton and futsal courts), asphalt and coloured playing surfaces, passive student and staff relaxing spaces and event space. This site was reported to be highly utilised but a planning application has been submitted to redevelop the space. If approved this would displacing current uses.

The rapid increase in housing stock in the precinct is also increasing the number of apartments available for rent in the CBD. A large number of apartments are targeted at students and young professionals seeking a convenient yet affordable apartment with a smaller number targeted at wealthier households seeking premium accommodation. As of November 2015 there were 605 apartments listed for rent and 917 for sale in Melbourne (REALESTATE 2015c), equivalent to approximately 8 per cent of housing stock based on the 2011 census. The pool of available accommodation is likely to be larger once private and informal rentals are taken into account.

The area from Flinders Street to Collins Street on Swanston Street is subject to a lower level of residential development and hosts a larger number of public landmarks such as St Paul's Cathedral, Federation Square, Young and Jackson Hotel and Flinders Street Station. The precinct also hosts more public space with Federation Square, the City Square and St Paul's Cathedral all used for this purpose. There are also a number of older apartment blocks in proximity to Port Phillip Arcade.

The intersection of Swanston and Flinders Streets is the southern gateway to the CBD with a highly valued streetscape. This section of Swanston Street also acts as a site for parades and is a focus of much of the retail and cultural facilities in Melbourne.

Swanston Street and the adjoining streets host retailers, restaurants, hotels, performance venues and other facilities that attract people from across the city, regionally and interstate as well as overseas visitors.

11.2.1 Community Attitudes and Values

Many of the attendees at the CBD community information sessions expressed their support for the project. Part of this support is likely attributable to Victorian Government's decision to adopt a mined approach to the stations in the CBD which was seen by attendees as avoiding a lot of the potential issues that could have been generated by the project.

This support for Melbourne Metro was confirmed by a survey of CBD residents before the decision to adopt a mined cavern approach. Of those surveyed, 65 per cent supported the project even when it was thought that the surface level impacts would be greater (Ipsos 2015).

The key perceived benefits of the project identified by the CBD community included: better access to public transport (57 per cent), more trains throughout the day (43 per cent), more reliable trains (36 per cent), reduced congestion on the roads (35 per cent) and trains with room for more people (34 per cent). There were a number of concerns raised by CBD residents, with 39 per cent of respondents in the CBD concerned about temporary changes in road access and traffic management and a further 33 per cent concerned about noise. These concerns were replicated in the community information sessions and in the online forums with questions raised about:

- How noise and vibration during construction would be managed
- Impact of tunnelling on buildings in the CBD and above the tunnels
- Maintaining pedestrian access to businesses on Swanston Street
- Maintaining access to the Melbourne City Baths

- Changing pedestrian movements and the effect on businesses close to construction zones
- Impacts on tram services
- Impacts on laneways
- Implications of strata acquisition on adjoining development
- Potential for over site development at the Port Phillip Arcade and La Trobe Street sites.

A number of attendees at the sessions also accepted that a level of disruption would be required for the project. However, a number of residents and businesses adjacent to the Port Phillip Arcade were very concerned as to how the project would affect them.

The survey also found that the CBD is the most heavily utilised by the wider community of all the project precincts with more than one-third (35 per cent) of survey participants indicating they visited the CBD more than three times each week (IPSOS 2015a). Of these, half were travelling to and from for work or study while a third visited for other reasons such as recreation, shopping and social reasons. Nearly all CBD users in the survey (88 per cent) also indicated they accessed the CBD via public transport.

11.2.2 The Adjoining Community

RMIT and a number of commercial buildings largely surround the CBD North station site, however, there are residential buildings further west off Little La Trobe Street and A'Beckett Streets as well as the Verve Apartments on Swanston Street and Milano Apartments on Franklin Street. There are also proposed residential developments on the northwest corner of Swanston and Latrobe Street that have or are seeking planning approval.

The CBD South station entrance would be in proximity to a number of older apartment blocks, two of these, 241 Flinders Lane (Bible House) and 237 Flinders Lane (Ashdown Apartments), abut Scott Alley, the northern entrance of Port Phillip Arcade. Another, Manchester House, is located off Manchester Lane behind the potential entrance at 65 and 67 Swanston Street. While a number of these apartments are rented out, many appear to have been improved and updated over the years and cater to a range of household types with higher incomes. Advertisements for several of the properties have promoted their heritage values, architectural features and views. UniLodge, a residential building immediately west of the Port Phillip Arcade, provides student accommodation on a short term, semester or full year basis (UniLodge 2016).

Of the landholders interviewed, the majority reported that they are owner-occupiers and either work in the CBD or have retired there. The households interviewed were predominantly two person families, who have lived in the CBD for several years or more. Common reasons stated for living in the CBD included:

- Proximity to employment, dining and entertainment
- Parks and gardens
- Access to public transport.

Many interviewees also spoke about the vibrancy of the CBD and considered the walkability of the city a major attractor for city living. A number of the longer-term residents also noted that there was a sense of community in the city.

When asked to identify issues facing the CBD community, common responses included:

- New development, particularly high rises and the impact these had on adjoining buildings as well as the streetscape
- Construction impacts associated with new developments such as noise
- Noise associated with garbage collection
- Limited availability of open space for both formal and informal recreation.

Most interviewees were supportive of the project, citing reasons such as improved access to the central CBD for Melbourne, the reduced need for cars as well as improvements to tram services on Swanston Street.

Despite this support, landholders raised a number of concerns about the construction including:

- Noise, vibration and dust
- The loss of pedestrian connectivity and access
- Traffic congestion given existing traffic concerns on streets such as Flinders Lane
- The loss of open space, particularly in City Square
- The preservation and reinstatement of mature trees.

Interviewees also noted opportunities relating to operation including:

- The importance of the CBD South station entrance integrating with existing structures in order to maintain the visual amenity and 'openness' of the square
- A desire for the redevelopment of the Port Phillip Arcade site to be undertaken concurrently with the construction of the station to better integrate with the station and compliment other prominent buildings flanking the intersection.

11.2.3 Residents of the Properties Potentially Subject to Acquisition

While CBD north station would largely be surrounded by RMIT, there is a residential building on the site of the future La Trobe and Swanston Street entrance. This building contains 49 apartments, the majority of which are tenanted rather than by owner-occupied. Most of the tenants spoken to within the block were intending on living there for a fixed period although there was a small number of tenants who had been there longer term. The majority of apartments within the block appear to be either group households or single people with no children identified in discussions.

Historically many of the apartments have been promoted for sale or rent based on the location of the building or suitability for young professionals or students and several come fully furnished.

Several of the tenants spoken with speak English as a second language and had been living in Melbourne for several years.

At the time of writing, the tenants in the La Trobe Street building showed a low level of interest in the project or participating in the social impact assessment. MMRA provided each of them with an information pack about the project, potential acquisition and details of a translation service. However, to date very few have followed up with the project and several have not responded to calls. This could be, in part, due to language or cultural difficulties experienced by this Culturally and Linguistically Diverse (CALD) community. It is also likely to be a reflection of the short-term tenure of tenants, many of whom would have relocated by the time the project commences.

Figure 11-3 State Library Forecourt facing south-east

11.2.4 Key Social Assets and Attractors

Table 11-1 provides a snapshot of the key social assets and attractors in the CBD North and South precincts. The locations of each with respect to the location of the proposed CBD North and South station are shown in Figure 11-4 and Figure 11-5 respectively.

Table 11-1 Key social assets and attractors in the CBD North and South precincts

Asset	Details
Queen Victoria Market, Ref 24, Figure 11-4	The Queen Victoria Market is open every day except Mondays and public holidays. Vendors sell everything from food to clothes, catering to tourists, locals and people from across wider Melbourne. The City of Melbourne has endorsed a new master plan for the site which would see an increase in the number of visitors and increased reliance on public transport to access the site (City of Melbourne 2015b).
Birrarung Marr, Ref 47, Figure 5-21	Birrarung Marr is a park located on the northern side of the Yarra River next to Federation Square. It hosts a number of events and festivals, includes a shared path and a permanent children's 'Art Play' facility (That's Melbourne 2015b).
Melbourne City Baths, Ref 25, Figure 11-4	Located on Swanston Street, north of Franklin Street, Melbourne Baths has been operating since 1860 and offers a range of activities including swimming, gym and squash (Melbourne 2015d) The facility is used by a broad spectrum of the community, from children learning to swim, people attending the gym or squash to seniors involved in group fitness or aquatic activities. The baths are open between 6:00 am and 8:00 pm during the week and 8:00 am to 6:00 pm on weekends.
Old Melbourne Gaol, Ref 26, Figure 11-4	This museum and former prison is located off Russell Street and managed by the National Trust of Australia (Victoria). The gaol hosts events and regular tours (OMG 2015).

Asset	Details
The Oxford Scholar Hotel, Ref 27, Figure 11-4	The building has operated as a hotel since 1857 making it one of the oldest in Melbourne. It is located on Swanston Street on the corner of A'Beckett Street.
RMIT, Ref 28, Figure 11-4	RMIT is a university, located on Swanston Street, north of La Trobe Street. It hosts over 40,000 students and employs 4,772 staff. It has been operating for 100 years drawing students from across Victoria and internationally (RMIT 2015). RMIT notes that a key attractor for students is its proximity to good public transport in via Melbourne Central station and trams on Swanston Street. Many of the faculties and schools within RMIT share facilities across campuses. This results in large flows of students and staff between classes across Swanston Street, Franklin Street and Bowen Street. Class timetabling takes these pedestrian movements into account. The university buildings on the eastern side of Swanston street are orientated towards Bowen street, creating a stark interface with the footpath. The university plans to address this via the New Academic Street development commencing in 2016. This development would create spaces and facilities that open onto Swanston Street encouraging more people to use the businesses and other facilities in the university.
Melbourne Central Ref 29, Figure 11-4	Melbourne Central provides a key interchange between several rail lines and, because of its location adjacent to Swanston Street, with several tram lines. The shopping centre is a key attractor in itself acting as a retail and recreational facility with shops, restaurants, cinemas and bars. The shopping centre is also integrated with adjoining retail centres, in a chain of retail spaces reaching for several blocks across Melbourne. The facility is built around the Shot Tower, a historic building located in the middle of the centre.
State Library of Victoria, Ref 31, Figure 11-4	The library holds over 200 million books and serials. It hosts both free and paid exhibitions, workshops, literary events, tours, screenings, and talks and guided tours throughout the year, and had some 1.8M visitors in the 2013-14 financial year (SLV 2014). The forecourt of the library appears heavily used, particularly in summer and represents one of the few large grassed areas available as open space in the vicinity (Figure 11-3).
Swanston Street, Ref 35, Figure 11-4	One of Melbourne's busiest retails areas, Swanston Street hosts shops, restaurants, shopping centres, hotels and an array of other attractors (Figure 11-1). The street allows for a variety of uses including public art, busking, retail spaces and tram stops. The street links several of Melbourne main shopping areas and is heavily utilised seven days a week. As with several others of the main streets in Melbourne, it is tree lined with street furniture available for people to sit. In recognition of its role as one of the busiest cycling and pedestrian routes in the CBD, private vehicles are not permitted to enter Swanston Street between La Trobe and Flinders Streets. It is also one of Melbourne's most iconic and busiest tram routes, with 11 tram routes travelling on the street and several more across it.
Chinatown, Ref 33, Figure 11-4	Chinatown is located on Little Bourke Street between Spring Street and Swanston Street. Chinatown hosts a number of restaurants and entertainment businesses and is popular with both residents and tourists.
QV Centre Ref 32, Figure 11-5	QV hosts 120 retailers and together with Melbourne Central forms a central shopping and entertainment precinct in the CBD.
Bourke Street Mall Ref 34, Figure 11-5	Bourke Street is restricted to pedestrian traffic and trams between Elizabeth Street and Royal Lane (just east of Swanston Street). It hosts several large department stores within the mall including Myer (whose Christmas window displays attract large crowds each year) as well as smaller stores and restaurants. The mall is heavily trafficked during the day but less so at night when the stores close.
Capitol Theatre, Ref 36,	Walter Burley Griffin designed the Capitol Theatre which was constructed in 1924. The

Asset	Details
Figure 11-5	theatre belongs to RMIT University and seats up to 600 people, used to accommodate lectures, festivals and events (That's Melbourne, 2015).
Melbourne Town Hall, Ref 37, Figure 11-5	The town hall hosts a number of performances across the year and acts as the central hub for the Melbourne Comedy Festival. The building is important for its heritage values and is available to hire for weddings, receptions and exhibitions.
The Regent Theatre, Ref 38, Figure 11-5	Located behind the Westin Hotel, this theatre hosts many of the premiere musicals that come to Melbourne.
City Square, Ref 39, Figure 11-5	The City Square is located on the corner of Swanston and Collins Streets (Figure 11-2). It is a public space used for festivals and events, with cafes and alfresco dining. The site used to be the main city square (before the construction of Federation Square) and was modified several times before settling on its current configuration in the early 2000s. City Square is regularly used for events such as Christmas Square, Fashion Week and the Comedy Festival amongst others. It is heavily utilised by people for passive activities or meeting people as well as for public protests and demonstrations. The square is one of the few public open spaces in the CBD, with the nearest being Federation Square, two blocks to the south and the State Library lawns, six blocks north.
St Paul's Cathedral, Ref 40, Figure 11-5	The cathedral was built in 1891 and holds daily services (St Paul's 2015). It is the most famous Anglican Cathedral in Melbourne and a popular location for weddings and photos and in tandem with Young and Jackson Hotel, Flinders Street Station and Federation Square frames the entry to the CBD for people entering from St Kilda Road.
Federation Square, Ref 43, Figure 11-5	Federation Square is one of Victoria's most visited tourist attractions and incorporates the City's principal Information Centre, several art centres – the Ian Potter Centre: NGV Australia, Australian Centre for the Moving Image – as well as the Australian Racing Museum and a number of bars, cafes and restaurants. It attracts local, interstate and international visitors and forms a natural meeting spot for people given its proximity to Flinders Street Station. Permanent and temporary attractions such as cultural, lifestyle or sporting festivals attract a large number of people to the square. The space is also used for protests and as a convenient public space. Usage of the square peaks on sunny days but it is busy across the week with school students and other city visitors visiting between activities or as a meeting spot.
Flinders Street Railway Station, Ref 42, Figure 11-5	The station is a famous Melbourne landmark and entry point to the city. It is used by over 90,000 people every day making it one of the busiest stations in the city. The station would be subject to re-development to improve station access, equipment and facilities (Major Projects Victoria, 2015). The station clocks are an iconic meeting spot in Melbourne, with dozens of people congregating on the steps of station forecourt throughout the day and night to meet friends or socialise.
Young and Jackson Hotel, Ref 41, Figure 11-5	This hotel is located on the corner of Flinders and Swanston Street. The building dates back to 1861 and is famed for Chloe, a nude portrait of a young woman, hanging in Chloe's bar.
Princes Bridge, Ref 44, Figure 11-5	Princes Bridge is a centrally located bridge that connects Swanston Street to the north bank (Ref 35) and St Kilda Road (Ref 49) to the south bank. It is used by trams, cars bikes and pedestrians,

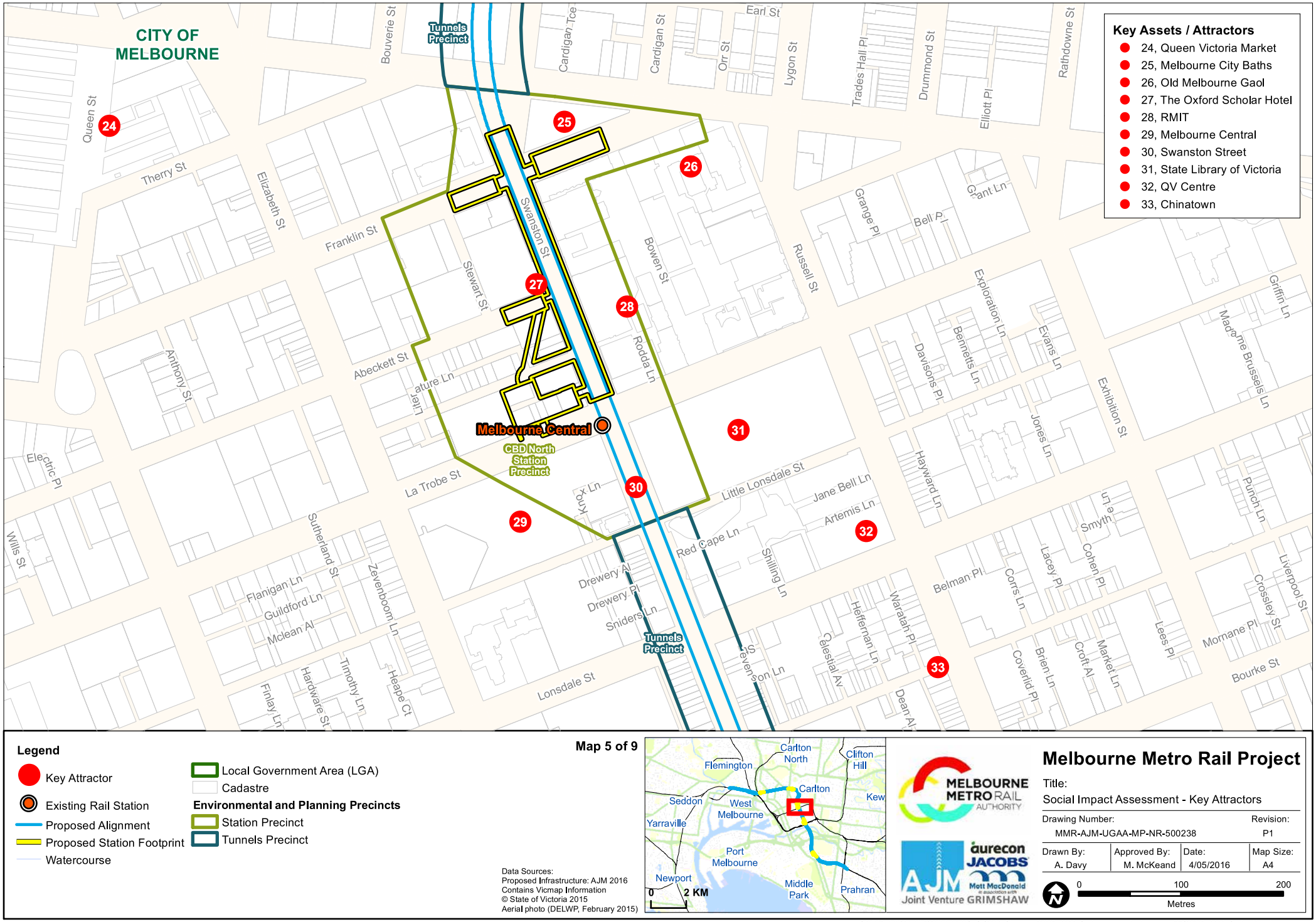

Figure 11-5 CBD North station precinct key attractors

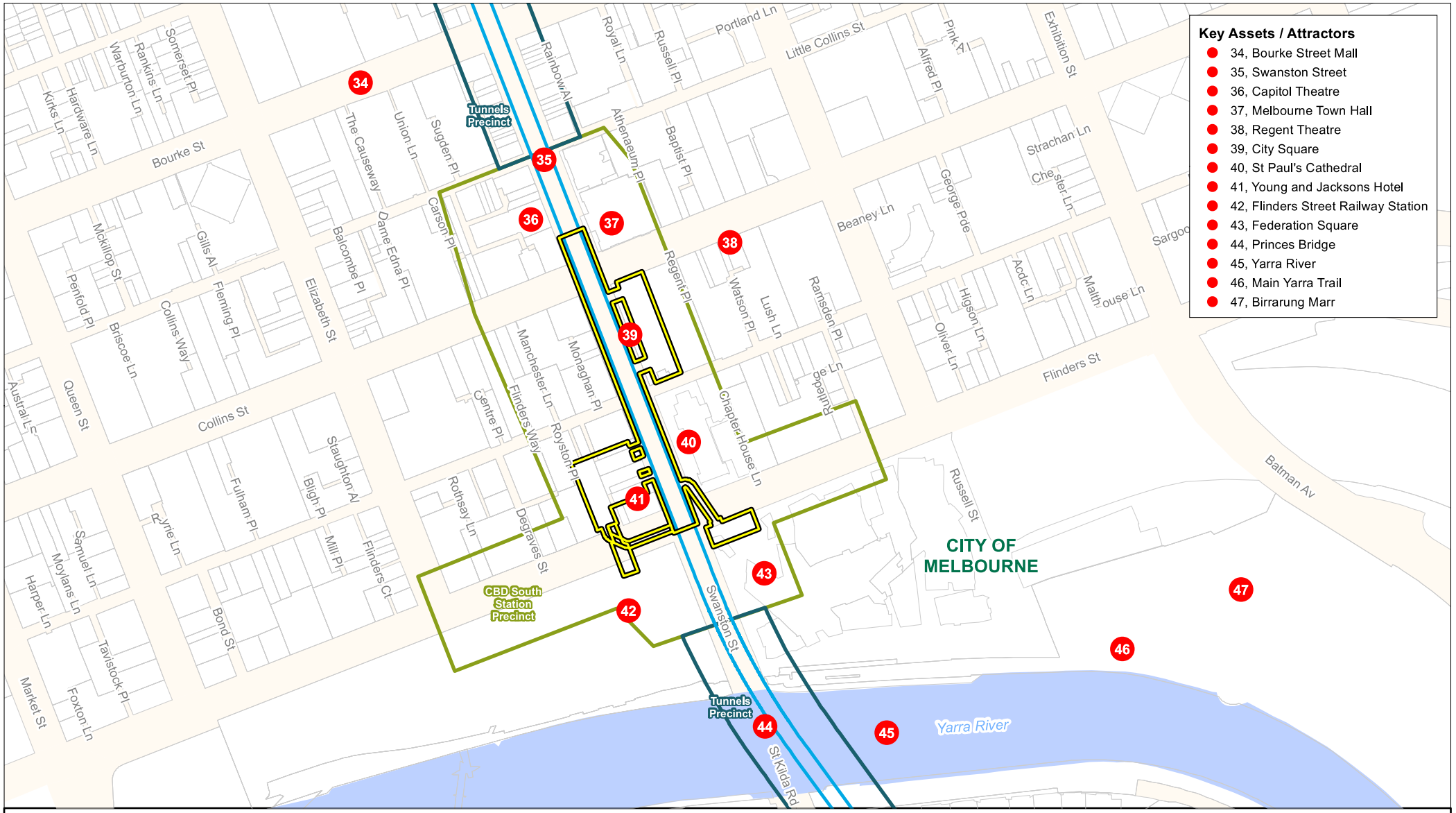

Figure 11-6 CBD South station precinct key attractors

11.3 Key Issues

As identified in the risk assessment (Table 6-1), the key issues associated with the Concept Design are identified in Table 11-2 and Table 11-3.

Table 11-2 Key issues - CBD North

Issue	Description	Risk no.
Design		
Possible construction activities inhibit future planning for households	Residential property owners subject to acquisition or in proximity to construction areas put on hold or reconsider their plans for their properties	SC001
Project varies from Concept Design	Community opposition to the final design due to differences from the Concept Design on which the community were consulted	SC002
Construction		
Construction activities inhibit access to residences	Reduced or loss of access to residences due to traffic management or construction activities	SC004
Construction activities alter existing community access patterns	Construction activities act as a barrier to social infrastructure, recreational assets or cause social severance diminishing community networks	SC007
Construction activities result in a loss of amenity for residents	Construction activities impact on the amenity of households diminishing their ability to enjoy their dwelling or use it as they do currently	SC009
Construction activities impacting on the amenity of health, educational, commercial, recreational and other facilities	Sustained amenity impacts on RMIT and Melbourne City Baths affects the ability of staff or users to continue to use these facilities	SC013
Truck movements alter local travel patterns	Truck movements and changes to local access sever existing community networks and disrupt access patterns particularly for families with young children, those with mobility impairments or the elderly	SC018
Construction workforce demand for parking could result in a reduction in parking available for residents, workers or other visitors to the area	Loss of access to community facilities, recreational spaces or severance of social networks	SC026
Truck movements in proximity to residential areas	Truck movements impact on residential amenity	SC027
Acquisition of 49 dwellings in CBD North	Displacement of 49 mostly tenanted dwellings and diminishment of networks within the immediate community	SC030
Construction and operation		
Construction activities alters valued streetscapes	Changes to the Swanston Street streetscape or the loss of trees is of concern to a wide cross section of the community	SC036

Table 11-3 Key issues - CBD South

Issue	Description	No.
Design		
Possible construction activities inhibit future planning for households	Residential property owners in proximity to construction areas put on hold or reconsider their plans for their properties	SC001
Project varies from Concept Design	Community opposition to the final design due to differences from the Concept Design on which the community were consulted	SC002
Construction		
Construction activities inhibit access to residences	Reduced or loss of access to residences due to traffic management or construction activities	SC004
Construction activities alter existing community access patterns	Construction activities act as a barrier to social infrastructure, recreational assets or cause social severance diminishing community networks.	SC007
Construction activities result in a loss of amenity for residents	Construction activities impact on the amenity of households diminishing their ability to enjoy their dwelling or use it as they do currently	SC009
Construction activities impacting on the amenity of health, educational, commercial, recreational and other facilities	Sustained amenity impacts on St Paul's Cathedral and Federation Square affects the ability of staff or users to continue to use the facilities	SC014
Truck movements alter local travel patterns	Truck movements and changes to local access sever existing community networks and disrupt access patterns particularly for families with young children, those with mobility impairments or the elderly	SC018
Construction activities located within open spaces or recreation areas used for passive recreation	Construction activities in City Square displace passive recreation in an area with limited alternatives, reducing recreational opportunities for the community	SC020
Construction workforce demand for parking could result in a reduction in parking available for residents, workers or other visitors to the area	Loss of access to community facilities, recreational spaces or severance of social networks	SC026
Truck movements in proximity to residential areas	Truck movements impact on residential amenity	SC027
Construction and operation		
Construction activities alters valued streetscapes	Changes to the Swanston Street streetscape or the loss of trees is of concern to a wide cross section of the community	SC037

11.4 Benefits and Opportunities

Table 11-4 and Table 11-5 summarise the key benefits and opportunities associated with CBD North and South stations.

Table 11-4 Benefits and opportunities associated with the CBD North Concept Design

Benefits	Opportunities
• Improved access for the large number of current and future residents in the precinct to the rest of Melbourne • Enhanced access to the CBD for wider Melbourne • Would maintain access to RMIT by avoiding congestion • Would provide for an easier interchange between rail lines by linking with the Melbourne Central station, improving access to the wider network • Easier interchange between tram and train stops.	• Opportunity to better activate Swanston Street north of La Trobe Street • Opportunity to reinstate Franklin and A'Beckett Streets as recreational spaces for the community • Partner with RMIT to identify opportunities to integrate construction activities with existing or future courses enhancing the opportunities available to students • Engage the community on the proposed treatments for surface level infrastructure like entrances, reinstatement design approach and landscaping.

Table 11-5 Benefits and opportunities associated with CBD South Concept Design

Benefits	Opportunities
• Enhanced access to the CBD for wider Melbourne • Would provide improved access to valued places such as Federation Square and St Paul's Cathedral.	• Opportunity to redesign City Square to offset any change in function driven by the placement of the station entrance • Provides an opportunity to improve the north western corner of the Flinders and Swanston Street intersection, enhancing its sense of place as the southern entry point to Melbourne's CBD • Engage with the community on the design of station entrances and landscaping.

11.5 Impact Assessment

The following draft EES evaluation objectives and assessment criteria are relevant to this assessment.

Table 11-6 EES evaluation objectives and assessment criteria

Draft EES evaluation objectives	Assessment Criteria	Chapter reference
Social, community, land use and business: To manage effects on the social fabric of the community in the area of the project, including with regard to land use changes, community cohesion, business functionality and access to services and facilities, especially during the construction phase. **Landscape, visual and recreational values:** To avoid or minimise adverse effects on landscape, visual amenity and recreational values as far as practicable.	Minimise impacts to private residential property owners and occupiers.	11.5.1
	Minimise impacts on social infrastructure such as educational, health, religious and sporting facilities.	11.5.2
	Maintain community accessibility and avoid social severance.	11.5.1, 11.5.2
	Achieve consistency with community values.	11.5.1, 11.5.2
	Minimise impacts on, and enhance amenity for residents and the community and maintain perceptions of safety during the construction phase.	11.5.2
	Minimise impacts on valued places, including public open space and recreation reserves.	11.5.1, 11.5.2

11.5.1 CBD North Station

11.5.1.1 Minimise impacts to private residential property owners and occupiers

The CBD North station would require the acquisition of 49 residences. The severity of the impact is reduced given the majority of these apartments are likely tenanted by group households made up of students or young professionals. It is likely that this block experiences a higher level of turnover with dwellings previously marketed for students and young professionals and apartment configurations not amenable to family households. The low level of amenity within the building and high level of turnover within the CBD also suggest many of the apartments in the building would likely be re-tenanted in the coming years. The large supply of apartments in the precinct and the CBD more generally suggests that many of the residents would be able to find alternative accommodation locally.

The impact of this acquisition would be reduced by taking a case management approach to each household, the provision of support to assist with the transition and the offer of early purchase for affected households

During construction, the Concept Design may require short-term changes in access for people living in apartment blocks off A'Beckett Street or Little La Trobe Street. This could be managed via appropriate traffic management and engagement with affected households, with any detours minimised.

Uncertainty during the planning and initial construction stages would also likely result in some households in proximity to the construction area putting on hold or reconsidering their plans for their properties.

11.5.1.2 Maintain community accessibility and avoid social severance

The placement of a construction work site on Franklin Street and activities on A'Beckett Street adjacent to RMIT have the potential to disrupt the student and staff movements across campus. The delays that accrue from disruption could result in an inability of students or staff to get to classes on time necessitating a timetable change. Reducing the sensitivity to this impact RMIT has previously undergone several large developments and maintained operations during their construction. They are also planning a major redevelopment with the potential to disrupt student and staff movements but have been able to adapt timetables and class arrangements to suit. This impact can further be reduced through engagement with RMIT during planning and initial design of the project.

Construction of the CBD North station may also result in minor changes in pedestrian access to the State Library for people traveling from the north or to the Melbourne City Baths for people travelling from the south. Small increases in travel time to access these facilities would have a minor impact on users. Access to these facilities would be maintained throughout construction, However, the rerouting of access would impact on any users with mobility impairments such as the aged or people with disabilities. With appropriate traffic management, it is likely that DDA compliant access could be achieved without substantially increasing travel times for users.

Construction workforce demand for parking could also result in a reduction in parking available for residents, workers or other visitors to the area if not managed appropriately. Reducing the severity of this impact is the range of alternative travel modes available locally. While these alternative modes such as public transport, cycling or walking may be impacted by construction activities, with appropriate management this could be minimised (discussed further in Technical Appendix D *Transport*).

11.5.1.3 Achieve consistency with community values

The potential for over site development created by the demolition of the properties on the corner of La Trobe and Swanston Streets would likely be of concern to some members of the community. However, this area would likely be subject to further development irrespective of the project given the current owners plans for their properties.

The Concept Design would also require the removal of trees, which may be of concern to a wider cross section of the community, particularly if the removal is perceived to impact on valued streetscapes.

11.5.1.4 Minimise impacts on, and enhance amenity for residents and the community and maintain perceptions of safety during the construction phase

Both RMIT and the Melbourne City Baths would experience an ongoing amenity (noise) impact associated with the works in Franklin Street, potentially affecting the ability of people to use these facilities. This would be most pronounced during the demolition and the shaft construction stages of the works (discussed further in Technical Appendix I *Noise and Vibration*). While a number of City Bath users may be less sensitive to noise, management of this impact would require close engagement with this facility and its users during construction.

The State Library forecourt would also be subject to a high visual impact during construction (discussed further in Technical Appendix L *Landscape and Visual*). The sensitivity to this impact would be diminished by the current levels of noise users of the forecourt are subject to and the visibility of other construction work sites in the area. Further diminishing the sensitivity to this impact for the State Library is the distance of the facility to surface level activities.

Residences adjoining the La Trobe Street, A'Beckett and Franklin Street constructions zone are also likely to experience ongoing noise and dust 24 hours a day during the construction phase. The hours and nature of these works would have a greater impact on these households than other construction work sites in the area where works would typically be restricted to during normal working hours. There would also be several periods during construction where the vibration from road header, rock breaking or activities could impact on human comfort (discussed further in Technical Appendix I *Noise and Vibration*). This impact could be reduced through early engagement with these households and making available the option of relocation for highly impacted households, particularly for sustained out of hours works.

It is likely visitors to the CBD North precinct would also be impacted by changes in amenity, however, it is expected that this would be of no worse impact than exposure to previous developments such as the QV building or redevelopment works at RMIT.

The interface between users of the precinct and construction activities could also be perceived to impact on safety. Vulnerable to this are pedestrians under the influence of alcohol or other drugs leaving licenced entertainment venues such as bars or pubs or special events at RMIT, those with mobility impairments or children. Appropriate traffic management and engagement with the relevant facilities and users would reduce this impact.

When considered cumulatively with other proposed developments in the precinct, there is the potential for the impacts outlined above to increase. However, with appropriate coordination with other projects the severity of the cumulative impacts could be reduced.

11.5.2 CBD South Station Precinct

11.5.2.1 Minimise impacts to private residential property owners and occupiers

Uncertainty during the planning and initial construction stages would also likely result in some households in proximity to the construction area putting on hold or reconsidering their plans for their properties.

11.5.2.2 Minimise impacts on social infrastructure such as educational, health, religious and sporting facilities

The Concept Design would require the mining of tunnels in proximity to St Paul's Cathedral, however, it is expected that this would be of sufficient depth to have negligible impact.

11.5.2.3 Maintain community accessibility and avoid social severance

Construction activities may require slight changes in pedestrian access for properties located off Flinders Street due to the closure of the Port Phillip Arcade. It is anticipated that these delays would not impact on accessibility. Construction activities may also necessitate temporary changes in access to St Paul's Cathedral but it is anticipated that access could be maintained.

During construction, there would also be disruptions in access to the northern end of Federation Square as an entrance is constructed, however, it is anticipated that the functions of the visitors centre could be maintained either in situ or elsewhere in Federation Square during construction.

There would also be temporary disruptions in access to Flinders Street Station during construction of the entrance connecting to CBD south. However, access to Flinders Street Station forecourt and steps would be maintained to avoid disrupting social networks and the function of this location as an important meeting point.

Construction workforce demand for parking could also result in a reduction in parking available for residents, workers or other visitors to the area if not managed appropriately. Reducing the severity of this impact is the range of alternative travel modes available locally.

11.5.2.4 Achieve consistency with community values

Construction activity in proximity to St Paul's Cathedral is likely to be of concern to the community, particularly if it is considered to present a risk to the structure or its operations. However, these concerns could be addressed through the explanation of measures taken to protect the facility. Members of the community are likely to be concerned about the potential for impacts on the Young and Jackson Hotel, however, if this business could remain operating during construction this would diminish these concerns.

Following construction, the Port Phillip Arcade site would be available for over-site development. This site is within view of the intersection of Flinders Street and Swanston Street. There is the potential for this development to be of concern to the wider community if it is perceived to be inconsistent with other buildings in the Flinders and Swanston Street intersection. To address this, the project would need to ensure any future development is of high quality and suitable to its role within this valued intersection.

Over-site development would also likely be inconsistent with the aspirations of the residents of Bible House and Ashdown Apartments, primarily for the impact it would have on their views. Diminishing the severity of this impact, the loss of views is a regular occurrence within the CBD. Apartment owners can reasonably expect to have their views disrupted given the planning controls and the ongoing level of redevelopment that is occurring within the CBD.

The connection between CBD South station and Flinders Street Station also has the potential to trigger community concern if it perceived to negatively impact on the heritage values of northern side of Flinders Street Station (Lovell Chen 2016). However, the choice of treatment and proposed upgrade of the station as part of the Flinders Street Redevelopment Project could reduce community sensitivity to this change.

The Concept Design would also require the removal of trees, which may be of concern to the community, particularly if the removal is perceived to impact on valued streetscapes.

11.5.2.5 Minimise impacts on valued places, including public open space and recreation reserves

During construction, City Square would be occupied by construction activities and no longer able to host special events and other activities potentially resulting in a loss of some of these events and the relocation of others. The site would also no longer be available for passive recreation. Increasing the severity of this impact is the limited number of alternative sites available within the CBD. The nearest alternative open spaces are either Federation Square approximately 4 minutes south or the State Library 10 minutes' walk north along Swanston Street. The loss of this site during construction could be offset via the provision of comparable open space elsewhere nearby for use by the community.

Once operational the Concept Design would increase the use of City Square as people access the station via the eastern entrance. An increase in pedestrian traffic could alter the current use of the site for passive recreation and interfere with formal events held on site (e.g. fashion week or the comedy festival) as well as informal activities. The placement of the City Square entrance could also result in the ongoing displacement

of some of these activities. The disruption to activities in City Square could impact on the social networks of groups within the community who have limited alternatives available to them.

11.5.2.6 Minimise impacts on, and enhance amenity for residents and the community and maintain perceptions of safety during the construction phase

Construction in the Port Phillip Arcade site and 65-67 Swanston Street is likely to have a sustained amenity impact (noise and vibration) on adjoining buildings such as Bible House, UniLodge, Manchester House and Ashdown Apartments. This severity of this impact would be increased by the 24-hour nature of works occurring within the Port Phillip Arcade. There would also be several periods during construction where the vibration from road header activities could impact on human comfort (discussed further in Technical Appendix I *Noise and Vibration*). They would also have an amenity impact on St Paul's Cathedral and Federation Square. This impact could be reduced through early engagement with affected households and facilities. The impact for dwellings could be further reduced by making available the option of relocation for highly impacted households, particularly for sustained out of hours works.

It is likely visitors to the CBD South precinct would also be impacted by changes in amenity, however, it is expected that this would be of no worse impact than exposure to previous developments such as the construction of City Square.

Construction of the connection with Federation Square has the potential to adversely impact the amenity of this facility and displace passive recreation in proximity to the visitors centre. However, the affected area of Federation Square is not as heavily utilised as other parts of the facility reducing this impact. There is also likely sufficient space available on the square to avoid the displacement of most activities.

The interface between users of the precinct and construction activities could be perceived to impact on safety. Vulnerable to this are pedestrians under the influence of alcohol or other drugs leaving licenced entertainment venues such as bars or nightclubs, those with mobility impairments or children. Appropriate traffic management and engagement with the relevant facilities and users would reduce this impact.

When considered cumulatively with other proposed developments in the precinct, there is the potential for the impacts outlined above to increase. However, with appropriate coordination the potential severity and likelihood of this impact would decrease.

11.5.3 Early Works

The early works could result in short term impacts on local access and amenity particularly where they involve works on footpaths. These works also have the potential to create community concern where they occur with valued places such as city square or result in the loss of established trees. The impact of these works could be reduced with appropriate management and communication.

11.5.4 Residual Risks

With the mitigation proposed in Section 11.6 the residual risks associated with the impacts identified above are of medium significance or lower (see Section 6).

11.6 Environmental Performance Requirements

Table 11-7 provides the recommended Environmental Performance Requirements and proposed mitigation measures to address the social impacts for the precinct. In some instances, individual performance requirements and mitigation measures have been used manage multiple impacts. Where feasible these are consolidated in the table below, however, there are instances where requirements or mitigation need to be repeated for different impacts.

The risk assessment in Section 6 applies the mitigation detailed below to the initial risks to determine the residual risks for the project.

Table 11-7 Environmental Performance Requirements for the precinct

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no.
Dwellings	Truck movements impact on residential amenity	Develop and implement a transport management plan(s) in consultation with the relevant road management authorities to minimise disruption to traffic, car parking, pedestrian and bicycle movements during construction.	• Develop and implement a community and business involvement plan to appropriately engage potentially affected stakeholders as well as to provide information on the progress of design and construction activities such as significant milestones, changed traffic conditions and other matters which are of concern or interest to them • Utilise truck routes that reduce the number of dwellings impacted by truck movements • Design construction work sites in proximity to residential areas to minimise the number of trucks that need to reverse.	SC018
Dwellings	Displacement of 49 mostly tenanted dwellings and diminishment of networks within the immediate community	Reduce the disruption to residences from direct acquisition or temporary occupation.	• Utilise a case management approach to manage all Project interactions with affected landholders • Appoint a social worker or equivalent to assist households make the transition • Provide a central point of contact for all affected landholders and tenants • Consider the relative vulnerability of households (e.g. young families, those with mobility impairments or the elderly) and consider what additional assistance is needed to assist with relocation • Purchase properties early, where possible and requested by the landowner • Acquire part of properties, where possible and requested by the landowner.	SC030

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no.
Dwellings	Residential property owners in proximity to construction areas put on hold or reconsider their plans for their properties	Prior to main works or shaft construction, develop and implement a community and business involvement plan to engage potentially affected stakeholders and advise them of the planned construction activities and project progress Develop and implement a transport management plan(s) in consultation with the relevant road management authorities to minimise disruption to traffic, car parking, pedestrian and bicycle movements during construction. Prior to main works or shaft construction in areas affected,	• Engage landholders adjoining the project alignment during the planning, design and implementation stages on the construction method, project design and how this would affect their property • Utilise a complaints management system for responding to all community complaints or enquiries • Maintain access for residents' carparks under the Westin • Communicate alternative access methods to the community in advance of works • Allows for existing pedestrian access patterns and considers the needs of vulnerable people such as children and those with mobility.	SC001
	Reduced or loss of access to residences due to traffic management or construction activities			SC004

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no.
Dwellings	Construction activities impact on the amenity of households diminishing their ability to enjoy their dwelling or use it as they do currently	develop a relocation management framework that allows for a uniform approach across the project for the voluntary (temporary) relocation of households subject to: • Construction activities likely to unduly affect their amenity (e.g. out of hours works or sustained loss of amenity during the day for shift workers) • Loss of access. Develop and implement measures to minimise light spillage during construction to protect the amenity of adjacent neighbourhoods, parks and community facilities.	impairments • Develop appropriate community information tools – website, on site boards, brochures etc. to update community on changed access arrangements • Develop a relocation management framework that allows for a uniform approach across the project. Consider and incorporate the following into this framework: – Provision for the voluntary relocation of households subject to: ▪ Construction activities likely to unduly affect their amenity (e.g. out of hours works or sustained loss of amenity during the day for shift workers) ▪ Loss of access – Provision of options suitable to the duration of relocation, for example: ▪ Use of hotels / motels for short term disruptions ▪ Use of equivalent housing for longer term relocations • Utilise truck routes that reduce the number of dwellings impacted by truck movements • Design construction work sites in proximity to residential areas to minimise the number of trucks that need to reverse • Avoid parking or idling construction vehicles in proximity to dwellings outside of normal working hours • Use reversing beepers that minimise disturbance on adjoining properties.	SC014 SC009

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no.
Community values	Community opposition to the final design due to differences from the Concept Design on which the community were consulted	Prior to main works or shaft construction, develop and implement a community and business involvement plan to engage potentially affected stakeholders and advise them of the planned construction activities and project progress Prior to main works or shaft construction commencing, work with the City of Melbourne to identify possible alternative areas of public open space for community use during the construction phase to minimise the impacts of loss of existing public open space that are to be utilised as construction worksites Work with relevant local councils to plan for and coordinate with key stakeholders during major public events In consultation with key stakeholders and in accordance with the Urban Design Strategy, relevant statutory approvals and other relevant requirements, re-establish sites impacted by construction works In consultation with the City of Melbourne, develop a plan to utilise part of the Franklin Street road reserve for public open space post-construction. Plans must be in accordance with the Melbourne Metro Urban Design Strategy Develop and implement measures for construction and operation of Melbourne Metro that aim to minimise impacts to the	• Demonstrate that community feedback is incorporated in the design and the design requirements have been made clear to the community • Demonstrate to the community and key stakeholders how the design aligns with the Concept Design and community feedback • Where the design is potentially inconsistent with community feedback, explain the rationale and anticipated outcomes of the design change • Consult with affected communities on design changes likely to be of public interest prior to finalisation.	SC002
Social infrastructure	Construction activities act as a barrier to social infrastructure or recreational assets		• Consult with managers of key facilities during the drafting of the CEMP and sub plans so that impacts on their operations and wellbeing of their users are minimised and notification timeframes agreed	SC007
RMIT and Melbourne City Baths	Sustained amenity impacts affects the ability of staff or users to continue to use these facilities		• Provide advance warning of out of hours works and consult closely with the institutional stakeholders during their planning to determine times that must be avoided • Provide a forum in which key facilities can provide feedback on the construction approach	SC013
St Paul's Cathedral and Federation Square			• Communicate alternative access methods to the community in advance of works in a manner consistent with MMRA's Community and Stakeholder Engagement Plan • Develop appropriate community information tools – website, on site boards, brochures etc. to update community on changed access arrangements.	SC014

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no.
City Square	Construction activities displace passive recreation in an area with limited alternatives	development and/or operation of existing land uses Design permanent and temporary works in consultation with local councils and the Office of Victorian Government Architect to comply with the MMRA Urban Design Strategy. The design shall avoid or minimise visual impacts on sensitive receptors and maintain broader landscape character values	• Consult early with open space users on project timelines and likely impacts • Develop public open space on the eastern portion of the St Pauls Cathedral site to ameliorate the loss of the City Square during project construction. Development would include removing the current surface car park and installing hard and soft landscaping, paths, lighting and structures. The space would allow informal recreation and potentially support public events • In consultation with the City of Melbourne develop a plan to utilise part of the Franklin Street Road Reserve for public open space post construction.	SC020
Access patterns	Truck movements and changes to local access sever existing community networks and disrupt access patterns particularly for families with young children, those with mobility impairments or the elderly	Prior to main works or shaft construction, develop and implement a community and business involvement plan to engage potentially affected stakeholders and advise them of the planned construction activities and project progress Develop and implement a traffic management plan(s) in consultation with the relevant road management authorities to minimise disruption to traffic, car parking, pedestrian and bicycle movements during construction In consultation with key stakeholders and in accordance with the Urban Design Strategy, relevant statutory approvals and other relevant requirements, re-establish sites impacted by construction works	• Communicate alternative access methods to the community in advance of works in a manner consistent with MMRA's Community and Stakeholder Engagement Plan • Allow for existing pedestrian access patterns and considers the needs of vulnerable people such as children and those with mobility impairments • Develop appropriate community information tools – website, on site boards, brochures etc. to update community on changed access arrangements • Target of no net loss of public parking outside the construction zone • Management of workforce car parking to include subcontractors.	SC018
Car parking	Construction workforce demand for parking could result in a reduction in parking available for residents, workers or other visitors to the area			SC026

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no.
Swanston Street	Changes to the Swanston Street streetscape or the loss of trees is of concern to a wide cross section of the community		• Provide a mechanism within the sub plan governing reinstatement to incorporate community feedback in consultation with the land manager.	SC036 SC037

12 Precinct 7: Domain Station

12.1 Project Components

Domain station would be located under St Kilda Road, adjacent to Albert and Domain Roads. It would be of a low visual impact design, integrated with the sensitive heritage values and civic character of the surrounding area, particularly the Shrine of Remembrance. The station would include three entrances:

- East into the Shrine Parklands
- West into the triangular park located on the corner of Albert Road and St Kilda Road
- Domain tram interchange in the centre of St Kilda Road.

Domain station would provide an unpaid[7] connection under St Kilda Road linking both sides. It would also require a change to the functional layout of St Kilda Road.

The following aspects of project construction are of most interest to the social impact assessment:

- Temporary disruptions to trams on St Kilda Road to accommodate station construction
- Staged road traffic diversions along St Kilda Road to accommodate station construction
- Vehicular, pedestrian and cycle access would be maintained around construction zones for the duration of the works with one bike lane and at least one traffic lane provided in each direction along St Kilda Road
- 100 average daily truck movements each day for 48 months
- Above ground construction would take place from 7 am to 12 am from 2018 to 2020
- Below ground fit out and tunnelling would operate 24 hours a day from 2017 to 2023
- The station would be constructed using cut and cover methods
- Up to 223 trees would be removed for the construction requiring reinstatement (discussed further in Technical Appendix R Arboriculture)
- Site compounds would be established at Edmund Herring Oval and Albert Road Reserve. These areas would be used for site offices, amenities, equipment storage and materials laydown. A portion of the western boundary of the Shrine of Remembrance Reserve would also be used for this purpose
- Memorials and trees located in the areas used for the site compounds would be temporarily relocated or protected and reinstated following construction
- Domain Road would be closed, with the number 8 tram terminating at Domain Road or rerouted
- South Yarra Main Sewer would be protected or relocated under Melbourne Grammar School
- The South African Soldiers War Memorial would be relocated during the works and reinstated following completion of construction
- TBM southern launch site - Domain
  - Adjacent to the Domain station precinct in St Kilda Road and the Shrine of Remembrance Reserve
  - Requires the placement of several surface level and sub level construction structures and machinery.
  - Spoil removal and deliveries to site would occur 24 hours a day, seven days a week
  - Acoustic containment structures, such as noise walls and acoustic enclosures, may be applied to reduce the noise impacts during the evening and night time periods.

[7] No ticket would be required for people accessing the concourse to cross St Kilda Road.

- The Domain launch site would be expected to be in operation from 2017 to 2022.

12.1.1 Early Works

Early works for the Domain precinct would require the relocation and replacement of a number of telecommunications and water assets.

12.2 Existing Conditions

Domain station would be located on the border of the Cities of Melbourne and Port Phillip within the suburbs of Melbourne, South Melbourne and South Yarra.

During consultation, the City of Port Phillip and other stakeholders noted that the area surrounding the proposed project boundary has been subject to a large volume of residential development in recent years. The population growth in and around the precinct is increasing demand for public open space in the area including Albert Park, Fawkner Park and the Royal Botanic Gardens. It was noted that the open space such as Albert Road reserve and Bowen Crescent Reserve are also used by workers for passive recreation such as socialising and sitting and reading. The City of Port Phillip has identified the reserve as requiring an upgrade to improve its amenity for users.

12.2.1 Community Attitudes and Values

As at August 2015, almost half of all survey respondents visited the Domain precinct for work or study (36 per cent) or other reasons (35 per cent) such as walking around the gardens for exercise, leisure and recreation (Ipsos 2015a). At the Domain community information session, many attendees expressed support for the project although this was tempered by resident and property owner concerns about the construction impacts that would be generated by the project. The level of support was more mixed amongst survey respondents with 52 per cent supporting the project, the lowest of any precinct.

Within the survey, the key perceived benefits of the project that the Domain community identified included: better access to public transport (60 per cent), reduced congestion on the roads (56 per cent) and the creation of jobs during construction (47 per cent).

Key concerns identified in the survey included temporary changes in road management (34 per cent) and changes to parks and gardens (34 per cent).

These were replicated in the community information sessions and in the online forums with concerns raised about:

- Amenity impacts for local residents due to dust, noise and vibration during construction, particularly for out of hours works
- Impacts on the local road network due to the closure of Domain Road and the reduction in lanes on St Kilda Road during construction
- Access to Melbourne Grammar School and local residences
- Impacts on property values and ability to rent out properties during construction
- Impacts on the Domain Parklands and Fawkner Park
- Loss of parking in the area
- Impacts on the Domain Road businesses
- The temporary loss of the Edmund Herring Oval
- Implications of the tram route changes.

One group of attendees also noted the opportunity to remove some of the parking in Albert Road and provide a green corridor between Domain Parklands and Albert Park.

In other consultation for the project, some residents raised concerns about the placement of an entrance in Albert Road Reserve and the levels of pedestrian traffic this would generate in the immediate area.

Port Phillip Planning Scheme - Amendment C107 / Draft St Kilda Road North Precinct Plan (Port Phillip 2013a) also provides insight into community attitudes and values in the area. Informed by consultation, with the community and other stakeholders the proposed planning scheme amendment noted the importance of respecting the Shrine of Remembrance setting and the landscape identity created in part by the trees abutting St Kilda and Albert Roads. The value placed on the trees along the St Kilda Road boulevard was also raised by several people during engagement for Melbourne Metro.

12.2.2 The Adjoining Community

The Domain precinct is bordered by Domain Parklands and Melbourne Grammar School to the east and a mixture of commercial and residential buildings to the west. The residential buildings cater to a range of households from professionals and young families to retirees who have downsized to apartments. The tenure of the buildings varies, with some on St Kilda Road predominately owner-occupiers and others housing a greater percentage of renters. The number of people living in this area would be expected to continue growing with a number of new developments approved or planned. Residents of these new developments typically use both public transport as well as private vehicles to access the wider area.

Most interviewees from the Domain precinct reported to live in two person households with no children, although at least one family with children household was interviewed. Interviewees typically lived in the area for a long period of time with several reporting over 10 years of residence. Common reasons cited for moving to the area included its proximity to the CBD, access to parks and gardens and the opportunity to overlook the Domain Parklands or Albert Park. Several longer term residents emphasised they chose to live in the area because it was perceived to be less developed than areas like Southbank and not subject to overshadowing caused by high rise buildings like in the CBD. Several interviewees also noted they or their neighbours were mobility impaired increasing their reliance on private or public transport.

St Kilda Road does not have a central activity district. Several interviewees reported they and their neighbours travel to South Melbourne Market or South Yarra for grocery shopping given the limited grocery options available locally. The City of Port Phillip noted during consultation that high levels of traffic on Kings Way is already acting as a barrier for the community, reducing connectivity between areas in proximity to the proposed station and west of Kings Way. With the addition of younger families to the area, the high levels of traffic in the area is also acting as a barrier to access for community services such as maternal health.

The City of Port Phillip noted the following key community concerns in Domain*:*

- Access to public transport and overcrowding on trams
- Maintaining the character of the boulevard and tree health
- Local traffic conditions including parking and congestion
- Access, both pedestrian and vehicular.

This is consistent with feedback from interviewees who emphasised their concerns about new developments and associated population growth which were seen to put pressure on traffic, parking and public transport such as trams on St Kilda Road. The increased number and height of new developments was also of concern to the community given a belief that they would cause overshadowing and create ‘wind tunnels’.

Several interviewees stated their opposition to the construction of a new station in the precinct noting they would not use the train and the area was already well served by public transport. Others noted that the train station would cater to workers and not local residents.

Interviewees raised a number of concerns specific to the project including:

- Amenity impacts on residents, in particular, noise and dust
- Disruption to existing transport patterns

- Maintaining pedestrian and car access (especially crossing St Kilda Road)
- Maintaining traffic flows on streets such as Park Street and Kings Way
- Impact of closing Domain Road

- The loss of mature trees on St Kilda Road and in the construction work sites
- The cumulative impacts of construction with other developments in the precinct
- Encroachment on the Shrine grounds especially near Cobbers statue (Figure 12-1) and the Macpherson Robertson fountain.

12.2.3 Key Social Assets and Attractors

Table 12-1 summarises the key social attractors in the Domain precinct. The locations of each, relative to the proposed Domain station are shown in Figure 12-4.

Table 12-1 Key social assets and attractors in the Domain precinct study area

Asset	Details
Albert Park, Ref 62, Figure 12-4	Albert Park hosts sporting facilities, playgrounds, eight dining and function venues, a 45-hectare lake and 5 km walking and running track (Parks Victoria 2015). Users of the park are able to cycle, sail, row, jog and walk their dogs in a number of designated off-leash areas. The park was opened to the public in 1864 and attracts over six million visits each year (Parks Victoria 2015). Albert Park hosts the Australia Formula One Grand Prix (314,900 estimated attendees in 2014, AGPC 2015), the RSPCA's Million Paws Walk, the Melbourne Marathon, Taste of Melbourne and many other events. A Master Plan for the park is being developed by Parks Victoria.
Albert Reserve, Ref 57, Figure 12-4	A small reserve adjoining Domain Interchange on the western side of St Kilda Road, The reserve hosts the South African Soldiers War Memorial and is often used by workers on Albert Road during lunch hours.
Albert Road Clinic, Ref 59, Figure 12-4	A private psychiatric clinic located on Albert Road. The facility has 80 beds and operates both inpatient and outpatient services. Staff and trucks access the Clinic via Bowen Lane from both St Kilda Road and Kings Way. Consulting rooms in the clinic front onto Albert Road.
Edmund Herring Oval, Ref 58, Figure 12-4	The oval is located adjacent to the Shrine of Remembrance reserve. Melbourne Grammar and clubs represented by the Mercantile Cricket Association and the Australian Chinese Soccer Association including South Yarra Cricket Club and Burnley Cricket Club use the oval for soccer, cricket and other sports. The oval is unlit which restricts use to daytime although the City of Melbourne is considering installing lighting and other upgrades to increase use of the park and make it available for other uses such as dog walking at night. There is a seasonal application process to use the park. While no club or organisation is guaranteed use of the oval, some clubs have been able to use the oval continuously for several years. As with other ovals in the region, demand for the facility exceeds capacity.
Mac Robertson Girls' High School, Ref 61, Figure 12-4	The school is located on Kings Way, Albert Park. It is a select entry public school with capacity for up to 900 students (girls) from across Melbourne (MacRob 2015). Many students access the school by tram from St Kilda Road.
Melbourne Grammar School, Ref 60, Figure 12-4	Melbourne Grammar School was founded in 1858. Its middle and senior schools are bordered by Domain and St Kilda Roads and hosts 1,100 students. Wadhurst, the Junior School (years 7 and 8) is located in the northern corner of the property at the intersection of Domain and St Kilda Roads. There are 400 students enrolled in Wadhurst and the buildings are used regularly for after-hours functions such as concerts and guest speakers. The section of the campus closest to Domain Road hosts a number of classes including music, drama, art, science, design and gym. Several of the school buildings are located outside the main campus boundary including boarding

Asset	Details
	houses, properties owned by the school, and the art school. The main access point for the school is on Domain Road where many students are dropped off by car, particularly those attending the Junior School. Many students also get to the school by tram, alighting at Toorak Road and walking the remaining distance to the school. The school uses the Edmund Herring Oval three times a week for organised sports. This is in addition to their own sports facilities on campus and across the region.
Melbourne Synagogue, Ref 63, Figure 12-4	The synagogue has a membership of 1,000 and the capacity to seat 1,300 people. It hosts regular services as well as hosting high profile and community events (Melbourne Synagogue, 2015, Figure 12-2).
Royal Botanic Gardens, Ref 56, Figure 12-4	The Royal Botanic Gardens are one of Victoria's most popular tourist attractions, drawing over 1.5 million people a year (That's Melbourne 2015). Attractors within the gardens include Government House, the Ian Potter Foundation Children's garden and the Moonlight Cinema.
Sidney Myer Music Bowl, Ref 50, Figure 12-3	The music bowl is an outdoor entertainment venue set in the Kings Domain Gardens. The facility hosts a range of musical and other events aimed at a range of audiences.
St. Kilda Road, Ref 49, Figure 12-3	St Kilda Road is a tree lined arterial linking the southern and south eastern suburbs of Melbourne with the CBD (Figure 12-6). The road also acts as an important commuter cycling route. The trees adjoining the road in the Domain precinct are considered an important contributor to the overall liveability of the adjoining areas, with the trees providing a park like setting. Currently 10 tram routes travel through St. Kilda Road in this precinct (Figure 5-22).
South African Soldiers War Memorial, Ref 54, Figure 12-4	The South African Soldiers Memorial is located within the Albert Road Reserve. Completed in 1924, the memorial is now overshadowed by a number of the surrounding buildings on Albert and St Kilda Roads. The National Boer War Memorial Association (Victoria) holds services on the reserve to commemorate the Boer War but the size of the reserve and the surrounding roadways restrict the number of people who can attend. The National Boer War Memorial Association (Victoria) is advocating the relocation of the memorial to the Domain Parklands, while other members of the community have noted their desire for it to remain in proximity to its current location.
Tan Track, Ref 53, Figure 12-3	A popular running track that runs the circumference of the Royal Botanic Gardens (Figure 12-5).
The Shrine of Remembrance Reserve, Ref 55, Figure 12-4	The Shrine of Remembrance and Shrine of Remembrance Reserve is one of Melbourne's most valued places, hosting Anzac and Remembrance Day memorial each year. During consultation, the Shrine was reported to be valued by veterans and their families, school groups, tourists and visitors to the building. The community has a strong sense of connection with the Shrine and even incidental visitors can become emotionally attached. Any change to the grounds is noticed and if inadequately communicated, triggers enquiries. The Shrine was reported to have experienced a large increase in visitors in recent years. Part of this increase is attributable to 2014 being the centenary of the commencement of World War One. It has also been partly driven by the redevelopment of the Shrine, which has expanded the range of activities on offer to visitors. The Shrine of Remembrance expects that interest in the Shrine would increase again in 2018 to celebrate the centenary of the end of World War 1. Peak periods for the Shrine include Anzac Day (25 April) and Remembrance Day (11 November) with Anzac Day busy from midnight (the night before) until 2 pm the following day. December and January are quiet months for ceremonies, but there are a lot of visitors during these months. It was noted during consultation that people generally get to the Shrine via public transport on Domain Road, or walk from the CBD or get dropped off by charter buses or private vehicles on Birdwood Avenue. The topography of the Shrine site means that western pathways are not easily

Asset	Details
	used by people with mobility impairments leading them to access the site via vehicle drop-off on Birdwood Avenue. During the wider community engagement for the project, there has been a lower level of interest shown in the Shrine of Remembrance Reserve and potential impacts. This is, however, likely the result of a lack of awareness of the activities proposed within and adjoining the reserve. Close to the western edge of the shrine of the Remembrance Reserve is the Cobbers sculpture (Figure 12-1), a memorial to Australian service at the Battle of Fromelle and the Macpherson Robertson Fountain.

Figure 12-1 Cobbers sculpture facing north

Figure 12-2 Melbourne Synagogue, viewed from Toorak Road West

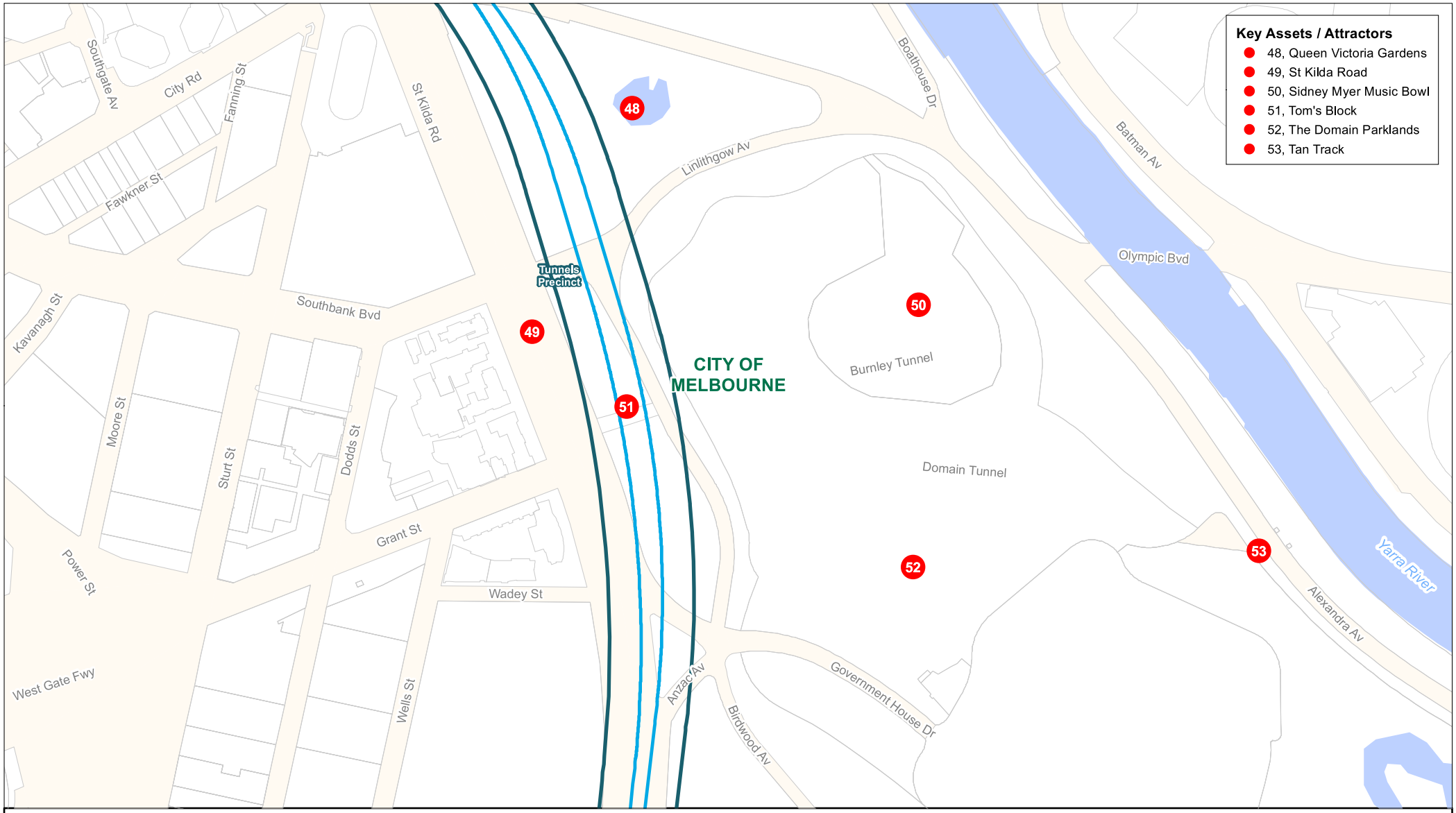

Figure 12-4 Domain parklands key attractors

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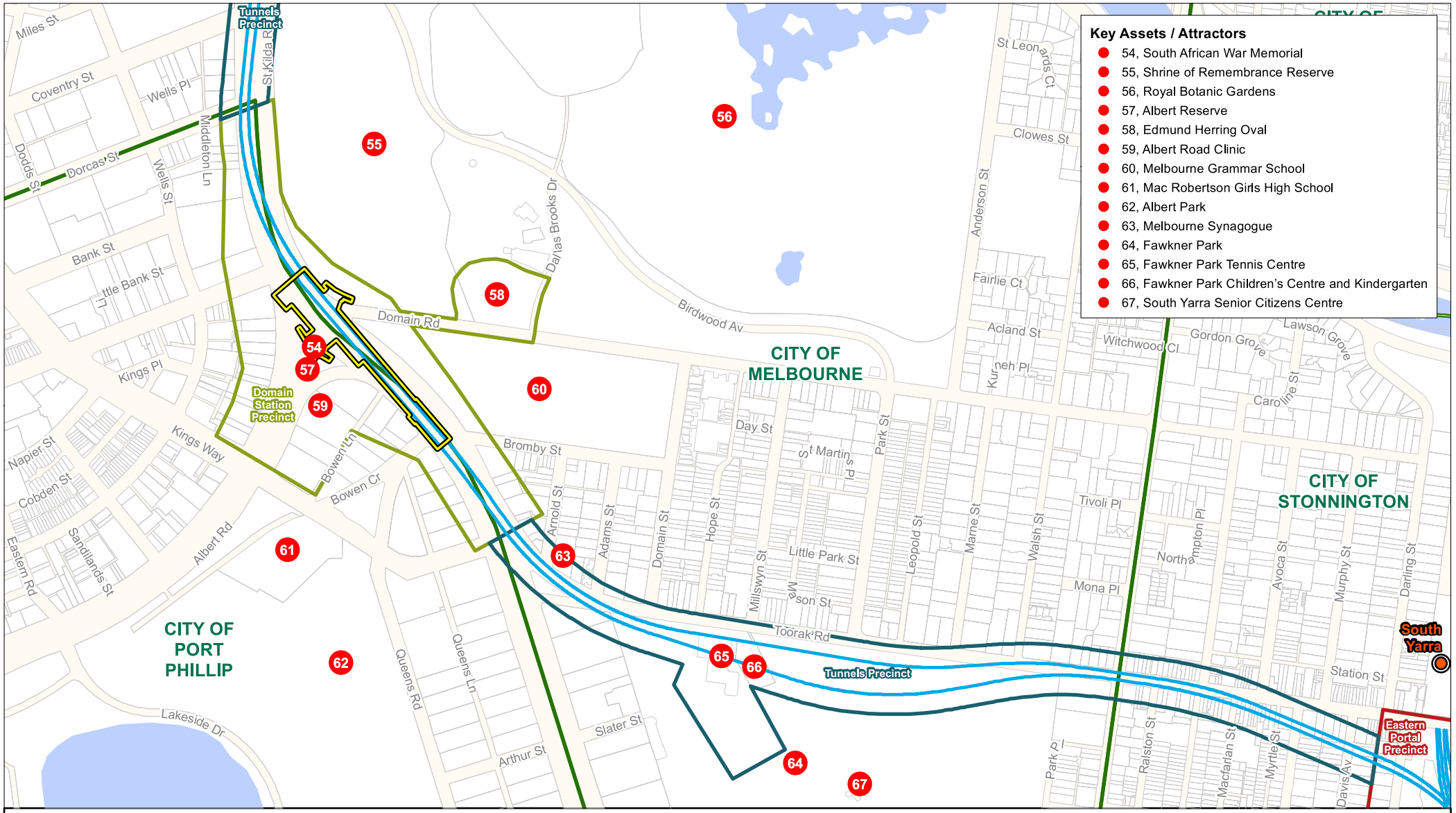


Figure 12-5 Domain station precinct key attractors

12.3 Key Issues

As identified in the risk assessment (Table 6-1), the key issues associated with the Concept Design are listed in Table 12-2.

Table 12-2 Key issues associated with the Concept Design

Issue	Description	Risk no.
Design		
Possible construction activities inhibit future planning for households	Residential property owners in proximity to construction areas put on hold or reconsider their plans for their properties.	SC001
Project varies from Concept Design	Community opposition to the final design due to differences from the Concept Design on which the community were consulted.	SC002
Construction		
Construction activities result in a loss of amenity for residents	Construction activities impact on the amenity of households diminishing their ability to enjoy their dwelling or use it as they do currently.	SC009
Construction activities impacting on the amenity of health, educational, commercial, recreational and other facilities	Sustained amenity impacts on the Shrine of Remembrance Reserve, Albert Road Clinic and Melbourne Grammar affects the ability of staff or users to continue to use these facilities.	SC015
Construction activities in proximity to Melbourne Grammar	Construction activities in proximity to areas frequented by children such as Melbourne Grammar could result in a perceived diminishment in public safety.	SC016
Truck movements alter existing community access patterns	Truck movements and changes to local access sever existing community networks and disrupt access patterns particularly for families with young children, those with mobility impairments or the elderly .	SC017
Construction activities located within open spaces or recreation areas used for passive recreation	Construction activities in Edmund Herring Oval, Shrine of Remembrance Reserve and Albert Road Reserve displace passive recreation.	SC022
Construction activities located within open spaces or recreation areas used for active recreation	Construction activities displace organised sports in Edmund Herring Oval. Limited local alternatives for these facilities would reduce recreational opportunities for the community.	SC025
Construction workforce demand for parking could result in a reduction in parking available for residents, workers or other visitors to the area.	Loss of access to community facilities, recreational spaces or severance of social networks.	SC026
Truck movements in proximity to residential areas	Truck movements impact on residential amenity.	SC027
Construction and operation		
Construction activities would take place within the Shrine of Remembrance reserve permanently changing it with ongoing infrastructure retained	Works within the Shrine of Remembrance reserve have the potential to create distress for veterans and other members of the community who value the site.	SC032
Construction activities require the temporary movement of the South African War Memorial and other monuments	Impacts on South African War Memorial and other monuments is of concern to the local community.	SC038

12.4 Benefits and Opportunities

Table 12-3 provides the benefits and opportunities associated with each part of Concept Design.

Table 12-3 Benefits and opportunities associated with the Concept Design

Benefits	Opportunities
• Would improve access to employers in the St Kilda Road precinct despite the large increase in demand on the transport network • Would provide an unpaid, grade separated crossing of St Kilda Road (via an underpass), improving pedestrian safety • When operational the station would improve access to Melbourne Grammar School and Mac Robertson Girls' High School. The Concept Design would also improve access for residents to medical and education facilities in Parkville and across Melbourne. • The station would improve access for the wider community to the Shrine of Remembrance, Albert Park and the wider employment area on St Kilda Road. The improvement in access would largely accrue for facilities in proximity to St Kilda Road such as the Shrine of Remembrance. This would be of particular benefit for school groups, tourists and others reliant on public transport. For places that are further away such as the Royal Botanic Gardens or the Sidney Myer Music Bowl the improvement in access would be reduced given the distances of these facilities from a future station • The benefit of improved access to the Domain Parklands would also be diminished by the topography of the land. The steep paths on the western side of the Shrine of Remembrance would still present a barrier to people with mobility impairments, meaning they would be likely to continue accessing the Shrine via private vehicles on Birdwood Avenue.	• Provision of an improved pedestrian link between the Shrine of Remembrance Reserve and Albert Park • Improve the streetscape and amenity of Albert Road • Improve the utility of Albert Road Reserve for the surrounding community • Increase the area available for services at the South African Soldiers Memorial • Provide a setting more conducive for reflecting at the South African Soldiers Memorial • Provide improve linkages from the Domain precinct to the Royal Botanic Gardens and other attractors within the Domain Parklands • Improve the facilities or infrastructure at Edmund Herring Oval during reinstatement.

Figure 12-5 The Royal Botanic Gardens Tan track near Tom's Block looking south

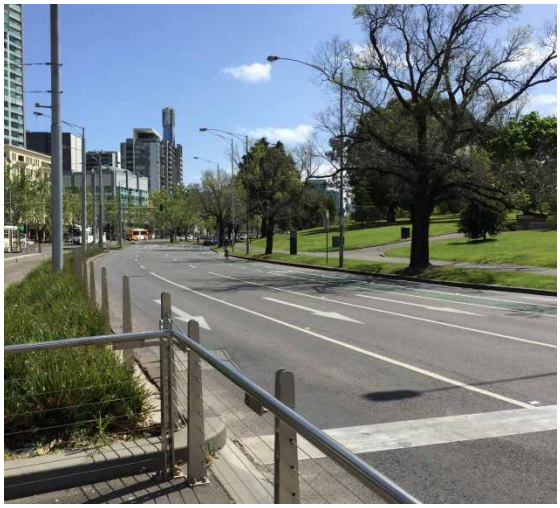


Figure 12-6 St Kilda Road looking north from Domain Road Interchange

12.5 Impact Assessment

The following draft EES evaluation objectives and assessment criteria are relevant to this assessment.

Table 12-4 EES evaluation objectives and assessment criteria

Draft EES evaluation objectives	Assessment Criteria	Chapter reference
Social, community, land use and business: To manage effects on the social fabric of the community in the area of the project, including with regard to land use changes, community cohesion, business functionality and access to services and facilities, especially during the construction phase. **Landscape, visual and recreational values:** To avoid or minimise adverse effects on landscape, visual amenity and recreational values as far as practicable.	Minimise impacts to private residential property owners and occupiers.	N/A
	Minimise impacts on social infrastructure such as educational, health, religious and sporting facilities.	12.5.1
	Maintain community accessibility and avoid social severance.	12.5.1
	Achieve consistency with community values.	12.5.1
	Minimise impacts on, and enhance amenity for residents and the community and maintain perceptions of safety during the construction phase.	12.5.1
	Minimise impacts on valued places, including public open space and recreation reserves.	12.5.1

12.5.1 Domain station

12.5.1.1 Minimise impacts to private residential property owners and occupiers

Uncertainty during the planning and initial construction stages would also likely result in some households in proximity to the construction area putting on hold or reconsidering their plans for their properties

12.5.1.2 Minimise impacts on social infrastructure such as educational, health, religious and sporting facilities

The Concept Design would require the temporary occupation of the Edmund Herring Oval. This would displace existing users who have limited if any alternatives available locally. Reducing this potential impact is access to the Edmund Herring Oval is subject to an annual application process and its use is limited by the absence of lighting, particularly during winter months when the days are shorter. The use of this site would also reduce the land needed at other more valued spaces such as Fawkner Park or the Shrine of Remembrance Reserve. To reduce this impact further, current users could be hosted on alternative playing fields if the project assisted them in identifying them and made the appropriate arrangements with the respective facility manager.

The Concept Design would also require the temporary occupation of the Albert Road Reserve, displacing current passive activities and precluding the use of the site for services by the National Boer War Memorial Association (Victoria). Reducing the severity of the impact, the reserve is not heavily used currently and with appropriate traffic management, users should be able to access alternatives like the Domain Parklands or Albert Park. Engaging appropriately with the association and other interested stakeholders during reinstatement planning for the reserve and memorial would reduce this impact further

12.5.1.3 Maintain community accessibility and avoid social severance

The Concept Design would require diversion of pedestrian and cycling traffic traveling alongside the Shrine of Remembrance Reserve but existing pedestrian access paths would be maintained. It would require the termination of the number 8 tram at Domain Road or its rerouting. Traffic management would be in place to maintain access to residences, the Shrine of Remembrance, Albert Park Clinic, Melbourne Grammar School and MacRobertson Girls' High School. However, it is likely that local residents and users of these facilities would have to change their travel patterns potentially increasing travel times. Most vulnerable to these changes are likely to be school students accessing MacRobertson Girls' High School and Melbourne Grammar School, or people with mobility impairments unable to walk longer distances to access alternative transport options.

There are high levels of community concern about the potential impacts of construction on the traffic network. While keeping St Kilda Road operating is likely to be consistent with wider community expectations, the Domain Precinct is expected to be subject to traffic delays during construction (discussed further in Technical Appendix D *Transport*). Truck movements and changes to local access associated with project activities in Fawkner Park and with other private sector developments in the area would likely have a potential cumulative impact on local residents' access, particularly people living between Domain Road and Toorak Road West. There is a risk that increased congestion in the precinct would create social severance if people were unable to access their wider social networks or social infrastructure. The reported reliance of households in the precinct on private vehicles to shop, socialise and access employment, and the presence of vulnerable groups such as those with young children, mobility impairments or the elderly increases severity of this potential impact.

Appropriate traffic management that allows for the needs for vulnerable people and early engagement with the community and affected facilities would reduce this impact.

Construction workforce demand for parking could result in a reduction in parking available for residents, workers or other visitors to the area so would also require management.

12.5.1.4 Achieve consistency with community values

The community could become concerned about works within the Shrine of Remembrance Reserve associated with the TBM launch or the placement of the eastern entrance if they are perceived to compromise the integrity of the Reserve or if the Shrine of Remembrance does not support the construction method used. The eastern entrance would be in view of the Cobbers Sculpture, Macpherson Robertson Fountain, plaques and other memorials in the Shrine of Remembrance Reserve. This has the potential to

alter the way in which people view or value these sites and could impinge on the ability of people to reflect. Commuter movements through this entrance also have the potential to be disruptive to ceremonies taking place close at these sites.

Endorsement from the Shrine of Remembrance Trustees on the construction method and design, avoidance of works during key times such as Anzac Day and Remembrance Day as well engagement with interested stakeholders would likely reduce the level of potential community concern.

Construction activities in the Shrine of Remembrance Reserve would also reduce the level of open space available to the community for passive recreation. Diminishing this potential impact, much of the Shrine of Remembrance Reserve could be avoided during construction and appropriate mitigation put in place to protect trees, plaques and monuments during the works.

Loss of the trees on St Kilda Road is also likely to be of concern to the local and wider community as this would represent a long stretch of vegetation loss in a valued leafy boulevard. Increasing the magnitude of this potential impact would be the length of time it would take to grow replacement trees.

Increasing pedestrian flows in proximity to the South African Soldiers War Memorial would likely be of concern to the National Boer War Memorial Association (Victoria) and some local residents. Engaging appropriately with the association and other interested stakeholders during reinstatement planning for the reserve and memorial would reduce this impact.

12.5.1.5 Minimise impacts on valued places, including public open space and recreation reserves

The works would require the use of the western border of the Shrine of Remembrance Reserve. This would affect the amenity of the reserve and has the potential to disturb services and other activities taking place on the grounds. Construction activities in the Shrine of Remembrance would also reduce the level of open space available to the community for passive recreation. The use of the Shrine of Remembrance reserve for this purpose is likely to be considered a diminishment of this valued place.

The loss of trees or interference with memorials and plaques, could lead to a diminishment of the sense of place at the reserve if done in a manner not supported by the Shrine of Remembrance. Diminishing this impact is the likelihood that much of the Shrine of Remembrance Reserve could be avoided with appropriate mitigation, with trees, plaques and monuments protected during the works.

The eastern entrance would be placed at the southwestern extent of the Shrine of Remembrance. This area would no longer be available for passive recreation. Diminishing this impact is the availability of alternative open space throughout the remainder of the reserve and the Domain Parklands.

The use of the Albert Road Reserve is likely to have a lesser impact due to the comparatively low levels of use the reserve currently experiences and the ability of users to access alternatives such as Albert Park.

12.5.1.6 Minimise impacts on, and enhance amenity for residents and the community and maintain perceptions of safety during the construction phase

Construction would also generate large volumes of noise and dust during working hours. This would have a sustained amenity impact on the precinct (discussed further in Technical Appendix H *Air Quality,* Technical Appendix I *Noise and Vibration and* Technical Appendix L *Landscape and Visual)*. Groups likely to experience the greatest potential impact include:

- Students and staff in Melbourne Grammar School's junior school
- Residents in proximity to works who are likely to be home during the day or whose bedrooms face St Kilda Road
- Users of the Shrine of Remembrance Reserve and Domain parklands including both attendees at ceremonies and tourists
- Patients at the Albert Road Clinic.

This potential amenity impact would be attenuated through acoustic treatments but for some residents this is still likely to result in an observable diminishment of amenity particularly outside of normal working hours. This impact could be reduced through early engagement with these households and making available the option of relocation for highly impacted households, particularly for sustained out of hours works.

The Domain construction work site could also generate concerns about human health and safety. Air quality modelling suggests that with management, air quality could be maintained within SEPP criteria, however on days when background particulate concentrations are high, there is the potential for air quality exceedances in the precinct (discussed further in Technical Appendix H *Air Quality*). This is likely to be of greater concern to vulnerable groups such as children and their parents or people with existing health conditions. This impact could be reduced through early engagement with concerned households.

The interface between users of the precinct and construction activities could also be perceived to impact on safety, particularly for students at nearby schools, those with mobility impairments or children visiting the Domain Parklands. However, it is likely with appropriate traffic management and communication these concerns could be addressed.

12.5.2 Early Works

Early works could have short-term impact on local access and community amenity. Works that occur within the Shrine of Remembrance and Albert Road Reserve have the potential to create concern amongst the adjoining community. However, with appropriate management and communication the impact of these works could be reduced.

12.5.3 Residual Risks

With the mitigation proposed in Section 12.6 most of the residual risks associated with the potential impacts identified above are of medium significance or lower (see Section 6). However, the residual risk associated with the modification of the St Kilda Road streetscape remains high.

12.6 Environmental Performance Requirements

Table 12-5 provides the recommended Environmental Performance Requirements and proposed mitigation measures to address the social impacts for the precinct. In some instances, individual performance requirements and mitigation measures have been used manage multiple impacts. Where feasible these are consolidated in Table 12-5, however, there are instances where requirements or mitigation need to be repeated for different impacts.

The risk assessment in Section 6 applies the mitigation detailed below to the initial risks to determine the residual risks for the project.

Table 12-5 Environmental Performance Requirements for the precinct

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no.
Dwellings	Residential property owners in proximity to construction areas put on hold or reconsider their plans for their properties	Prior to main works or shaft construction, develop and implement a community and business involvement plan to engage potentially affected stakeholders and advise them of the planned construction activities and project progress. Prior to main works or shaft construction in areas affected, develop a relocation management framework that allows for a uniform approach across the project for the voluntary (temporary) relocation of households subject to: • Construction activities likely to unduly affect their amenity (e.g. out of hours works or sustained loss of amenity during the day for shift workers) • Loss of access. Develop and implement measures to minimise light spillage during construction to protect the amenity of adjacent neighbourhoods, parks and community facilities.	• Engage landholders during the planning, design and implementation stages on the construction method, project design and how this would affect their property.	SC001
	Construction activities impact on the amenity of households diminishing their ability to enjoy their dwelling or use it as they do currently		• Consider and incorporate the following into the relocation management framework: – Provision for the voluntary relocation of households subject to: ▪ Construction activities likely to unduly affect their amenity (e.g. out of hours works or sustained loss of amenity during the day for shift workers) ▪ Loss of access. – Providing options suitable to the duration of relocation, for example: ▪ Use of hotels / motels for short term disruptions ▪ Use of equivalent housing for longer term relocations • Utilise a complaints management system for responding to all community complaints or enquiries.	SC009

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no.
Dwellings	Truck movements impact on residential amenity	Develop and implement a transport management plan(s) in consultation with the relevant road management authorities to minimise disruption to traffic, car parking, pedestrian and bicycle movements during construction.	• Utilise truck routes that reduce the number of dwellings impacted by truck movements • Design construction work sites in proximity to residential areas to minimise the number of trucks that need to reverse • Avoid parking or idling construction vehicles in proximity to dwellings outside of normal working hours • Use reversing beepers that minimise disturbance on adjoining properties • Ensure landholders adjoining construction zones are consulted on the treatments applied to noise walls, sheds and others structures.	SC027
Community values	Community opposition to the final design due to differences from the Concept Design on which the community were consulted	Prior to main works or shaft construction, develop and implement a community and business involvement plan to engage potentially affected stakeholders and advise them of the planned construction activities and project progress.	• Demonstrate that community feedback is incorporated in the design and the design requirements have been made clear to the community • Demonstrate to the community and key stakeholders how the design aligns with the Concept Design and community feedback • Where the design is potentially inconsistent with community feedback, explain the rationale and anticipated outcomes of the design change • Consult with affected communities on design changes likely to be of public interest prior to finalisation.	SC002
Shrine of Remembrance Reserve, Albert Road Clinic and Melbourne Grammar	Sustained amenity impacts on the Shrine of Remembrance Reserve, Albert Road Clinic and Melbourne Grammar affects the ability of staff or users to continue to use these facilities	Prior to main works or shaft construction, develop and implement a community and business involvement plan to engage potentially affected stakeholders and advise them of the planned construction activities and project progress. Develop and implement a traffic management plan(s) in consultation with the relevant road management authorities to minimise disruption to traffic, car parking, pedestrian and bicycle	• Consult with managers of key facilities during so that impacts on their operations and wellbeing of their users are minimised and notification timeframes agreed • Provide advance warning of out of hours works and consult closely with the institutional stakeholders during their planning to determine times that must be avoided • Provide a forum in which key facilities can provide feedback on the construction approach.	SC015

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no.
	Construction activities in proximity to areas frequented by children such as Melbourne Grammar could result in a perceived diminishment in public safety.	movements during construction. Work with relevant local councils to plan for and coordinate with key stakeholders during major public events. Design permanent and temporary works in consultation with local councils and the Office of Victorian Government Architect to comply with the MMRA Urban Design Strategy. The design shall avoid or minimise visual impacts on sensitive receptors and maintain broader landscape character values.	• Communicate alternative access methods to the community in advance of works • Avoid truck movements during peak pick up and drop off times for these facilities.	SC016
Access patterns	Truck movements and changes to local access sever existing community networks and disrupt access patterns particularly for families with young children, those with mobility impairments or the elderly.	Develop and implement a traffic management plan(s) in consultation with the relevant road management authorities to minimise disruption to traffic, car parking, pedestrian and bicycle movements during construction. Prior to main works or shaft construction, develop and implement a community and business involvement plan to engage potentially affected stakeholders and advise them of the planned construction activities and	• Communicate alternative access methods to the community in advance of works • Ensure that the relevant sub plan allows for existing pedestrian access patterns and considers the needs of vulnerable people such as children and those with mobility impairments • Develop appropriate community information tools – website, on site boards, brochures etc. to update community on changed access arrangements.	SC017

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no.
Edmund Herring Reserve, Shrine of Remembrance Reserve and Albert Road Reserve	Construction activities in Edmund Herring Reserve, Shrine of Remembrance Reserve and Albert Road Reserve displace passive recreation.	project progress. Prior to main works or shaft construction commencing, work with the City of Melbourne to identify possible alternative areas of public open space for community use during the construction phase to minimise the impacts of loss of existing public open space that are to be utilised as construction worksites. In consultation with key stakeholders and in accordance with the Urban Design Strategy, relevant statutory approvals and other relevant requirements, re-establish sites impacted by construction works. Develop and implement measures for construction and operation of Melbourne Metro that aim to minimise impacts to the development and/or operation of existing land uses.	• Consult early with open space users on project timelines and likely impacts • Develop a relocation strategy to help users identify alternative facilities (where available) they could use during construction.	SC022
Edmund Herring Reserve	Construction activities displace organised sports. Limited local alternatives for these facilities reduces recreational opportunities for the community.	Prior to main works or shaft construction commencing, work with the City of Melbourne to identify possible alternative areas of public open space for community use during the construction phase to minimise the impacts of loss of existing public open space that are to be utilised as construction worksites. Develop a relocation strategy for sports clubs and other formal users of directly impacted recreational facilities. Develop and implement measures for construction and operation of Melbourne Metro that aim to minimise impacts to the development and/or operation of existing land uses.	• Consult early with open space users on project timelines and likely impacts • Develop a relocation strategy to help users of the Edmund Herring Oval users identify alternative facilities (where available) they could use.	SC025

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no.
Workforce parking	Construction workforce demand for parking could result in a reduction in parking available for residents, workers or other visitors to the area.	Develop and implement a traffic management plan(s) in consultation with the relevant road management authorities to minimise disruption to traffic, car parking, pedestrian and bicycle movements during construction.	• Target of no net loss of public parking outside the construction zone • Management of workforce car parking to include subcontractors.	SC026
Shrine of Remembrance	Works within the Shrine of Remembrance reserve have the potential to create distress for veterans and other members of the community who value the site	Prior to main works or shaft construction, develop and implement a community and business involvement plan to engage potentially affected stakeholders and advise them of the planned construction activities and project progress. Work with relevant local councils to plan for and coordinate with key stakeholders during major public events. Develop and implement measures for construction and operation of Melbourne Metro that aim to minimise impacts to the development and/or operation of existing land uses.	• Make provision to cease or silence works for times of special significance to the Shrine of Remembrance such as on Remembrance and Anzac Days • Ensure the Shrine of Remembrance Trustees are consulted on the construction and reinstatement approach and are satisfied it represents an appropriate outcome for the Shrine or Remembrance and its stakeholders • Allow for changed usage patterns during events such as Anzac Day at the Shrine of Remembrance • Avoid use of the Shrine of Remembrance reserve for construction activities unrelated to the station entrance.	SC032
South African War Memorial	Impacts on South African War Memorial and other monuments is of concern to the local community		• Provide a mechanism within the sub plan governing reinstatement to consider community feedback in consultation with the land manager.	SC038

13 Precinct 8: Eastern Portal (South Yarra)

13.1 Project Components

The Concept Design would require extensive modification in and around South Yarra Siding Reserve, including:

- A cut and cover structure that travels under the Sandringham line, Frankston line, freight and regional lines
- A decline structure (open to air) which would align Melbourne Metro tracks to the same vertical level as the existing rail corridor
- Track modifications
- Tunnel ventilation shaft, and an underground substation.

During construction South Yarra Siding Reserve, Osborne Street Reserve and Lovers Walk would be inaccessible to the public. William Street bridge would also be removed. Following construction, all of these facilities would be reinstated. Other aspects of construction of relevance to this assessment include:

- Construction of a ventilation shaft, and substation in the Osborne Street Reserve
- Construction vehicle access bridge between Osborne Street and South Yarra Siding Reserve. This bridge would be maintained as a pedestrian bridge post construction
- Acquisition of seven dwellings
- Major disruptions to local road traffic with construction traffic movements in constrained residential streets, particularly Osborne Street, William Street and Arthur Street
- Restricted vehicular access to residential properties opposite Osborne Street Reserve
- An average of 50 truck movements a day for 30 months
- Normal operating hours except for rail occupations which would be 24 hours
- Construction commencing in the middle of 2018 before completion in the middle of 2023
- Removal of up to 218 trees within the construction zone
- Widening of the existing rail corridor and construction of retaining walls.

On completion of the Concept Design, there would be an increased number of trains travelling through the cutting with more Frankston line trains in addition to existing freight trains traveling at a higher elevation.

Figure 13-1 South Yarra Siding Reserve facing north west

13.1.1 Works

Early works in the eastern portal precinct would involve the relocation and replacement of a number of electrical, gas, water and telecommunications assets.

The early work of most interest to this assessment is:

- The establishment of a new low pressure gas main connection from Osborne Street to Arthur Street bored under railway tracks.

13.2 Existing Conditions

The eastern portal would be located within the City of Stonnington in the suburb of South Yarra.

The City of Stonnington notes that there are a number of issues currently facing South Yarra that are of relevance to the eastern portal. Foremost amongst these is traffic and pedestrian congestion. The Forrest Hill precinct and developments south of Toorak Road are generating large volumes of truck traffic which is negatively impacting on the road network making it harder for existing residents to navigate the area. Cumulatively, this construction activity has had noise, dust and vibration impacts for adjoining landholders.

This development is facilitating strong population growth in and around the precinct, which is increasing demand for the limited available open space and placing pressure on the local parking options. Stonnington Planning Scheme proposed amendment C172 identifies a need to 'improve the quality of and access to the South Yarra Siding Reserve, including more direct access from the Forrest Hill Precinct' (Stonnington 2015). Ideas to improve this connection include a plaza (on decking) or a separate pedestrian/cycling bridge (Stonnington 2015b)

The City of Stonnington notes that Lovers Walk, South Yarra Siding Reserve (Figure 13-1) and Osborne Street Reserve are all highly valued by the local community. Consequently any modification to these assets needs to consider the amenity of local residents. However, a lack of open space in the precinct means that Fawkner Park is also highly utilised by local residents.

There is a large volume of housing available for sale within South Yarra but most have two bedrooms or less (Realestate 2015d), with 24 semi-detached or detached houses with three bedrooms or more available at the time of research. Of these only eight have four bedrooms or more.

13.2.1 Community Attitudes and Values

As at August 2015, over half of all survey respondents visited South Yarra at least every six months or more. Of these (43 per cent) visited family and friends or for other social reasons (Ipsos 2015a). At the South Yarra community information sessions, many attendees expressed support for the project although this was diminished by disappointment that it would not provide a connection at South Yarra station. There was also widespread concern about the level of construction impact the community would be subject to with no perceived benefit for the impacted community. The survey results reflect this mixed support with 61 per cent of respondents supporting the project, the second lowest behind Domain.

The key perceived benefits of the project identified by the South Yarra survey respondents included: better access to public transport (50 per cent), reduced congestion on the roads (41 per cent), trains that can carry more passengers (41 per cent) and more train stations (39 per cent).

Key concerns identified in the survey included temporary changes in road management (42 per cent) and retaining access to residences (35 per cent).

This was replicated in the community information sessions and in the online forums with concerns raised about:

- Lack of a connection with South Yarra station and the need to upgrade the existing South Yarra station

- Perception that the South Yarra community would receive no benefit despite being heavily potentially impacted during construction
- Potential amenity potential impacts for local residents (dust/noise) during construction
- Volume of truck traffic and the use of local roads to access South Yarra Siding Reserve
- Sustained nature of impacts on adjoining households
- Loss of parking in William Street and the limited availability of alternative parking
- Loss of South Yarra Siding Reserve during construction and the lack of other off leash dog parks in the area
- The effect on vulnerable residents such as the elderly
- Potential impacts on property values and financial cost of planning uncertainty in the area
- The need for noise walls and the resulting visual impact.

Attendees at the sessions were also very interested in how the project area would be reinstated following construction, and opportunities to input to this process.

13.2.2 The Adjoining Community

The area surrounding the proposed eastern portal is characterised by a mixture of detached and semi-detached housing as well as apartment blocks. The ongoing popularity of South Yarra is seeing a rapid conversion of detached properties to multi story apartment developments.

The community of the area reflects this trend and is composed of a mixture of longer-term residents with established social networks, and shorter-term apartment dwellers, many of which are renting their properties.

During the landholder interviews, several of the property owners closest to the rail cutting noted their aspirations to redevelop their properties as multi-unit developments. Of these, several had already received the relevant planning permits or were in the process of applying for them. Nearly all of the properties that would be subject to redevelopment were tenanted.

Further back from the rail corridor, a number of the households interviewed, typically those in town houses, noted that they intended to live in their properties for the foreseeable future. Several of these households also owned investment properties in or close to the precinct. These properties were occupied by a mixture of families with older teenagers, older retired couples or older couples likely to retire in the coming years. Most of these households had lived in the area for a number of years.

The community along Arthur Street and Williams Road were well connected, with several households meeting in South Yarra Siding Reserve and socialising together on a regular basis. Several interviewees also noted that several residents had come together to oppose at least one development in the area. This provided a forum through which several of the households, including those who do not use the South Yarra Siding Reserve, were able to meet and form friendships.

South Yarra Siding Reserve is an off leash dog park, and households in the area were reported to play there with their dogs regularly (Table 13-1). Several site inspections support this claim with several dogs and their owners seen in the reserve on different days and times. Many people in the precinct were reported to have met each other in the reserve and formed relationships on that basis.

Many of the residents interviewed for this impact assessment reported they used Lovers Walk during the day, but avoided using it at night due to concerns about safety. They also noted the perceived poor condition of the path currently with litter and graffiti considered to be particular problems. The Stonnington Planning Scheme proposed amendment C172 supports this concern noting a need to ‘Improve passive surveillance to and sightlines along Lovers Walk’ (Stonnington 2015).

The City of Stonnington also noted that the Osborne Street community in particular highly value the amenity the Osborne Street Reserve provides to the area.

Many of the households interviewed for this social impact assessment reported common reasons for living in the area, with proximity to schools, the CBD, transport (trams and trains), availability of restaurants, Prahran Market and shopping areas on Toorak Road and Chapel Street all seen as important. Discussions with the City of Stonnington also support this view. Interviewees acknowledged that these aspects offset the potential amenity impacts associated with existing train operations in the rail cutting, with several noting that they had become acclimatised to the noise of regular metro trains. Freight trains are the exception, considered by many interviewees to be very disruptive, particularly during the night. Several residents closer to South Yarra Siding Reserve also noted that the previous rail sleeper replacement works had been very disruptive overnight, with the sound of reversing beepers highlighted as one of the most disruptive activities.

During interviews with households to be acquired or in proximity to the rail corridor a number of the issues raised were similar to those raised in the information sessions. Those of greatest concern to local landholders included:

- Potential noise, dust and vibration impacts during construction, particularly those associated with occupations
- Amenity impacts associated with the operation of the elevated Frankston, V/Line and freight lines
- Loss of property value
- William Street bridge removal
- ability of residents to access Toorak Road during construction
- safety issues associated with the height of the reinstated bridge and existing lines of sight for cars and users of Lovers Walk
- Truck traffic during construction, the associated congestion on the local road network and potential amenity impacts on residents
- South Yarra Siding Reserve
- Lack of alternative open space in the area to walk dogs or catch up with neighbours during construction
- Opportunities to improve the park during reinstatement
- Need to retain it as an off leash area into the future
- Planning uncertainty and the lack of available information on the project.

13.2.3 Residents of the Properties Potentially Subject to Acquisition

The project would acquire six dwellings in South Yarra. Of these, two are occupied by families, with close connections with their neighbours and prior to the project an intention to live in the area longer term. Of the remaining four dwellings, two are tenanted with plans for multiunit developments. The remaining two are vacant. Discussions with the owners indicate that prior to being contacted by the project, they intended to sell these properties.

13.2.4 Key Social Assets and Attractors

Table 13-1 Key social assets and attractors in the eastern portal precinct

Asset	Details
Chapel Street, Ref 72, Figure 13-2	Chapel Street is an important retail destination with shops, cafes, restaurants, clubs, and entertainment venues and arts spaces. It draws people from across Melbourne both for the shopping and night life.
Lovers Walk, Ref 71, Figure 13-2	A pedestrian path that follows the railway cutting between Toorak Road and Chapel Street. The path is highly utilised during the day and in the morning and afternoon peak. Several houses and gardens abut the walk but have walls restricting passive surveillance. Lovers Walk is subject to graffiti on rear walls of adjoining properties and the abutting rail

Asset	Details
	reserve is also subject to extensive littering along its length.
Osborne Street Reserve, Ref 68, Figure 13-2	A thin, linear park traveling the length of Osborne Street between Toorak Road and Fawkner Street. The park provides a vegetated backdrop of Osborne Street Residents, separating them visually from the train line. The park has a number of benches available for people to sit on.
South Yarra Siding Reserve, Ref 69, Figure 13-2	The reserve is a public park, located between the Cranbourne/Pakenham and Frankston and Sandringham railway tracks. Directly south of South Yarra station, there is no direct access from Toorak Road to the park, instead users access it via William Street. The park is primarily used for passive recreation and operates as an off leash park for dogs. The terraced nature of the park and the interface with the adjoining train lines limits the uses of the park at its eastern and northern extents.
Toorak Road, Ref 70, Figure 13-2	Toorak Road hosts a selection of shops, cafes, restaurants, clubs, and entertainment venues and arts spaces. The City of Stonnington noted that this area has a more local catchment than Chapel Street. Toorak Road hosts the number 8 tram, which travels to the CBD via the proposed Domain station precinct.

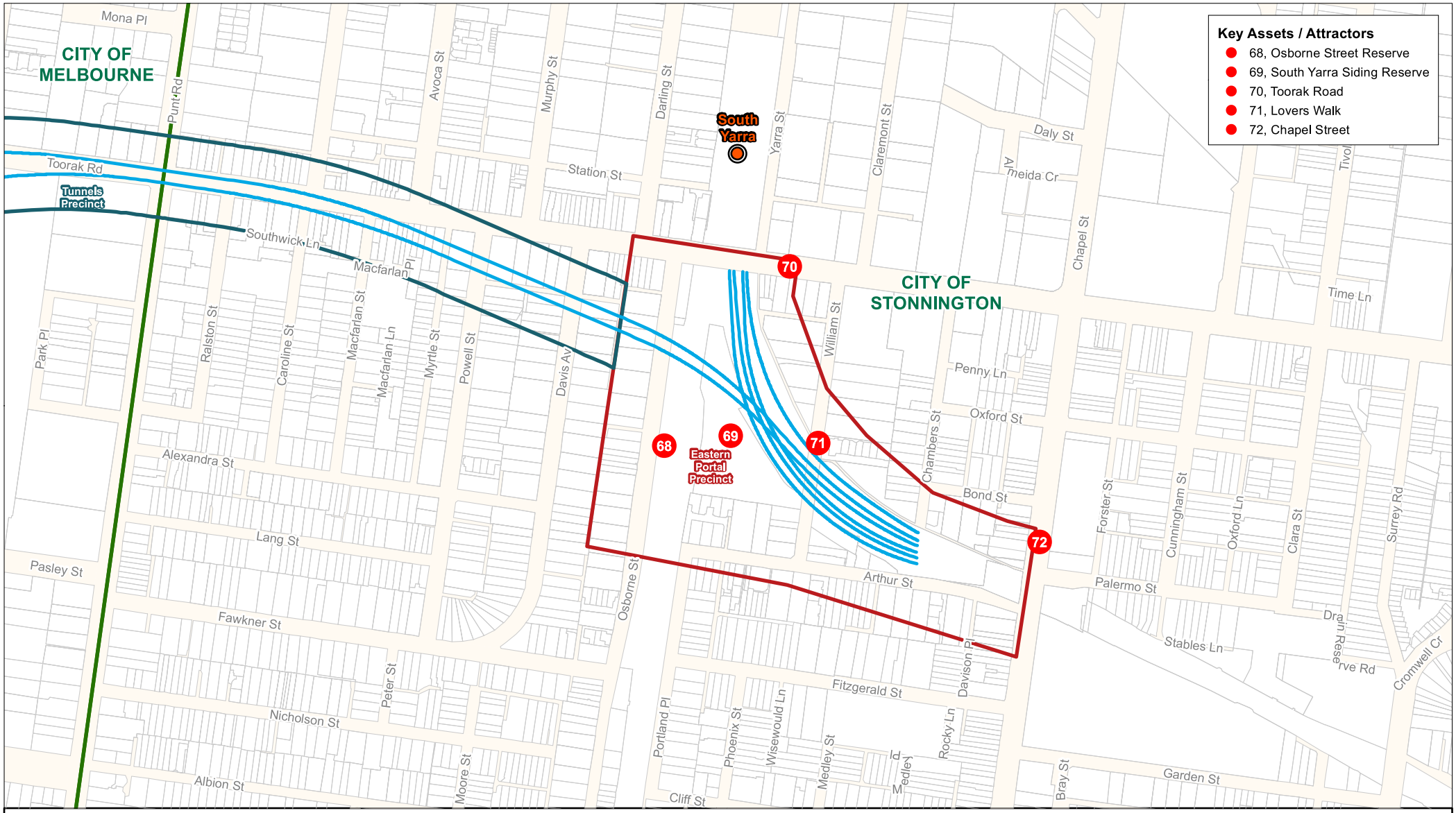


Figure 13-3 Eastern portal key attractors

13.3 Key Issues

As identified in the risk assessment (Table 6-1), the key issues associated with the Concept Design are identified in Table 13-2 w.

Table 13-2 Key issues associated with the Concept Design

Issue	Description	Risk no.
Design		
Possible construction activities inhibit future planning for households	Residential property owners subject to acquisition or in proximity to construction areas put on hold or reconsider their plans for their properties.	SC001
Project varies from Concept Design	Community opposition to the final design due to differences from the Concept Design on which the community were consulted.	SC002
Construction		
Construction activities inhibit access to residences	Reduced or loss of access to residences due to traffic management or construction activities.	SC005
Construction activities alter existing community access patterns	Construction activities act as a barrier to recreational assets or cause social severance diminishing community networks.	SC007
Construction activities result in a loss of amenity for residents	Construction activities impact on the amenity of households diminishing their ability to enjoy their dwelling or use it as they do currently.	SC009
Truck movements alter existing community access patterns	Truck movements and changes to local access sever existing community networks and disrupt access patterns particularly for families with young children, those with mobility impairments or the elderly.	SC017
Construction activities located within open spaces or recreation areas used for passive recreation	Construction activities in South Yarra Siding Reserve and Osborne Reserve displace passive recreation in an area with limited alternatives, reducing recreational opportunities for the community.	SC019
Construction workforce demand for parking could result in a reduction in parking available for residents, workers or other visitors to the area	Loss of access to community facilities, recreational spaces or severance of social networks.	SC026
Truck movements in proximity to residential areas	Truck movements impact on residential amenity.	SC027
Acquisition of seven dwellings in the eastern portal precinct	Displacement of two (2) households (the remaining five (5) households are vacant or proposed for multi-unit developments) and diminishment of networks within the surrounding community.	SC031

Issue	Description	Risk no.
Construction and operation		
Placement of above ground infrastructure impacts on the ongoing amenity for residents	The placement of project infrastructure such as ventilation shafts or noise walls has an ongoing impact on the amenity of households.	SC044
	Acoustic treatments such as noise walls discourage people from using Lovers Walk or result in a perceived reduction of safety for users of the walkway.	SC045

13.4 Benefits and Opportunities

Table 13-3 provides the benefits and opportunities associated with each part of the Concept Design.

Table 13-3 Benefits and opportunities associated with the eastern portal

Benefits	Opportunities
Increased number of trains traveling on the Frankston and Sandringham lines would make it easier for South Yarra residents to access wider Melbourne	• Opportunity to provide an improved pedestrian linkage between Toorak Road and South Yarra Siding Reserve • Opportunity to enhance the operation and lay out of South Yarra Siding Reserve during reinstatement • Opportunity to improve Osborne Street Reserve during reinstatement and install infrastructure that better reflects community needs including the construction of a new bridge accessing the South Yarra Siding Reserve from Osborne Street • Opportunity to improve the perceived safety of Lovers Walk by improving passive surveillance and improving the interface with adjoining streets and buildings • Opportunity to offset potential impacts through working with other agencies to improve the operation South Yarra station or Toorak Road.

13.5 Impact Assessment

The following draft EES evaluation objectives and assessment criteria are relevant to this assessment.

Table 13-4 EES evaluation objectives and assessment criteria

Draft EES evaluation objectives	Assessment Criteria	Chapter reference
Social, community, land use and business: To manage effects on the social fabric of the community in the area of the project, including with regard to land use changes, community cohesion, business functionality and access to services and facilities, especially during the construction phase. **Landscape, visual and recreational values:** To avoid or minimise adverse effects on landscape, visual amenity and recreational values as far as practicable.	Minimise impacts to private residential property owners and occupiers.	13.5.1
	Minimise impacts on social infrastructure such as educational, health, religious and sporting facilities.	N/A
	Maintain community accessibility and avoid social severance.	13.5.1
	Achieve consistency with community values.	13.5.1
	Minimise impacts on, and enhance amenity for residents and the community and maintain perceptions of safety during the construction phase.	13.5.1
	Minimise impacts on valued places, including public open space and recreation reserves.	13.5.1

13.5.1 Eastern Portal

13.5.1.1 Minimise impacts to private residential property owners and occupiers

The Concept Design avoids property acquisition where possible but requires the acquisition of seven dwellings. Of these, two are occupied by families with connections to the local community and intentions to live in the area longer term. Of the remaining five dwellings, two are tenanted with plans for multiunit developments. The remaining three are vacant. The impact of this acquisition would be reduced by taking a case management approach to each household, the provision of support to assist with the transition and the offer of early purchase for affected households

Pending decisions on the construction method, eight dwellings on William Street may lose vehicular access to their properties due to temporary occupation of their driveways. The severity of this potential impact may be diminished for some households within walking distance of their wider social network or the facilities they currently use. However, this would still be an issue for households in which residents have mobility impairments, or other characteristics that make them dependent on private vehicles. This impact could be reduced through early engagement with these households, appropriate traffic management and making available the option of relocation for households likely to experience a sustained loss of access.

Uncertainty during the planning and initial construction stages would also likely result in some households in proximity to the construction area putting on hold or reconsidering their plans for their properties

13.5.1.2 Maintain community accessibility and avoid social severance

Properties on Osborne, William and Arthur Streets may temporarily lose local access during construction through the loss of the William Street Bridge or construction activities that preclude access to properties. The cumulative potential impact of reduced local access with additional truck movements on the local road network could lead to social severance if people are unable to access their wider social networks or social infrastructure. The severity of this potential impact may be diminished for some households within walking distance of their wider social network or the facilities they currently use. However, this would still be an issue for households in which residents have mobility impairments, or other characteristics that make them dependent on private vehicles. This impact could be reduced through early engagement with these households, appropriate traffic management and making available the option of relocation for households likely to experience a sustained loss of access

The loss of Lovers Walk during construction may also impact on the local connectivity. However, there are alternative pedestrian paths available in the precinct.

Losing access to the South Yarra Siding Reserve risks creating social severance, as the community would lose a key meeting point. This would have a greater impact on the elderly or those with a mobility impairment who may not be able to travel to the alternative off leash dog areas or would do so less often.

Construction workforce demand for parking could also result in a reduction in parking available for residents, workers or other visitors to the area if not managed appropriately.

During planning, the rerouting of the Cranbourne and Pakenham lines from South Yarra Station to the new tunnels may be perceived to impact on community access. However, the actual impact on access would likely be minimal as train users adapt and incorporate the need to interchange into their normal travel patterns.

13.5.1.3 Achieve consistency with community values

The Concept Design is likely to be inconsistent with local community aspirations for a connection to the new rail line to be provided at South Yarra. This may change should the community understand the likely social impacts that would be caused by construction of a new station (e.g. property acquisition and potential impacts on valued places such as Chapel Street). However, construction in this precinct is likely to be perceived by the community as inequitable with an expectation that the Concept Design would deliver limited if any benefit but potential significant construction impacts.

13.5.1.4 Minimise impacts on valued places, including public open space and recreation reserves

During construction Lovers Walk, South Yarra Siding Reserve and Osborne Street Reserve would be heavily modified and inaccessible from mid-2018 to mid-2013. The South Yarra Siding Reserve is an important asset for the local community with limited alternatives locally (the nearest being Fawkner Park, Como Park or Rockley Gardens). Ongoing there would be noise walls placed on the eastern boundary of the Reserve. Pending the nature of reinstatement, this could enhance the function and appearance of this reserve.

Lovers Walk would also be significantly altered during construction with access constrained. Ongoing it would have noise walls installed and vegetation removed, which could enhance or detract from its perceived sense of place.

Osborne Street Reserve would also host ventilation and access shafts restricting future uses of the northern extent of this park. While the Osborne Street Reserve is not highly utilised the adjoining community values as a vegetated screen from the rail corridor. Pending the final design, the reinstatement of the reserve could either diminish or enhance it for the adjoining community.

The social impacts associated with changes to these valued places can be managed through engagement with the affected community during reinstatement planning to understand preferences and through the application of appropriate landscaping and treatments for above ground infrastructure.

13.5.1.5 Minimise impacts on, and enhance amenity for residents and the community and maintain perceptions of safety during the construction phase

During construction, residents adjoining South Yarra Siding Reserve and Lovers Walk would experience an improvement in amenity with acoustic treatments likely to reduce background noise from rail operations (discussed further in Technical Appendix I *Noise and Vibration*). However, they would experience a sustained loss of visual amenity with the placement of noise walls, loss of vegetation and construction activities. The use of Osborne, William and Arthur Streets for construction traffic is also likely to have a potential amenity impact for residents living on these streets. A large number of local residents, such as retirees, would probably be home during the day increasing the severity of this impact.

While amelioration treatments such as hoardings and the retention of trees (where possible) would be used to reduce visual impacts (discussed further in Technical Appendix L *Landscape and Visual*), this would still be amenity impacts associated with construction traffic traveling on quite local roads. The loss of vegetation is also likely to be of concern to the community given the limited availability of alternative vegetated parkland in proximity to South Yarra Siding Reserve.

The interface between users of the precinct and construction activities could be perceived to impact on safety. Particularly vulnerable to this are pedestrians under the influence of alcohol or other drugs leaving licenced venues such as bars or nightclubs, those with mobility impairments or children. It is likely with appropriate traffic management and engagement with the local community and facilities that these concerns could be addressed.

The potential cumulative impact of these activities would potentially increase when considered both against the likely level of private development in the area and the project activities in Fawkner Park. However, with appropriate coordination with other proponents, the severity of this impact could be reduced.

13.5.2 Early Works

Early works could have a short-term impact on local access and community amenity. Works that potentially impact the Osborne Street and South Yarra Siding Reserves also have the potential to create concern amongst the adjoining community. However, the potential impacts associated with these works could be reduced with appropriate mitigation and communication.

13.5.3 Residual Risks

With the mitigation proposed in Section 13.6 the residual risks associated with the impacts identified above are of medium significance (see Section 6).

13.6 Environmental Performance Requirements

Table 13-5 provides the recommended Environmental Performance Requirements and proposed mitigation measures to address the social impacts specific to this precinct. In some instances, individual performance requirements and mitigation measures have been used manage multiple impacts. Where feasible these are consolidated in Table 13-5, however, there are instances where requirements or mitigation need to be repeated for different impacts.

The risk assessment in Section 6 applies the mitigation detailed below to the initial risks to determine the residual risks for the project.

Table 13-5 Environmental Performance Requirements for the precinct

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no.
Dwellings	Residential property owners subject to acquisition or in proximity to construction areas put on hold or reconsider their plans for their properties	Prior to main works or shaft construction, develop and implement a community and business involvement plan to engage potentially affected stakeholders and advise them of the planned construction activities and project progress. Reduce the disruption to residences from direct acquisition or temporary occupation. Prior to main works or shaft construction in areas affected, develop a relocation management framework that allows for a uniform approach across the project for the voluntary (temporary) relocation of households subject to: • Construction activities likely to unduly affect their amenity (e.g. out of hours works or sustained loss of amenity	• Engage landholders during the planning, design and implementation stages on the construction method, project design and how this would affect their property.	SC001
	Displacement of two households and diminishment of networks within the immediate community		• Utilise a case management approach to manage all Project interactions with affected landholders • Appoint a social worker or equivalent to assist households make the transition • Provide a central point of contact for all affected landholders and tenants • Consider the relative vulnerability of households (e.g. young families, those with mobility impairments or the elderly) and consider what additional assistance is needed to assist with relocation • Purchase properties early, where possible and requested by the landowner • Acquire part of properties, where possible and requested by the landowner.	SC031
	Reduced or loss of access to residences due to traffic management or construction activities		• Communicate alternative access methods to the community in advance of works in a manner consistent with MMRA's Community and Stakeholder Engagement Plan • Ensure that the relevant sub plan allows for existing pedestrian access patterns and considers the needs of vulnerable people such as children and those with	SC005

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no.
Dwellings	Construction activities impact on the amenity of households diminishing their ability to enjoy their dwelling or use it as they do currently	during the day for shift workers) • Loss of access. Develop and implement a transport management plan(s) in consultation with the relevant road management authorities to minimise disruption to traffic, car parking, pedestrian and bicycle movements during construction. Develop and implement measures to minimise light spillage during construction to protect the amenity of adjacent neighbourhoods, parks and community facilities.	mobility impairments • Develop appropriate community information tools – website, on site boards, brochures etc. to update community on changed access arrangements • Develop a relocation management framework that allows for a uniform approach across the project • Consider and incorporate the following into this framework: – Provision for the voluntary relocation of households subject to: ▪ Construction activities likely to unduly affect their amenity (e.g. out of hours works or sustained loss of amenity during the day for shift workers) ▪ Loss of access – Providing options suitable to the duration of relocation, for example: ▪ Use of hotels / motels for short term disruptions ▪ Use of equivalent housing for longer term relocations ▪ Utilise truck routes that reduce the number of dwellings impacted by truck movements • Design construction work sites in proximity to residential areas to minimise the number of trucks that need to reverse • Avoid parking or idling construction vehicles in proximity to dwellings outside of normal working hours • Use reversing beepers that minimise disturbance on adjoining properties • Ensure landholders adjoining construction zones are consulted on the treatments applied to noise walls, sheds and others structures • Utilise a complaints management system for responding to all community complaints or enquiries.	SC009
	Truck movements impact on residential amenity			SC017

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no.
Community values	Community opposition to the final design due to differences from the Concept Design on which the community were consulted	Prior to main works or shaft construction, develop and implement a community and business involvement plan to engage potentially affected stakeholders and advise them of the planned construction activities and project progress Develop and implement a traffic management plan(s) in consultation with the relevant road management authorities to minimise disruption to traffic, car parking, pedestrian and bicycle movements during construction	• Demonstrate that community feedback is incorporated in the design and the design requirements have been made clear to the community • Demonstrate to the community and key stakeholders how the design aligns with the Concept Design and community feedback • Where the design is potentially inconsistent with community feedback, explain the rationale and anticipated outcomes of the design change • Consult with affected communities on design changes likely to be of public interest prior to finalisation.	SC002
Social infrastructure	Construction activities act as a barrier to recreational assets or cause social severance diminishing community networks		• Consult with managers of key facilities so that impacts on their operations and wellbeing of their users are minimised and notification timeframes agreed • Provide advance warning of out of hours works and consult closely with the institutional stakeholders during their planning to determine times that must be avoided • Provide a forum in which key facilities can provide feedback on the construction approach • Communicate alternative access methods to the community in advance of works in a manner consistent with MMRA's Community and Stakeholder Engagement Plan • Ensure that the relevant sub plan allows for existing pedestrian access patterns and considers the needs of vulnerable people such as children and those with mobility impairments • Develop appropriate community information tools – website, on site boards, brochures etc. to update community on changed access arrangements • Utilise a complaints management system for responding to all community complaints or enquiries.	SC007

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no.
Access patterns	Truck movements and changes to local access sever existing community networks and disrupt access patterns particularly for families with young children, those with mobility impairments or the elderly	Prior to main works or shaft construction, develop and implement a community and business involvement plan to engage potentially affected stakeholders and advise them of the planned construction activities and project progress. Develop and implement a traffic management plan(s) in consultation with the relevant road management authorities to minimise disruption to traffic, car parking, pedestrian and bicycle movements during construction. In consultation with key stakeholders and in accordance with the Urban Design Strategy, relevant statutory approvals and other relevant requirements, re-establish sites impacted by construction works.	• Communicate alternative access methods to the community in advance of works in a manner consistent with MMRA's Community and Stakeholder Engagement Plan • Ensure that the relevant sub plan allows for existing pedestrian access patterns and considers the needs of vulnerable people such as children and those with mobility impairments • Develop appropriate community information tools – website, on site boards, brochures etc. to update community on changed access arrangements.	SC017
Public parking	Construction workforce demand for parking could result in a reduction in parking available for residents, workers or other visitors to the area		• Target of no net loss of public parking outside the construction zone • Management of workforce car parking to include subcontractors.	SC026
South Yarra Siding Reserve	Construction activities in South Yarra Siding Reserve and Osborne Reserve displace passive recreation in an area with limited alternatives, reducing recreational opportunities for the community		• Consult early with open space users on project timelines and likely impacts • Provide a mechanism within the sub plan governing reinstatement to consider community feedback in consultation with the land manager.	SC019

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no.
Lovers Walk and South Yarra Siding Reserve	The placement of project infrastructure such as ventilation shafts or noise walls has an ongoing impact on the amenity of households	Prior to main works or shaft construction, develop and implement a community and business involvement plan to engage potentially affected stakeholders and advise them of the planned construction activities and project progress. In consultation with key stakeholders and in accordance with the Urban Design Strategy, relevant statutory approvals and other relevant requirements, re-establish sites impacted by construction works. Design permanent and temporary works in consultation with local councils and the Office of Victorian Government Architect to comply with the MMRA Urban Design Strategy. The design shall avoid or minimise visual impacts on sensitive receptors and maintain broader landscape character values.	• Consistent with the Community and Stakeholder Engagement Plan, ensure landholders adjoining construction zones are consulted on the treatments applied to noise walls, sheds and others structures • Provide a mechanism within the sub plan governing reinstatement to consider community feedback in consultation with the land manager.	SC044
	Acoustic treatments such as noise walls discourage people from using Lovers Walk or result in a perceived reduction of safety for users of the walkway			SC045

14 Precinct 9: Western Turnback

14.1 Project Components

The western turnback would enable excess trains to terminate at West Footscray and return to the CBD before continuing back to Cranbourne/Pakenham.

The western turnback would require the construction of a third passenger platform and track at West Footscray station. While it would require modifications to the existing concourse no additional works are anticipated outside the rail corridor. Passengers at West Footscray would be able to board empty services turning back towards the city.

14.2 Existing Conditions

The western turnback would be located in the suburb of Footscray within the City of Maribyrnong.

14.2.1 Adjoining Community

The western turnback would be located within the rail corridor, adjacent to the existing West Footscray station in Melbourne's western suburbs (Figure 14-1, Figure 14-2 and Figure 14-3). The area surrounding West Footscray station is set back from the rail corridor and predominantly residential to the north, south and east with an industrial precinct to the south west of the station. Whitten Oval and its associated facilities are located directly north of the station. The housing in the area was primarily built in the late 19th and early 20th centuries with the exception of a new development north west of the station precinct, which is comprised of townhouses and smaller parks.

14.2.2 Key Social Assets and Attractors

Table 14-1 Key social assets and attractors[8] in the western turnback precinct

Asset	Description
Whitten Oval, Ref 05, Figure 14-4	Whitten Oval is located in Barkly Street, West Footscray. The recently redeveloped facility includes an elite learning centre, a child care centre, a community sports hall, a café; administration and office facilities as well as public and tenanted spaces (http://foreverfoundation.linux.predelegation.com/?page_id=24).
Potter's House Christian Church, Ref 04, Figure 14-4	Located on Cross street, the church is part of the Christian Fellowship Ministries. (http://www.footscraychurch.com/About_Us.html).
Central Australian College, Ref 03, Figure 14-4	CAC is a registered training organisation (RTO) that runs courses in automotive technology, management, business and marketing (http://cac.vic.edu.au/).
Cross Street shared bike path, Ref 02, Figure 14-4	A bike and pedestrian path that connects the Buckley Street on road path and the Sunshine rail trail.
Lions Park, Ref 01, Figure 14-4	Lions Park is located off Russell Street on the northern side of the rail corridor. The park contains a new children's playground.

[8] This includes social, recreational and community infrastructure as well as known valued places.

Figure 14-1 Location of the new train platform looking east

Figure 14-2 Location of the new platform looking west

Figure 14-3 Looking west towards proposed platform extension

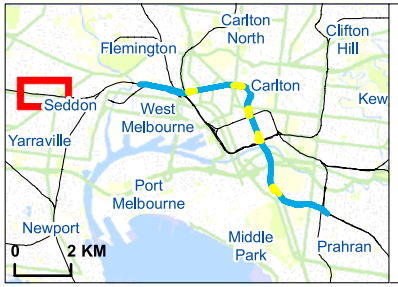
Legend

- Key Attractor
- Existing Rail Station
- Proposed Alignment
- Proposed Station Footprint
- Watercourse
- Local Government Area (LGA)
- Cadastre

Environmental and Planning Precincts

- Western Turnback Precinct

Map 1 of 9



Data Sources:
Proposed Infrastructure: AJM 2016
Contains Vicmap Information
© State of Victoria 2015
Aerial photo (DELWP, February 2015)

MELBOURNE METRO RAIL AUTHORITY

aurecon JACOBS Mott MacDonald AJM Joint Venture GRIMSHAW

Melbourne Metro Rail Project

Title:
Social Impact Assessment - Key Attractors

Drawing Number:			Revision:
MMR-AJM-UGAA-MP-NR-500238			P1
Drawn By:	Approved By:	Date:	Map Size:
A. Davy	M. McKeand	4/05/2016	A4

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Metres

Figure 14-4 Western turnback (West Footscray) precinct key attractors

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14.3 Key Issues

As identified in the risk assessment (Table 6-1), Table 14-2 outlines the key issues associated with the western turnback precinct.

Table 14-2 Key issues associated with the western turnback

Concept Design	Issue	Risk no.
Design		
Project varies from Concept Design	Community opposition to the final design due to differences from the Concept Design on which the community were consulted.	SC002
Construction		
Construction activities alter existing community access patterns	Construction activities act as a barrier to social infrastructure, recreational assets or cause social severance diminishing community networks.	SC008

14.4 Benefits and Opportunities

Table 14-3 outlines the benefits of the Concept Design.

Table 14-3 Benefits and opportunities associated with the western turnback

Benefits	Opportunities
• Increased number of services departing from West Footscray station • Increased number of empty trains originating at the station, meaning more space and seats for commuters	• None identified.

14.5 Impact Assessment

The following draft EES evaluation objectives and assessment criteria are relevant to this assessment.

Table 14-4 EES evaluation objectives and assessment criteria

Draft EES evaluation objectives	Assessment Criteria	Chapter reference
Social, community, land use and business: To manage effects on the social fabric of the community in the area of the project, including with regard to land use changes, community cohesion, business functionality and access to services and facilities, especially during the construction phase.	Minimise impacts to private residential property owners and occupiers.	N/A
	Minimise impacts on social infrastructure such as educational, health, religious and sporting facilities.	N/A
	Maintain community accessibility and avoid social severance.	14.5.1
	Achieve consistency with community values.	N/A
Landscape, visual and recreational values: To avoid or minimise adverse effects on landscape, visual amenity and recreational values as far as practicable.	Minimise impacts on, and enhance amenity for residents and the community and maintain perceptions of safety during the construction phase.	N/A
	Minimise impacts on valued places, including public open space and recreation reserves.	N/A

14.5.1 Western Turnback

14.5.1.1 Maintain community accessibility and avoid social severance

The western turnback largely avoids adverse social impacts. However, construction movements to and from the rail corridor could be of concern to the community, especially where they cross the Cross Street shared path. However, with appropriate traffic management and communication this impact can be minimised.

14.5.2 Residual Risks

With the mitigation proposed in Section 14.6 the residual risks associated with the impacts identified above are of low significance (see Section 6).

14.6 Environmental Performance Requirements

Table 14-5 provides the recommended Environmental Performance Requirements and proposed mitigation measures to address the social impacts specific to this precinct. In some instances, individual performance requirements and mitigation measures have been used manage multiple impacts. Where feasible these are consolidated in Table 14-5, however, there are instances where requirements or mitigation need to be repeated for different impacts.

The risk assessment in Section 6 applies the mitigation detailed below to the initial risks to determine the residual risks for the project.

Table 14-5 Environmental Performance Requirements for the precinct

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no.
Community values	Community opposition to the final design due to differences from the Concept Design on which the community were consulted	Prior to main works or shaft construction, develop and implement a community and business involvement plan to engage potentially affected stakeholders and advise them of the planned construction activities and project progress.	• Demonstrate that community feedback is incorporated in the design and the design requirements have been made clear to the community • Demonstrate to the community and key stakeholders how the design aligns with the Concept Design and community feedback • Where the design is potentially inconsistent with community feedback, explain the rationale and anticipated outcomes of the design change • Consult with affected communities on design changes likely to be of public interest prior to finalisation.	SC002
Social infrastructure	Construction activities act as a barrier to social infrastructure, recreational assets or cause social severance diminishing community networks	Develop and implement a transport management plan(s) in consultation with the relevant road management authorities to minimise disruption to traffic, car parking, pedestrian and bicycle movements during construction.	• Communicate alternative access methods to the community in advance of works in a manner consistent with MMRA's Community and Stakeholder Engagement Plan • Ensure that the relevant sub plan allows for existing pedestrian access patterns and considers the needs of vulnerable people such as children and those with mobility impairments • Develop appropriate community information tools – website, on site boards, brochures etc. to update community on changed access arrangements.	SC008

15 Environmental Performance Requirements

This section provides a comprehensive list of the recommended Environmental Performance Requirements and proposed mitigation measures identified as a result of this impact assessment. The following tables provide the Environmental Performance Requirements that apply to each precinct, linked to the relevant draft EES evaluation objective and associated risks identified in the risk assessment.

15.1 Tunnels

Table 15-1 Environmental Performance Requirements for the Tunnels Precinct

Draft EES evaluation objective	Impact	Environmental Performance Requirements	Proposed mitigation measures	Timing	Risk no.
Social, community, land use and business - To manage effects on the social fabric of the community in the area of the project, including with regard to land use changes, community cohesion, business functionality and access to services and facilities, especially during the construction phase	Construction activities impact on the amenity of households diminishing their ability to enjoy their dwelling or use it as they do currently.	• Prior to main works or shaft construction in areas affected, develop a relocation management framework that allows for a uniform approach across the project for the voluntary (temporary) relocation of households subject to: – Construction activities likely to unduly affect their amenity (e.g. out of hours works or sustained loss of amenity during the day for shift workers) – Loss of access. • Develop and implement a transport management plan(s) in consultation with the relevant road management authorities to minimise disruption to traffic, car parking, pedestrian and bicycle movements during construction, including but not limited to: – Management of any temporary or permanent full or partial closure of traffic lanes including (but not limited to):	• Develop a relocation management framework that allows for a uniform approach across the project. Consider and incorporate the following into this framework: – Provision for the voluntary relocation of households subject to: ▪ Construction activities likely to unduly affect their amenity (e.g. out of hours works or sustained loss of amenity during the day for shift workers) ▪ Loss of access. • Providing options suitable to the duration of relocation, for example: – Use of hotels / motels for short term disruptions – Use of equivalent housing for longer term relocations • Utilise truck routes that reduce the number of dwellings impacted by truck movements.	Preconstruction and construction	SC009
	Truck movements impact on residential amenity.				SC027
	Residential property owners in proximity to construction areas put on hold or reconsider their plans for their properties.				

Draft EES evaluation objective	Impact	Environmental Performance Requirements	Proposed mitigation measures	Timing	Risk no.
	Strata acquisition creates concern and anxiety about vibration and subsidence amongst affected property owners and tenants.	▪ Childers Street, Kensington ▪ Royal Parade, Grattan Street and Barry Street, Parkville ▪ Franklin Street, A'Beckett Street and Little La Trobe Street at CBD North ▪ Flinders Street and Flinders Lane at CBD South ▪ Linlithgow Avenue, Melbourne ▪ St Kilda Road, Domain Road, Albert Road at Domain ▪ Toorak Road at Fawkner Park ▪ Osborne Street, William Street in South Yarra • Prior to main works or shaft construction, develop and implement a community and business involvement plan to engage potentially affected stakeholders and advise them of the planned construction activities and project progress. The plan must include: – Measures to minimise impacts to the development and/or operation of existing facilities – Measures for providing advance notice of significant milestones, changed traffic conditions, periods of predicted high noise and vibration activities – Process for registering and management of complaints – Measures to address any other matters	• Design construction work sites in proximity to residential areas to minimise the number of trucks that need to reverse • Avoid parking or idling construction vehicles in proximity to dwellings outside of normal working hours • Use reversing beepers that minimise disturbance on adjoining properties • Utilise a complaints management system for responding to all community complaints or enquiries • Engage landholders adjoining the project alignment during the planning, design and implementation stages on the construction method, project design and how this would affect their property • Undertake pre-tunnelling condition surveys and make the results available to affected property owners on request • Demonstrate that community feedback is incorporated in the design and the design requirements have been made clear to the community • Demonstrate to the community and key stakeholders how the design aligns with the Concept Design and community feedback • Where the design is potentially inconsistent with community feedback, explain the rationale and anticipated outcomes of the design change • Consult with affected communities on design changes likely to be of public interest prior to	Preconstruction and construction	SC001 SC003

Draft EES evaluation objective	Impact	Environmental Performance Requirements	Proposed mitigation measures	Timing	Risk no.
	Community opposition to the final design due to differences from the Concept Design on which the community were consulted.	which are of concern or interest to them. The plan would consider each precinct and station location in detail. Stakeholders to be considered in the plan include (but are not limited to): – Municipalities – Potentially affected residents – Potentially affected businesses – Recreation, sporting and community groups and facilities • Develop and implement measures to minimise light spillage during construction to protect the amenity of adjacent neighbourhoods, parks and community facilities. • Prior to main works or shaft construction in areas affected, develop a relocation management framework that allows for a uniform approach across the project for the voluntary (temporary) relocation of households subject to: – Construction activities likely to unduly affect their amenity (e.g. out of hours works or sustained loss of amenity during the day for shift workers) – Loss of access. • Develop a relocation strategy for sports clubs and other formal users of directly impacted recreational facilities • Provision of car parking for construction	finalisation • Communicate alternative access methods to the community in advance of works in a manner consistent with MMRA's Community and Stakeholder Engagement Plan • Ensure that the relevant sub plan allows for existing pedestrian access patterns and considers the needs of vulnerable people such as children and those with mobility impairments • Develop appropriate community information tools – website, on site boards, brochures etc. to update community on changed access arrangements • Consult early with open space users on project timelines and likely impacts • Develop a relocation strategy to help users of the Fawkner Park tennis centre identify alternative facilities (where available) they could use during construction • Avoid locating construction activities likely to cause community concern such as spoil management adjacent to the Child Care Centre, Kindergarten and the South Yarra Senior Citizens Centre • Relocate the Fawkner Park Childcare Centre, kindergarten and Senior Citizens Centre locally for the duration of the works • Avoid truck movements during peak pick up and drop off times for these facilities • Consider and incorporate the following into the	Preconstruction and construction	SC002
	Construction activities act as a barrier to social infrastructure, recreational assets or cause social severance diminishing community networks.			Construction	SC006
	Construction activities displace organised sports at the Fawkner Park Tennis Centre. Limited local alternatives for these facilities reduces recreational opportunities for the community.			Preconstruction	SC024

Draft EES evaluation objective	Impact	Environmental Performance Requirements	Proposed mitigation measures	Timing	Risk no.
	Sustained amenity impacts affects the ability of staff or users to continue to use these facilities.	workers where possible • Work with relevant local councils to plan for and coordinate with key stakeholders during major public events. Develop and implement measures for construction and operation of Melbourne Metro that aim to minimise impacts to the development and/or operation of existing land uses, including: – Limiting the permanent change of use within existing public open space – Minimising footprints of construction sites and permanent infrastructure on public land – Minimising impacts to existing public open spaces and recreational facilities and the users of these facilities, including but not limited, to JJ Holland Park, University Square, City Baths, City Square, Federation Square, the Shrine of Remembrance and the Shrine Reserve, Domain Parklands, Edmund Herring Oval, Fawkner Park and Albert Road Reserve – Such measures must be developed in consultation with affected land managers for public land. • Design permanent and temporary works in consultation with local councils and the Office of Victorian Government Architect to comply with the MMRA Urban Design Strategy. The design shall avoid or minimise visual impacts on sensitive receptors and maintain broader	traffic management plan: – target of no net loss of public parking outside the construction zone – management of workforce car parking to include subcontractors. • Consult early with open space users on project timelines and likely impacts • Provide a mechanism within the sub plan governing reinstatement to consider community feedback in consultation with the land manager • Demonstrate to the satisfaction of MMRA that construction compounds and other footprints are optimised to reduce their footprint across the corridor • Design access shafts so that they respect they respect their park settings • Demonstrate to the satisfaction of MMRA that ground improvement works are optimised to reduce their footprint • Avoid ground improvement techniques that would preclude the reestablishment of trees • Provide a mechanism within the sub plan governing reinstatement to consider community feedback in consultation with the land manager • Demonstrate to the satisfaction of MMRA that construction compounds and other footprints are optimised to reduce their footprint across the corridor • Minimise the footprint and height of the access	Preconstruction and construction	SC010
	Construction activities in proximity to areas frequented by children could result in a perceived diminishment in public safety.				SC016
	Construction workforce demand for parking could result in a reduction in parking available for residents, workers or other visitors to the area.			Construction	SC026

Draft EES evaluation objective	Impact	Environmental Performance Requirements	Proposed mitigation measures	Timing	Risk no.
	Construction activities in Fawkner Park displace passive recreation in an area with limited alternatives, reducing recreational opportunities for the community.	landscape character values • Reinstate quality soils to sufficient volumes to support long-term viable growth of replacement trees • In consultation with key stakeholders and in accordance with the Urban Design Strategy, relevant statutory approvals and other relevant requirements, re-establish sites impacted by construction works, including but not limited to: – Childers Street, Kensington – JJ Holland Park – Royal Parade and Grattan Street, Parkville – The south western entrance of the proposed CBD South station – St Kilda Road boulevard – Edmund Herring Oval – Fawkner Park and Fawkner Park Tennis Facility – Osborne Street Reserve – South Yarra Siding Reserve – Lovers Walk – The South African Soldiers War Memorial. • Design permanent and temporary works in consultation with local councils and the Office of Victorian Government Architect to comply with the MMRA Urban Design Strategy. The design shall avoid or minimise visual impacts on sensitive receptors and maintain broader landscape character values	shaft and provide architectural treatments that enable it to better reflect the park setting • Provide a mechanism within the sub plan governing reinstatement to consider community feedback in consultation with the land manager • Demonstrate to the satisfaction of MMRA that construction compounds and other footprints are optimised to reduce their footprint across the corridor • Minimise the footprint and height of the access shaft and provide architectural treatments that enable it to better reflect the park setting	Preconstruction and construction	SC019
	Community concern about works within the park, particularly the impact on trees, paths and amenity				SC033
	Construction of the intervention shaft results in loss of an area used for passive recreation.				
	Construction of the intervention shaft in Fawkner Park is inconsistent with community expectations the placement of transport infrastructure in the park.				SC034

Draft EES evaluation objective	Impact	Environmental Performance Requirements	Proposed mitigation measures	Timing	Risk no.
	Community concern about the impact on this valued place and ongoing diminishment in the perceived value of this wooded parkland.			Construction	SC039
	The placement of and emergency access shaft is inconsistent with community aspirations for Domain Parklands. Parts of the community likely to be most impacted include those traveling on St Kilda Road in trams or by foot who value this part of the landscape.				SC041
	Placement of the intervention shaft in Queen Victoria Gardens is inconsistent with community expectations on the uses of this park.				SC040

15.2 Western Portal

Table 15-2 Environmental Performance Requirements for the western portal precinct

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Timing	Risk no.
Social, community, land use and business - To manage effects on the social fabric of the community in the area of the project, including with regard to land use changes, community cohesion, business functionality and access to services and facilities, especially during the construction phase	Community opposition to the final design due to differences from the Concept Design on which the community were consulted.	• Prior to main works or shaft construction, develop and implement a community and business involvement plan to engage potentially affected stakeholders and advise them of the planned construction activities and project progress. The required contents of this plan are included in Table 15-1 • Reduce the disruption to residences from direct acquisition or temporary occupation • Develop and implement measures to minimise light spillage during construction to protect the amenity of adjacent neighbourhoods, parks and community facilities • Prior to main works or shaft construction in areas affected, develop a relocation management framework that allows for a uniform approach across the project for the voluntary (temporary) relocation of households subject to: – Construction activities likely to unduly affect their amenity (e.g. out of hours works or sustained loss of amenity during the day for shift workers) – Loss of access. • Develop and implement a transport management plan(s) in consultation with the relevant road management authorities to minimise disruption to traffic, car parking, pedestrian and bicycle movements during construction, as per requirements listed in Table 15-1 • Provision of alternative routes for trucks accessing the 50 Lloyd Street Business	• Demonstrate that community feedback is incorporated in the design with design requirements have been made clear to the community • Where the design is potentially inconsistent with community feedback, explain the rationale and anticipated outcomes of the design change • Consult with affected communities on design changes likely to be of public interest prior to finalisation • Engage landholders during the planning, design and implementation stages on the construction method, project design and how this would affect their property • Utilise a case management approach to manage all Project interactions with affected landholders • Appoint a social worker or equivalent to assist households make the transition • Provide a central point of contact for all affected landholders and tenants • Consider the relative vulnerability of households (e.g. young families, those with mobility impairments or the elderly) and consider what additional assistance is needed to assist with relocation • Purchase properties early, where possible and requested by the landowner • Acquire part of properties, where possible and requested by the landowner • Utilise truck routes that reduce the number of dwellings impacted by truck movements	Preconstruction and construction	SC002
	Residential property owners subject to acquisition or in proximity to construction areas put on hold or reconsider their plans for their properties.				SC001

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Timing	Risk no.
	Displacement of households with strong ties to their community.	Estate, Kensington • Provision of alternate parking where possible to replace parking lost from Childers Street, Laurens Street, Grattan Street, Domain Road, St Kilda Road and Albert Road during construction and preventing parking at undesignated locations on local roads • Work with relevant local councils to plan for and coordinate with key stakeholders during major public events • Develop and implement measures for construction and operation of Melbourne Metro that aim to minimise impacts to the development and/or operation of existing land uses • Design permanent and temporary works in consultation with local councils and the Office of Victorian Government Architect to comply with the MMRA Urban Design Strategy. The design shall avoid or minimise visual impacts on sensitive receptors and maintain broader landscape character values, particularly in relation to public open space • In consultation with key stakeholders and in accordance with the Urban Design Strategy, relevant statutory approvals and other relevant requirements, re-establish sites impacted by construction works.	• Design construction work sites in proximity to residential areas to minimise the number of trucks that need to reverse • Avoid parking or idling construction vehicles in proximity to dwellings outside of normal working hours • Use reversing beepers that minimise disturbance on adjoining properties • Utilise a complaints management system for responding to all community complaints or enquiries • Consult with managers of key facilities so that impacts on their operations and wellbeing of their users are minimised and notification timeframes agreed • Provide advance warning of out of hours works and consult closely with the institutional stakeholders during their planning to determine times that must be avoided • Provide a forum in which key facilities can provide feedback on the construction approach • Communicate alternative access methods to the community in advance of works in a manner consistent with MMRA's Community and Stakeholder Engagement Plan • Ensure existing pedestrian access patterns are allowed for the needs of vulnerable people such as children and those with mobility impairments are considered	Preconstruction and construction	SC0028 SC0029
	Construction activities impact on the amenity of households diminishing their ability to enjoy their dwelling or use it as they do currently.				SC009
	Truck movements impact on residential amenity.			Construction	SC027
	Construction activities act as a barrier to social infrastructure, recreational assets or cause social severance diminishing community networks.			Preconstruction and construction	SC008
	Sustained amenity impacts on J.J. Holland Park				SC011

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Timing	Risk no.
	Truck movements and changes to local access sever existing community networks and disrupt access patterns particularly for families with young children, those with mobility impairments or the elderly.		• Develop appropriate community information tools – website, on site boards, brochures etc. to update community on changed access arrangements • Provide advance warning of out of hours works and consult closely with the institutional stakeholders during their planning to determine times that must be avoided • Provide a forum in which key facilities can provide feedback on the construction approach • Ensure that the relevant sub plan allows for existing pedestrian access patterns and considers the needs of vulnerable people such as children and those with mobility impairments • Develop appropriate community information tools – website, on site boards, brochures etc. to update community on changed access arrangements • Target of no net loss of public parking outside the construction zone • Management of workforce car parking to include subcontractors • Consult with landholders adjoining construction zones on the treatments applied to noise walls, sheds and others structures.	Construction	SC018
	Loss of access to community facilities, recreational spaces or severance of social networks.			Construction	SC026
	Acoustic treatments at the western portal such as noise walls impact on visual amenity or are otherwise inconsistent with community preferences.			Preconstruction and construction	SC043

15.3 Arden

Table 15-3 Environmental performance requirements for the Arden Precinct

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Timing	Risk no.
Social, community, land use and business - To manage effects on the social fabric of the community in the area of the project, including with regard to land use changes, community cohesion, business functionality and access to services and facilities, especially during the construction phase	Residential property owners subject to acquisition or in proximity to construction areas put on hold or reconsider their plans for their properties	• Prior to main works or shaft construction, develop and implement a community and business involvement plan to engage potentially affected stakeholders and advise them of the planned construction activities and project progress. The required contents of this plan are included in Table 15-1 • Develop and implement a transport management plan(s) in consultation with the relevant road management authorities to minimise disruption to traffic, car parking, pedestrian and bicycle movements during construction, as per details in Table 15-1	• Engage landholders during the planning, design and implementation stages on the construction method, project design and how this would affect their property • Demonstrate that community feedback is incorporated in the design and the design requirements have been made clear to the community • Demonstrate to the community and key stakeholders how the design aligns with the Concept Design and community feedback • Where the design is potentially inconsistent with community feedback, explain the rationale and anticipated outcomes of the design change • Consult with affected communities on design changes likely to be of public interest prior to finalisation • Communicate alternative access methods to the community in advance of works in a manner consistent with MMRA's Community and Stakeholder Engagement Plan • Develop appropriate community information tools – website, on site boards, brochures etc. to update community on changed access arrangements • Consult with managers of key facilities so that impacts on their operations and wellbeing of their users are minimised and notification timeframes agreed • Provide advance warning of out of hours works and consult closely with the institutional stakeholders during their planning to determine times that must be avoided	Preconstruction and construction	SC001
	Community opposition to the final design due to differences from the Concept Design on which the community were consulted			Preconstruction and construction	SC002
	Construction activities act as a barrier to social infrastructure, recreational assets or cause social severance diminishing community networks			Preconstruction and construction	SC008
	Sustained amenity impacts on North Melbourne Recreation Centre and Football Club			Preconstruction and construction	SC011

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Timing	Risk no.
	Construction workforce demand for parking could result in a reduction in parking available for residents, workers or other visitors to the area		• Provide a forum in which key facilities can provide feedback on the construction approach • Target of no net loss of public parking outside the construction zone • Management of workforce car parking to include subcontractors • Ensure that the relevant sub plan allows for existing pedestrian access patterns and considers the needs of vulnerable people such as children and those with mobility impairments.	Construction	SC026
	Truck movements and changes to local access sever existing community networks and disrupt access patterns particularly for families with young children, those with mobility impairments or the elderly			Construction	SC018

15.4 Parkville

Table 15-4 Environmental Performance Requirements for the Parkville Precinct

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Timing	Risk no.
Social, community, land use and business - To manage effects on the social fabric of the community in the area of the project, including with regard to land use changes, community cohesion, business functionality and access to services and facilities, especially during the construction phase	Community opposition to the final design due to differences from the Concept Design on which the community were consulted.	• Prior to main works or shaft construction, develop and implement a community and business involvement plan to engage potentially affected stakeholders and advise them of the planned construction activities and project progress. The required contents of this plan are included in Table 15-1 • Develop and implement a transport management plan(s) in consultation with the relevant road management authorities to minimise disruption to traffic, car parking, pedestrian and bicycle movements during construction, as per details in Table 15-1 • Design permanent and temporary works in consultation with local councils and the Office of Victorian Government Architect to comply with the MMRA Urban Design Strategy. The design shall avoid or minimise visual impacts on sensitive receptors and maintain broader landscape character values • Prior to main works or shaft construction commencing, work with the City of Melbourne to identify possible alternative areas of public open space for community use during the construction phase to minimise the impacts of loss of existing public open space that are to	• Demonstrate that community feedback is incorporated in the design and the design requirements have been made clear to the community • Demonstrate to the community and key stakeholders how the design aligns with the Concept Design and community feedback • Where the design is potentially inconsistent with community feedback, explain the rationale and anticipated outcomes of the design change • Consult with affected communities on design changes likely to be of public interest prior to finalisation • Communicate alternative access methods to the community in advance of works in a manner consistent with MMRA's Community and Stakeholder Engagement Plan • Ensure that the relevant sub plan allows for existing pedestrian access patterns and considers the needs of vulnerable people such as children and those with mobility impairments • Develop appropriate community information tools – website, on site boards, brochures etc. to update community on changed access	Preconstruction and construction	SC002
	Truck movements and changes to local access sever existing community networks and disrupt access patterns particularly for families with young children, those with mobility impairments or the elderly.			Preconstruction and construction	SC018
	Construction activities act as a barrier to social infrastructure or recreational assets.			Preconstruction and construction	SC006

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Timing	Risk no.
	Sustained amenity impacts on the University of Melbourne, Royal Melbourne Hospital and Peter Doherty Institute affects the ability of staff or users to continue to use these facilities.	be utilised as construction worksites • Work with relevant local councils to plan for and coordinate with key stakeholders during major public events • In consultation with key stakeholders and in accordance with the Urban Design Strategy, relevant statutory approvals and other relevant requirements, re-establish sites impacted by construction works • Develop and implement measures for construction and operation of Melbourne Metro that aim to minimise impacts to the development and/or operation of existing land uses • Prior to main works or shaft construction in areas affected, develop a relocation management framework that allows for a uniform approach across the project for the voluntary (temporary) relocation of households subject to: – Construction activities likely to unduly affect their amenity (e.g. out of hours works or sustained loss of amenity during the day for shift workers) – Loss of access. • Develop and implement measures to minimise light spillage during construction to protect the amenity of adjacent neighbourhoods, parks and community facilities.	arrangements • Consult with managers of key facilities so that impacts on their operations and wellbeing of their users are minimised and notification timeframes agreed • Provide advance warning of out of hours works and consult closely with the institutional stakeholders during their planning to determine times that must be avoided • Provide a forum in which key facilities can provide feedback on the construction approach • Communicate alternative access methods to the community in advance of works in a manner consistent with MMRA's Community and Stakeholder Engagement Plan • Utilise a complaints management system for responding to all community complaints or enquiries • Consult with managers of key facilities during the drafting of the CEMP and sub plans so that impacts on their operations and wellbeing of their users are minimised and notification timeframes agreed • Provide advance warning of out of hours works and consult closely with the institutional stakeholders during their planning to determine times that must be avoided • Provide a forum in which key facilities can provide feedback on the construction approach • Communicate alternative access methods to the community in advance of works in a manner	Preconstruction and construction	SC012
	Construction activities in University Square displace passive recreation in an area with limited alternatives, reducing recreational opportunities for the community.			Preconstruction and construction	SC019
	Construction workforce demand for parking could result in a reduction in parking available for residents, workers or other visitors to the area.			Construction	SC026

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Timing	Risk no.
	Changes to valued streetscapes or the loss of trees on St Kilda Road, Grattan Street, Royal Parade is of concern to a wide cross section of the community.		consistent with MMRA's Community and Stakeholder Engagement Plan • Consult early with open space users on project timelines and likely impacts • Develop a relocation strategy to help users identify alternative facilities (where available) they could use during construction • Target of no net loss of public parking outside the construction zone	Construction	SC035
	Construction activities impact on the amenity of households diminishing their ability to enjoy their dwelling or use it as they do currently.		• Management of workforce car parking to include subcontractors • Provide a mechanism within the sub plan governing reinstatement to incorporate community feedback in consultation with the land manager • Design construction work sites in proximity to residential areas to minimise the number of trucks that need to reverse • Avoid parking or idling construction vehicles in proximity to dwellings outside of normal working hours • Use reversing beepers that minimise disturbance on adjoining properties • Utilise a complaints management system for responding to all community complaints or enquiries • Engage landholders during the planning, design and implementation stages on the construction method, project design and how this would affect their property.		SC009

15.5 CBD

Table 15-5 Environmental Performance Requirements for the CBD Precincts

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Timing	Risk no.
Social, community, land use and business - To manage effects on the social fabric of the community in the area of the project, including with regard to land use changes, community cohesion, business functionality and access to services and facilities, especially during the construction phase	Truck movements impact on residential amenity.	• Reduce the disruption to residences from direct acquisition or temporary occupation • Prior to main works or shaft construction, develop and implement a community and business involvement plan to engage potentially affected stakeholders and advise them of the planned construction activities and project progress. The required contents of this plan are included in Table 15-1 • Develop and implement a transport management plan(s) in consultation with the relevant road management authorities to minimise disruption to traffic, car parking, pedestrian and bicycle movements during construction, as per details in Table 15-1 • Prior to main works or shaft construction in areas affected, develop a relocation management framework that allows for a uniform approach across the project for the voluntary (temporary) relocation of households subject to: – Construction activities likely to unduly affect their amenity (e.g. out of hours	• Acquire part of properties, where possible and requested by the landowner • Allow for existing pedestrian access patterns and considers the needs of vulnerable people such as children and those with mobility impairments • Allows for existing pedestrian access patterns and considers the needs of vulnerable people such as children and those with mobility impairments • Appoint a social worker or equivalent to assist households make the transition • Avoid parking or idling construction vehicles in proximity to dwellings outside of normal working hours • Communicate alternative access methods to the community in advance of works • Communicate alternative access methods to the community in advance of works in a manner consistent with MMRA's Community and Stakeholder Engagement Plan • Consider the relative vulnerability of households (e.g. young families, those with mobility impairments or the elderly) and consider what additional assistance is needed to assist with relocation • Consult early with open space users on project timelines and likely impacts	Preconstruction and construction	SC018
	Displacement of 49 mostly tenanted dwellings and diminishment of networks within the immediate community.				SC030

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Timing	Risk no.
	Residential property owners in proximity to construction areas put on hold or reconsider their plans for their properties.	works or sustained loss of amenity during the day for shift workers) – Loss of access. • Develop and implement measures to minimise light spillage during construction to protect the amenity of adjacent neighbourhoods, parks and community facilities • Prior to main works or shaft construction commencing, work with the City of Melbourne to identify possible alternative areas of public open space for community use during the construction phase to minimise the impacts of loss of existing public open space that are to be utilised as construction worksites • Work with relevant local councils to plan for and coordinate with key stakeholders during major public events • In consultation with key stakeholders and in accordance with the Urban	• Consult with affected communities during the mobilisation phase to explain and changes in anticipated impacts resulting from improvements in constructor's method • Consult with affected communities on design changes likely to be of public interest prior to finalisation • Consult with landholders adjoining construction zones on the treatments applied to noise walls, sheds and others structures • Consult with managers of key facilities during the drafting of the CEMP and sub plans so that impacts on their operations and wellbeing of their users are minimised and notification timeframes agreed		SC001
	Reduced or loss of access to residences due to traffic management or construction activities.		• Demonstrate that community feedback is incorporated in the design and the design requirements have been made clear to the community • Demonstrate to the community and key stakeholders how the design aligns with the Concept Design and community feedback • Design construction work sites in proximity to residential areas to minimise the number of trucks that need to	Construction	SC004

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Timing	Risk no.
	Construction activities impact on the amenity of households diminishing their ability to enjoy their dwelling or use it as they do currently	Design Strategy, relevant statutory approvals and other relevant requirements, re-establish sites impacted by construction works • In consultation with the City of Melbourne, develop a plan to utilise part of the Franklin Street road reserve for public open space post-construction. Plans must be in accordance with the Melbourne Metro Urban Design Strategy • Develop and implement measures for construction and operation of Melbourne Metro that aim to minimise impacts to the development and/or operation of existing land uses • Design permanent and temporary works in consultation with local councils and	reverse • Develop and implement a community and business involvement plan to appropriately engage potentially affected stakeholders as well as to provide information on the progress of design and construction activities such as significant milestones, changed traffic conditions and other matters which are of concern or interest to them • Develop appropriate community information tools – website, on site boards, brochures etc. to update community on changed access arrangements • Engage landholders adjoining the project alignment during the planning, design and implementation stages on the construction method, project design and how this would affect their property • Maintain access for residents carparks under the Westin • Management of workforce car parking to include		SC014 SC009

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Timing	Risk no.
	Community opposition to the final design due to differences from the Concept Design on which the community were consulted	the Office of Victorian Government Architect to comply with the MMRA Urban Design Strategy. The design shall avoid or minimise visual impacts on sensitive receptors and maintain broader landscape character values.	subcontractors • Provide a central point of contact for all affected landholders and tenants • Provide a forum in which key facilities can provide feedback on the construction approach • Provide a mechanism within the sub plan governing reinstatement to incorporate community feedback in consultation with the land manager • Provide advance warning of out of hours works and consult closely with the institutional stakeholders during their planning to determine times that must be avoided • Provide alternative open space in proximity to City Square that can be used for similar activities for the duration of construction • Purchase properties early, where possible and requested by the landowner • Target of no net loss of public parking outside the construction zone • Use reversing beepers that minimise disturbance on adjoining properties • Utilise a case management approach to manage all Project interactions with affected landholders • Utilise a complaints management system for responding to all community complaints or enquiries • Utilise truck routes that reduce the number of dwellings impacted by truck movements	Preconstruction and construction	SC002
	Construction activities act as a barrier to social infrastructure or recreational assets				SC007

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Timing	Risk no.
	Sustained amenity impacts affects the ability of staff or users to continue to use these facilities continue to use the facilities		• Where the design is potentially inconsistent with community feedback, explain the rationale and anticipated outcomes of the design change.		SC013
	Construction activities displace passive recreation in an area with limited alternatives			Preconstruction and construction	SC014
	Truck movements and changes to local access sever existing community networks and disrupt access patterns particularly for families with young children, those with mobility impairments or the elderly			Preconstruction and construction	SC020
	Construction workforce demand for parking could result in a reduction				SC018

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Timing	Risk no.
	in parking available for residents, workers or other visitors to the area				SC026
	Changes to the Swanston Street streetscape or the loss of trees is of concern to a wide cross section of the community			Construction	SC036 SC037

15.6 Domain

Table 15-6 Environmental Performance Requirements for the Domain Precinct

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Timing	Risk no.
Social, community, land use and business - To manage effects on the social fabric of the community in the area of the project, including with regard to land use changes, community cohesion, business functionality and access to services and facilities, especially during the construction phase.	Residential property owners in proximity to construction areas put on hold or reconsider their plans for their properties.	• Prior to main works or shaft construction, develop and implement a community and business involvement plan to engage potentially affected stakeholders and advise them of the planned construction activities and project progress. The required contents of this plan are included in Table 15-1 • Develop and implement a transport management plan(s) in consultation with the relevant road management authorities to minimise disruption to traffic, car parking, pedestrian and bicycle movements during construction, as per details in Table 15-1 • Prior to main works or shaft construction in areas affected, develop a relocation management framework that allows for a uniform approach across the project for the voluntary (temporary) relocation of households subject to: – Construction activities likely to unduly affect their amenity (e.g. out of hours works or sustained loss of amenity during the day for shift workers) – Loss of access. • Develop and implement measures to minimise light spillage during construction to protect the amenity of adjacent neighbourhoods, parks and	• Engage landholders during the planning, design and implementation stages on the construction method, project design and how this would affect their property • Utilise a complaints management system for responding to all community complaints or enquiries • Utilise truck routes that reduce the number of dwellings impacted by truck movements • Design construction work sites in proximity to residential areas to minimise the number of trucks that need to reverse • Avoid parking or idling construction vehicles in proximity to dwellings outside of normal working hours • Use reversing beepers that minimise disturbance on adjoining properties • Ensure landholders adjoining construction zones are consulted on the treatments applied to noise walls, sheds and others structures • Demonstrate that community feedback is incorporated in the design and the design requirements have been made clear to the community • Demonstrate to the community and key stakeholders how the design aligns with the Concept Design and community feedback • Where the design is potentially inconsistent with community feedback, explain the rationale and anticipated outcomes of the design change • Consult with affected communities on design changes	Preconstruction and construction	SC001
	Construction activities impact on the amenity of households diminishing their ability to enjoy their dwelling or use it as they do currently.			Preconstruction and construction	SC009

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Timing	Risk no.
	Truck movements impact on residential amenity.	community facilities • Design permanent and temporary works in consultation with local councils and the Office of Victorian Government Architect to comply with the MMRA Urban Design Strategy. The design shall avoid or minimise visual impacts on sensitive receptors and maintain broader landscape character values • Prior to main works or shaft construction commencing, work with the City of Melbourne to identify possible alternative areas of public open space for community use during the construction phase to minimise the impacts of loss of existing public open space that are to be utilised as construction worksites • In consultation with key stakeholders and in accordance with the Urban Design Strategy, relevant statutory approvals and other relevant requirements, re-establish sites impacted by construction works • Prior to main works or shaft construction commencing, work with the City of Melbourne to identify possible alternative areas of public open space for community use during the construction phase to minimise the impacts of loss of existing public open space that are to be utilised as construction worksites • Develop a relocation strategy for sports	likely to be of public interest prior to finalisation • Consult with managers of key facilities during so that impacts on their operations and wellbeing of their users are minimised and notification timeframes agreed • Provide advance warning of out of hours works and consult closely with the institutional stakeholders during their planning to determine times that must be avoided • Provide a forum in which key facilities can provide feedback on the construction approach • Communicate alternative access methods to the community in advance of works • Avoid truck movements during peak pick up and drop off times for these facilities • Ensure that the relevant sub plan allows for existing pedestrian access patterns and considers the needs of vulnerable people such as children and those with mobility impairments • Develop appropriate community information tools – website, on site boards, brochures etc. to update community on changed access arrangements • Consult early with open space users on project timelines and likely impacts • Develop a relocation strategy to help users identify alternative facilities (where available) they could use during construction • Consult early with open space users on project timelines and likely impacts • Develop a relocation strategy to help users of the Edmund Herring Oval users identify alternative facilities (where available) they could use during • Target of no net loss of public parking outside the	Preconstruction and construction	SC027
	Community opposition to the final design due to differences from the Concept Design on which the community were consulted.			Preconstruction and construction	SC002
	Sustained amenity impacts on the Shrine of Remembrance Reserve, Albert Road Clinic and Melbourne Grammar affects the ability of staff or users to continue to use these facilities.			Preconstruction and construction	SC015
	Construction activities in proximity to areas frequented by children such as Melbourne Grammar could result in a perceived diminishment in public safety.			Preconstruction and construction	SC016

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Timing	Risk no.
	Truck movements and changes to local access sever existing community networks and disrupt access patterns particularly for families with young children, those with mobility impairments or the elderly	clubs and other formal users of directly impacted recreational facilities • Develop and implement measures for construction and operation of Melbourne Metro that aim to minimise impacts to the development and/or operation of existing land uses • Work with relevant local councils to plan for and coordinate with key stakeholders during major public events.	construction zone • Management of workforce car parking to include subcontractors • Make provision to cease or silence works for times of special significance to the Shrine of Remembrance such as on Remembrance and Anzac Days • Ensure the Shrine of Remembrance Trustees are consulted on the construction and reinstatement approach and are satisfied it represents an appropriate outcome for the Shrine or Remembrance and its stakeholders • Allow for changed usage patterns during events such as Anzac Day at the Shrine of Remembrance • Avoid use of the Shrine of Remembrance reserve for construction activities unrelated to the station entrance • Provide a mechanism within the sub plan governing reinstatement to consider community feedback in consultation with the land manager.	Preconstruction and construction	SC017
	Construction activities in Edmund Herring Reserve, Shrine of Remembrance Reserve and Albert Road Reserve displace passive recreation.			Preconstruction and construction	SC022

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Timing	Risk no.
	Construction activities displace organised sports. Limited local alternatives for these facilities reduces recreational opportunities for the community			Preconstruction and construction	SC025
	Construction workforce demand for parking could result in a reduction in parking available for residents, workers or other visitors to the area.			Preconstruction and construction	SC026
	Works within the Shrine of Remembrance reserve have the potential to create distress for veterans and other members of the community who value the site			Preconstruction and construction	SC032
	Impacts on South African War Memorial and other monuments is of concern to the local community			Preconstruction and construction	SC038

15.7 Eastern Portal

Table 15-7 Environmental Performance Requirements for the Eastern Portal precinct

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Timing	Risk no.
Social, community, land use and business - To manage effects on the social fabric of the community in the area of the project, including with regard to land use changes, community cohesion, business functionality and access to services and facilities, especially during the construction phase	Residential property owners subject to acquisition or in proximity to construction areas put on hold or reconsider their plans for their properties	• Prior to main works or shaft construction, develop and implement a community and business involvement plan to engage potentially affected stakeholders and advise them of the planned construction activities and project progress. The required contents of this plan are included in Table 15-1 • Develop and implement a transport management plan(s) in consultation with the relevant road management authorities to minimise disruption to traffic, car parking, pedestrian and bicycle movements during construction, as per details in Table 15-1 • Reduce the disruption to residences from direct acquisition or temporary occupation • Prior to main works or shaft construction in areas affected, develop a relocation management framework that allows for a uniform approach across the project for the voluntary (temporary) relocation of households subject to: – Construction activities likely to unduly affect their amenity (e.g. out of hours works or sustained loss of amenity during the day for shift workers) – Loss of access • Develop and implement measures to	• Engage landholders during the planning, design and implementation stages on the construction method, project design and how this would affect their property • Utilise a case management approach to manage all Project interactions with affected landholders • Appoint a social worker or equivalent to assist households make the transition • Provide a central point of contact for all affected landholders and tenants • Consider the relative vulnerability of households (e.g. young families, those with mobility impairments or the elderly) and consider what additional assistance is needed to assist with relocation • Purchase properties early, where possible and requested by the landowner • Acquire part of properties, where possible and requested by the landowner • Communicate alternative access methods to the community in advance of works in a manner consistent with MMRA's Community and Stakeholder Engagement Plan • Ensure that the relevant sub plan allows for existing pedestrian access patterns and considers the needs of vulnerable people. such as children and those with mobility impairments • Develop appropriate community information tools – website, on site boards, brochures etc. to update community on changed access arrangements	Preconstruction and construction	SC001
	Displacement of two households and diminishment of networks within the immediate community			Preconstruction and construction	SC031
	Reduced or loss of access to residences due to traffic management or construction activities			Preconstruction and construction	SC005
	Construction activities impact on the amenity of households diminishing their ability to enjoy their dwelling or use it as they do currently			Preconstruction and construction	SC009

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Timing	Risk no.
	Truck movements impact on residential amenity	minimise light spillage during construction to protect the amenity of adjacent neighbourhoods, parks and community facilities • In consultation with key stakeholders and in accordance with the Urban Design Strategy, relevant statutory approvals and other relevant requirements, re-establish sites impacted by construction works • In consultation with key stakeholders and in accordance with the Urban Design Strategy, relevant statutory approvals and other relevant requirements, re-establish sites impacted by construction works • Design permanent and temporary works in consultation with local councils and the Office of Victorian Government Architect to comply with the MMRA Urban Design Strategy. The design shall avoid or minimise visual impacts on sensitive receptors and maintain broader landscape character values.	• Develop a relocation management framework that allows for a uniform approach across the project • Utilise truck routes that reduce the number of dwellings impacted by truck movements. • Design construction work sites in proximity to residential areas to minimise the number of trucks that need to reverse • Avoid parking or idling construction vehicles in proximity to dwellings outside of normal working hours • Use reversing beepers that minimise disturbance on adjoining properties • Ensure landholders adjoining construction zones are consulted on the treatments applied to noise walls, sheds and others structures • Utilise a complaints management system for responding to all community complaints or enquiries • Demonstrate that community feedback is incorporated in the design and the design requirements have been made clear to the community • Demonstrate to the community and key stakeholders how the design aligns with the Concept Design and community feedback • Where the design is potentially inconsistent with community feedback, explain the rationale and anticipated outcomes of the design change • Consult with affected communities on design changes likely to be of public interest prior to finalisation • Consult with managers of key facilities so that impacts on their operations and wellbeing of their users are minimised and notification timeframes agreed • Provide advance warning of out of hours works and consult closely with the institutional stakeholders during their planning to determine times that must be avoided	Preconstruction and construction	SC017
	Community opposition to the final design due to differences from the Concept Design on which the community were consulted			Preconstruction and construction	SC002
	Construction activities act as a barrier to recreational assets or cause social severance diminishing community networks			Preconstruction and construction	SC007
	Truck movements and changes to local access sever existing community networks and disrupt access patterns particularly for families with young children, those with mobility impairments or the elderly			Preconstruction and construction	SC017

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Timing	Risk no.
	Construction workforce demand for parking could result in a reduction in parking available for residents, workers or other visitors to the area		• Provide a forum in which key facilities can provide feedback on the construction approach • Communicate alternative access methods to the community in advance of works in a manner consistent with MMRA's Community and Stakeholder Engagement Plan • Ensure that the relevant sub plan allows for existing pedestrian access patterns and considers the needs of vulnerable people such as children and those with mobility impairments • Develop appropriate community information tools – website, on site boards, brochures etc. to update community on changed access arrangements • Utilise a complaints management system for responding to all community complaints or enquiries • Communicate alternative access methods to the community in advance of works in a manner consistent with MMRA's Community and Stakeholder Engagement Plan • Ensure that the relevant sub plan allows for existing pedestrian access patterns and considers the needs of vulnerable people such as children and those with mobility impairments • Develop appropriate community information tools – website, on site boards, brochures etc. to update community on changed access arrangements • Target of no net loss of public parking outside the construction zone • Management of workforce car parking to include	Preconstruction and construction	SC026
	Construction activities in South Yarra Siding Reserve and Osborne Reserve displace passive recreation in an area with limited alternatives, reducing recreational opportunities for the community			Preconstruction and construction	SC019
	The placement of project infrastructure such as ventilation shafts or noise walls has an ongoing impact on the amenity of households			Preconstruction and construction	SC044

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Timing	Risk no.
	Acoustic treatments such as noise walls discourage people from using Lovers Walk or result in a perceived reduction of safety for users of the walkway		subcontractors • Consult early with open space users on project timelines and likely impacts • Provide a mechanism within the sub plan governing reinstatement to consider community feedback in consultation with the land manager • Consistent with the Community and Stakeholder Engagement Plan, ensure landholders adjoining construction zones are consulted on the treatments applied to noise walls, sheds and others structures • Provide a mechanism within the sub plan governing reinstatement to consider community feedback in consultation with the land manager.	Preconstruction and construction	SC045

15.8 Western Turnback

Table 15-8 Environmental Performance Requirements for the western turnback precinct

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Timing	Risk no.
Social, community, land use and business - To manage effects on the social fabric of the community in the area of the project, including with regard to land use changes, community cohesion, business functionality and access to services and facilities, especially during the construction phase	Community opposition to the final design due to differences from the Concept Design on which the community were consulted	• Prior to main works or shaft construction, develop and implement a community and business involvement plan to engage potentially affected stakeholders and advise them of the planned construction activities and project progress. The required contents of this plan are included in Table 15-1 • Develop and implement a transport management plan(s) in consultation with the relevant road management authorities to minimise disruption to traffic, car parking, pedestrian and bicycle movements during construction, as per details in Table 15-1	• Demonstrate that community feedback is incorporated in the design and the design requirements have been made clear to the community • Demonstrate to the community and key stakeholders how the design aligns with the Concept Design and community feedback • Where the design is potentially inconsistent with community feedback, explain the rationale and anticipated outcomes of the design change. • Consult with affected communities on design changes likely to be of public interest prior to finalisation • Communicate alternative access methods to the community in advance of works in a manner consistent with MMRA's Community and Stakeholder Engagement Plan. • Ensure that the relevant sub plan allows for existing pedestrian access patterns and considers the needs of vulnerable people such as children and those with mobility impairments. • Develop appropriate community information tools – website, on site boards, brochures etc. to update community on changed access arrangements.	Preconstruction and construction	SC002
	Construction activities act as a barrier to social infrastructure, recreational assets or cause social severance diminishing community networks			Preconstruction and construction	SC008

16 Conclusion

This report assessed the social impacts and opportunities of Melbourne Metro Concept Design against two draft evaluation objectives within the EES Scoping Requirements:

1. *To manage the effects on the social fabric of the community in the area of the project, including with regard to land use changes, community cohesion, business functionality and access to services and facilities, especially during the construction phase*
2. *To avoid or minimise adverse effects on landscape, visual amenity and recreational values as far as practicable*

In respect to the first objective, this assessment considered effects on the social fabric of the community. Land use change and business impacts were considered in the land use and planning, and business impact assessments. The social impact assessment also considered recreational values as required by the second objective, while landscape and visual values were considered in a separate landscape and visual impact assessment.

The following assessment criteria were used to understand potential social risks and the potential impact of the project:

- Minimise impacts to private residential property owners and occupiers
- Minimise impacts on social infrastructure such as educational, health, religious and sporting facilities
- Maintain community accessibility and avoid social severance
- Achieve consistency with community values
- Minimise impacts on and enhance amenity for residents and the community and maintain perceptions of safety during the construction phase
- Minimise impacts on valued places, including public open space and recreation reserves.

Two project activities present a high residual social risk (following mitigation):

- Acquisition of 9 dwellings in the western portal
- Modification of valued streetscapes in particular the St Kilda Road boulevard and Grattan Street.

A number of other activities present a medium residual social risk (following mitigation):

- Variations from the Concept Design on which the community were consulted
- Residential strata acquisition and the associated concern and anxiety this may cause for property owners
- Acquisition of 49 dwellings in the CBD North Station precinct
- Acquisition of seven dwellings in the Eastern Portal precinct
- Ground improvement works in the Domain Parklands that result in the permanent loss of trees
- Placement of the emergency access shafts in the Domain Parklands and Fawkner Park
- Design and construction of acoustic treatments
- Placement of above ground infrastructure impacts on the ongoing amenity for residents
- Construction activities that:
  - Inhibit future planning for households
  - Inhibit access to residences
  - Alter existing community access patterns

- Result in a sustained loss of amenity for residents as well as health, educational, commercial, recreational and other facilities
- Displace formal or informal recreation in open spaces or recreation areas with limited alternatives
- Place additional demand on public parking
- Require part of the Shrine of Remembrance Reserve and Fawkner Park
- Require the temporary movement of the South African Soldiers War Memorial and other monuments.

Overall, the project would benefit users of the wider transport network and enable the community to continue accessing employment, social infrastructure, valued places and wider social networks. Without this and other projects that increase the capacity of the transport network it is likely the community would face a diminishment of social opportunities with projected population growth outstripping road and rail capacity.

Other key benefits include:

- Provision of Arden station would ensure integration of future residential development in the area with the rest of the transport network and provide easier access to employment, services and wider social networks
- Parkville station would provide improved access to the Parkville medical and educational Precinct for staff, students, visitors and patients from across Melbourne
- CBD North station would provide enhanced access to the CBD North precinct including RMIT and Queen Victoria Market. It would also improve access for the large number of current and future residents in the northern CBD to the rest of Melbourne
- The CBD South station would also provide enhanced access to the CBD South precinct including valued places such as Federation Square and St Paul's Cathedral
- Domain station would provide improved access for the wider community to the Shrine of Remembrance, Albert Park and the wider employment area on St Kilda Road.

The main social impacts requiring management to ensure consistency with the relevant draft EES evaluation objectives are as follows:

- Acquisition

  The acquisition of up 64 dwellings needs to be managed to avoid the potential displacement of households, particularly in the western portal precinct.

  The Concept Design largely minimises impacts to private residential property owners and occupiers, however it would necessitate strata acquisition under approximately 3,000 dwellings. The strata acquisition would not directly result in dislocation of affected dwellings but may trigger concerns about vibration and subsidence during and after the passing of the TBMs.

- Social infrastructure

  The project would minimise direct impacts on the social infrastructure across the alignment, however it would directly impact on the Fawkner Park Tennis Centre and Edmund Herring Oval through their temporary occupation.

- Community accessibility

  While the project would largely maintain existing community accessibility, it has the potential to affect existing community access patterns and networks. Key impacts include:

  - Truck movements through residential areas such as in the eastern portal precinct and in proximity to social infrastructure such as the Fawkner Park Child Care Centre, Kindergarten and South Yarra Senior Citizens Centre
  - Changes to the road network and driving conditions in Domain and Parkville during construction with flow on impacts on local access for residents and access to the hospitals, University of Melbourne and Shrine of Remembrance Reserve

- Construction workforce demand for parking across the precincts
- Impacts on pedestrian movements across RMIT and University of Melbourne campuses.

- Community values

  While the project is largely consistent with community values, there are some inconsistencies at the precinct level, these include:

  - Community aspirations for a direct connection to the new tunnels at South Kensington and South Yarra
  - The loss of trees across the project precincts, particularly on valued streetscapes such as Royal Parade, Grattan Street or St Kilda Road
  - The construction and ongoing maintenance of project infrastructure in park lands such as Fawkner Park, Domain Parklands and South Yarra Siding Reserve
  - Construction in and modification of City Square, Shrine of Remembrance Reserve and Albert Road Reserve
  - Concerns about community safety associated with truck movements and construction activities
  - Changes in access to emergency facilities in Parkville
  - Over site development, particularly in CBD South.

- Amenity and perceptions of safety

  The project would impact amenity impact in most precincts during construction due to noise, vibration and dust as well as changes to the landscape. The most sensitive to changes would be dwellings subject to sustained construction noise or out of hours works in the eastern portal, Domain, CBD and western portal.

  Amenity changes would also affect social infrastructure across the alignment in:

  - Parkville (University of Melbourne, Victorian Comprehensive Cancer Centre, Royal Melbourne Hospital, Peter Doherty Institute, Royal Women's Hospital)
  - CBD North (RMIT, Melbourne City Baths, State Library)
  - Domain (Melbourne Grammar).
  - The sensitivity of some of these facilities and their users to changes in amenity would be diminished by their previous experience adapting to major construction projects in each precinct.

- Impacts on valued places, including public open space and recreation reserves

  The Concept Design largely avoids valued places along the alignment but would have impact in:

  - Tunnels (Tom's Block and Fawkner Park)
  - Parkville (northern end of University Square)
  - CBD South (City Square)
  - Domain (Shrine of Remembrance Reserve and Albert Road Reserve)
  - Eastern portal (South Yarra Siding Reserve, Lovers Walk and Osborne Street Reserve).

With the application of the mitigation and Environmental Performance Requirements proposed in this assessment, the project would manage the potential effect on community cohesion and access to services and facilities, especially during the construction phase. It would also minimise the adverse effects on recreational values as far as is practicable.

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Appendices

Appendix A Legislation, policies and strategies

The following table lists additional legislation, policies and strategies of relevance to the assessment.

Legislation / policy	Key policies/ strategies	Description for this Project
Arden-Macaulay Structure Plan (Com, 2012)	Seeks to guide urban development and renewal within the Arden-Macaulay area within North Melbourne.	The Social Impact Assessment considers the role Melbourne Metro plays in this plan.
City North Structure Plan 2012 (City of Melbourne 2012b)	Protect and enhance the quality of existing open spaces (Lincoln and University Squares). Community and cultural facilities and services are accessible by good public transport, day and night.	The proposed alignment passes under these open spaces and in proximity to several key community and cultural facilities. The Social Impact Assessment considers how the project would impact on open spaces and improve access to community and cultural facilities.
Fawkner Park Master Plan (City of Melbourne 2006)	Protect the landscape character of the park by avoiding new structures or expansion of existing structures.	The Social Impact Assessment considers how compatible the Concept Design is with the current community values and how any impacts could be minimised or mitigated.
Melbourne Transport Strategy (City of Melbourne 2012c)	The Concept Design must integrate the new stations with the surrounding urban fabric to enhance the mobility, liveability and economic performance of the city.	The Social Impact Assessment considers how Melbourne Metro would improve access to social infrastructure and valued places.
Port Phillip Planning Scheme - MSS	Clause 21.04-8 Social Impact Assessments. Emphasises the need to identify relationship between land use, development and social quality, and the integration of social issues into land use planning to deliver positive social outcomes for the community and inform decision-making.	Social Impact Assessment approach is consistent with this clause.
Port Phillip Planning Scheme - Amendment	Requires high quality development that respects the Shrine of Remembrance setting, landscape identity of the precinct {and} contributes to an inviting and	The Social Impact Assessment considers what impact the proposed Melbourne Metro would have on the trees on St. Kilda

Legislation / policy	Key policies/ strategies	Description for this Project
C107 / Draft St Kilda Road North Precinct Plan	activated environment for pedestrians at street level.	Road.
Stonnington Planning Scheme - MSS	Several clauses of the Stonnington Municipal Strategic Statement are relevant to the Social Impact Assessment including: 21.03 Vision. No net loss of open space. Open space should be safe and accessible for public use and meet the diverse and changing needs of the community. 21.06 Built Environment and Heritage. To encourage physical design that is safe and accessible and which facilitates social inclusion for all members of the community. 21.08-6 Social impact assessments. Acknowledging the potential social impacts of major development proposals and the need to maintain and enhance the health, safety and well-being of the community.	The Social Impact Assessment considers impacts on open space during construction, ongoing and current linkages and the vulnerability of affected communities to impacts.
Stonnington Planning Scheme proposed amendment C172	Notes that users of Lovers Walk would benefit from better surveillance and that a 'laneway' program may reactivate the area.	The Social Impact Assessment considers how the project would interface with Lovers Walk.
Chapel reVision Structure Plan 2013-2031	South Yarra Siding Reserve is earmarked for further development.	The Social Impact Assessment considers the opportunity to facilitate this redevelopment.

Appendix B Peer Review Report

PEER Review of Melbourne Metro Rail Project Social and Community Impact Assessment

1. Scope of peer review

The scope of this final review, as defined in the letter of retainer from Herbert Smith Freehills dated 18 March 2016, is "…comment on the methodology adopted and conclusions drawn in the [SCIA] Report and should identify any matters in relation to which you have a difference of opinion to that expressed in the Report".

2. Peer review process

This letter reports on the final stage of a peer review process that began in November 2015 with my review of the initial (November 2015) draft Social and Community Impact Assessment (SCIA) report prepared by Aurecon Jacobs Mott MacDonald Joint Venture (AJM).

The peer review process is outlined in the following timeline:

Date	Activity
	Review draft Methodology section of SIA (17/11/2015 draft) and AJM JV Planning Task Plan for SIA
15/12/2015	Provide written advice to HSF on draft Methodology and proposed work plan
	Inspected major proposed MMRP works areas
	Review Melbourne Metro Rail Project Social and Community Impact Assessment (10/01/2016 Draft for MMRA Review)
18/1/2016	Provide draft Peer Review Report to HSF
	Review written AJM response to peer review comments
	Review Melbourne Metro Rail Project Social and Community Impact Assessment (25/01/2016 Draft for MMRA Review)
2/2/2016	Meeting with AJM and HSF to discuss peer review comments
8/2/2016	Provide feedback to AJM on AJM response to peer review comments
3/2/2016	Meeting with AJM and HSF to discuss outstanding issues
	Review Melbourne Metro Rail Project Social and Community Impact Assessment (24/3/2016)
	Provide final Peer Review report to HSF

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During the peer review I have challenged the AJM team to reconsider and reassess their impact assessments for some events and the resultant levels of residual risk. The AJM responses to my peer review comments have been detailed and constructive. As a result of these discussions, some impact assessments have been adjusted and some have been demonstrated to be appropriate.

3. Framing questions

I have sought to focus this review by applying four framing questions, which have been developed from the scope referenced above as well as my understanding of the EES process and requirements:

- Has the SCIA identified the major potential social impacts (i.e. "effects[1]") of the MMRP?
- Was the SCIA methodology appropriate and in accordance with good practice?
- Are the SCIA's findings appropriately robust?
- Are there outstanding matters about which I have a difference of opinion to the authors of the SCIA?

I address each of these questions in the body of this review.

4. Documentation

In undertaking this peer review, I have read a number of drafts of the Social and Community Impact Assessment as well as other relevant documents.

The documentation reviewed and/or that I have relied upon to inform the review was:

- AJM JV Planning Task Plans – Melbourne Metro Rail Project. Social and Community – EES Scope of Work (Final draft, 17/9/2015)
- Melbourne Metro Rail Project Social and Community Impact Assessment (four drafts)
- Melbourne Metro Rail Project, Environmental Effects Statement, Chapter 23, Environmental Management Framework
- Draft Project Description for EES Specialists (and updates)
- Melbourne Metro: Social Research Phase One. Draft report prepared for MMRA (undated). Ipsos
- Scoping Requirements for Melbourne Metro Rail Project, November 2015 (Marked as DRAFT in header and watermark)
- Ministerial Guidelines for Assessment of Environmental Effects Under the Environmental Effects Act 1978, Seventh Edition, 2006, and
- Melbourne Metro Rail Project, EES Community and Stakeholder Engagement Plan, December 2015.

1 The EES Scope document refers to "effects" which should be taken to be synonymous with "social impacts" or "consequences" as described in the SIA document.

5. Response to Framing Questions

5.1 Has the SCIA identified the major social impacts of the MMRP?

Based on my experience, the inquiries I have made, review of the draft SCIA reports and discussions with the AJM study team I am satisfied that the SCIA process and report present the major social impacts of the MMRP as it is configured based on the current Project Description.

There will undoubtedly be differences of opinion expressed as to the relative severity of identified impacts and effectiveness of proposed mitigation, particularly at the level of the individual property owner or resident, but for the purposes of providing a robust assessment of social and community impacts for the Environment Effects Assessment process, I am satisfied that it is an appropriate and thorough assessment.

Should the project change significantly from the project that was assessed, then this may have an impact on the nature and significance of the social impacts arising. There are well established procedures under State environment and planning legislation for addressing this should it be required.

5.2 Was the SCIA methodology appropriate and in accordance with good practice?

The methodology applied and as described in the SCIA report was appropriate and was in accordance with good practice for social impact assessment within the Victorian legislative context.

The risk assessment approach used is appropriate, although structurally complex and may be difficult for non-specialist readers of the EES documentation to follow. Throughout the peer review process, I have encouraged the SCIA authors to improve the transparency of the risk assessment, and I am satisfied that the final risk assessment presented in the SCIA report is of a good standard and that the information is available to enable an informed discussion in the public exhibition stage of the EES process.

I was initially concerned that the stakeholder engagement leading up to preparation of the early SCIA drafts was too limited in scope – particularly for CBD stations – but the scope of this engagement has been substantially improved and I am satisfied that consultation during preparation of the final document was sufficient to identify the major impacts and to inform development of proposed mitigation measures.

5.3 Are the SCIA findings appropriately robust?

The SCIA findings are summarised in SCIA report Section 16: Conclusions. For them to be considered robust I would expect that the key findings presented are predominately factual, underpinned by empirical and/or expert evidence and supported by an even-handed discussion where there are uncertainties to be taken into account. Robust findings also require that proposed mitigation measures are sound and can be implemented, as these are instrumental in reducing the residual risk. This adjusted risk ranking has been subject to considerable scrutiny during the peer review and in discussions with the SCIA authors.

I am satisfied that the SCIA findings are appropriately robust for inclusion in the EES. There will be considerable additional scrutiny of the community and social impacts during the EES process and the SCIA final report as reviewed is of a suitable standard to inform and guide this process and the deliberations of the independent panel.

5.4 Are there outstanding matters about which I have a difference of opinion to the authors of the SCIA?

The Environmental Performance Requirements were still being finalised by the project team up until a few days before I submitted my peer review comments. Feedback was provided to further clarify the requirements however I understand that my feedback on the final EPRs was not incorporated into the public version of the SCIA.

As previously stated, I agree with the SCIA assessment methodology, findings, Proposed Mitigation Measures and EPRs. However, I think that some revisions to the EPRs could be made as I understand that these will be incorporated into contract documentation to drive contractor performance.

In summary, my recommendation is that the EPRs be revised prior to the issuing of contracts to include:

- Adding a requirement to "seek stakeholder feedback on matters potentially affecting them" into the EPR covering development of a community and business improvement plan
- Broadening the EPR covering light spillage to include reference to other amenity impacts such as noise and dust so that this EPR is focussed more broadly on amenity protection
- Broadening the EPR covering a relocation strategy for sports clubs to include community facilities such as child care, senior citizens etc., and
- Adding a new EPR requiring a Complaints Management System.

This peer review was undertaken and the report prepared by myself. I have operated as an independent expert in carrying out my peer review duties. I have no professional or personal relationships with any parties within MMRA, AJM joint venture or HSF that have, or could be perceived to have, influenced the independent conduct of this peer review.

Timothy Offor
Director
Pax Republic Pty Ltd

20 April, 2016

Appendix C Key Demographic Information

		West Footscray		Kensington		North Melbourne		Greater Melbourne
		2001	2011	2001	2011	2001	2011	2011
Total population		9,450	10,222	7,531	9,719	9,701	11,755	3,999,982
Total private dwellings		4,316	4,573	3,761	4,863	4,402	5,945	1,636,167
Age (% total)	0-4 years	6.6	7.7	7	7	5	4	6
	5-14 years	10.6	9.1	8	7	8	7	12
	15-24 years	12.8	11.8	16	13	25	23	14
	25-34 years	47.7	20.9	57	30	46	29	15
	35-44 years		18.2		18		13	15
	45-54 years		12.9		10		9	13
	55-64 years	7.9	8.6	6	8	7	7	11
	65-74 years	14.7	4.8	5	4	5	4	7
	75+ years		6	3	3	4	4	6
Mode to work (%)	Walk/Bicycle	3.1	3	7	10	19	28	4
	Public transport	10.4	22	19	23	20	26	9
	Car / Motorbike	65.2	57	55	46	36	29	65
	Multiple modes	5.9	-	5	12	3	9	5
	Other modes /Worked at home	3.5	-	3	3	5	4	5
	Did not go to work/Not stated	11.8	-	11	10	16	11	11
Completed Post-school qualification (%)			29.9	-	41	-	48	25

Source ABS 2012

		Parkville		Carlton		Melbourne		Greater Melbourne
		2001	2011	2001	2011	2001	2011	2011
Total population		6,737	6,192	9,966	14,104	18,671	28,371	3,999,982
Total private dwellings		1,705	1,744	5,096	8,276	8,103	18,030	1,636,167
Age (% total)	0-4 years	3	3	4.8	2.9	2	2	6
	5-14 years	4	4	5.8	4.2	4	2	12
	15-24 years	46	44	35.5	41	25	32	14
	25-34 years	29	19	41.5	26.7	53	35	15
	35-44 years		8		8.6		11	15
	45-54 years		6		5.6		7	13
	55-64 years	6	7	5.8	5.4	9	6	11
	65-74 years	5	5	6.7	5.5	4	2	7
	75+ years	6	6			5	2	6
Mode to work (%)	Walk/Bicycle	19	25	26.2	35	27	37	4
	Public transport	18	23	17.7	19.5	14	30	9
	Car / Motorbike	28	27	30	19.6	34	20	65
	Multiple modes	2	9	3.4	-	5	7	5
	Other modes /Worked at home	6	5	5.2	-	6	5	5
	Did not go to work/Not stated	28	19	16.6	-	14	8	11
Completed Post-school qualification		-	77	-	67	-	61	25

Source ABS 2012

		South Melbourne		South Yarra		Greater Melbourne
		2001	2011	2001	2011	2011
Total population		7,744	9,317	18,012	19,134	3,999,982
Total private dwellings		4,322	8,233	10,819	11,605	1,636,167
Age (% total)	0-4 years	4	5	3	3	6
	5-14 years	6	6	6	5	12
	15-24 years	14	11	18	14	14
	25-34 years	53	23	53	32	15
	35-44 years		19		15	15
	45-54 years		13		10	13
	55-64 years	9	11	10	10	11
	65-74 years	13	7	6	7	7
	75+ years		6	5	5	6
Mode to work (%)	Walk/Bicycle	16	21	13	22	4
	Public transport	19	22	22	31	9
	Car / Motorbike	44	38	44	36	65
	Multiple modes	2	4	4	10	5
	Other modes /Worked at home	8	6	6	6	5
	Did not go to work/Not stated	11	8	11	9	11
Completed Post-school qualification		-		-	38	25

Source ABS 2012

Socio-economic indexes for areas								
Suburb	Relative socio-economic advantage and disadvantage		Relative socio-economic disadvantage		Economic resources		Education and occupation	
	Score	Decile (Vic)	Score	Decile (Vic)	Score	Decile (Vic)	Score	Decile (Vic)
West Footscray	971	3	967	2	930	1	1031	8
Kensington	1060	9	1042	7	955	2	1152	10
North Melbourne	990	4	959	2	841	1	1121	10
Parkville	1078	9	1053	8	932	1	1196	10
Carlton	980	4	942	2	768	1	1149	10
Melbourne	1053	8	1027	6	832	1	1194	10
South Melbourne	1050	8	1022	5	938	2	1155	10
South Yarra	1081	10	1070	1	936	1	1172	10

Appendix D Key stakeholder engagement

The table below provides a summary of the key stakeholder representatives consulted with.

Meetings	When	Who
City of Melbourne	30/07/2015	Senior Open Space Planner
City of Melbourne	30/09/2015	Neighbourhood Community Development officer Team Leader, Planning and Performance, Community Services Team Leader City People City Research Acting Director City Strategy
City of Melbourne	5/11/ 2015	Senior Open Space Planner Senior Recreation Planner
City of Melbourne	9/11/2015	Neighbourhood Development Officer Acting Director City Strategy
City of Melbourne	12/11/2015	Neighbourhood Community Development officer Team Leader, Planning and Performance, Community Services
City of Melbourne	17/12/2015	Strategic planner Senior Open Space Planner
City of Stonnington	28/09/2015	Manager, City Strategy Transport and Parking Manager Manager Economic and Cultural Development Manager Leisure and Libraries Coordinator Corporate and Community Planning Consultant Strategic Planner, City Strategy
City of Stonnington	29/10/2015	Manager, Parks and Environment Consultant Strategic Planner, City Strategy
City of Port Phillip	17/09/2015	Manager Community Relations Social Planner Coordinator, Communications and Engagement

Meetings	When	Who
		Senior Strategic Planner
City of Port Phillip	30/10/2015	Manager Community Relations
Federation Square	15/09/2015	General Manager Operations Tenant Liaison General Manager Program & Events
Fawkner Park Children's Centre and Kindergarten	14/12/2015	Centre Manager
Fawkner Park Tennis Centre	14/12/2015	Centre Manager
Inner City Christian Church	01/02/2016	Pastor
Kensington Community and Recreation Centre	29/10/2015	Memberships Coordinator
Kensington Community Children's Co-Operative	06/11/2015	Centre Manager
Melbourne Grammar School	26/10/2015	Property Manager Director of Finance and Administration
Melbourne University	27/11/2015	Executive Director Property & Sustainability Facilities Planning Coordinator
Parks Victoria	15/09/2015	Ranger in charge
RMIT	11/11/2015	Deputy Director, Projects Head of School and Deputy Pro Vice Chancellor, International Senior Manager, Asset Planning Deputy Director, Planning and Asset Utilisation Senior Manager, Annual Works Program Senior Manager, Asset Utilisation Senior Manager, Sustainability Services Snr Mgr, Tech Infrastructure & Resources Director, Planning and Resources Director, Project NAS Deputy Director - Marketing & Comm Director Student Services
Royal Melbourne Hospital	04/11/2015	Director Strategy & Planning Director Capital Works

Meetings	When	Who
		Director Facilities Management at Melbourne Health Chief Operating Officer
Shrine of Remembrance	23/09/2015	Director Corporate Services Manager Operations Chief Executive Officer Manager Education, Marketing & Community Programs
Shrine of Remembrance	26/11/2015	Director Corporate Services Manager Operations Chief Executive Officer Manager Education, Marketing & Community Programs
State Library	11/09/2015	Manager Service Delivery & Design Manager Community Programs Director Library Services Director Community Engagement – Acting CEO Building Services Manager Director Digital Strategy & Engagement Commercial & Business Services Planning Manager, Library Redevelopment Manager People & Property
State Library	16/09/2015	Project Manager, Building Redevelopment Manager Service Delivery & Design Manager Community Programs Building Services Manager Planning Manager, Library Redevelopment Commercial & Business Services Education programs Communications manager

Appendix E Social Research Report

Melbourne Metro:
Social Research Phase One

Executive summary

Between 28 July and 25 August 2015, 2,979 people participated in a ten minute survey about the Melbourne Metro Rail Project.

The survey was required to establish a broad baseline measure of community awareness and understanding of the Melbourne Metro Rail Project, develop a high-level understanding as to the perceived benefits and issues associated with the project and understand preferred methods of communication during the planning process.

Key findings

1. Four out-of-every five (84%) Victorians were aware of the Melbourne Metro Rail Project. While awareness was higher in Melbourne (85%) relative to Regional Victoria (79%), those within the Project Precinct were no more likely to be aware of the project when compared to the Broader Melburnians.
2. Victorians were mostly favourable towards the Melbourne Metro Rail Project (59% 'somewhat' or 'very favourable'). The share of those were unfavourable was low (12% somewhat unfavourable or very unfavourable). One out-of-every four had not formed an opinion (25% neutral).
3. Two-thirds (65%) of Victorians agreed the broader Victorian community will benefit from the Melbourne Metro Rail Project.
4. When asked to nominate the top benefits of the project, Victorians were most likely to say 'better access to public transport' (48%), 'reduced congestion on roads' (47%) and 'more trains across the day' (41%). When asked to state their concerns about the Melbourne Metro Rail Project, fifteen percent reported 'overall funding (e.g. ROI, costs going over budget)'.
5. The traditional mediums of television (news and advertisements), newspapers and radio (news) held the majority collective share of channels where Victorians had seen, read or heard about the Melbourne Metro Rail Project. Those within the Project Precinct were more likely to cite direct communications as a current channel, with one out-of-every five (20%) residents within the Project Precinct recalling that they had received and fully read the direct mail MMRA newsletter.
6. While the traditional mediums of television and newspapers (daily and local) made up the majority share of preferred channels with regard to future communications, those who resided within the Project Precinct were more likely to nominate personalised traditional and digital communications such as email updates and letters to their house as their preferred channels, moving forward.

Project Background and Objectives

Delivering the Melbourne Metro Rail Project was a policy of the Labor government when elected in November 2014. Once complete, Melbourne Metro will build network capacity and deliver five additional metropolitan stations along a north-south corridor.

Targeted and Victoria wide citizen research was required to:

1. Establish a broad baseline measure of community awareness and understanding of the Melbourne Metro Rail Project.
2. Develop a high-level understanding as to the perceived benefits and issues associated with the project.
3. Understand preferred methods of communication during the planning process.

Quantitative Fieldwork

Emphasis was placed on collecting a representation of three types of Victorians: people who resided in the Project Precinct (South Kensington to South Yarra), in broader Melbourne and in Regional Victoria. Victorians were randomly selected and self-selected to complete the survey.

Victorians randomly selected were drawn from three sources:

1. Letters to randomly selected addresses within the Project Precinct. These residents were asked to complete the survey online.
2. Intercepted at various train stations, tram stops and places of interest (e.g. parks) along the Project Precinct. These citizens completed the survey at the point-of-intercept or online in their own time (via email or SMS text invitation).
3. From an online panel of Victorians who have signed-up to participate in surveys.

The self-selected sample was drawn from Melbourne Metro Rail Authority marketing (digital advertising and at train stations).

In total, 2,979 people participated in the survey between 28 July and 25 August 2015:

1. n=1,922 people participated in the randomly selected survey…
   - n=564 within the Project Precinct
   - n=957 across Broader Melbourne
   - n=322 from Regional Victoria
2. n=1,057 people completed in the self-selected survey.

The findings within this report represent the views of those randomly selected to participate in the survey. The survey results have been weighted by age and gender using ABS Census estimates.

Melbourne Metro Rail Project Awareness and Attitudes

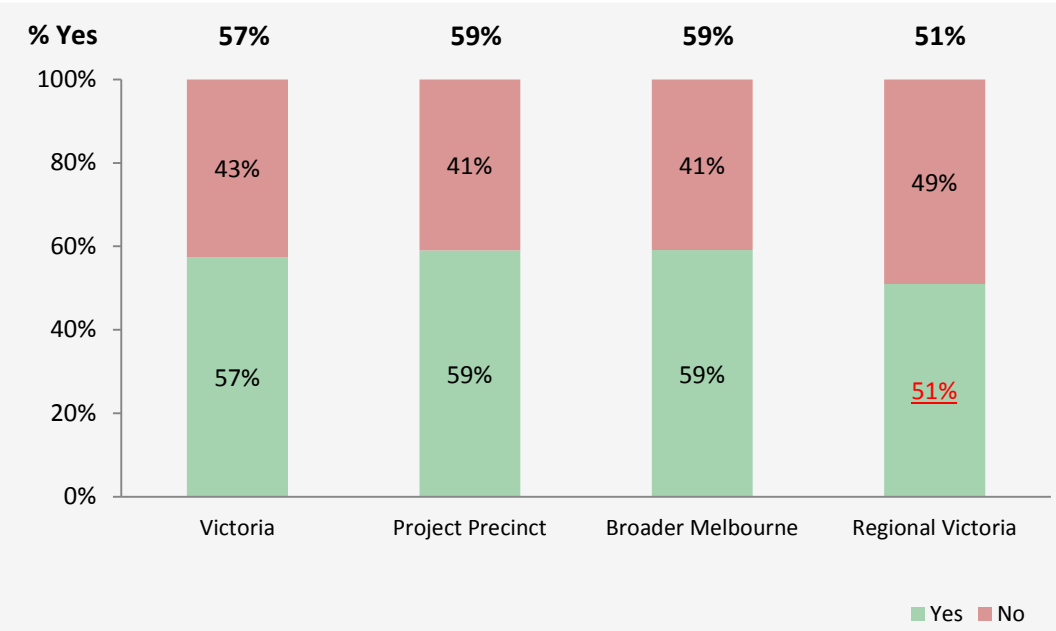
Melbourne Metro Project Awareness and Attitudes

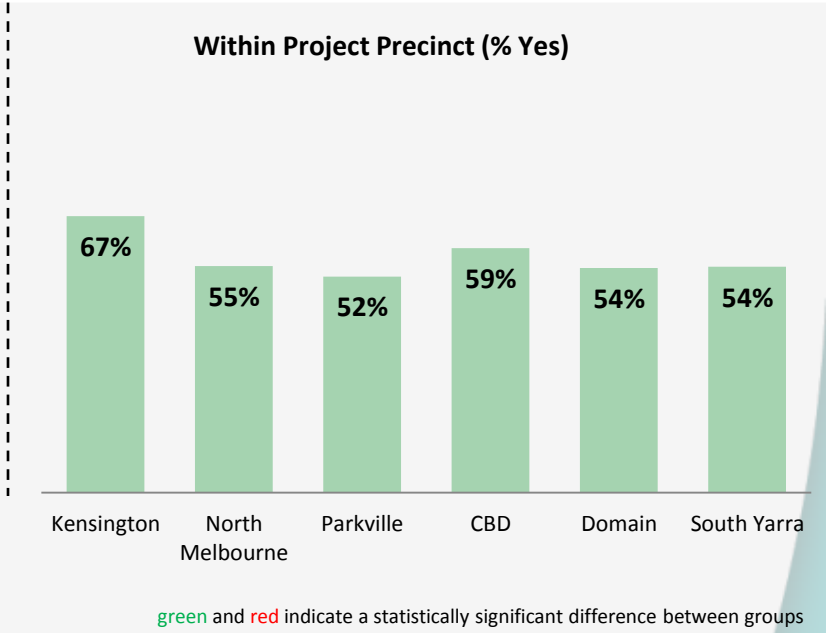
This section of the report contains:

1. Public awareness related to transport projects the state government is planning or building.
2. Unaided and aided awareness of the Melbourne Metro Rail Project.
3. What citizens believe the Melbourne Metro Rail Project is, and the reasons why the Melbourne Metro Rail Project is being built.
4. Self-reported knowledge of the Melbourne Metro Rail Project.
5. Estimates as to when construction will begin and end.
6. Overall opinion of the Melbourne Metro Rail Project.

Unaided Awareness of Melbourne Metro Rail Project

AW_1. Before today, were you aware of the Melbourne Metro Rail Project?



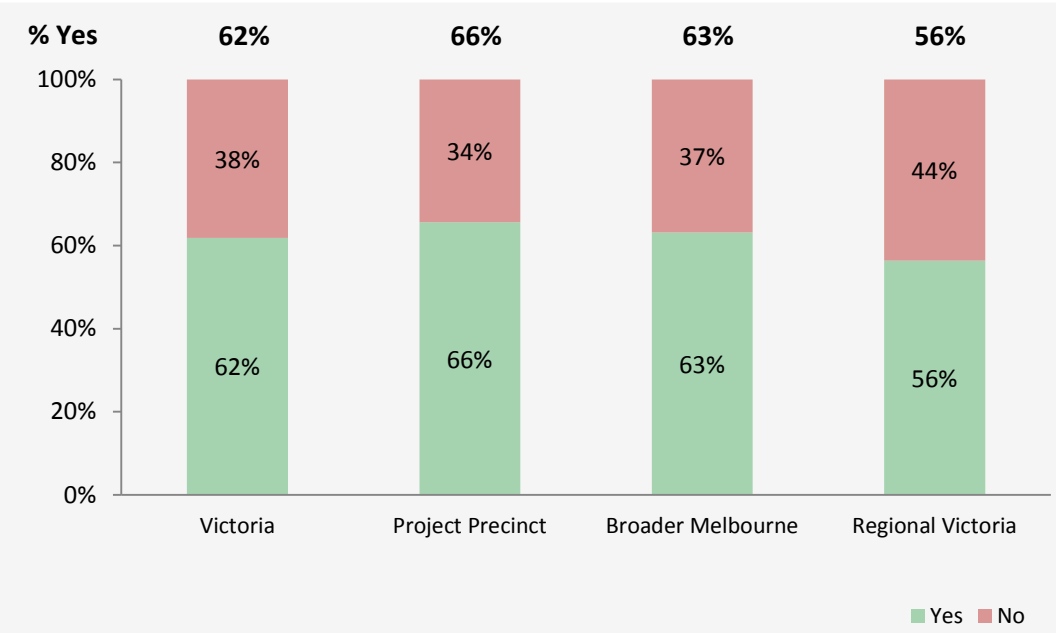


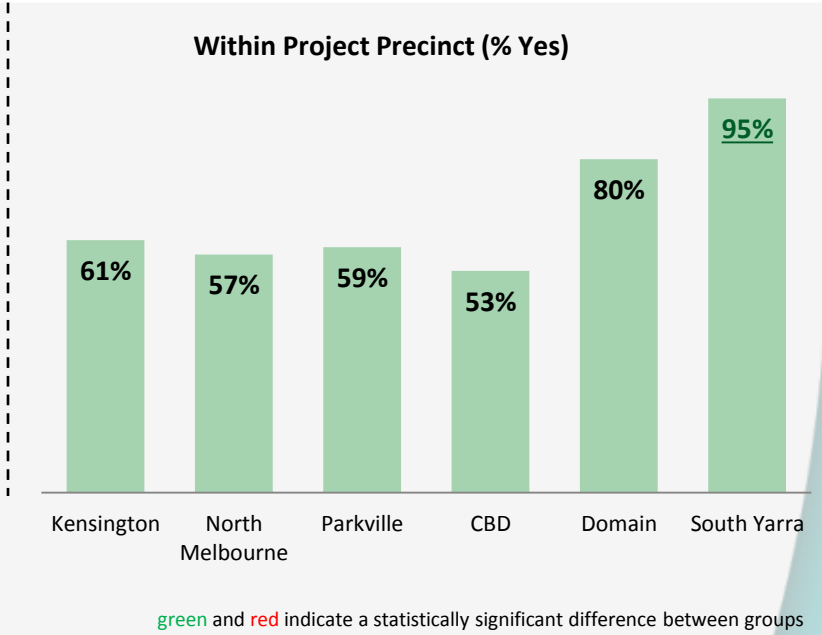
green and red indicate a statistically significant difference between groups

All participants were asked whether they were aware of the Melbourne Metro Rail Project prior to the survey. More than one out-of-every two Victorians (57%) were aware of the Melbourne Metro Rail Project. Unaided project awareness was consistent for those Melburnians who reside within and beyond the Project Precinct (59%). While a majority of Regional Victorians had heard of the project (51%) they were less likely to say this when compared to the Melburnians.

Aided Awareness of Melbourne Metro Rail Project

AW_4. Before today, were you aware of the Melbourne Metro Rail Project?



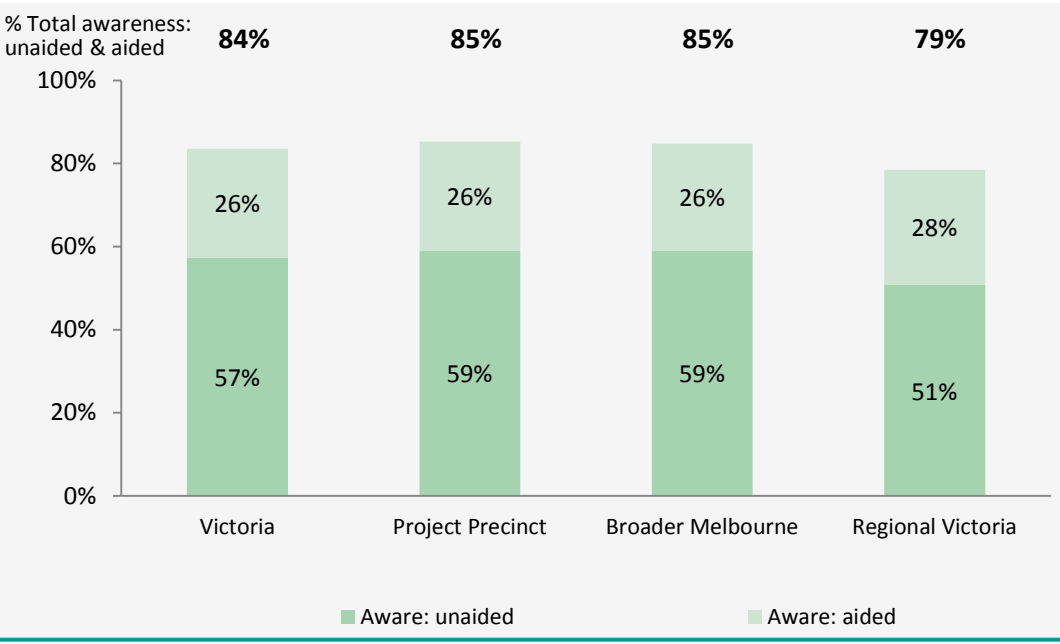


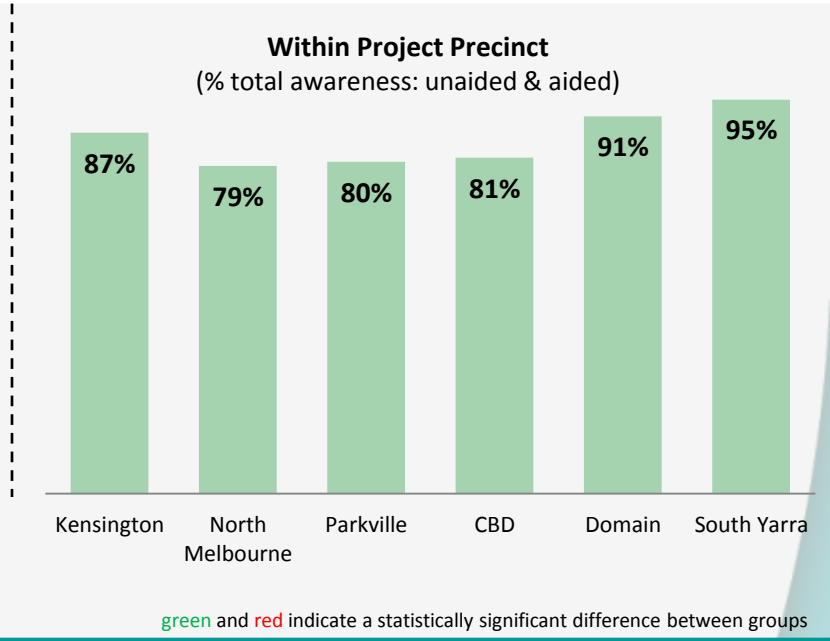
green and red indicate a statistically significant difference between groups

The 43% of Victorians who were unaware of the Melbourne Metro Rail Project were provided with a project summary to read. After reading the summary, they were again asked whether they had heard of the project. Sixty-two percent of those previously unaware were able to recall the project after reading the summary (i.e. had aided awareness).

Total Awareness of Melbourne Metro Rail Project

Unaided + Aided Awareness of the Melbourne Metro Rail Project





green and red indicate a statistically significant difference between groups

Accounting for both unaided and aided awareness, the total proportion of Victorians who were aware of the Melbourne Metro Rail Project was 84%. One out-of-every five (21%) Regional Victorians were not aware of the Project. The combined unaided and aided awareness value varied from 79% (North Melbourne) to 95% (South Yarra) across the Project Precinct.

Purpose of Melbourne Metro Rail Project

AW_2. In your own words, what is the Melbourne Metro Rail Project?

Project Definition	Victoria	Project Precinct	Broader Melbourne	Regional Victoria
Improving infrastructure/improving Melbourne (No Further Information)	8%	3%	9%	10%
A rail tunnel through the city/under Swanston Street	7%	6%	7%	5%
Rail tunnel/underground rail (No Further Information)	6%	9%	6%	5%
A rail link from the South	5%	12%	4%	3%
Building new train stations	5%	4%	5%	3%
Confusion with other projects (e.g. Regional Rail Link)	2%	1%	3%	2%
Increasing rail capacity	2%	2%	2%	4%
Improving inner	2%	3%	2%	2%
Connecting existing train lines	2%	0%	2%	1%
More trains	2%	1%	1%	3%

green and red indicate a statistically significant difference between groups

When asked what the Melbourne Metro Rail Project is, one out-of-every ten (8%) Victorians cited 'improving infrastructure / improving Melbourne'. Seven percent stated 'a rail tunnel through the city / under Swanston Street' and six percent simply stated 'rail tunnel / underground rail'. Twelve-percent from within the Project Precinct stated that the Melbourne Metro Rail Project is 'a rail link from the south'.

Purpose of Melbourne Metro Rail Project

AW_3. Again, in your own words, can you describe why the Melbourne Metro Rail Project is being built?

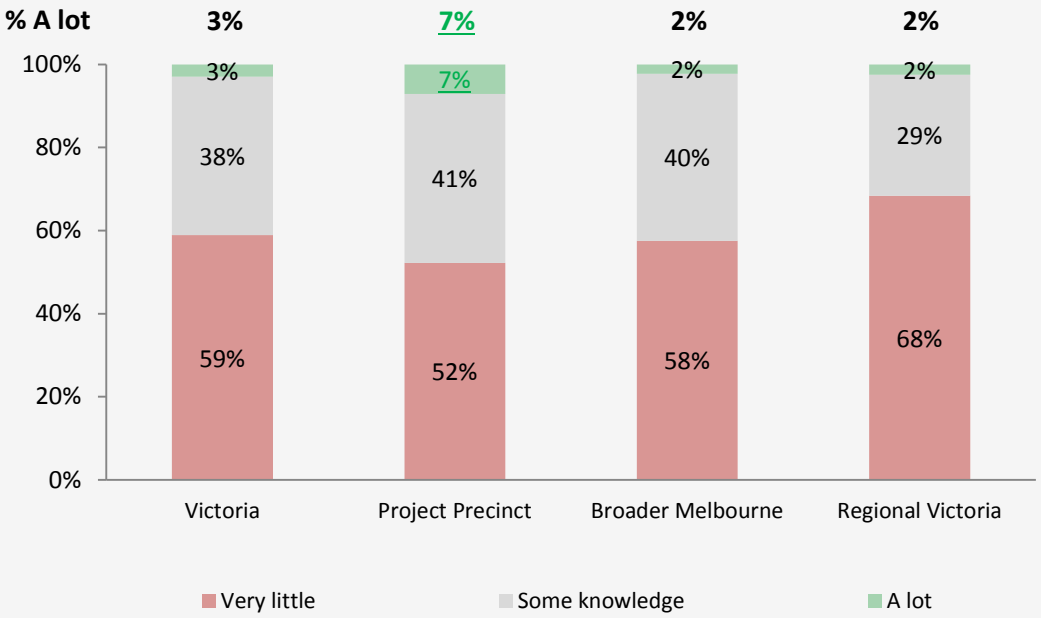
Project Purpose	Victoria	Project Precinct	Broader Melbourne	Regional Victoria
To increase rail capacity/reduce congestion on trains	15%	20%	15%	14%
To improve Melbourne's public transport infrastructure	9%	9%	8%	10%
To increase train patronage/reduce car use/traffic	8%	6%	8%	7%
To make the rail system more efficient/faster	7%	5%	7%	8%
To meet the needs of a growing population	4%	5%	4%	3%
To improve the accessibility of Melbourne	3%	6%	3%	3%
Negative comments	3%	3%	3%	3%
To take the pressure off the city loop	2%	3%	2%	1%
To allow people to travel across the city/connect the north	2%	2%	2%	0%
To reduce congestion on trams	1%	1%	1%	0%

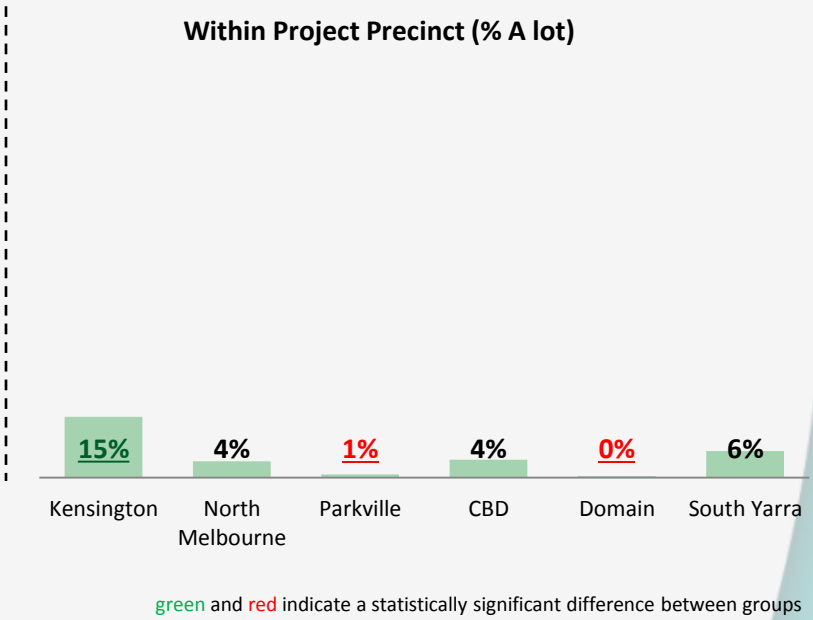
green and red indicate a statistically significant difference between groups

When asked why the Melbourne Metro Rail Project is being built, fifteen percent stated it was ‘to increase rail capacity / reduce congestion on trains’. One out-of-every ten (9%) said it was ‘to improve Melbourne’s public transport infrastructure’. Eight percent reported that the project is being built ‘to increase train patronage / reduce car use / traffic’.

Self-Reported Knowledge of Melbourne Metro Rail Project

AW_5. Which of the following best describes how much you know about the Melbourne Metro Rail Project?



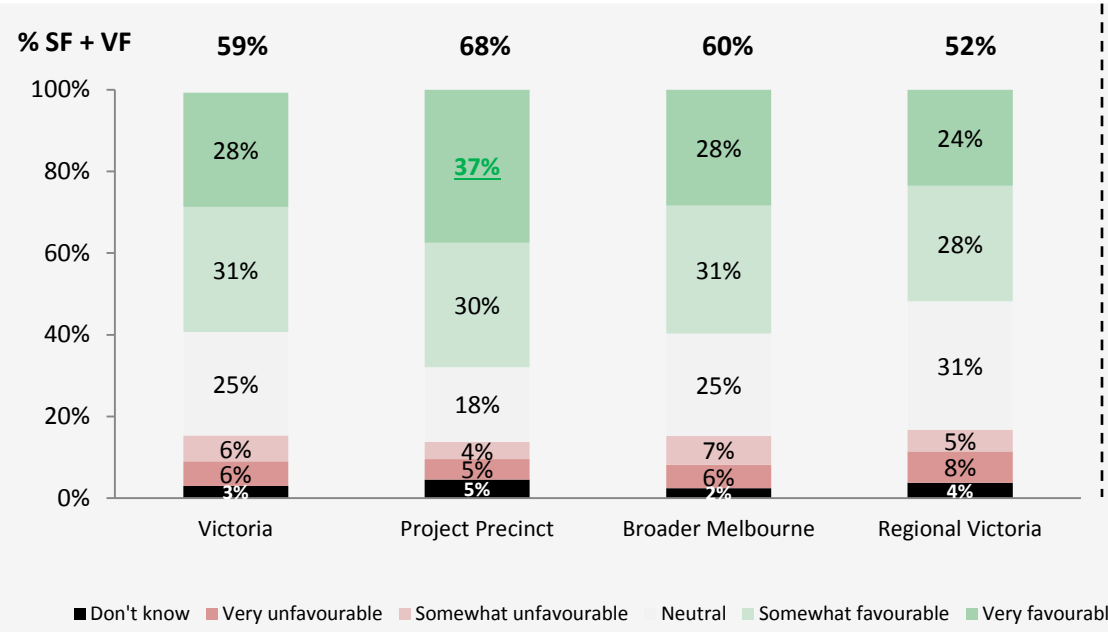


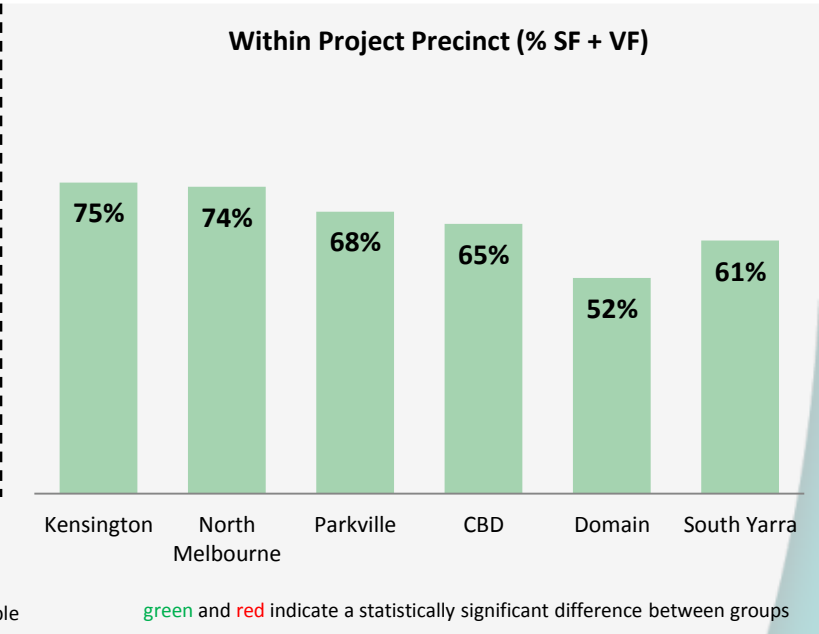
green and red indicate a statistically significant difference between groups

While only three percent of Victorians reported knowing ‘a lot’ about the Melbourne Metro Rail Project, four out-of-ten (38%) advised they had ‘some knowledge’. A majority (59%) reported that they knew ‘very little’. While Project Precinct residents were more likely report ‘a lot’ of knowledge, the actual share of that population reporting as such is less than ten percent (7%). Kensington residents were most likely to report having ‘a lot’ of knowledge (15%) when compared to the balance of residents within the Project Precinct.

Overall Opinion Towards Melbourne Metro Rail Project

AW_6. My overall opinion of the Melbourne Metro Rail Project is…





A majority (59%) of Victorians were favourable towards the Melbourne Metro Rail Project. Those residing within the Project Precinct were more likely to be 'very favourable' (37%) when compared to the balance of Victorians. Within the Project Precinct favourability was highest amongst Kensington (75%), North Melbourne (74%) and Parkville (68%) residents.

Chapter Conclusion: Project Awareness and Attitudes

Four out-of-every five (84%) Victorians were aware of the Melbourne Metro Rail Project. While awareness was higher in Melbourne (85%) relative to Regional Victoria (79%), those within the Project Precinct were no more likely to be aware of the project when compared to the Broader Melburnians.

Victorians were mostly favourable towards the Melbourne Metro Rail Project (59% ‘somewhat’ or ‘very favourable’). The share of those were unfavourable was low (12% somewhat unfavourable or very unfavourable). One out-of-every four had not formed an opinion (25% neutral).

Melbourne Metro Rail Project: Perceived Benefits, Concerns and Impact

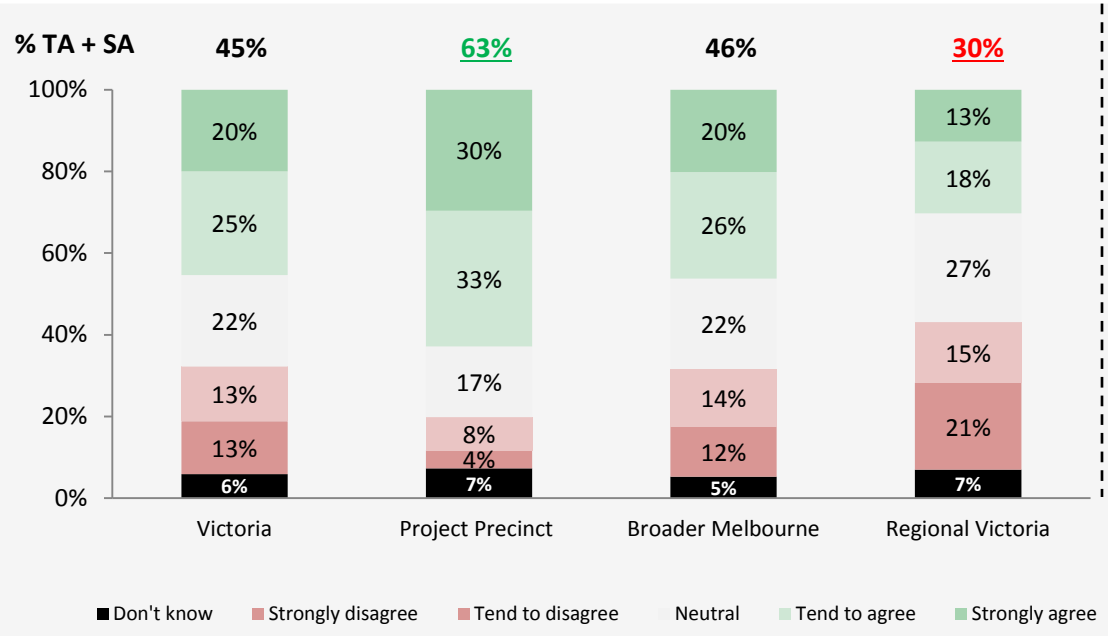
Perceived Benefits, Concerns and Impact

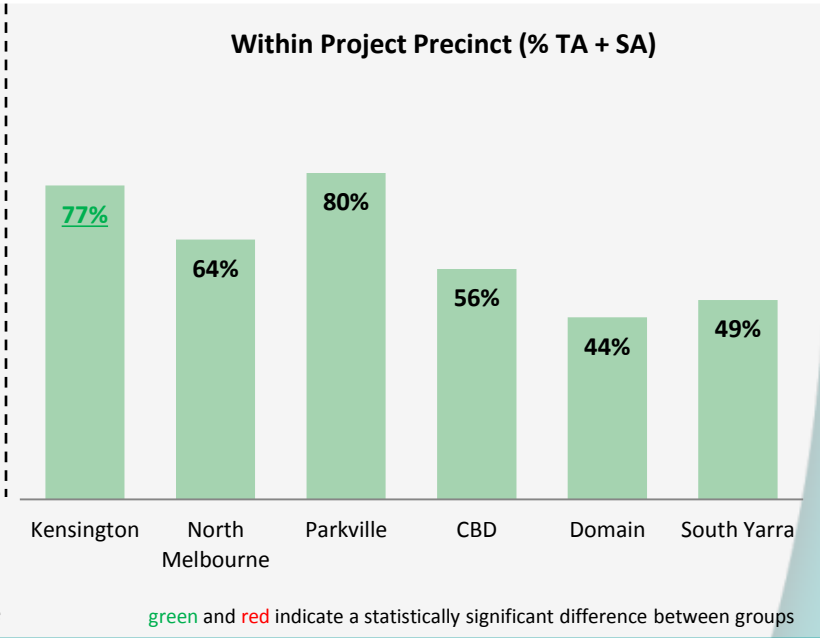
This section of the report contains:

1. Whether citizens believed their household, local area or the broader Victorian community will benefit from the Melbourne Metro Rail Project.
2. How people will benefit from the Melbourne Metro Rail Project.
3. The top benefits from the Melbourne Metro Rail Project.
4. Concerns about the Melbourne Metro Rail Project.
5. The top concerns about the Melbourne Metro Rail Project during construction.
6. How the Melbourne Metro Rail Project will change the train network.

Benefits from Melbourne Metro Rail Project

A_1A. Someone in my household will benefit from Melbourne Metro Rail Project

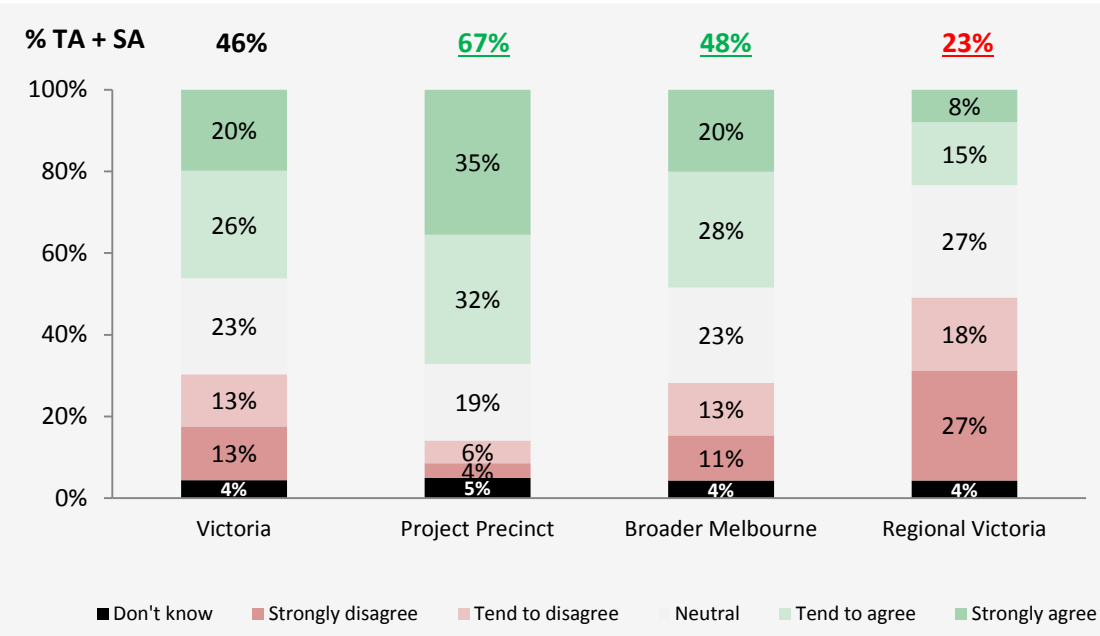


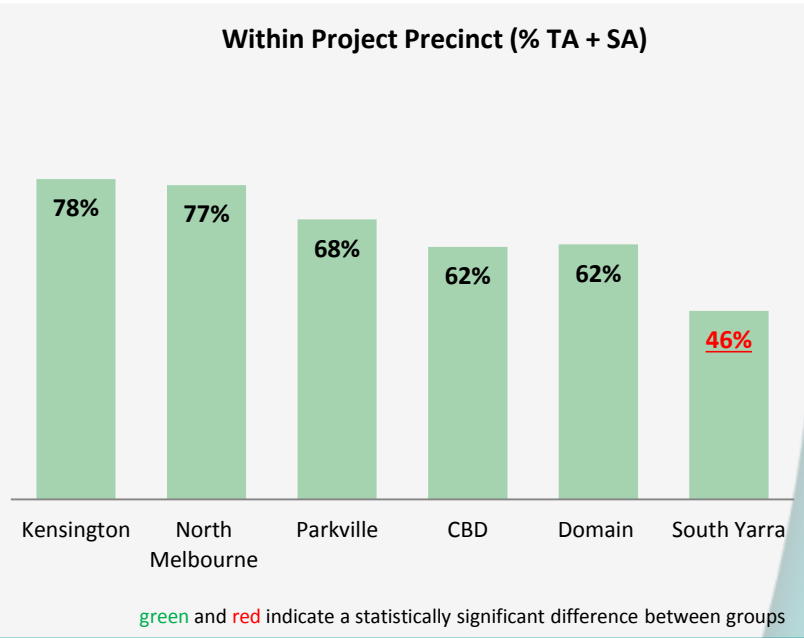


Less than one out-of-every two Victorians (45%) reported that someone in their household will benefit from the Melbourne Metro Rail Project. Residents across the Project Precinct were more likely to agree (63%) with this statement relative to the balance of Victorians. Regional Victorians were the least likely to report that someone in their household will benefit (30%). Regional Victorians were more likely to disagree than agree when presented with this question.

Benefits from Melbourne Metro Rail Project

A_1B. My local community will benefit from Melbourne Metro Rail Project

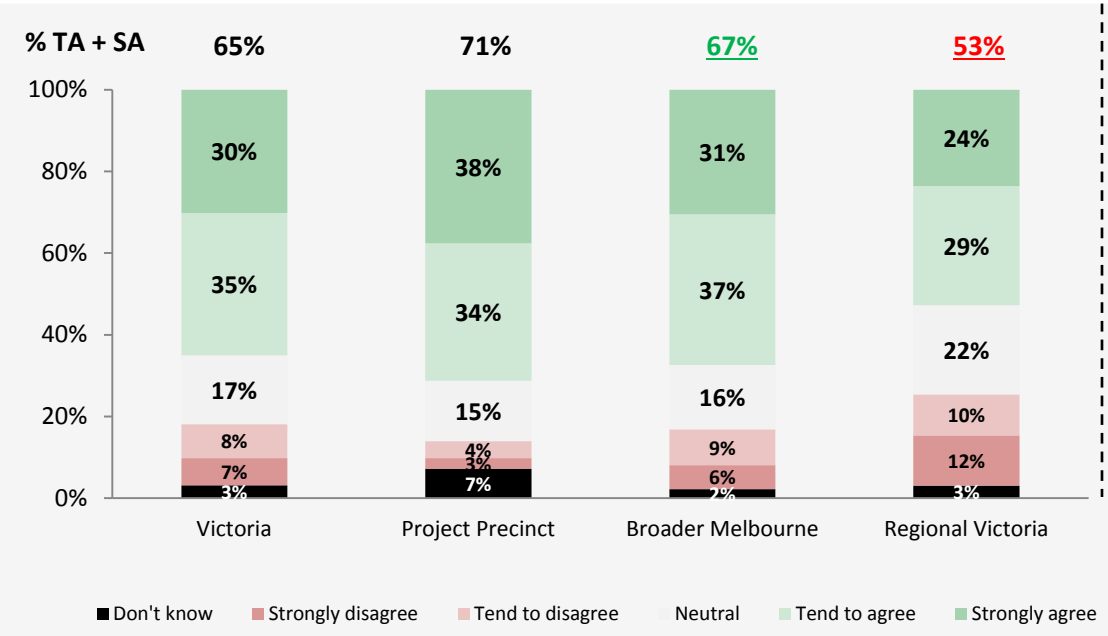


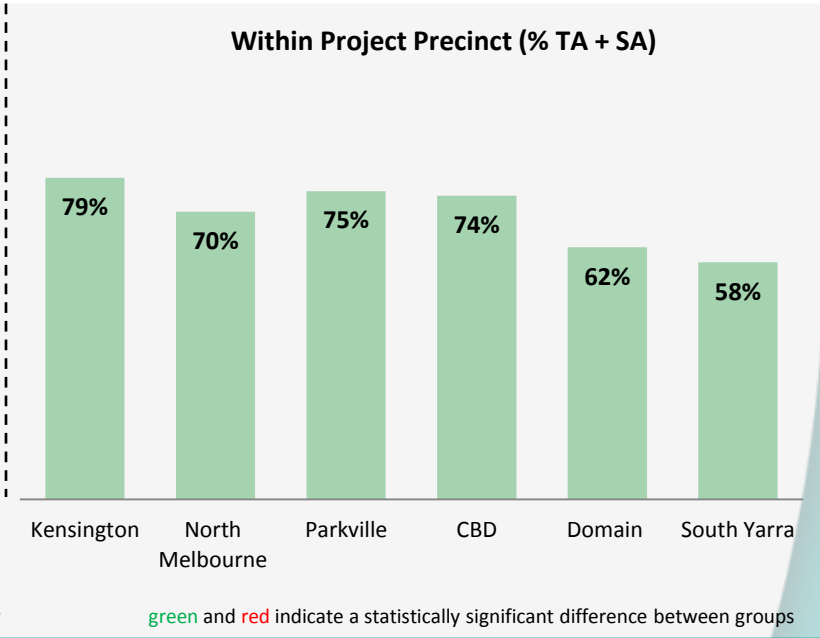


Almost half (46%) of Victorians agreed that their local community will benefit from the Melbourne Metro Rail Project. Those residing within the Project Precinct were most likely to cite the community benefit (67%). Broader Melbourne residents were twice as likely to cite the local benefit when compared to Regional Victorians (48% compared to 23%). Regional Victorians were more likely to disagree than agree with this statement. Within the Project Precinct, South Yarra residents were less likely to report a local community benefit (46%).

Benefits from Melbourne Metro Rail Project

A_1C. The broader Victorian community will benefit from Melbourne Metro Rail Project





Two-thirds (65%) of Victorians agreed the broader Victorian community will benefit from the Melbourne Metro Rail Project. While those living in Regional Victoria were less able to cite the broader benefit (53% agreement), they were more likely to agree than disagree when presented with this question.

How People will Benefit from Melbourne Metro Rail Project

A_2. And how will people benefit from the Melbourne Metro Rail Project?

Benefits	Victoria	Project Precinct	Broader Melbourne	Regional Victoria
Reduced travel times/increased efficiency	12%	11%	12%	13%
More train services/less congestion on trains	10%	13%	10%	8%
Reduced road congestion/traffic	8%	9%	8%	7%
Convenience/more transport options	7%	9%	7%	5%
Increased accessibility in general to train network	6%	9%	6%	4%
Improved services/improved public transport (No Further Information)	5%	5%	5%	4%
Encouraging public transport use/reducing car dependence	5%	4%	4%	5%
Providing a cross	3%	4%	3%	0%
More reliable services	3%	3%	3%	1%
Improving accessibility of specific areas (e.g. Parkville, South Melbourne, CBD)	2%	4%	2%	1%

green and red indicate a statistically significant difference between groups

When asked how people will benefit from the Melbourne Metro Rail Project twelve percent stated ‘reduced travel times / increased efficiency’. One out-of-every ten (10%) cited ‘more train services / less congestion on trains’. Eight percent reported ‘reduced road congestion / traffic’.

Top Benefits of Melbourne Metro Rail Project

A_2a. What do you think are the top three benefits of the Melbourne Metro Rail Project?

Benefits	Victoria	Project Precinct	Broader Melbourne	Regional Victoria
Better access to public transport	48%	56%	46%	50%
Reduce congestion on roads	47%	46%	47%	45%
More trains across the day	41%	43%	40%	40%
Trains with room for more people	33%	32%	32%	36%
More reliable trains	31%	28%	31%	34%
More railway stations	29%	31%	31%	21%
Creating jobs during construction	29%	25%	30%	29%

green and red indicate a statistically significant difference between groups

'Better access to public transport' (48%) and 'reduced congestion on roads' (47%) were reported as the two top benefits of the Melbourne Metro Rail Project. 'More trains across the day' was the third most cited benefit (41%). A majority of those residing within the Project Precinct reported 'better access to public transport' as a benefit. Broader Melburnians selected 'reduced congestion on roads' (47%) as their primary benefit.

Top Benefits of Melbourne Metro Rail Project

A_2a. What do you think are the top three benefits of the Melbourne Metro Rail Project?

Benefits	Kensington	North Melbourne	Parkville	CBD	Domain	South Yarra
Better access to public transport	57%	57%	59%	57%	60%	50%
Reduce congestion on roads	43%	56%	80%	35%	56%	41%
More trains across the day	62%	34%	34%	43%	18%	36%
Trains with room for more people	31%	28%	24%	34%	34%	41%
More reliable trains	32%	22%	26%	36%	21%	23%
More railway stations	38%	25%	39%	21%	27%	39%
Creating jobs during construction	23%	34%	35%	21%	47%	11%

green and red indicate a statistically significant difference between groups

Residents from Parkville were more likely to cite ‘reduced congestion on roads’ (80%) as a benefit of the Melbourne Metro Rail Project when compared to the balance of residents within the Project Precinct. Kensington residents were more likely to select ‘more trains across the day’ (62%).

Concerns about Melbourne Metro Rail Project

A_3. What concerns do you have about the Melbourne Metro Rail Project?

Concerns	Victoria	Project Precinct	Broader Melbourne	Regional Victoria
Overall funding (e.g. ROI, costs going over budget)	15%	12%	15%	16%
General construction disruption	9%	14%	9%	5%
Overall timeframe	7%	9%	7%	7%
Disruption of existing rail services during construction	5%	7%	6%	2%
Disruption to CBD (e.g. Swanston St, shopping precincts, pedestrians)	2%	4%	2%	0%
Government changes delaying / affecting funding / cancelling works	2%	2%	2%	3%
No clear benefit for the cost and disruption	2%	2%	2%	1%
Doesn't service new areas	2%	3%	1%	3%
Money better spent on existing network	1%	1%	1%	0%
Network won't actually be completed	1%	1%	1%	1%

green and red indicate a statistically significant difference between groups

When asked to state their concerns about the Melbourne Metro Rail Project, fifteen percent reported ‘overall funding (e.g. ROI, costs going over budget). Nine percent said ‘general construction disruption’ and seven percent cited the ‘overall time-frame’. Those from within the Project Precinct were more likely to be concerned about ‘general construction disruption’ relative to the balance of Victorians.

Top Concerns of Melbourne Metro Rail Project

A_3. What disruptions and impacts are you most concerned about? (during construction)

Concerns	Victoria	Project Precinct	Broader Melbourne	Regional Victoria
Temporary changes in road access / traffic management	41%	39%	42%	39%
Changes to current train scheduling	33%	25%	35%	30%
Business impacts	20%	17%	20%	20%
Changes to parks and gardens	18%	26%	17%	16%
Noise during works	13%	24%	12%	9%
Access to where I work	12%	12%	14%	5%
Access to places where I shop	11%	15%	11%	10%
Vibration during works	9%	14%	9%	7%
Access to where I live	9%	23%	7%	2%

green and red indicate a statistically significant difference between groups

Victorians were most concerned about 'temporary changes in road access / traffic management' (41%) followed by 'changes to current train scheduling' (33%) and 'business impacts' (20%). While those within the Project Precinct shared concerns about road access, they were more likely to be worried about 'changes to parks and gardens' (26%), 'noise during works' (24%), 'access to where I live' (23%) and 'vibration during works' (14%). Broader Melburnians were more likely to be worried about 'changes to train scheduling' (35%) and 'access to where I work' (14%).

Top Concerns of Melbourne Metro Rail Project

A_3. What disruptions and impacts are you most concerned about? (during construction)

Concerns	Kensington	North Melbourne	Parkville	CBD	Domain	South Yarra
Temporary changes in road access / traffic management	45%	38%	18%	39%	34%	42%
Changes to current train scheduling	36%	10%	16%	26%	19%	21%
Business impacts	18%	20%	14%	21%	10%	10%
Changes to parks and gardens	28%	30%	24%	16%	34%	29%
Noise during works	26%	24%	10%	33%	15%	17%
Access to where I work	16%	5%	21%	12%	10%	8%
Access to places where I shop	10%	8%	29%	18%	18%	19%
Vibration during works	6%	24%	9%	18%	22%	9%
Access to where I live	24%	21%	16%	18%	21%	35%

green and red indicate a statistically significant difference between groups

Excluding Parkville, residents across the Project Precinct were most likely to be concerned about ‘temporary changes in road access / traffic management’. The rest of the concerns were mixed; with Kensington residents concerned about ‘changes to current train scheduling’ (36%) and South Yarra residents worried about ‘access to where I live’ (35%). Those who resided in Domain were concerned about ‘changes to parks and gardens’ (34%) whereas CBD residents cited ‘noise during works’ (33%).

How Melbourne Metro Rail Project will Change Train Network

A_4. How do you think the Melbourne Metro Rail Project will change the way the train network operates?

Changes because of Melbourne Metro	Victoria	Project Precinct	Broader Melbourne	Regional Victoria
Overall improvement of infrastructure	6%	9%	5%	8%
Improved capacity	6%	5%	6%	7%
Increased train frequency	5%	4%	6%	2%
Convenience/more transport options	5%	5%	5%	2%
Increased accessibility in general to train network	4%	6%	4%	5%
Improved reliability of services	2%	2%	3%	1%
No real change	2%	2%	3%	2%
More reliable services	2%	4%	2%	3%
Reduced congestion on City Loop / City Loop can be bypassed	2%	4%	2%	0%
An overall network that can handle more passengers	2%	1%	1%	3%

green and red indicate a statistically significant difference between groups

When asked how the Melbourne Metro Rail Project will change the way the train network operates, six percent reported an ‘overall improvement of infrastructure’ and ‘improved capacity’. Five percent cited ‘increased train frequency’ and ‘convenience / more train options’.

Chapter Conclusion: Perceived Benefits, Concerns and Impact

Two-thirds (65%) of Victorians agreed the broader Victorian community will benefit from the Melbourne Metro Rail Project.

When asked to nominate the top benefits of the project, Victorians were most likely to say ‘better access to public transport’ (48%), ‘reduced congestion on roads’ (47%) and ‘more trains across the day’ (41%).

When asked to state their concerns about the Melbourne Metro Rail Project, fifteen percent reported ‘overall funding (e.g. ROI, costs going over budget)’.

Melbourne Metro Rail Project: Current and Future Communications

Current and Future Communications

This section of the report contains:

1. Where citizens have seen, read or heard about the Melbourne Metro Rail Project.
2. Whether citizens within the Project Precinct have received and engaged with formal written communications about the Melbourne Metro Rail Project.
3. What citizens are most interested about hearing about regarding the Melbourne Metro Rail Project.
4. Preferred mediums and frequency of future communications.

Current Communication Sources

CC_1. Where have you seen, read or heard about the Melbourne Metro Rail Project?

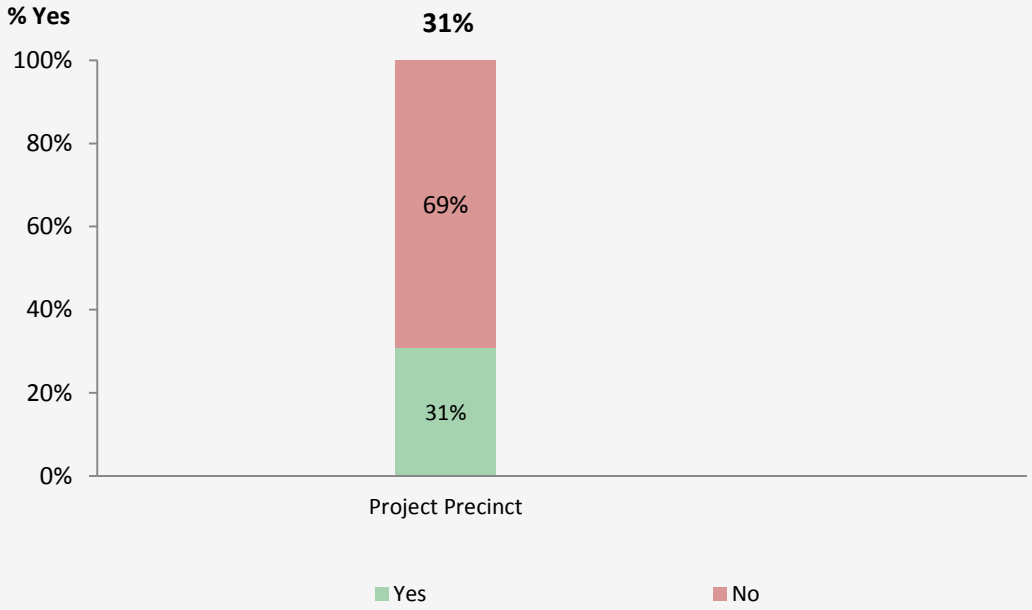
Current Communications	Victoria	Project Precinct	Broader Melbourne	Regional Victoria
Television news coverage	30%	17%	30%	40%
Newspapers (e.g. The Age, Herald Sun, local community)	22%	25%	23%	17%
Televisions advertisements / commercials	15%	9%	15%	20%
Radio news services	8%	5%	8%	10%
Online websites, blogs and forums (e.g. The Conversation)	8%	12%	7%	7%
Metro websites (e.g. mmrailproject.vic.gov.au, ptv.vic.gov.au etc.)	5%	7%	5%	3%
Direct Metro Rail leaflets / pamphlets / information sheets / letters sent to home	4%	15%	2%	1%
Social media (e.g. Facebook, Twitter, YouTube)	4%	6%	4%	3%
Hadn't heard of it before	3%	2%	3%	3%
Word of mouth	3%	4%	3%	2%

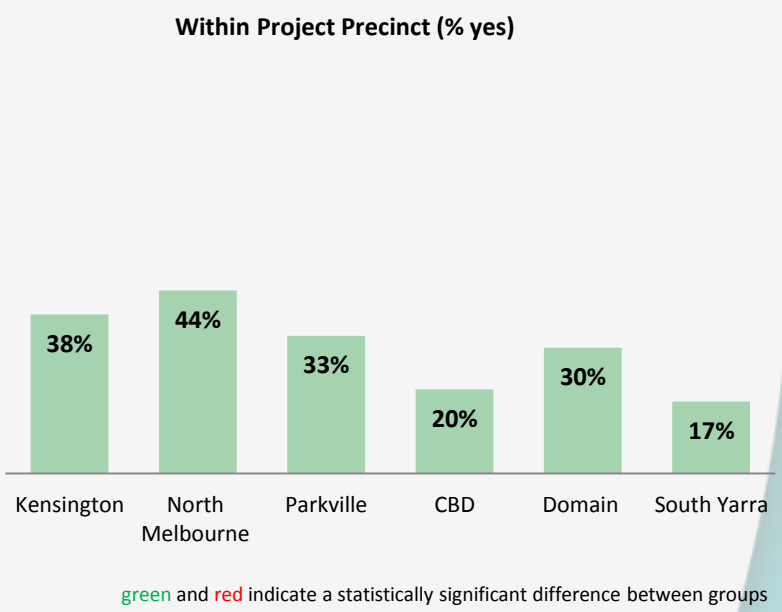
green and red indicate a statistically significant difference between groups

One out-of-every three Victorians (30%) reported seeing, reading or hearing about the Melbourne Metro Rail Project via 'Television news coverage'. Those within the Project were less likely to have recalled this medium relative to Regional Victorians (17% vs 40%). Those from within the Project Precinct were more likely to have heard about the Project from 'Direct Metro Rail leaflets / pamphlets / information sheets / letters sent to home' (15%).

Receipt of Written Communication

CC_2. Have you received any communications from the Melbourne Metro Rail Project or other notifications in the mail? (an example was shown on screen)

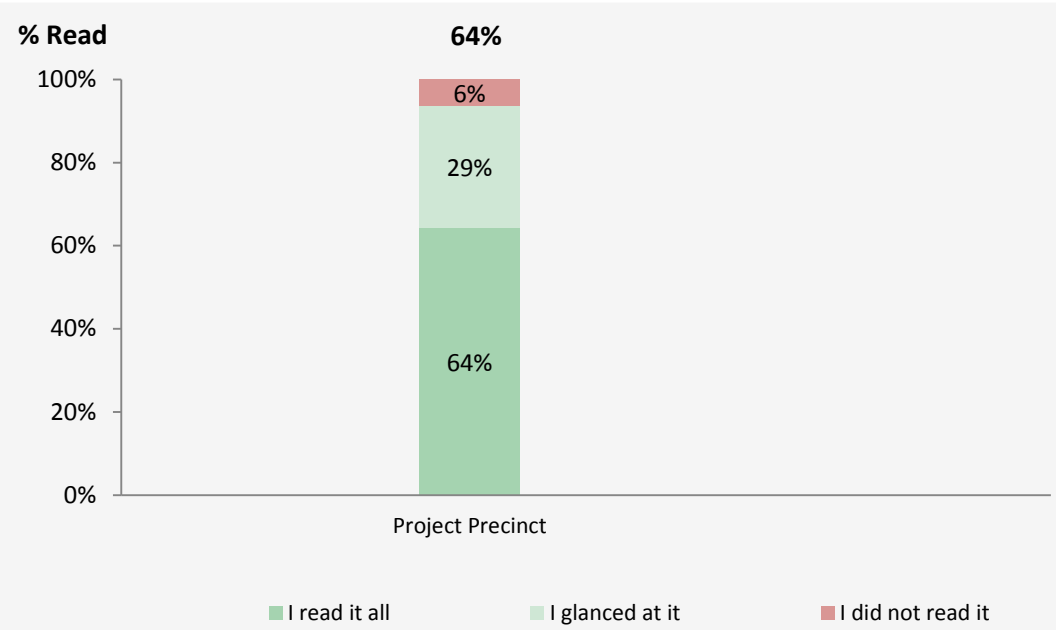


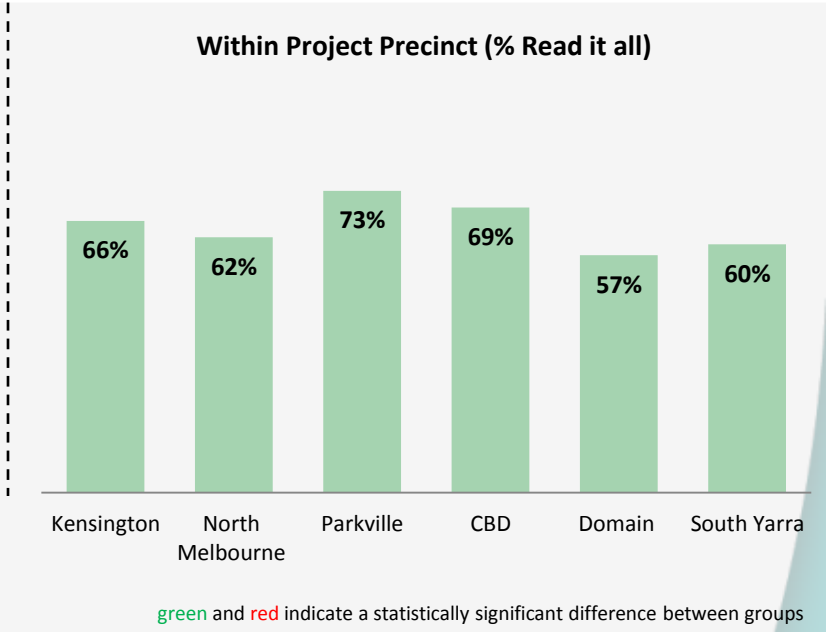


Three out-of-every ten (31%) residents surveyed within the Project Precinct recalled receiving communications from the Melbourne Metro Rail Project. Citizens from North Melbourne (44%), Kensington (38%) and Parkville (33%) were most likely to recall receiving communications. Those from South Yarra (17%) and the CBD (20%) were least likely.

Engagement with Current Communication

CC_3. Did you read the newsletter?





Of those who recalled receiving communication materials, two out-of-every three (64%) advised that they 'read it all'. Just under one-third (29%) 'glanced at it' and six percent 'did not read the document'. The total readership metric for the tested communication is approximately 20% (31% [recalled receiving] * 64% [recalled reading]).

Future Communications: Interests

FC_1. What is it that you are most interested to know about the Melbourne Metro Rail Project?

Future Communications	Victoria	Project Precinct	Broader Melbourne	Regional Victoria
Funding	10%	6%	11%	10%
Design plans (tunnels, network layout, exact station locations, routes)	9%	13%	10%	5%
Impact and changes to existing services	8%	10%	9%	3%
Overview of planned construction stages / predicted timeline	6%	10%	6%	3%
Exact start and / or completion dates	6%	9%	6%	4%
What the next steps will be, ongoing progress milestones	5%	8%	4%	4%
Impact and changes to residential areas affected (e.g. Nth Melbourne, Kensington)	3%	8%	2%	2%
Potential disruption to CBD	1%	2%	1%	0%
Potential and planned future expansion (new lines, new connections etc.)	1%	1%	0%	1%
How passengers will be able to connect to existing network	0%	0%	0%	0%

green and red indicate a statistically significant difference between groups

One out-of-every ten (10%) Victorians was most interested to know about the 'Funding' followed by 'Design plans (tunnels, network layout, exact station locations, routes)' (9%) and 'Impact and changes to existing services' (8%). Those within the Project Precinct were more likely to want to know about 'Impacts and changes to residential areas affected (e.g. North Melbourne, Kensington)' compared to the rest of Victorians.

Future Communications: Channel Preference

FC_2. Which are your preferred ways of receiving information about the Melbourne Metro Rail Project?

Preferred Future Mediums	Victoria	Project Precinct	Broader Melbourne	Regional Victoria
Television; including advertising and news	40%	29%	42%	43%
Daily newspapers; including online newspapers	32%	29%	33%	29%
Local newspapers; including online newspapers	25%	18%	27%	25%
Signage on public transport	24%	29%	26%	12%
Email updates	22%	28%	22%	18%
Internet search	21%	20%	22%	20%
Letters to my house	19%	30%	20%	9%
Radio; including advertising and news	19%	12%	20%	18%
Social media (twitter, Facebook)	13%	17%	15%	7%
Leaflets in public places	12%	13%	14%	7%
Community information sessions	5%	7%	5%	4%
SMS Text alerts	3%	4%	3%	4%
Presentations and neighbourhood briefings	3%	5%	4%	1%
I would not like to receive information	14%	7%	12%	24%

green and red indicate a statistically significant difference between groups

Forty-percent of Victorians cited ‘television; including advertising and news’ as their preferred way to receive information about the Melbourne Metro Rail Project. ‘Daily’ (32%) and ‘Local’ (25%) newspapers were the next most preferred mediums followed by ‘signage on public transport’ (24%). Residents within the Project Precinct were more interested in personalised communications with 30% requesting ‘letters to my house’ and 28% reporting ‘email updates’ their preferred mediums. One out-of-every four (24%) Regional Victorians did not want to receive information.

Future Communications: Channel Preference

FC_2. Which are your preferred ways of receiving information about the Melbourne Metro Rail Project?

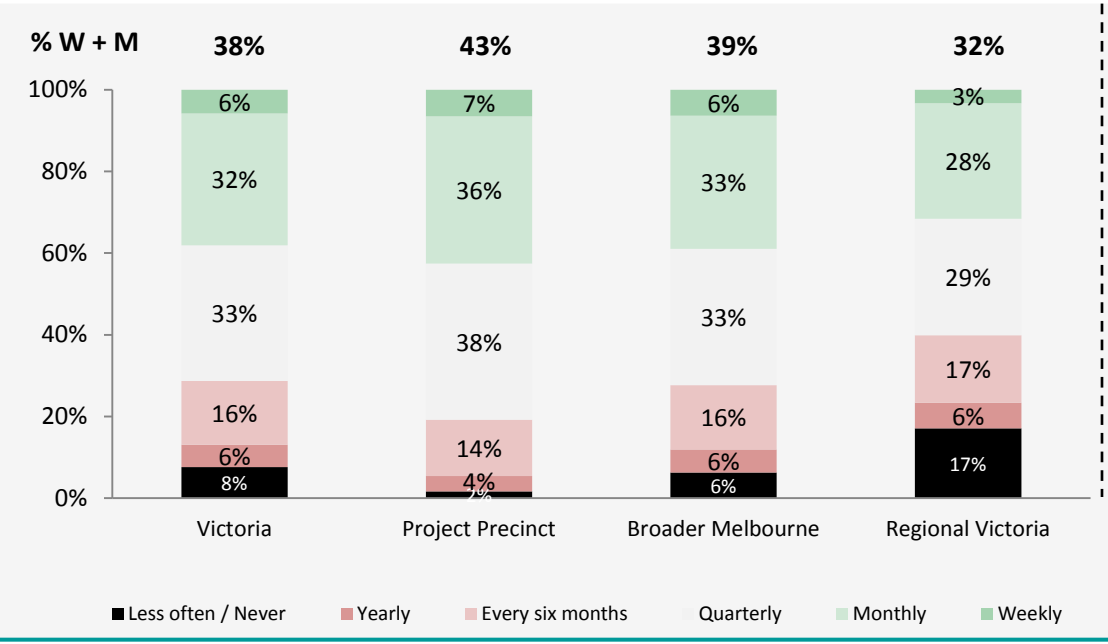
Preferred Future Mediums	Kensington	North Melbourne	Parkville	CBD	Domain	South Yarra
Television; including advertising and news	28%	33%	31%	30%	23%	30%
Daily newspapers; including online newspapers	35%	27%	20%	28%	23%	32%
Local newspapers; including online newspapers	18%	16%	8%	28%	10%	12%
Signage on public transport	36%	31%	25%	30%	26%	13%
Email updates	32%	21%	33%	27%	21%	28%
Internet search	24%	14%	26%	11%	17%	29%
Letters to my house	29%	41%	26%	29%	28%	28%
Radio; including advertising and news	13%	6%	17%	8%	13%	16%
Social media (twitter, Facebook)	23%	21%	12%	17%	14%	6%
Leaflets in public places	12%	12%	1%	18%	17%	8%
Community information sessions	12%	6%	8%	2%	12%	4%
SMS Text alerts	4%	1%	6%	5%	4%	1%
Presentations and neighbourhood briefings	5%	11%	1%	4%	8%	4%
I would not like to receive information	1%	8%	18%	12%	5%	9%

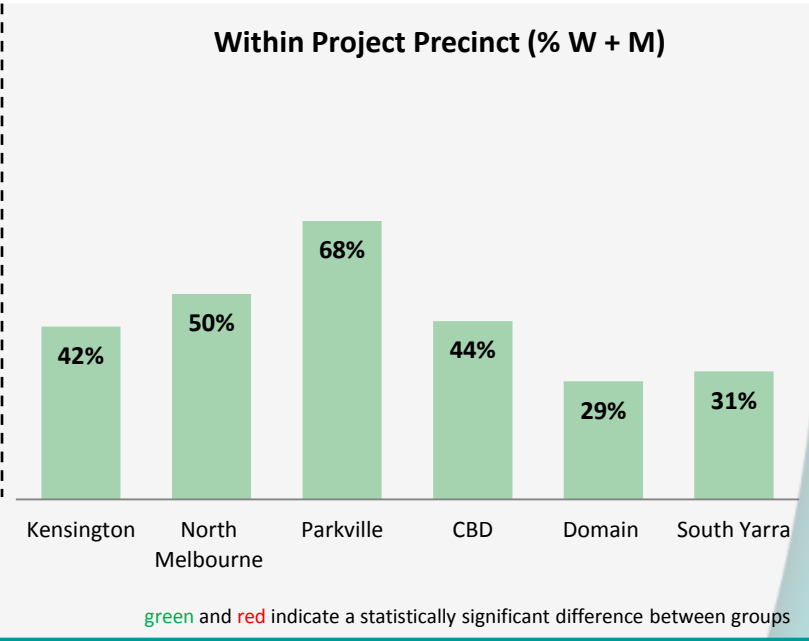
green and red indicate a statistically significant difference between groups

There was no clear stand-out or consistent mediums requested with regard to future communications from those who reside within the Project Precinct. ‘Letters to houses’ were – on average – the most preferred medium, followed by ‘television’ and ‘daily newspapers’. ‘Email updates’ and ‘signage on public transport’ were also considered valuable.

Future Communications: Channel Preference

FC_3. How often would you like to receive updates on the progress of the Melbourne Metro Rail Project during the planning phase?





green and red indicate a statistically significant difference between groups

When asked how often they would like to receive updates on the progress of the Melbourne Metro Rail Project during the planning phase, four out-of-every ten (38%) Victorians selected 'monthly' (32%) or 'weekly' (6%). The most popular frequency was once every quarter (33%).

Chapter Conclusion: Current and Future Communications

The traditional mediums of television (news and advertisements), newspapers and radio (news) held the majority collective share of channels where Victorians had seen, read or heard about the Melbourne Metro Rail Project.

Those within the Project Precinct were more likely to cite direct communications as a current channel, with one out-of-every five (20%) residents within the Project Precinct recalling that they had received and fully read the direct mail MMRA newsletter.

While the traditional mediums of television and newspapers (daily and local) made up the majority share of preferred channels with regard to future communications, those who resided within the Project Precinct were more likely to nominate personalised traditional and digital communications such as email updates and letters to their house as their preferred channels, moving forward.

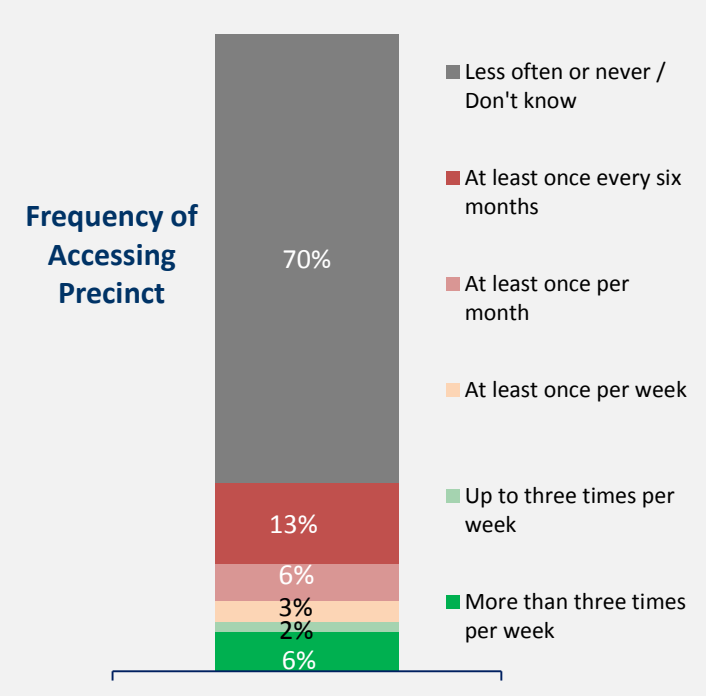
Engagement with the Project Precincts

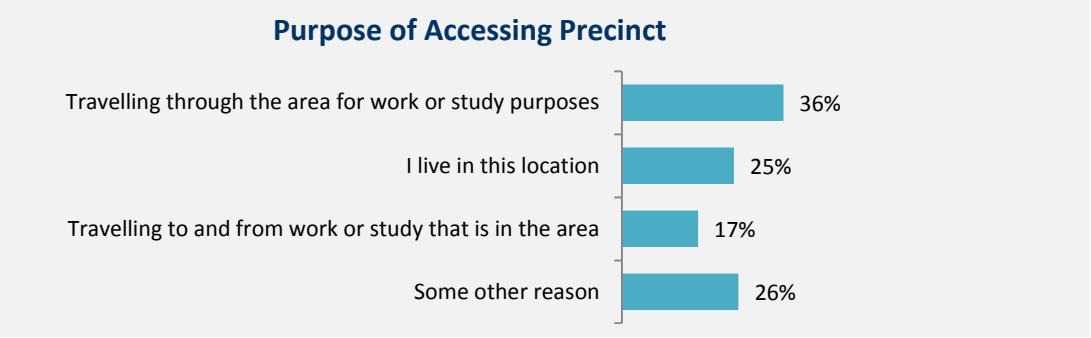
Engagement with the Project Precincts

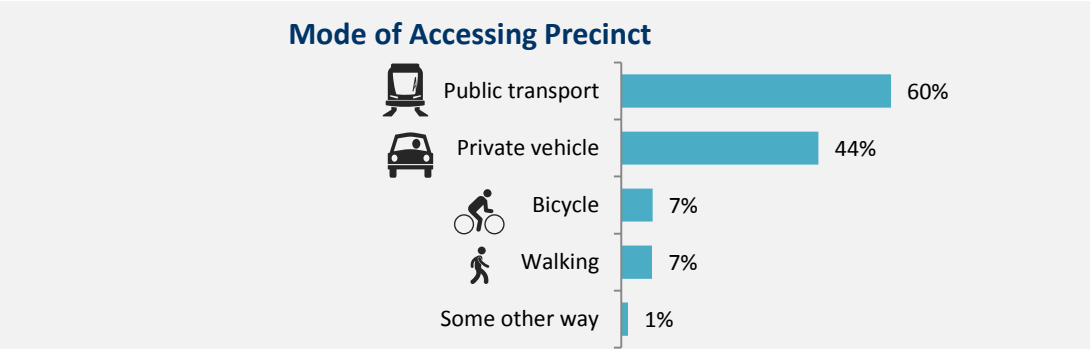
This section of the report contains:

1. How often citizens visit each Project Precinct.
2. The purpose for accessing each Precinct.
3. The mode of accessing each Precinct.

Kensington Precinct

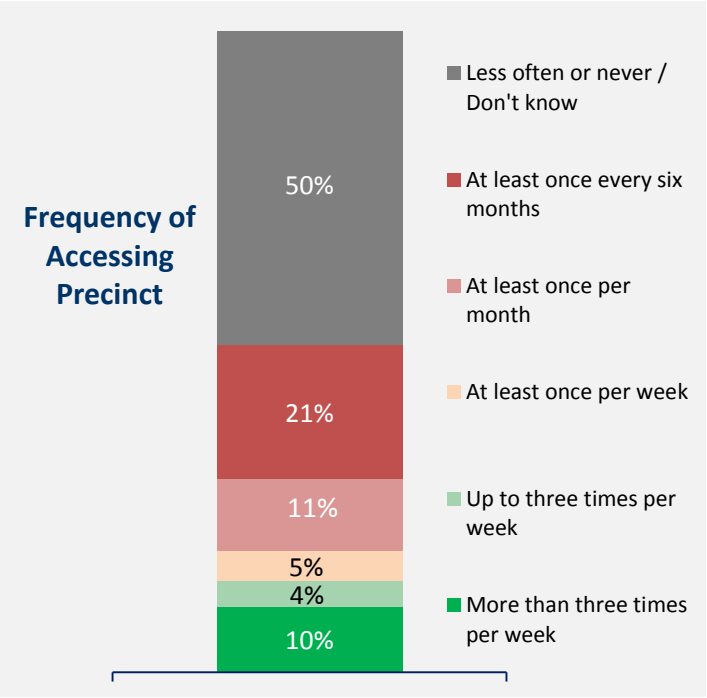


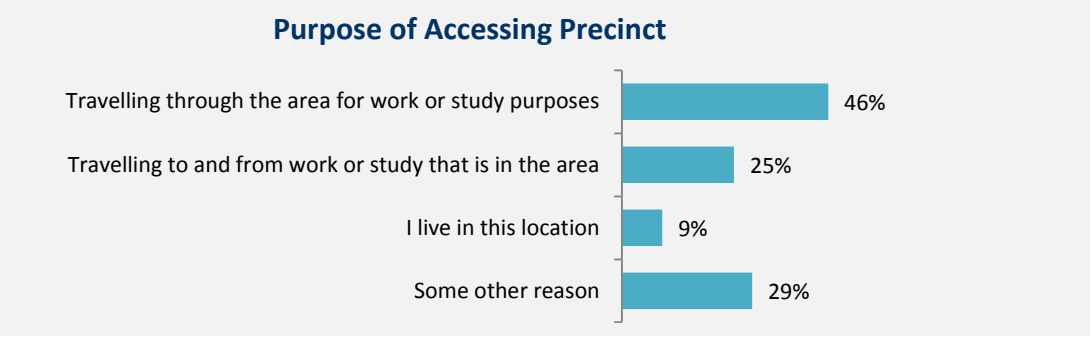


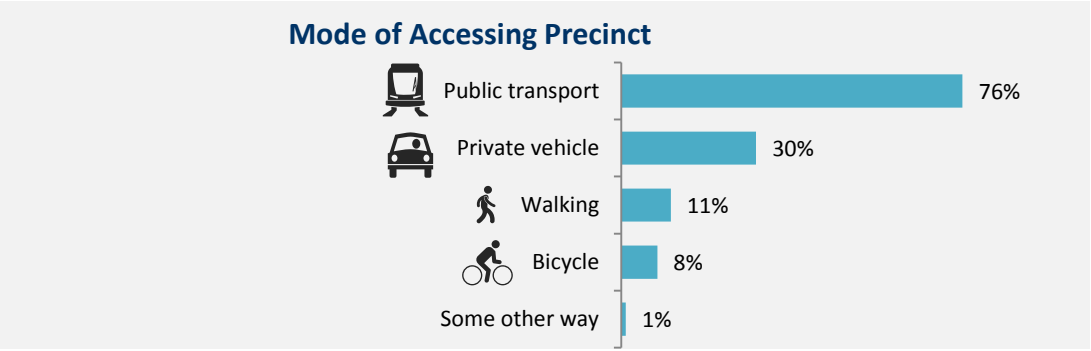


A majority (70%) of participants indicated that they had visited Kensington less than once every six months or had never visited at all. Among those who had visited Kensington, around a third (36%) indicated that they were travelling through the area for work or study purposes and 26% reported some other reason (e.g. visiting family and friends, shopping). More than half (60%) of participants who had visited Kensington used public transport to access the area, followed by 44% of participants who indicated that they had used a private vehicle.

North Melbourne Precinct

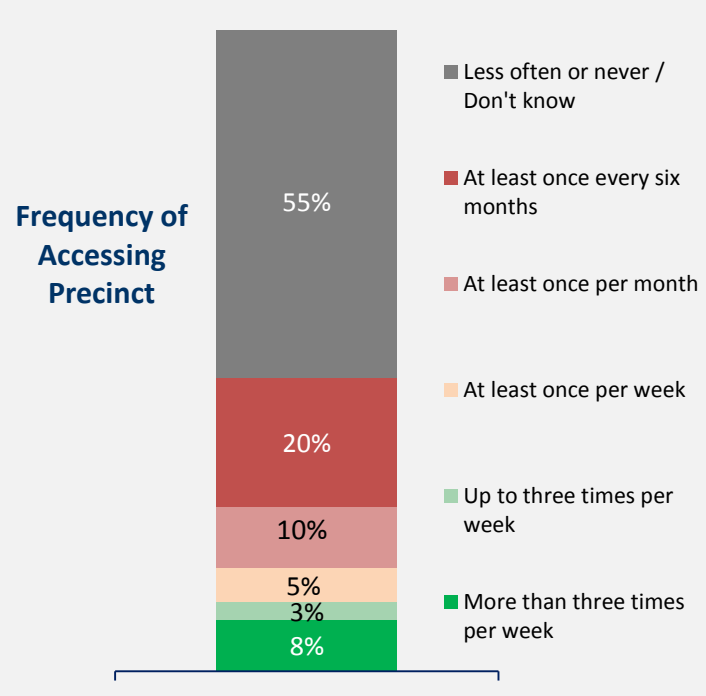


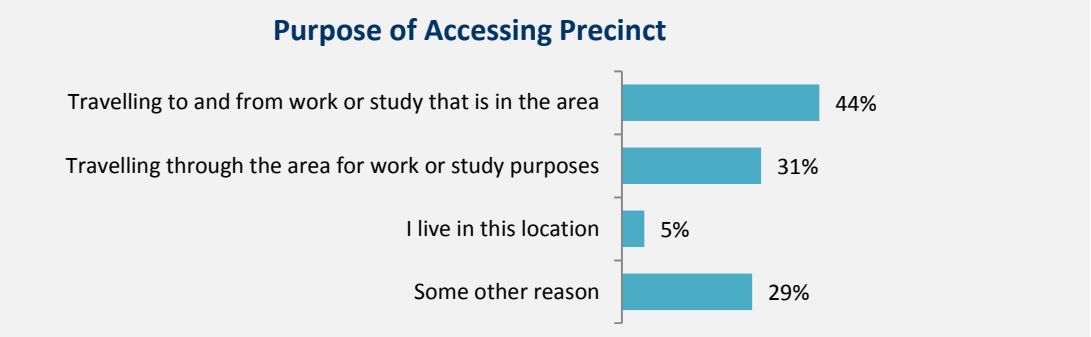


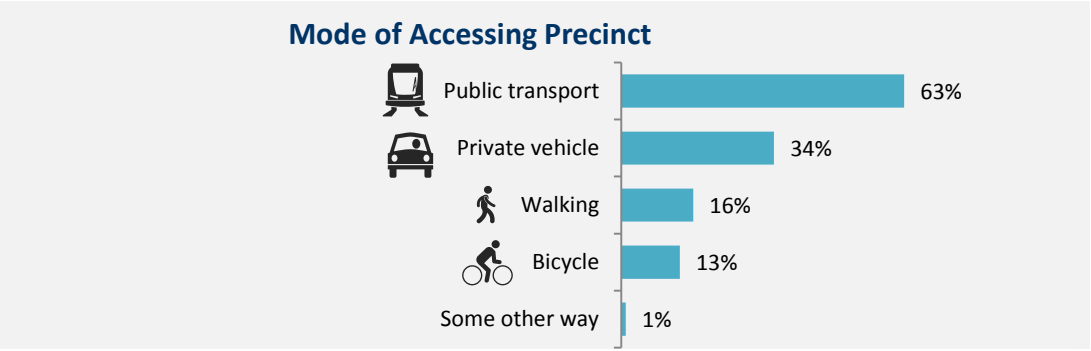


Half of participants (50%) indicated that they had never accessed North Melbourne or had visited the area less than once every six months. Twenty-one percent (21%) indicated they visited this area at least once every six months. Ten percent (10%) stated they accessed this location more than three times each week. Just under half (46%) travelled through the area for work or study purposes and 29% said they visited for some other reason (e.g. visiting family or friends, shopping). The most common mode of accessing this Precinct was public transport (76%).

Parkville Precinct

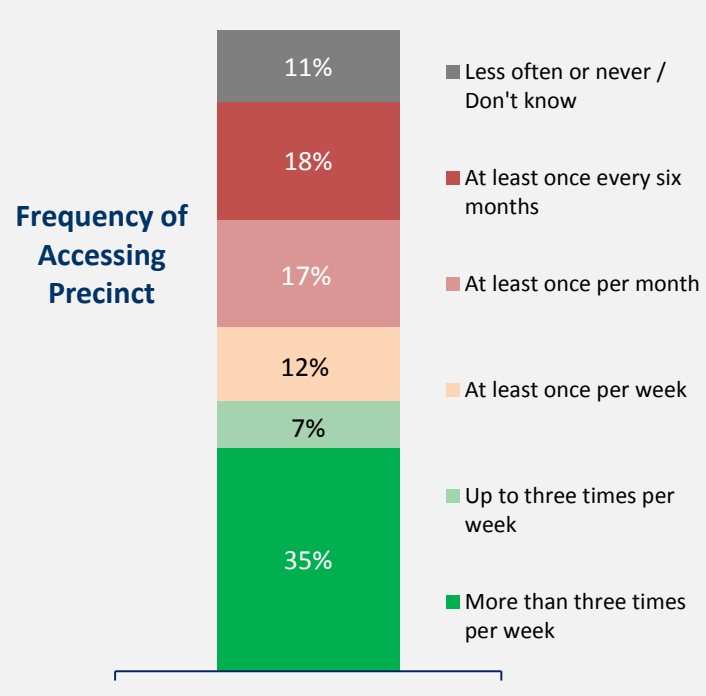


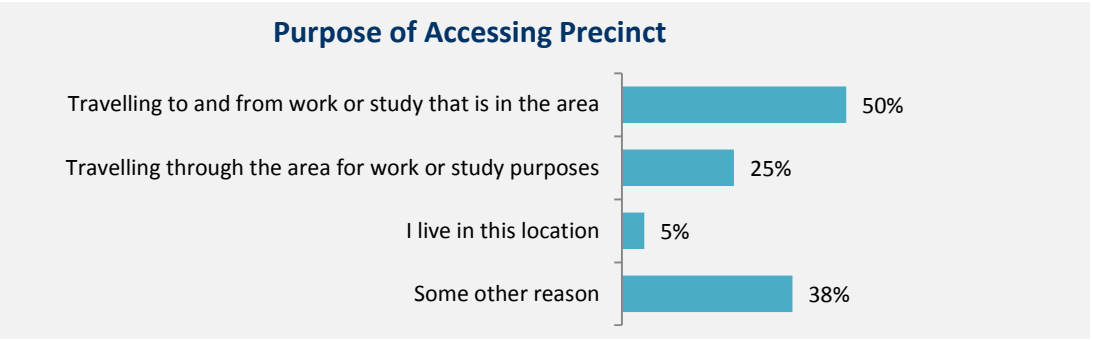


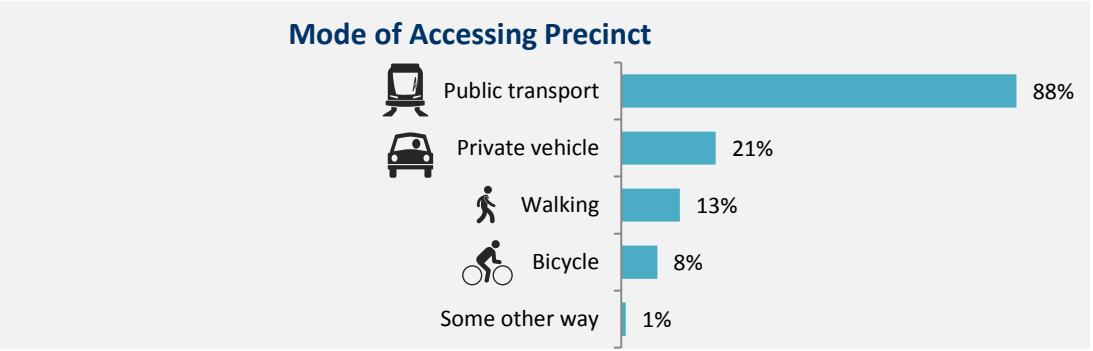


Three-quarters (75%) of participants indicated they visited the Parkville Precinct at least once every six months or less often. Of those who visited Parkville, less than half (44%) advised they were travelling to and from the area for work or study. A further 31% indicated they were travelling through the area for work or study purposes and 29% advised they visited for some other reason (e.g. going to or visiting a hospital, shopping and visiting family or friends). The majority (63%) had gained access to this area using public transport.

CBD Precinct

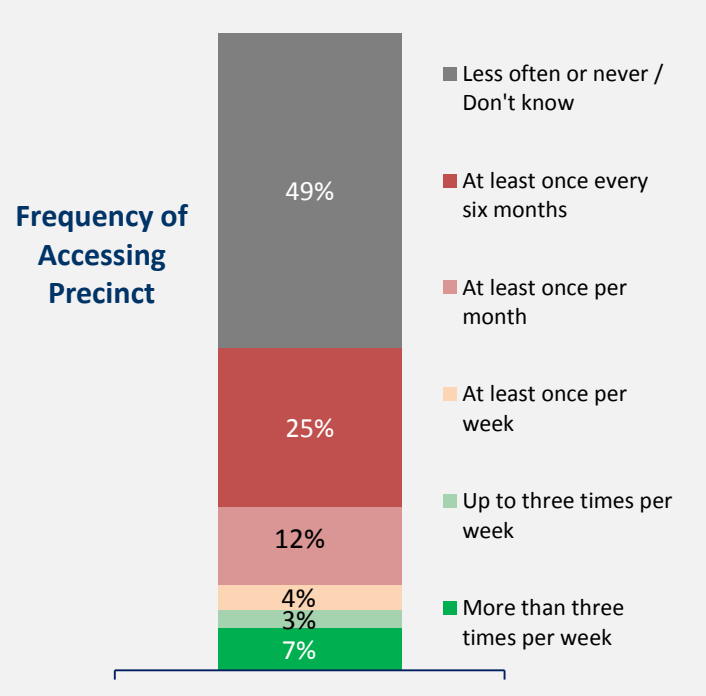


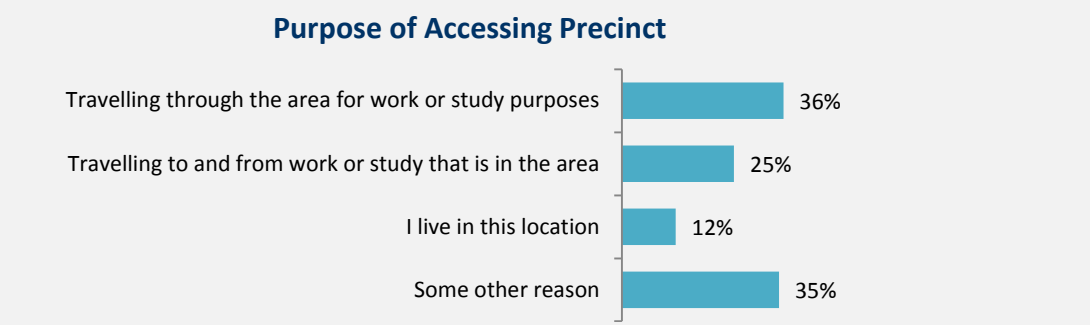


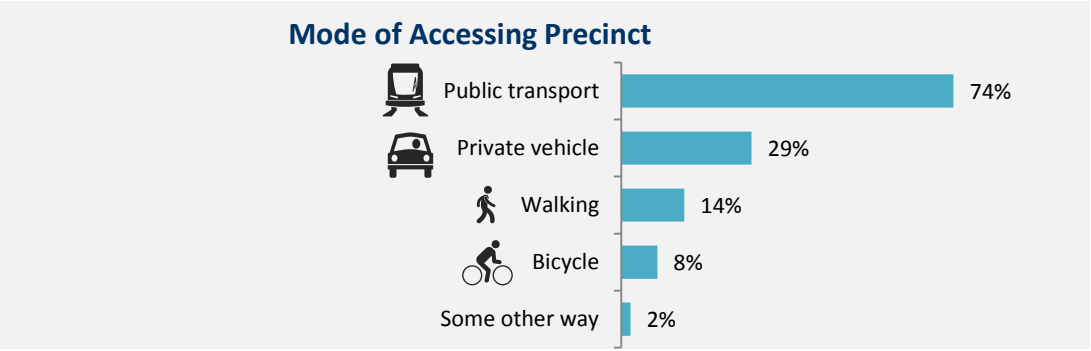


More than one-third (35%) indicated they visited the CBD more than three-times each week. Among those who had visited the CBD, half indicated that they were travelling to and from for work or study purposes. Thirty-eight percent advised they visited the CBD for some other reason (e.g. recreation, shopping and social reasons). The vast majority (88%) indicated that they accessed the CBD via public transport.

Domain Precinct

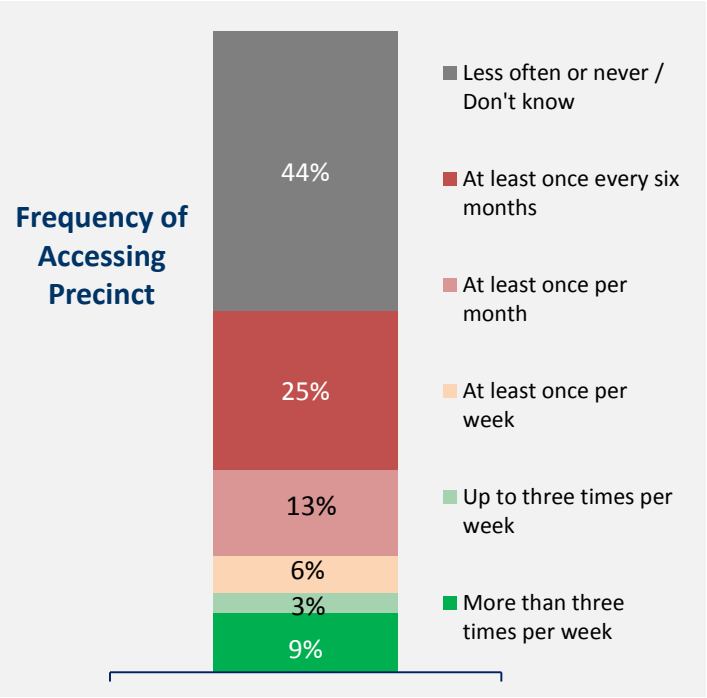


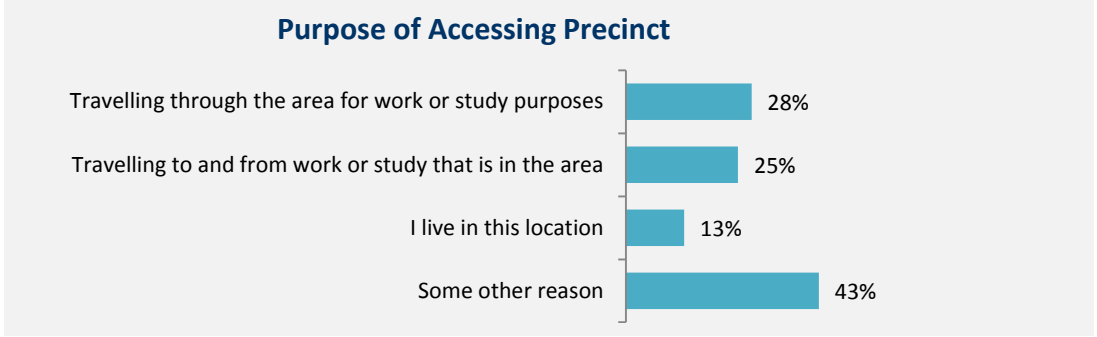


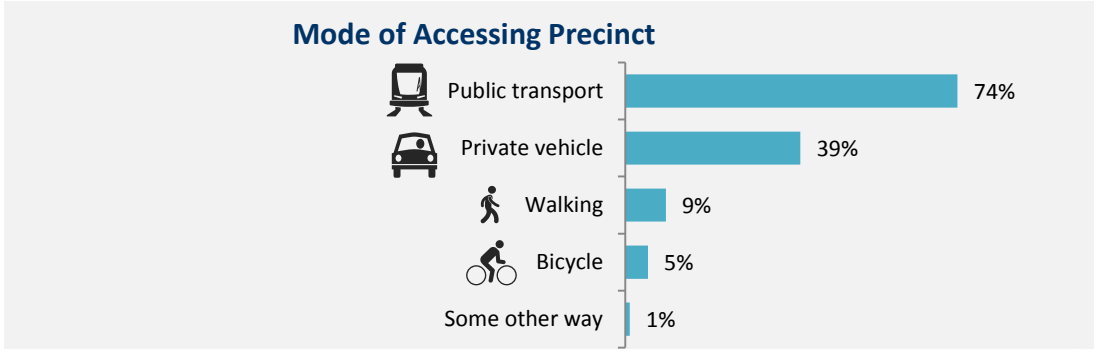


Almost half (49%) surveyed advised that they did not access the Domain Precinct. Of those who did, just over one-third (36%) indicated they travelled through the area for work or study purposes, followed by 35% who said they had visited Domain Precinct for other reasons (e.g. walking around the gardens or exercise, leisure and recreation). The majority (74%) accessed the Domain Precinct using public transport.

South Yarra Precinct





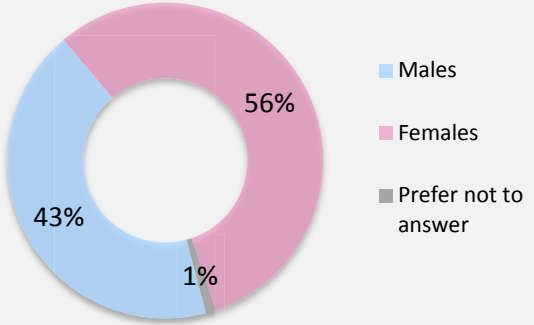


Over two-in-three (69%) indicated they had accessed South Yarra at least once every six months or less often. Among those who had visited this area, nearly half (43%) indicated that they visited this area for a reason other than work, study or residence (e.g. visiting family or friends, other social reasons). The majority (74%) had accessed this area using public transport.

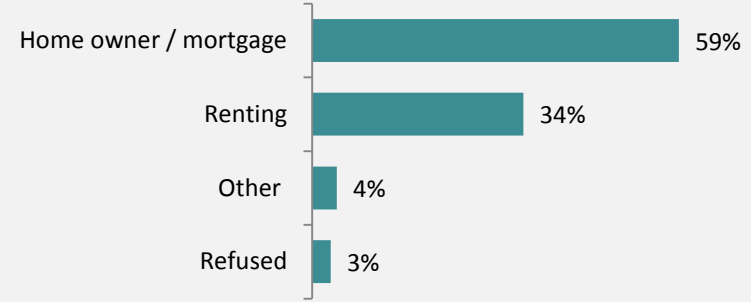
Survey sample characteristics

Survey sample characteristics: random sample (unweighted)

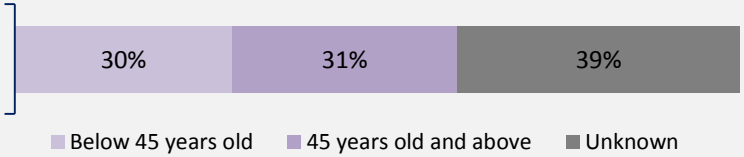
Gender



Current living arrangements



Age



Residential location

Project Precinct	30%	n=564
Broader Melbourne	52%	n=967
Regional Victoria	17%	n=322

More than half of participants (56%) were females. Six out-of-ten (60%) were home owners and one-third (30%) rented. While there was a relatively even number of survey participants below and over 45 years, a large proportion refused to answer this question. Almost one-third (30%) of the sample resided within the Project Precinct.

Survey sample characteristics: random sample (unweighted)

Residential postcodes

Top 5 Project Precinct postcodes		
3031	132	23%
3141	91	16%
3000	76	13%
3051	73	13%
3053	37	7%

Top 5 Broader Melbourne postcodes		
3205	28	3%
3030	25	3%
3029	20	2%
3150	18	2%
3134	16	2%

Top 5 Regional Victorian postcodes		
3337	12	4%
3216	12	4%
3219	11	3%
3350	8	2%
3140	7	2%

One-quarter (23%) of the Project Precinct participants lived within postcode 3031 followed by 16% who resided in 3141 and 13% who lived in postcode 3000.

Self-selected sample results

Self-selected sample

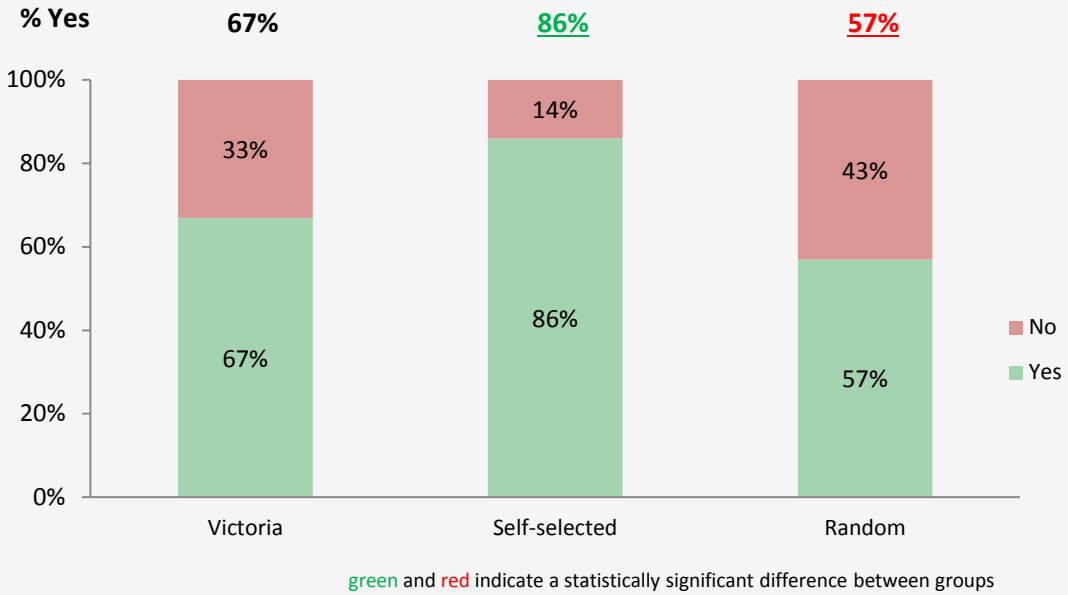
In addition to collecting the Random sample, MMRA administered communications (digital advertising and at train stations) yielded more than one thousand additional survey participants.

The following slides summarise the findings from those n=1,057 Self-selected participants compared with the Randomly collected sample for selected questions.

The findings within this report represent the views of those randomly selected to participate in the survey. The survey results have been weighted by age and gender using ABS Census estimates.

Unaided Awareness of Melbourne Metro Rail Project

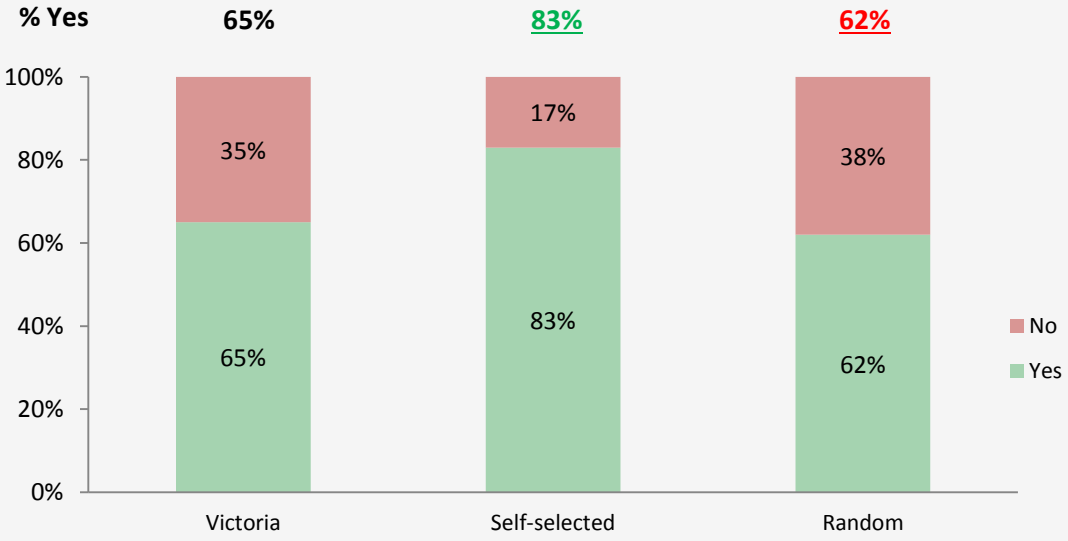
AW_1. Before today, were you aware of the Melbourne Metro Rail Project?



All participants were asked whether they were aware of the Melbourne Metro Rail Project prior to the survey. Two out of three surveyed (67%) were aware of the Melbourne Metro Rail Project. Those who Self-selected into the survey website were more likely to be aware of the Melbourne Metro Rail Project compared to those from the Random sample (86% vs. 57%).

Aided Awareness of Melbourne Metro Rail Project

AW_4. Before today, were you aware of the Melbourne Metro Rail Project?

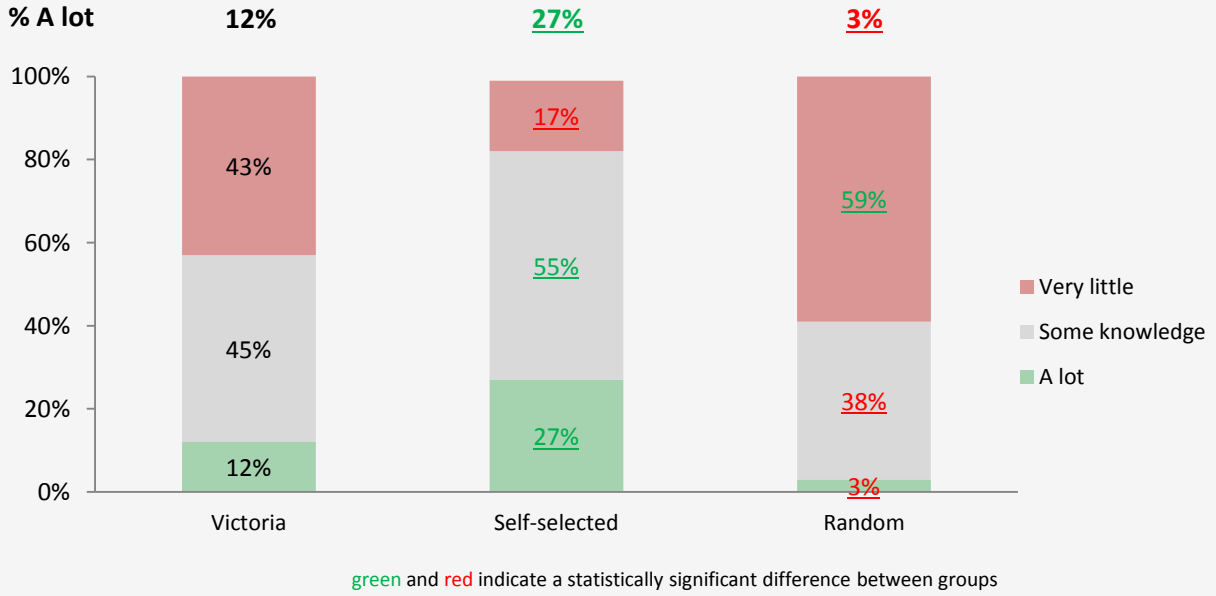


green and red indicate a statistically significant difference between groups

Survey participants who were unaware of the Melbourne Metro Rail Project were provided with a project summary to read. After reading the summary, they were again asked whether they had heard of the project. Sixty-five percent of those who were previously unaware were able to recall the project after reading the summary (aided awareness). Again, those who Self-selected into the survey were more likely to be aware of the project compared to the Random sample (83% vs. 62%).

Self-Reported Knowledge of Melbourne Metro Rail Project

AW_5. Which of the following best describes how much you know about the Melbourne Metro Rail Project?

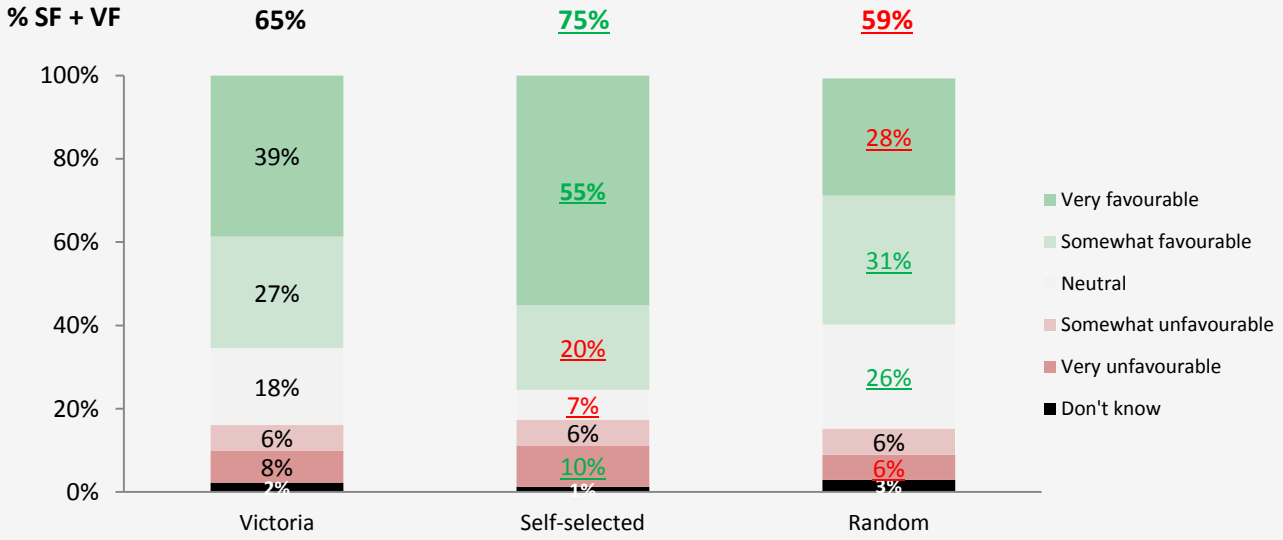


green and red indicate a statistically significant difference between groups

Those who were aware of the project were asked how much they knew about the Melbourne Metro Rail Project. Twelve-percent of survey participants reported they knew ‘a lot’ about the project. Those who Self-selected into the survey were more likely to reporting knowing ‘a lot’ about the project when compared to those who were Randomly selected (27% vs. 3%).

Overall Opinion Towards Melbourne Metro Rail Project

AW_6. My overall opinion of the Melbourne Metro Rail Project is…

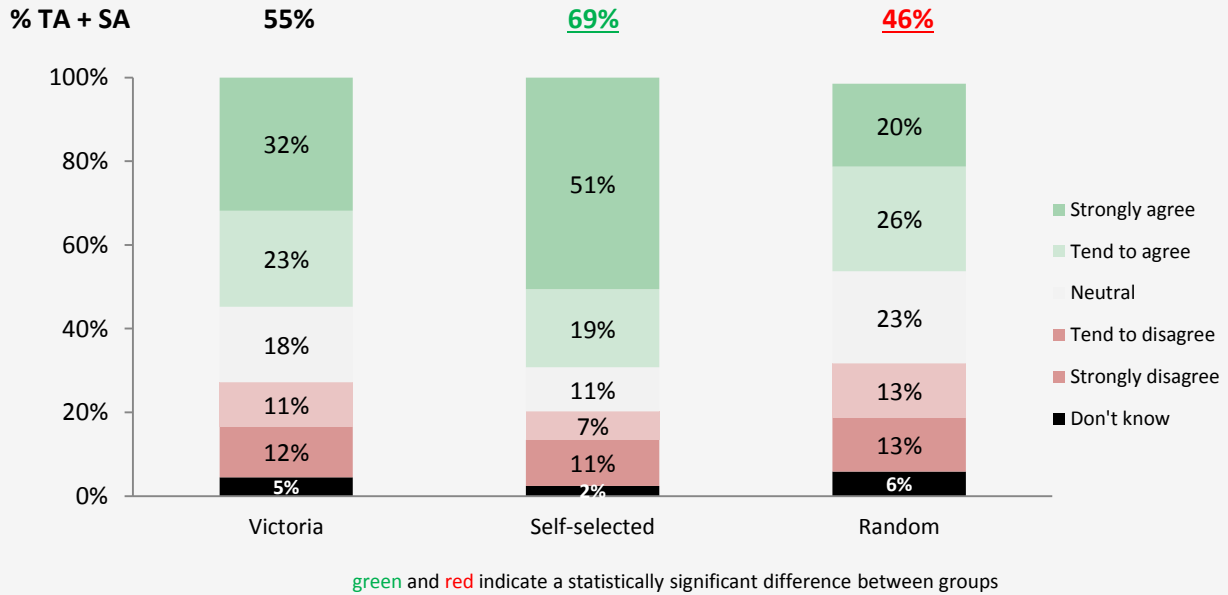


green and red indicate a statistically significant difference between groups

Two out-of-every three survey participants (65%) were favourable towards the Melbourne Metro Rail Project. Overall favourability was higher among Self-selected compared to Randomly selected participants (75% vs. 59%).

Benefits from Melbourne Metro Rail Project

A_1A. Someone in my household will benefit from Melbourne Metro Rail Project

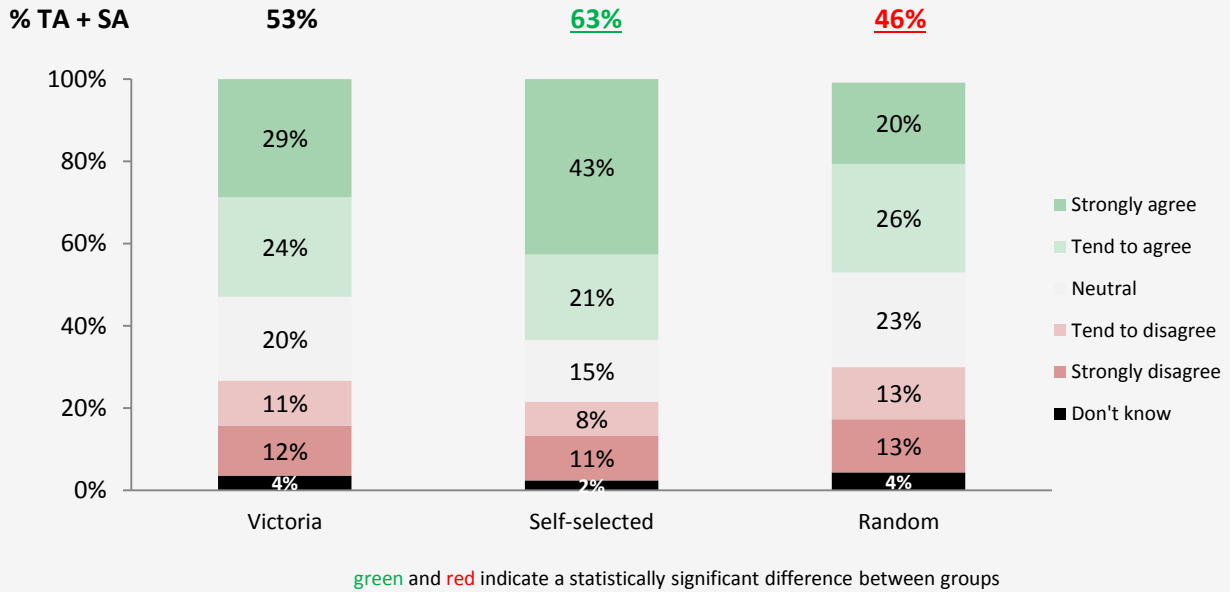


green and red indicate a statistically significant difference between groups

More than half surveyed (55%) reported that someone in their household will benefit from the Melbourne Metro Rail Project. Those who Self-selected were more likely to indicate to agree with this statement compared with those who were Randomly selected to participate (69% vs. 46%).

Benefits from Melbourne Metro Rail Project

A_1B. My local community will benefit from Melbourne Metro Rail Project

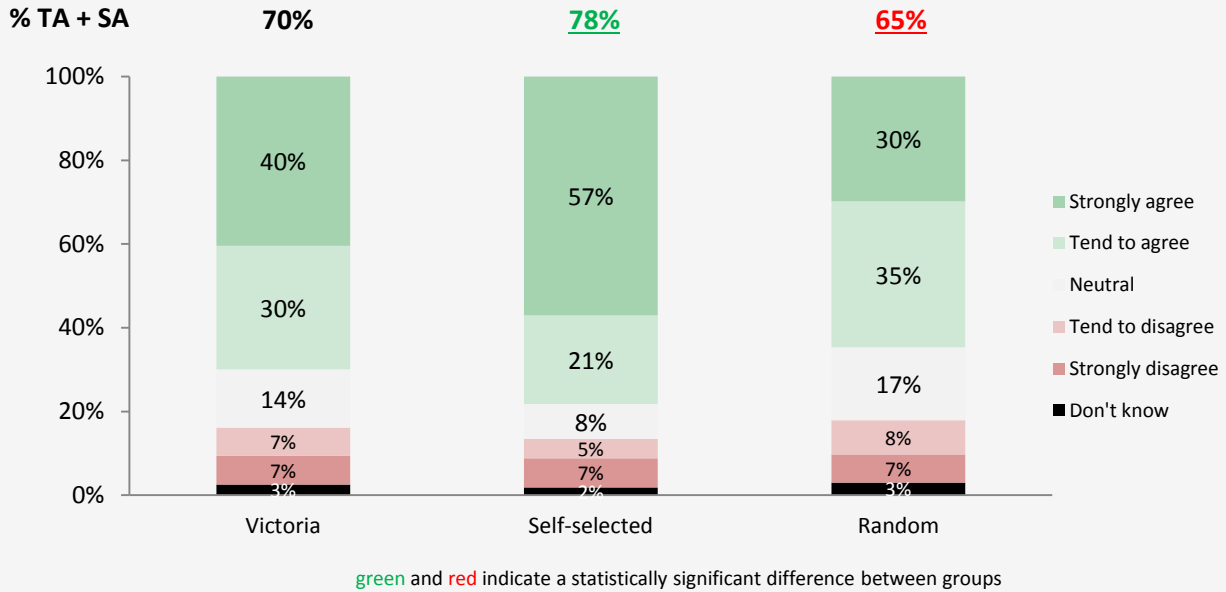


green and red indicate a statistically significant difference between groups

Half (53%) of those surveyed agreed that their local community will benefit from the Melbourne Metro Rail Project. Those who Self-selected into the survey were more likely to agree to this statement compared with Random sample (63% vs. 46%).

Benefits from Melbourne Metro Rail Project

A_1C. The broader Victorian community will benefit from Melbourne Metro Rail Project

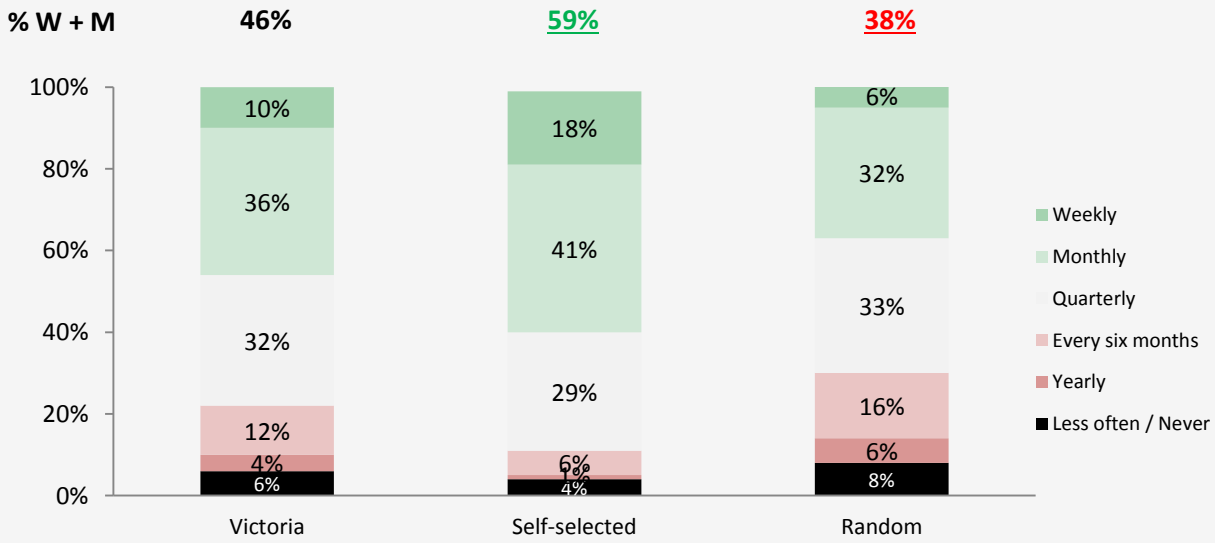


green and red indicate a statistically significant difference between groups

The majority (70%) of survey participants agreed the broader Victorian community will benefit from the Melbourne Metro Rail Project. Those who Self-selected to participate were more likely to agree to this statement compared to those who were Randomly selected (78% vs. 65%).

Future Communications: Channel Preference

FC_3. How often would you like to receive updates on the progress of the Melbourne Metro Rail Project during the planning phase?

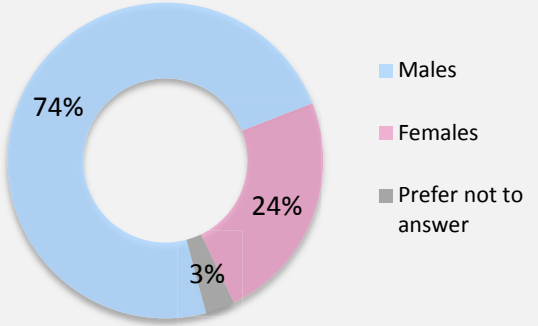


green and red indicate a statistically significant difference between groups

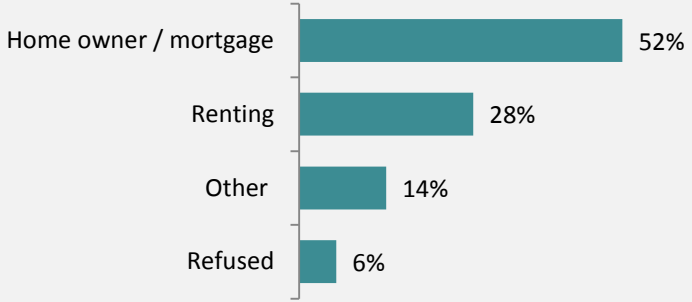
When asked how often they would like to receive updates on the progress of the Melbourne Metro Rail Project during the planning phase, just under half (46%) of those surveyed selected 'monthly' (36%) or 'weekly' (10%). Participants who Self-selected into the survey requested more frequent communications compared to those who were Randomly selected.

Sample characteristics: self-selected sample (unweighted)

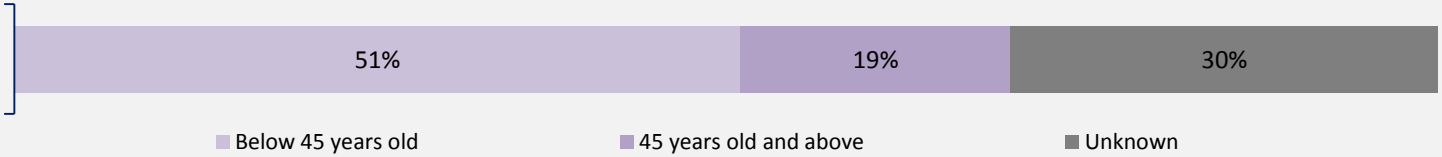
Gender



Current living arrangements



Age



Three-quarters (74%) were males. Just over half (52%) were home owners and under one-third (28%) were renters. One out-of-every two (51%) identified as under 45 years-old.

Survey sample characteristics: random sample (unweighted)

Residential postcodes

Top 10 postcodes						
3141	34	3%		3056	16	2%
3031	30	3%		3012	16	2%
3429	19	2%		3000	15	1%
3051	17	2%		3163	15	1%
3011	17	2%		3204	15	1%

More than 30 Self-selected survey participants were from postcodes 3141 (South Yarra) and 3031 (Kensington/Flemington) – at either end of the Project Precinct.

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