



# 10 Social and Community

## 10.1 Overview

This chapter provides an assessment of the social and community impacts associated with the construction and operation of Melbourne Metro. The chapter is based on the impact assessment presented in Technical Appendix F *Social and Community*. All relevant references are provided in Technical Appendix F.

As noted throughout this EES, the Melbourne Metro alignment traverses a highly urbanised, densely populated and diverse area. With most of Melbourne Metro's construction and operation activities taking place below ground, the project would avoid or minimise many of the adverse social and community impacts that would otherwise be expected for a transport project of this scale. However, project activities would interact with social values and the community in a number of places.

The largest social benefit of the project would accrue to users of the wider transport network through the increase in rail capacity enabling the community to continue accessing employment, social infrastructure, recreational facilities, valued places and wider social networks. Without Melbourne Metro, it is likely the community would face a reduction in social opportunities as projected population growth and travel demand exceed the capacity of the transport network.

While the wider community would benefit from Melbourne Metro, there would be adverse social impacts associated with its construction. These include amenity impacts for residents and the community (such as noise, vibration and dust), the loss of access to valued public spaces (including recreational spaces) and changes to local accessibility during construction. The project would require the acquisition of 65 dwellings, affecting owner occupiers and tenants. There would also be a smaller number of longer term impacts associated with the placement of above ground infrastructure such as noise walls and the modification of streetscapes.

As the adverse impacts would largely be localised, the social and community impact assessment for the EES focused on the local government areas and suburbs surrounding each of the project precincts, including the communities of Carlton, Kensington, Melbourne, North Melbourne, Parkville, South Melbourne, South Yarra and West Footscray.

To assess potential changes to the social fabric of the community and recreational values, the social impact assessment considered 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
- Valued places, including public open space and recreation reserves.

The social and community impact assessment found that the majority of the adverse social impacts identified would occur during the construction phase of the project. The impact assessment also found that achieving the recommended Environmental Performance Requirements and implementing the proposed mitigation measures would reduce the social risks of most of these impacts to medium, low or very low.

With the adoption of the proposed mitigation measures to meet the recommended Environmental Performance Requirements, only two activities would still present a high risk:

- Residential acquisition around the western portal in Kensington
- Temporary modification of a number of highly valued streetscapes during construction, particularly sections of St Kilda Road, Royal Parade and Grattan Street.

## 10.2 EES Objectives

The EES Scoping Requirements set the following draft evaluation objectives for social and community effects:

- *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.*

This chapter considers effects on the social fabric of the community, with the exception of land use change and business impacts, which are considered in Chapter 9 *Land Use and Planning* and Chapter 11 *Business*. This chapter also considers recreational values, while landscape and visual values are considered separately in Chapter 16 *Landscape and Visual*.

In line with the draft evaluation objectives, the existing conditions, potential impacts and associated risks to the social fabric and recreational values were assessed in relation to Melbourne Metro. Using this information, recommended Environmental Performance Requirements and proposed mitigation measures were identified to avoid, as far as possible, adverse effects to social values and the community from the construction and operation of Melbourne Metro.

## 10.3 Legislation

As discussed in Chapter 4 *EES Assessment Framework and Approach*, social and community impacts from Melbourne Metro would be managed and assessed in accordance with Victorian standards, goals and objectives. The main legislation relevant to Melbourne Metro is set out in Table 10–1.

Table 10–1 Social and community legislation relevant to Melbourne Metro

Legislation	Comments
<b>State</b>	
<i>Environment Effects Act 1978</i>	<p>The Act provides for the assessment of actions that are capable of having a significant environmental effect. The <i>Ministerial guidelines for assessment of environmental effects under the Environment Effects Act 1978</i> identify a number of social effects that can be considered, including:</p> <ul style="list-style-type: none"> <li>• Local population and demographic profile</li> <li>• Social structure and networks</li> <li>• Residential amenity and social well-being</li> <li>• Social vulnerability and differential effects on parts of the community</li> <li>• Housing and social infrastructure needs</li> <li>• Perceptions of aesthetic, recreational and other social values of landscape or locality</li> <li>• Attitudes to proposed development.</li> </ul> <p>The social and community impact assessment has considered and assessed these factors.</p>
<i>Transport Integration Act 2010</i>	<p>The Act provides that transport planning must consider social and economic inclusion. Planning must ensure barriers to access are minimised so that, as far as is possible, the transport system is available to as many persons as wish to use it. It must also ensure that access to residences, employment, markets, services and recreation is maximised.</p> <p>The social and community impact assessment has considered access and severance in relation to dwellings, social infrastructure, valued places and recreational infrastructure.</p>
<i>Planning and Environment Act 1987</i>	<p>The Act provides that explicit consideration of social and economic effects is required when decisions are made about the use and development of land. As such, the social and community impact assessment has identified social effects for consideration in the EES and would be used to inform the development of the planning scheme amendment.</p>

## 10.4 Methodology

### 10.4.1 Assessment Approach

The approach adopted to assess potential impacts to social values and the community from Melbourne Metro consisted of:

- A review of relevant Commonwealth, State and local government legislation and policy

- A series of site inspections across the Melbourne Metro alignment
- A desktop review of relevant studies and assessments
- Consultation with stakeholders including the City of Melbourne, City of Port Phillip, City of Stonnington, City of Maribyrnong and others such as the Shrine of Remembrance, the University of Melbourne and Fed Square Pty Ltd
- A social survey involving participants from the Melbourne Metro precincts, broader Melbourne and regional Victoria
- Community engagement including participation in information sessions, online forums, meetings with key stakeholders, interviews with directly and indirectly impacted residential landowners and a review of the findings from a number of online and in-person consultation processes
- Development of a social profile detailing information about the communities within and surrounding the precincts, their values, existing issues, valued places and key social infrastructure.

In addition, the social and community impact assessment considered the findings of the following assessments:

- 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*.

The assessment also drew on the outcomes of the activities outlined in Technical Appendix C *Community and Stakeholder Feedback Summary Report*.

The social and community impact assessment was independently peer reviewed.

## 10.4.2 Baseline and Background Data

A wide range of data sources were used in the social and community impact assessment, including:

- DELWP, *Victoria in Future 2015*
- Australian Census Data (2001, 2006 and 2011)
- Council websites, plans and policies
- Aerial imagery
- Small area labour markets surveys

- Socio-economic Indices for Areas
- Results of a social survey (see below).

Further details of the desktop investigation and background data are provided in Section 4 of Technical Appendix F.

### 10.4.3 Social Survey

Ipsos conducted a social survey between 28 July and 25 August 2015, which included a random sample and a self-selected sample of people living within the project precincts, broader Melbourne and regional Victoria. The self-selected survey was accessible from the project website and promoted via social media, at engagement events and through other government channels, including a media release from the Premier.

Almost 3,000 people participated in the survey. Of these people, approximately 1,920 participated in the randomly selected survey and the remaining 1,060 completed the self-selected survey.

The survey collected information on topics such as community attitudes and values, project awareness and understanding, levels of support and perceived benefits and issues. The results were used to provide an initial indication of how the proposed works associated with Melbourne Metro would interact (positively or negatively) with the community and its values.

Results of the survey are discussed in Section 10.5.3 and reported in Section 4.2.4 of Technical Appendix F.

### 10.4.4 Assessment Criteria

The impact assessment used criteria to assess the performance of the project against the relevant draft EES evaluation objectives concerning social values and the community. The assessment criteria used in the social and community assessment are:

- 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.

## 10.5 Existing Conditions

### 10.5.1 Regional Context

As noted in Chapter 2 *Project Rationale and Benefits*, Melbourne's population is expected to reach 7.8 million by 2051. This strong population growth and the shift from manufacturing towards knowledge-based services across the Victorian economy 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. Public transport demand is forecast to grow at a compounded 4.4 per cent per annum to 2021. 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, schools, shops and recreation activities, and would diminish community access to wider social networks.

### 10.5.2 Local Context

Melbourne Metro would involve construction of infrastructure within four local government areas (Cities of Melbourne, Port Phillip, Stonnington and Maribyrnong) and eight suburbs. From west to east, the suburbs are West Footscray, Kensington, North Melbourne, Parkville, Carlton, Melbourne, South Melbourne and South Yarra.

Table 10–2 summarises the demographic profiles and key social assets of suburbs where project surface infrastructure would be located.

Table 10–2 Summary profiles of suburbs

Suburb	Population	Key social assets and attractors
West Footscray	<ul style="list-style-type: none"><li>• 10,200</li><li>• 47% born overseas</li><li>• 48% speak a language other than English at home</li><li>• 61% family households</li><li>• 22% moved in the last 12 months</li></ul> Median household income: \$1129/week	Whitten Oval, Potters House Christian Church, Central Australian College, shared path to the north of West Footscray station

Suburb	Population	Key social assets and attractors
Kensington	<ul style="list-style-type: none"> <li>• 9,700</li> <li>• 32% born overseas</li> <li>• 26% speak a language other than English at home</li> <li>• 54% family households</li> <li>• 26% moved in the last 12 months</li> <li>• Median household income: \$1720/week</li> </ul>	JJ Holland Park, Kensington Community Recreation Centre, Childers Street shared path
North Melbourne	<ul style="list-style-type: none"> <li>• 14,700</li> <li>• 41% born overseas</li> <li>• 37% speak a language other than English at home</li> <li>• 44% family households</li> <li>• 41% moved in the last 12 months</li> <li>• Median household income: \$1229/week</li> </ul>	North Melbourne Football Club, North Melbourne Recreation Reserve, North Melbourne Recreation Centre, Capital City Trail
Parkville	<ul style="list-style-type: none"> <li>• 7,200</li> <li>• 36% born overseas</li> <li>• 27% speak a language other than English at home</li> <li>• 53% family households</li> <li>• 33% moved in the last 12 months</li> <li>• Median household income: \$1487/week</li> </ul>	Royal Melbourne Hospital, Royal Children's Hospital, Royal Women's Hospital, Victorian Comprehensive Cancer Centre, University of Melbourne, University Square, Royal Parade, Peter Doherty Institute, University High School
Carlton	<ul style="list-style-type: none"> <li>• 14,104</li> <li>• 67.5% born overseas</li> <li>• 59.9% speak a language other than English at home</li> <li>• 32.6 % family households</li> <li>• 44.6% moved last 12 months</li> <li>• Median household income \$598/week</li> </ul>	Lincoln Square
Melbourne – CBD North	<ul style="list-style-type: none"> <li>• 28,800</li> <li>• 79% born overseas</li> <li>• 55% speak a language other than English at home</li> </ul>	Melbourne Central, Melbourne City Baths, RMIT University, State Library of Victoria, Chinatown, QV Shopping Centre, Swanston Street
Melbourne – CBD South	<ul style="list-style-type: none"> <li>• 35% family households</li> <li>• 36% moved in the last 12 months</li> <li>• Median household income:</li> </ul>	St Paul's Cathedral, City Square, Federation Square, Flinders Street Station, Young and Jackson Hotel, Swanston Street

Suburb	Population	Key social assets and attractors
Melbourne – Domain	\$1352/week	Shrine of Remembrance, Domain Parklands, Edmund Herring Oval, Fawkner Park, Victorian College of the Arts, Melbourne Grammar School, Mac.Robertson Girls' High School, Melbourne Synagogue, Royal Botanic Gardens, Sydney Myer Music Bowl, Tan Track
South Melbourne	<ul style="list-style-type: none"> <li>• 9,300</li> <li>• 33% born overseas</li> <li>• 19% speak a language other than English at home</li> <li>• 54% family households</li> <li>• 20% moved in the last 12 months</li> <li>• Median household income: \$1352/week</li> </ul>	Albert Road Reserve, South African War Memorial
South Yarra	<ul style="list-style-type: none"> <li>• 19,100</li> <li>• 30% born overseas</li> <li>• 16% speak a language other than English at home</li> <li>• 46% family households</li> <li>• 34% moved in the last 12 months</li> <li>• Median household income: \$1,871/week</li> </ul>	Toorak Road and Chapel Street, South Yarra Siding Reserve, Osborne Street Reserve, Lovers Walk

Source: ABS (2012) Census of Population and Housing

### 10.5.3 Community Attitudes and Values

The social survey found that over half of Melburnians are aware of Melbourne Metro by name, but 58 per cent have very little knowledge of the project. Despite the low level of project knowledge, over half the people surveyed (59 per cent) supported Melbourne Metro, with just 13 per cent opposed. Support for the project was based generally on the belief that it would benefit the wider Victorian community (65 per cent).

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

While community attitudes and values varied across the project precincts, common concerns raised by respondents related to:

- Temporary changes in road access/traffic management
- Changes to current train scheduling



- Changes to parks and gardens
- Noise during works
- Access to 'where I live'.

Further information about community attitudes and values specific to each precinct is provided in Section 5.3 of Technical Appendix F.

## 10.6 Risk Assessment

An Environmental Risk Assessment was completed for the social and community impacts of Melbourne Metro. Further information about the risk assessment approach adopted for Melbourne Metro is included in Chapter 4 *EES Assessment Framework and Approach*.

Impact assessment must be informed by risk assessment so that the level of mitigation action relates to the likelihood of an adverse impact occurring.

The highly urbanised nature of the area through which Melbourne Metro would run (which includes well-established communities, valued public open spaces, community facilities and a range of social infrastructure) resulted in the identification of a number of potential events with a high initial social risk.

The impact assessment focused on those risks that were assessed as having an initial risk level of medium or above. As a result of the impact assessment, project-specific Environmental Performance Requirements – combined with proposed mitigation measures (project-wide and at specific locations) – have been recommended to reduce the identified impacts.

Despite the application of proposed mitigation measures, some residual risks remain at medium and two events have a high residual risk rating. 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 at medium and high levels because 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.

The two events with a high residual risk rating relate to the acquisition of residential properties near the western portal in Kensington (and the associated displacement of households with strong ties to their local community) and community concerns about changes to valued streetscapes or the loss of trees on St Kilda Road, Royal Parade and Grattan Street as a result of construction activities.

Social and community risks associated with Melbourne Metro with a residual risk rating of medium or above are shown in Table 10–3. A full list of social and community risks, showing the initial and residual risk rating of each risk, is provided in Technical Appendix B *Environmental Risk Assessment Report* and Technical Appendix F *Social and Community*.

The recommended Environmental Performance Requirements are listed in Section 10.18.

**Table 10–3 Social and community risks**

Impact pathway		Project phase	Precincts	Residual risk rating
Category	Potential event			
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	Design	All	Medium
Project varies from Concept Design	Community opposition to the final design due to differences from the Concept Design on which the community were consulted	Design	All	Medium
Residential strata acquisition – Tunnels	Strata acquisition creates concern and anxiety about vibration and subsidence amongst affected property owners	Construction	1 - Tunnels	Medium
Construction activities in residential areas	Reduced or loss of access to residences due to traffic management	Construction	8 - Eastern Portal	Medium
Construction activities alter existing community access patterns	Construction activities act as a barrier to social infrastructure and recreational assets or cause social severance, diminishing community networks	Construction	4 - Parkville station 7 - Domain station	Medium

Impact pathway		Project phase	Precincts	Residual risk rating
Category	Potential event			
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	Construction	1 - Tunnels 2 - Western portal 4 - Parkville station 5 - CBD North station 6 - CBD South station 7 - Domain station 8 - Eastern Portal	Medium
Construction activities in proximity to health, educational, commercial, recreational and other facilities	Sustained amenity impacts affect staff or users of these facilities	Construction	4 - Parkville station 5 - CBD North station 6 - CBD South station 7 - Domain station	Medium
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	Construction	7 - Domain station 8 - Eastern Portal	Medium
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.	Construction	8 - Eastern Portal	Medium
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	Construction	7 - Domain station	Medium

Impact pathway		Project phase	Precincts	Residual risk rating
Category	Potential event			
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	Construction	All	Medium
Truck movements in proximity to residential areas	Truck movements impact on residential amenity	Construction	All	Medium
Acquisition of nine dwellings in Kensington	Displacement of households with strong ties to their community	Construction and Operation	2 - Western Portal	High
Acquisition of 49 dwellings in CBD North	Displacement of 49 mostly tenanted dwellings and diminishment of networks within the surrounding community	Construction and Operation	5 - CBD North station	Medium
Acquisition of seven dwellings in the eastern portal precinct	Displacement of two households (the remaining five households are vacant or proposed for multi-unit developments) and diminishment of networks within the surrounding community	Construction and Operation	8 - Eastern Portal	Medium
Construction activities would take place within a part of the Shrine of Remembrance Reserve	Works within the Shrine of Remembrance Reserve have the potential to raise concern of veterans and other members of the community who value the site	Construction	1 - Tunnels 7 - Domain	Medium
Construction and operation of the Fawcner Park TBM launch site	Community concern about works within the park, particularly the impact on trees, paths and amenity	Construction	1 - Tunnels	Medium
Loss of street trees	Changes to valued streetscapes creates community concern	Construction and Operation	4 - Parkville station 7 - Domain station	High
			6 - CBD South station	Medium

Impact pathway		Project phase	Precincts	Residual risk rating
Category	Potential event			
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 memorials are of concern to the local community	Construction and Operation	7 - Domain	Medium
Queen Victoria Gardens emergency access shaft	Placement of the emergency access shaft in Queen Victoria Gardens is inconsistent with community expectations of the uses of this park	Construction and Operation	1 - Tunnels	Medium
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 travelling on St Kilda Road in trams or by foot who value this part of the landscape	Construction and Operation	1 - Tunnels	Medium
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	Operation	2 - Western Portal 7 - Domain station 8 - Eastern Portal	Medium

## 10.7 Impact Assessment

The risks identified in Section 10.6, along with the Scoping Requirements and relevant legislation, framed the criteria used to determine the social impacts discussed below and in each precinct.

Throughout the construction phase of Melbourne Metro, the potential impacts to social values and the community common to all precincts would be:

- Sustained amenity impacts (noise, vibration, dust and visual) – During construction, the community would be subject to amenity impacts in proximity to construction works and truck movements. This would affect dwellings as well as the users of and staff working in social infrastructure such as schools, universities or medical facilities. A number of proposed mitigation measures would be implemented to mitigate or eliminate these impacts, including consultation with stakeholders and, in some cases, the relocation of impacted residents. Specific technical measures to mitigate amenity impacts are addressed in Chapter 8 *Transport*, Chapter 12 *Air Quality*, Chapter 13 *Noise and Vibration* and Chapter 16 *Landscape and Visual*.
- Traffic implications and changes to local connectivity – Local connectivity would be affected by construction activities that result in changes to the traffic network, travel patterns and conditions (such as increased congestion). Consulting with councils and managers of social infrastructure, maintaining existing community access patterns where feasible and providing timely notification of construction activities would manage these impacts. Specific proposed measures to mitigate these impacts are discussed in Chapter 8 *Transport*.
- Construction workforce demand for parking – Construction workers who travel to work by car would require parking throughout their shift. This could result in a reduction in parking available for residents, workers or other visitors to the area. These impacts would be minimised by providing car parking for construction workers where possible and preventing construction vehicles from parking at undesignated locations on local roads (see Chapter 8 *Transport* for further information).
- Possible construction activities inhibiting future planning for households – Uncertainty about project activities could lead to residential property owners and tenants subject to acquisition or in proximity to construction areas putting on-hold or reconsidering their plans for their properties. Early and ongoing engagement with directly affected households through the design and construction stages would reduce this impact.

Further detail on the recommended Environmental Performance Requirements to be achieved and proposed mitigation measures to manage these impacts is provided in Section 10.18.

In addition to these project-wide construction impacts, there would be specific local impacts in each precinct during Melbourne Metro's construction and operation. These are discussed in Sections 10.8 to 10.16.

## 10.7.1 Key Benefits and Opportunities

Melbourne Metro would benefit the wider community as it would increase the capacity of Melbourne's transport system to cater for the large anticipated growth in travel demand. This would enable people to continue to access social infrastructure and valued places across Melbourne, as well as maintain their social networks.

Other key benefits delivered by Melbourne Metro include:

- Improved access and connectivity to wider Melbourne for the communities hosting the new train stations
- Improved access to the CBD
- Improved access to key sites such as the Parkville medical and education precinct, Shrine of Remembrance, Domain Parklands, Albert Park and North Melbourne Recreation Reserve
- Improved connectivity with employment, social and recreational facilities
- Improvements in reliability and capacity across the network
- Supporting the redevelopment of the Arden-Macaulay urban renewal site.

Key opportunities presented by the project would include:

- Involving local communities in the reinstatement of streetscapes, open space and other valued public land
- Opportunities to reinvigorate the streetscapes and amenity of the affected rail corridor and station precincts in a manner consistent with the vision for each precinct
- Engaging the community on the proposed treatments for surface level infrastructure such as portals and station entrances, and on the reinstatement design approach and landscaping
- Partnering with training providers to identify opportunities to integrate construction activities with existing or future courses, enhancing the opportunities available to students
- Exploring opportunities to link station design and surrounds to the unique social context of each precinct
- Enhancing Royal Parade and St Kilda Road as the 'gateways' to Melbourne.

In addition to these key benefits and opportunities, Melbourne Metro would offer other precinct-specific benefits and opportunities in each of the project precincts. These are discussed in Sections 10.8 to 10.16.

## 10.8 Precinct 1: Tunnels

The majority of works associated with the tunnels are located underground and would have minimal impacts at surface level. The following surface works would interface with the community:

- Vertical alignment:
  - Boring and supporting underground activities could occur 24 hours per day, seven days per week
  - Strata acquisition under up to 3,500 properties between the Arden station precinct and the eastern portal precinct (subject to change pending the final design of the tunnels)
- CityLink tunnel crossing (above CityLink tunnels):
  - Removal of a number of trees and relocation of monuments and plaques for the potential ground improvement works required above the tunnels through Tom's Block
- Queen Victoria Gardens and Fawkner Park emergency access shafts:
  - Permanent introduction of infrastructure into recreational areas
  - 10 average truck movements (round trips) per day for 12 months in Linlithgow Avenue
  - 12 average truck movements (round trips) per day for 10 months around Fawkner Park
- TBM launch site in Fawkner Park, in association with Domain (impacts discussed in Section 10.14):
  - Establishment of a major construction work site in the tennis courts at the north-western end of Fawkner Park
  - Truck movements and construction activities in proximity to the Fawkner Park Child Care Centre, Kindergarten and Senior Citizens Centre for 24 months
  - Permanent introduction of infrastructure in recreational areas.

During the boring of the tunnels, the vibration and ground borne noise would potentially generate concern amongst nearby households before, during and after the passing of the TBMs. This would be experienced by households for a relatively short period of time, with concerns addressed for most people by providing appropriate information in advance of tunnelling works, demonstrating property condition survey results and offering relocation to people where appropriate. However, this could still be a source of sustained concern for some affected households.



Crossing above the CityLink tunnels could impact on community values and public open space. The potential requirement for ground improvement works in the Domain Parklands could result in the loss of trees between Birdwood and Linlithgow Avenues. This would likely be inconsistent with community aspirations for the Domain Parklands and could result in a diminishment in the value people place on the parklands.

The Fawkner Park emergency access shaft would result in the limited loss of an area used for passive recreation. This impact would be reduced by the structure's relatively small footprint and by integrating it with the existing toilet block. While construction activities and the placement of transport infrastructure within the park may be inconsistent with community expectations, the amenity impacts could be managed with appropriate mitigation measures.

The siting of the Queen Victoria Gardens emergency access shaft adjacent to Linlithgow Avenue may not be consistent with community expectations about the uses of Queen Victoria Gardens and the associated loss of flowerbeds. However, the annual construction of the MPavilion suggests that the community may be less sensitive to change in this park than had it remained a purely ornamental garden. While construction activities and the placement of transport infrastructure within the park may be inconsistent with the community's expectations, the potential amenity impacts could be managed with appropriate mitigation measures.

The TBM launch site in Fawkner Park would impact on recreational activities in Fawkner Park through the loss of the tennis centre and have amenity impacts on the Fawkner Park Child Care Centre, Kindergarten and South Yarra Senior Citizens Centre. Even with the implementation of appropriate mitigation measures, users of these facilities would likely have ongoing concerns about the safety and amenity impacts associated with construction. Parts of the local community would be concerned about a construction work site within this park and the impact this could have on trees, existing access paths and general amenity during construction. This impact could be reduced by appropriate proposed mitigation treatments and engagement with the community.

The recommended Environmental Performance Requirements and proposed mitigation measures to manage these impacts include the development and implementation of a community and businesses involvement plan, the development and implantation of a relocation strategy for sports clubs and the reinstatement of sites impacted by construction works.

### 10.8.1 Alternative Design Options

Three alternative design options have been assessed for this precinct:

- Fawkner Park emergency access shaft would be constructed within the Fawkner Park southern TBM launch site (if Fawkner Park is used as a launch site)
- Linlithgow Avenue emergency access shaft would be located in Tom's Block

- CityLink tunnels crossing would be below the CityLink tunnels, not above them.

Ongoing, the Fawkner Park emergency access shaft would require a change to the existing layout of the Fawkner Park Tennis Centre to allow for the placement of the structure, but activities would likely be able to return to their current function and use. While parts of the local community could be concerned about the placement of the structure in the park, the location of the structure in proximity to the tennis centre would help to screen any change.

The Tom's Block emergency access shaft may be inconsistent with community aspirations for Domain Parklands. Ongoing, this would likely impact both park users and people travelling on St Kilda Road, either by tram or on foot, who value this part of the landscape. The emergency access shaft would represent the only surface level infrastructure in the park that is neither a memorial nor park infrastructure. The lower levels of pedestrian traffic in the area may reduce this sensitivity. Construction of the shaft also has the potential to disrupt the amenity of the park for its users (through noise and dust emissions). The loss of amenity may be of concern, especially if it disrupts events or the quiet enjoyment of the park.

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

The recommended Environmental Performance Requirements and proposed mitigation measures to manage these impacts include the reinstatement of sites impacted by construction works and the requirement to consult and coordinate with the City of Melbourne to identify possible alternative areas of public space.

## 10.8.2 Benefits and Opportunities

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. Key opportunities accruing from the Tunnels precinct include the potential to:

- Upgrade the reinstated tennis courts and facilities
- Redesign 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
- Adopt treatments that integrate the emergency access shaft and other infrastructure with the parkland setting.

## 10.9 Precinct 2: Western Portal (Kensington)

In addition to the general impacts of the track works and construction of the retaining and acoustic walls on Childers Street, the construction of the western portal would interact with the community through the following activities:

- Acquisition and demolition of nine residences
- Permanent relocation of one high voltage transmission tower currently in Childers Street and temporary relocation of another high voltage transmission tower in Childers Street
- Establishment of a major construction work site at 1 – 39 Hobsons Road in Kensington
- Removal of trees on Childers Street
- Occupation of the car park at South Kensington station
- Traffic disruptions to Childers Street in various stages of construction
- 25 average daily truck movements (round trips) per day for 30 months.

Construction activities would require the acquisition of nine residences adjacent to the rail corridor. Several of these properties host vulnerable households with school age children or residents with mobility impairments. The acquisition of these properties would likely result in displacement of some of these households due to the limited availability of equivalent housing in the suburb and the likely cost of alternatives.

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

The small number of truck movements expected to be generated by the project, combined with traffic management measures, would minimise the likelihood of traffic, safety and access impacts during construction.

Following construction, properties adjacent to those acquired and demolished would be exposed to rail operations requiring acoustic attenuation. Several properties on Altona and Ormond Streets would likely lose their current views of trees and terrace houses, which would have a negative impact on amenity from the rear of these properties and potentially alter the sense of place. Appropriate design, acoustic treatments and landscaping would manage this impact.

The recommended Environmental Performance Requirements and proposed mitigation measures to manage these impacts include the development and implementation of a relocation management framework and appointing case managers or social workers to reduce the disruption to residences from direct acquisition or temporary occupation.

### 10.9.1 Alternative Design Option

The alternative design option for the western portal would require the construction of an additional rail bridge over Kensington Road and the placement of the TBM retrieval box adjacent to the eastern edge of JJ Holland Park in Childers Street. The alternative design option would have similar impacts to the Concept Design, but would reduce the scale of residential acquisition required to one dwelling.

It would also result in increased truck traffic and local road disruption generated by 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 these would be minimised through appropriate traffic management. As noted in Section 10.9, the small number of truck movements expected to be generated in this precinct, combined with traffic management measures, would minimise the likelihood of traffic, safety and access impacts during construction.

### 10.9.2 Benefits and Opportunities

The western portal precinct would relocate a high voltage transmission tower further away from the community, improving the amenity of JJ Holland Park. Improvements in reliability and the increase in the capacity of train services stopping at South Kensington station would also improve accessibility for Kensington residents to the wider train network, their social networks and key social infrastructure.

Key opportunities presented by the western portal include:

- Reinstating acquired land as a park or a community facility after construction
- Involving the local community in the reinstatement planning for Childers Street and any acoustic treatments on the rail corridor
- Improving the Childers Street streetscape with appropriate treatments, providing a benefit for JJ Holland Park users
- Using acoustic treatments such as noise walls to enhance the visual amenity of the properties looking towards the rail corridor, if appropriately designed.

## 10.10 Precinct 3: Arden Station

In addition to the general impacts of the tunnel excavation, the TBM launch, major construction work site and construction of the station box, the construction of Arden station would interact with the community through the following activities:

- Potential loss of up to 121 trees
- Potential traffic disruptions for the duration of construction
- 130 average daily truck movements (round trips) each day for 48 months
- Truck access and movement 24 hours per day, seven days per week for 48 months
- Arden Street and Victoria Street used by trucks to access the Parkville station site
- Truck parking on publicly owned (VicTrack) land (until CBD construction work sites are ready to receive them).

During construction, the use of publicly owned land in an industrial area for most activities would reduce social impacts on the adjoining community. 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 concern may extend to sites such as North Melbourne Recreation Centre, which would be bordered by two truck routes during construction (Arden Street and Macaulay Road). The swimming pools within the North Melbourne Recreation Centre are uncovered and may be perceived to be susceptible to noise or dust generated by truck traffic on both sides of the facility. However, these facilities are already subject to truck traffic on Arden Street and the adoption of appropriate mitigation measures, such as traffic management plans, dust management and monitoring plans and regular communication with potentially affected households and businesses, would reduce these impacts.

The increased traffic on Arden and Laurens Streets during construction may be of concern to the community and could lead to changes in local access patterns. However, the project would be expected to have a minimal impact on pedestrian and cycling safety in this precinct.

The recommended Environmental Performance Requirements and proposed mitigation measures to manage these impacts include the development and implementation of a community and business involvement plan and the development of a relocation management framework.

## 10.10.1 Alternative Design Options

A number of alternative design options exist for the location of the Melbourne Metro electricity substation. Substation options 1 and 2, located in the north and east of the proposed Arden precinct respectively, would avoid generating social impacts due to their location in an industrial area away from residences and facilities.

Substation option 3 would be located in proximity to an apartment block at 5 Anderson Street (which backs onto Laurens Street) and could present a concern to these residents. Early communication with households to explain what is proposed could reduce potential sensitivity to this impact. This impact would be further reduced given the industrial nature of the site and the lower level of amenity already experienced by users of the building when on balconies facing Laurens Street.

## 10.10.2 Benefits and Opportunities

Arden station would provide a catalyst for redevelopment of the Arden-Macaulay precinct. This would in turn lead to an increase in the range of services and facilities available to the community. The provision of the station would also ensure that future residential development in the area is integrated with the rest of the metropolitan transport network, providing good access to employment, services and wider social networks.

Once operational, the provision of a train station at Arden would also enhance access to the North Melbourne Recreation Reserve and Football Club by reducing the distance to the nearest train station (currently North Melbourne) from approximately 850m through an industrial area to less than 200m.

The project would also improve the amenity of the surrounding residential area by moving industrial activities (such as concrete batching) to another 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.

Key opportunities presented by the Arden precinct include:

- Linking the station and its surrounds to the North Melbourne community and its history
- Involving the community in reinstatement planning for the site
- Providing enhanced pedestrian links between existing stations and the North Melbourne Recreation Reserve during construction.

## 10.11 Precinct 4: Parkville Station

In addition to the general impacts of the tunnel excavation and construction of the station box, the construction of Parkville station would interact with the community through the following activities:

- One partial acquisition and one partial strata acquisition from the University of Melbourne, as well as temporary occupation of the City Ford site and part of University Square
- Changes to the local traffic network including the diversion of bus routes through Grattan Street to the east of Royal Parade, the closure of Grattan Street between Royal Parade and Leicester Street for all vehicles and the maintenance of pedestrian and cycle access around construction zones
- 50 average daily truck movements (round trips) each day for 48 months
- Truck access and movements occurring 24 hours a day, seven days per week (upon placement of station roof)
- Potential loss of up to 145 trees
- Protection or relocation of major underground utilities
- Establishment of temporary construction work sites at 750 Elizabeth Street, Barry Street and the northern section of University Square, which would be used for five years
- Reinstatement of the affected areas following construction.

Construction activities would impact on social values and the community. These would mostly be confined to Grattan Street, Royal Parade, Berkeley Street and Barry Street. The key issues associated with the Parkville station precinct relate to amenity impacts (noise, vibration and visual) during construction and access. Amenity impacts would affect the University of Melbourne, Royal Melbourne Hospital, Victorian Comprehensive Cancer Centre and Peter Doherty Institute. While appropriate treatments would reduce these impacts, the impact associated with the noise and vibration of works could affect the way in which staff, students, patients and visitors use these facilities. Technical Appendix I *Noise and Vibration* outlines measures and trigger levels for the application of proposed management actions and mitigation measures to address these impacts.

During construction, access to the University of Melbourne, Royal Women's Hospital, Victorian Comprehensive Cancer Centre, Royal Melbourne Hospital, Peter Doherty Institute and other medical facilities in the precinct would be impacted, with Grattan Street blocked east of Royal Parade 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. These delays could require adjustments to timetabling or classes during the peak of construction disruption.

Access to medical facilities, particularly emergency facilities, would be maintained throughout construction. However, there may be periods in which access would be affected due to traffic congestion in the precinct. While emergency vehicles would be given priority with access maintained, there could be delays for people accessing the emergency departments at the Royal Melbourne and Royal Women's Hospitals in private vehicles. However, appropriate lead times for notification and collaboration with the facilities in the precinct on traffic management and the timing of activities would reduce this impact.

Further, engagement with key stakeholders has helped to refine the design and location of the stations to minimise impacts on access to hospitals and other important facilities. In addition, the construction contractors would be required to develop detailed traffic management plans in collaboration with local hospitals and collaborate with them on traffic management issues and the timing of construction activities.

The northern end of University Square would be used for construction for approximately five years. The southern end of the square would remain open, but would be subject to amenity impacts potentially affecting the use of this site. The northern end of the site is currently poorly used and subject to a master planning process that aims to improve its utility, reducing the severity of this impact. Following construction, the site would be made available for the preferred uses identified in the master planning process.

The loss of trees along Grattan Street and on Royal Parade would also be of ongoing concern for the local community, especially those who value the current streetscape. The severity of this impact would be increased by 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.

The recommended Environmental Performance Requirements and proposed mitigation measures to manage these impacts include the development and implementation of a community and business involvement plan and working with the City of Melbourne to identify possible alternative areas of public open space for community use during the construction phase.

### 10.11.1 Benefits and Opportunities

Melbourne Metro would improve access to the Parkville medical and education precinct for wider Melbourne, including access to 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. Some patients and visitors at the hospitals could also benefit from improved access.



The project would provide a grade-separated crossing of Royal Parade, improving pedestrian safety. The station entrances would also improve access to education and health organisations in the precinct and provide for easier interchange between tram and bus stops.

Key opportunities associated with the Parkville station precinct include:

- Enhancing Royal Parade as the northern entrance to Melbourne
- Better integrating trains and trams and improving access to the wider transport network in the northern suburbs of Melbourne
- Thematically linking the station with the function of the precinct, enhancing the sense of place
- Partnering with the University of Melbourne to identify opportunities to integrate construction activities with existing or future courses, enhancing the opportunities available to students
- Engaging the community on the reinstatement approach and landscaping.

## 10.12 Precinct 5: CBD North Station

In addition to the general impacts of the tunnel excavation and construction of the station box, the construction of CBD North station would interact with the community through the following:

- Acquisition of a residential block on La Trobe Street comprising 49 apartments and acquisition of several commercial premises on La Trobe Street and Swanston Street
- Increased construction traffic for the duration of CBD construction works with an average of 75 round trips each day for 15 months
- Constrained access for pedestrians alongside station entrance construction work sites
- Mostly 24 hour works from 2018 to 2023
- Potential loss of up to 46 trees
- Underground excavation of the station box
- Restoration of Swanston Street.

Construction and operational activities associated with the CBD North station would have social impacts. The project would require the acquisition of 49 dwellings in one apartment building; however, the severity of this impact would be diminished as the majority of these apartments are likely to be tenanted by group households made up of students or young professionals. It is likely that this block of apartments experiences a high level of turnover, with housing aimed at students 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 CBD more generally suggests that many of the residents would be able to find alternative accommodation locally.

The placement of a construction work site on Franklin Street and activities on A'Beckett Street adjacent to RMIT also have the potential to disrupt student and staff movements across campus. The delays caused could result in an inability of students or staff to attend classes on time, necessitating a timetable change. However, RMIT has undergone several large developments and is planning a major redevelopment with the potential to disrupt student and staff movements, and has been able to adapt timetables and class arrangements to suit.

RMIT and the Melbourne City Baths would also experience an amenity (noise) impact associated with the construction works in Franklin Street. This would be most pronounced during the shaft construction stages of the works. Measures would be taken to reduce these impacts, including acoustic construction sheds and preparation of a noise and vibration management plan.

Residences adjoining the La Trobe, Little La Trobe and A'Beckett Street construction zones are also likely to experience ongoing noise and dust 24 hours per day during the construction phase. The hours and nature of these works would be likely to have a greater impact on these households than other construction work sites in the area, which are typically restricted to normal working hours. There would also be several periods during construction where the vibration and ground-borne noise from roadheader activities could trigger the need for management actions and mitigation measures. As noted in Section 10.8, these impacts could be a source of concern for some affected residents, especially those close to the construction of the station cavern. Some of these residents could be offered temporary relocation and the construction contractors would need to engage closely with these households.

During construction, the Concept Design may also 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, minimising any detours.

The recommended Environmental Performance Requirements and proposed mitigation measures to manage these impacts include consulting with the City of Melbourne to develop a plan to use part of the Franklin Street road reserve for public open space post-construction and the development of a relocation management framework for residents affected by the construction of the station.

## 10.12.1 Benefits and Opportunities

CBD North station would improve access for the large number of current and future residents in the precinct to the rest of Melbourne. It would also enhance access to the CBD and key facilities such as RMIT and Queen Victoria Market for wider Melbourne.

CBD North Station would also provide an easier interchange between rail lines by linking with Melbourne Central station, improving access to the wider network.

Key opportunities associated with the CBD North station include:

- Better activation of Swanston Street north of La Trobe Street
- Conversion of Franklin and A'Beckett Streets as recreational spaces for the community
- Partnering with RMIT to identify opportunities to integrate construction activities with existing or future courses, enhancing the opportunities available to students
- Engaging the community on the proposed treatments for surface level infrastructure like entrances, reinstatement design approach and landscaping.

## 10.13 Precinct 6: CBD South Station

In addition to the general impacts of the tunnel excavation, the construction of pedestrian connections and the station box, CBD South station would interact with the community through the following activities:

- Acquisition of the Port Phillip Arcade in Flinders Street and a number of adjoining commercial buildings on Swanston Street
- Establishment of construction work sites at the north-west corner of Federation Square, in City Square and the proposed southern entrance
- Minor tram disruptions on Flinders Street
- 75 average truck movements (round trips) each day for 48 months
- Truck access and movements occurring 24 hours a day, seven days per week (upon placement of acoustic sheds)
- Potential for constrained access for pedestrians alongside station entrance construction work sites
- Mostly 24 hour works from 2018 to 2023
- Loss of up to 24 trees.

Construction of CBD South station would largely avoid direct impacts on private property and social infrastructure; however, it would impact on open space and valued places and have amenity impacts on the adjoining community.

During construction, City Square would be occupied by construction activities and no longer be able to host special events, potentially resulting in the loss or relocation of these events. 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 four minutes' walk south, or the State Library, 10 minutes' walk north along Swanston Street.

Construction of the southern station entrance would take place in the Port Phillip Arcade site in Flinders Street and require the acquisition of a number of commercial properties on Swanston Street. Activities at this site would likely have an amenity impact on residents in the adjoining buildings such as Bible House, UniLodge, Manchester House and the Ashdown Apartments. The potential severity of these impacts would be increased by the 24-hour nature of works occurring within the site. There would also be several periods during construction where the vibration and ground-borne noise impacts from roadheader activities could trigger the need for management actions and mitigation measures. As noted in Section 10.8, this impact could be reduced through early engagement with affected households. The impact on dwellings could be further reduced by offering relocation for highly impacted households, particularly for sustained out of hours construction works.

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 potential for this development to be of concern to the wider community if it is considered inconsistent with other prominent buildings visible in the intersection.

Once operational, the project would increase the use of City Square as people access the station via the northern entrance. An increase in pedestrian traffic could alter the current use of the site for passive recreation and interfere with formal events held on the site (such as Fashion Week or the Comedy Festival), as well as informal activities. The placement of the City Square entrance could also displace some of these activities. Disruption to activities in City Square could impact on the social networks of groups within the community who have limited alternatives available to them.

The recommended Environmental Performance Requirements to manage these impacts include working with the City of Melbourne to improve community access to open or recreational space within the CBD. A possible mitigation measure to achieve this would be to develop public open space on the eastern portion of the St Pauls Cathedral site to ameliorate the loss of the City Square during the project's construction.

### 10.13.1 Benefits and Opportunities

CBD South station would enhance access to the CBD for wider Melbourne and improve access to valued places such as Federation Square and St Paul's Cathedral. The precinct also presents a number of opportunities, including:

- Redesigning City Square to offset any change in function driven by the placement of the station entrance
- Improving the north-west corner of the Flinders and Swanston Street intersection, enhancing its sense of place as the southern entry point to Melbourne's CBD
- Engaging with the community on the design of station entrances and landscaping.

## 10.14 Precinct 7: Domain Station

In addition to the general impacts of the tunnel excavation, construction of pedestrian connections and construction of the station box, Domain station would interact with the community through the following activities:

- Temporary disruptions to trams on St Kilda Road
- Staged road traffic diversions along St Kilda Road
- 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
- 140 average daily truck movements (round trips) each day for 48 months
- Above ground construction would take place between 7 am and 12 am from 2018 to 2020
- Below ground fit out and tunnelling would operate 24 hours per day from 2017 to 2023
- Removal of up to 223 trees (trees would be replanted post construction)
- Site compounds would be established at Edmund Herring Oval, the Albert Road Reserve and a portion of the western boundary of the Shrine of Remembrance Reserve
- Relocation of the South African Soldiers Memorial
- TBM southern launch site in Domain
  - Removal of a number of trees and relocation of monuments and plaques
  - Traffic management and changes in access to residences, the Shrine of Remembrance Reserve and Melbourne Grammar School

- Construction work sites in Fawkner Park, Edmund Herring Oval and St Kilda Road
- Spoil removal and deliveries to the site would occur 24 hours per day, seven days per week.

Construction activities associated with Domain station would impact on community amenity and access, as well as on valued places and public open space.

Construction activities would require the temporary occupation of the Edmund Herring Oval. This would displace existing users who have limited, if any, alternatives available locally. This potential impact would be reduced as access to the Edmund Herring Oval is subject to an annual application process and hours of use for organised sports are limited by the absence of lighting. Using this site would also reduce the land needed at other, more valued spaces such as Fawkner Park and the Shrine of Remembrance Reserve.

There are high levels of community concern about the potential impacts of construction on the local traffic network. While keeping St Kilda Road operating would be consistent with community expectations, the Domain station precinct would likely experience traffic delays during construction.

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 cumulative impact on local residents' access, particularly people living between Domain Road and Toorak Road West. There would be a risk that increased congestion in the precinct would create social severance if people are unable to access their wider social networks or social infrastructure. The reported high 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, the mobility impaired or the elderly, would increase the severity of this potential impact. Achieving the recommended Environmental Performance Requirements would require the development of detailed traffic management plans to manage heavy vehicle movements, maintain access to businesses and households, and establish alternative routes around construction activities.

While works within the Shrine of Remembrance Reserve associated with the TBM launch or the placement of the eastern station entrance would potentially be of concern to the community, there would be no direct impacts anticipated to the Shrine of Remembrance vista from the location or final layout of Domain station and above ground infrastructure. 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 reserve could be avoided during construction and appropriate mitigation measures put in place to protect trees, plaques and monuments.

Loss of the trees on St Kilda Road would also likely be of concern to the local and wider community as it 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 the replacement trees. Achieving the recommended Environmental Performance Requirements for the project would require trees along St Kilda Road to be replaced as a double boulevard (with elms in the outer rows flanking the roadway and plane trees in the central medians) in line with a coordinated replanting strategy to be developed in consultation with the City of Melbourne and the City of Port Phillip.

Construction would also generate noise and dust during working hours. This would have an amenity impact on the precinct, particularly for Melbourne Grammar School, local residents, users of the Shrine of Remembrance Reserve (including attendees at ceremonies), tourists and patients at the Albert Road Clinic.

Dust and noise impacts would be managed in accordance with the recommended Environmental Performance Requirements (see Chapter 12 *Air Quality* and Chapter 13 *Noise and Vibration*). Dust monitoring at sensitive receptors would also be required in this precinct.

The placement of the eastern entrance within the Shrine grounds is likely to be of concern for some groups within the community. The use of the Shrine of Remembrance Reserve for this purpose could be considered a diminishment of this valued place. However, this can be managed through appropriate treatments and engagement with the Shrine of Remembrance on the design of the entrance.

Increasing pedestrian flows in proximity to the Albert Road Reserve 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 of the station entrance.

The recommended Environmental Performance Requirements and proposed mitigation measures to manage these impacts include the development and implementation of a community and business involvement plan and working with the City of Melbourne to identify possible alternative areas of public open space for community use during the construction phase.

### 10.14.1 Benefits and Opportunities

Domain station would maintain access to employers in the St Kilda Road precinct despite the large increase in demand on the transport network. It would also improve access to:

- Melbourne Grammar School and Mac.Robertson Girls' High School

- The Shrine of Remembrance, Albert Park and the employment area on St Kilda Road, Royal Botanic Gardens and the Sidney Myer Music Bowl (although this benefit would be reduced given the distances of these facilities from the station).
- Domain station would also improve access for Domain residents to medical and education facilities in Parkville and across Melbourne while providing a grade separated all weather crossing of St Kilda Road, improving pedestrian safety.

The station also presents a number of opportunities, including:

- An improved pedestrian link between the Shrine of Remembrance Reserve and Albert Park
- Improving the streetscape and amenity of Albert Road
- Improving the utility of Albert Road Reserve for the surrounding community
- Increasing the area available for services at the South African Soldiers Memorial.

## 10.15 Precinct 8: Eastern Portal (South Yarra)

During construction, the South Yarra Siding Reserve, Osborne Street Reserve and Lovers Walk would be inaccessible to the public. Following construction, all of these facilities would be reinstated. The William Street bridge would also be removed for a period and reinstated upon completion of works. The construction of the eastern portal would also interact with the community through the following activities:

- Construction of a ventilation shaft and emergency access shaft and substation in Osborne Street Reserve
- Acquisition of seven dwellings
- Disruptions to local road traffic with construction traffic movements in Osborne Street, William Street, Arthur Street, Toorak Road and Chapel Street.
- Restricted vehicular access to residential properties opposite Osborne Street Reserve in Osborne Street
- An average of 25 truck movements (one way) per day for 30 months
- Normal construction hours, except for rail occupations which would be 24 hours
- Construction commencing in the middle of 2018 and scheduled for completion in the middle of 2023
- Potential removal of up to 218 trees within the construction zone



- Widening of the existing rail corridor and construction of retaining walls.

Construction activities associated with the eastern portal would have a range of impacts on the adjoining community.

The South Yarra Siding Reserve is an important asset for the local community with limited alternatives available locally (the nearest being Fawkner Park, Como Park or Rockley Gardens). Losing access to the South Yarra Siding Reserve risks creating social severance, as the community would lose a natural meeting point. This would have an impact on elderly people or those with a mobility impairment who may not be able to travel to the alternative areas or would do so less often.

Melbourne Metro avoids property acquisition where possible, but would require the acquisition of seven dwellings in this precinct. 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 multi-unit developments and the remaining three are vacant.

Pending decisions on the construction method, several properties on Osborne, William and Arthur Streets may experience changed access arrangements to their properties during construction. 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 dependent on private vehicles, such as where residents are mobility impaired.

During construction, residents adjoining South Yarra Siding Reserve and Lovers Walk would experience an improvement in acoustic amenity with acoustic treatments likely to reduce background noise from rail operations. However, residents would experience a sustained loss of visual amenity associated with the placement of construction infrastructure, loss of vegetation and construction activities.

The use of Osborne, William and Arthur Streets for construction traffic would also have a potential amenity impact for residents living on these streets. A number of local residents, such as retirees or people with home offices, are likely to be home during the day, increasing the severity of this amenity impact. Works that occur overnight would also be likely to have an impact on adjacent households.

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) travelling at a slightly higher elevation.

The South Yarra Siding Reserve, Osborne Street Reserve and Lovers Walk would also be reinstated. During reinstatement, acoustic treatments would likely be installed on Lovers Walk to address the potential increase in operational noise within the cutting.

The Osborne Street Reserve would host ventilation and an emergency access shaft, restricting future uses of the northern extent of this park. While the Osborne Street Reserve is not highly used, the adjoining community values the reserve as a vegetated screen from the rail corridor. The reinstatement of the Osborne Street Reserve could either diminish or enhance this space for the adjoining community.

The social impacts associated with changes to these valued places could be managed through engagement with the affected community during reinstatement planning and through the application of appropriate landscaping and treatments for above ground infrastructure.

The recommended Environmental Performance Requirements and proposed mitigation measures to manage these impacts include the development and implementation of a relocation management framework and reducing the disruption to residences from direct acquisition or temporary occupation through appointing case managers or social workers.

### 10.15.1 Benefits and Opportunities

The increased number of trains traveling on the Frankston and Sandringham lines would make it easier for South Yarra residents to access wider Melbourne, due to increased capacity on these lines. The placement of the eastern portal presents a number of opportunities, including:

- Improving pedestrian links between Toorak Road and South Yarra Siding Reserve
- Enhancing the operation and layout of the South Yarra Siding Reserve during reinstatement
- Improving Osborne Street Reserve during reinstatement and installing infrastructure that better reflects community needs, including the construction of a new bridge accessing the South Yarra Siding Reserve from Osborne Street
- Improving safety along Lovers Walk by improving passive surveillance and the interface with adjoining streets and buildings
- Offsetting impacts by working with other agencies to improve the operation of South Yarra station and Toorak Road.

## 10.16 Precinct 9: Western Turnback (West Footscray)

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. The western turnback would largely avoid adverse social impacts.

## 10.16.1 Benefits and Opportunities

The Western turnback would result in an increased number of services departing from West Footscray station. A number of these services would be empty, meaning more space and seats for commuters.

## 10.17 Early Works

In general, the early works seek to modify existing services relating to water, sewerage, drainage, power, telecommunications and tramways. They would also include the closure of Domain Road and rerouting of the number 8 tram. The early works required would likely have short-term impacts on local access and residential amenity in almost all precincts. However, with appropriate management and communication, the impact of these works on the local community could be reduced.

## 10.18 Environmental Performance Requirements

Table 10–4 shows the recommended Environmental Performance Requirements for Melbourne Metro and proposed mitigation measures in relation to social and community impacts.

The risk numbers listed in the final column align with the list of social and community risks provided in Technical Appendix B *Environmental Risk Assessment Report*.

**Table 10–4 Environmental Performance Requirements for Social and Community**

Draft EES evaluation objective	Environmental Performance Requirements	Proposed mitigation measures	Precinct	Timing	Risk No.
<p><b>Social, community, land use and business</b></p> <p>- 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</p>	<p>Reduce the disruption to residences from direct acquisition or temporary occupation</p>	<p>Utilise a case management approach to manage all project interactions with affected landholders</p> <p>Appoint a social worker or equivalent to assist households make the transition</p> <p>Provide a central point of contact for all affected landholders and tenants</p> <p>Consider the relative vulnerability of households (such as young families, those with mobility impairments or the elderly) and consider what additional assistance is needed to assist with relocation.</p> <p>Purchase properties early, where possible and requested by the landowner</p> <p>Acquire part of properties, where possible and requested by the landowner</p>	<p>2, 3, 4, 5, 6, 7, 8</p>	<p>Pre-construction</p>	<p>SC028 SC029 SC030 SC031</p>
	<p>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:</p> <ul style="list-style-type: none"> <li>• Construction activities likely to unduly affect their amenity (such as out of hours works or sustained loss of amenity during the day for shift workers)</li> <li>• Loss of access</li> </ul>	<p>Develop a relocation management framework that allows for a uniform approach across the project. Consider and incorporate the following into this framework:</p> <ul style="list-style-type: none"> <li>• Provision for the voluntary relocation of households subject to: <ul style="list-style-type: none"> <li>– Construction activities likely to unduly affect their amenity (such as out of hours works or sustained loss of amenity during the day for shift workers)</li> <li>– Loss of access</li> </ul> </li> <li>• Provision of options suitable to the duration of relocation, for example: <ul style="list-style-type: none"> <li>– Use of hotels/motels for short term disruptions</li> <li>– Use of equivalent housing for longer term relocations</li> </ul> </li> </ul>	<p>All</p>	<p>Pre-construction</p>	<p>SC001 SC004 SC005 SC006 SC009</p>

Draft EES evaluation objective	Environmental Performance Requirements	Proposed mitigation measures	Precinct	Timing	Risk No.
	<p>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:</p> <ul style="list-style-type: none"> <li>Measures to minimise impacts to the development and/or operation of existing facilities</li> <li>Measures for providing advance notice of significant milestones, changed traffic conditions, periods of predicted high noise and vibration activities</li> <li>Process for registering and management of complaints</li> <li>Measures to address any other matters which are of concern or interest to them.</li> </ul> <p>The plan would consider each precinct and station location in detail. Stakeholders to be considered in the plan include (but are not limited to):</p> <ul style="list-style-type: none"> <li>Municipalities</li> <li>Potentially affected residents</li> <li>Potentially affected businesses</li> <li>Recreation, sporting and community groups and facilities</li> </ul>	<p>Provide a forum in which key facilities can provide feedback on the construction approach</p> <p>Make provision to cease or silence works for times of special significance to the Shrine of Remembrance such as on Remembrance and Anzac Days</p> <p>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</p> <p>Allow for changed usage patterns during events such as Anzac Day at the Shrine of Remembrance</p> <p>Avoid use of the Shrine of Remembrance reserve for construction activities unrelated to the station entrance</p> <p>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</p> <p>Avoid truck movements during peak pick up and drop off times for Fawkner Park Child Care Centre, Kindergarten, South Yarra Senior Citizens and Melbourne Grammar</p> <p>Communicate alternative access methods to the community in advance of works</p> <p>Consult with affected communities during the mobilisation phase to explain and changes in anticipated impacts resulting from improvements in constructor's method</p> <p>Consult with affected communities on design changes likely to be of public interest prior to finalisation</p> <p>Utilise a complaints management system for responding to all community complaints or enquiries</p> <p>Consult with managers of key facilities during so that impacts on their operations and wellbeing of their users are minimised and notification timeframes agreed Demonstrate that community feedback is incorporated in the design and the design requirements have been made clear to the community</p>	All	Pre-construction	SC001 to SC023 SC027 SC032 to SC038 SC041 SC043 SC044 SC045

Draft EES evaluation objective	Environmental Performance Requirements	Proposed mitigation measures	Precinct	Timing	Risk No.
	<ul style="list-style-type: none"> <li>Royal Melbourne Hospital, Victorian Comprehensive Cancer Centre, Peter Doherty Institute and other health and medical facilities</li> <li>University of Melbourne</li> <li>RMIT</li> <li>Fawkner Park Children's Centre and Kindergarten</li> <li>South Yarra Senior Citizens Centre</li> <li>Other public facilities in proximity</li> </ul>	<p>Demonstrate to the community and key stakeholders how the design aligns with the Concept Design and community feedback</p> <p>Develop appropriate community information tools – website, onsite boards, brochures, etc to update community on changed access arrangements</p> <p>Engage landholders during the planning, design and implementation stages on the construction method, project design and how this would affect their property</p> <p>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</p> <p>Undertake pre-tunnelling condition surveys and make the results available to affected property owners on request.</p> <p>Where the design is potentially inconsistent with community feedback, explain the rationale and anticipated outcomes of the design change</p>			
	<p>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</p>	<p>Consult early with open space users on project timelines and likely impacts</p>	All	Pre-construction	SC007 SC019 SC024 SC034

Draft EES evaluation objective	Environmental Performance Requirements	Proposed mitigation measures	Precinct	Timing	Risk No.
	Work with relevant local councils to plan for and coordinate with key stakeholders during major public events	<p>Consult with managers of key facilities so that impacts on their operations and wellbeing of their users are minimised and notification timeframes agreed</p> <p>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</p> <p>Provide a forum in which key facilities can provide feedback on the construction approach</p>	All	Pre-construction	SC007 SC013 SC033
	Develop a relocation strategy for sports clubs and other formal users of directly impacted recreational facilities	<p>Consult early with open space users on project timelines and likely impacts</p> <p>Develop a relocation strategy to help users of the Edmund Herring Oval users identify alternative facilities (where available) they could use</p> <p>Develop a relocation strategy to help users of the Fawkner Park tennis centre identify alternative facilities (where available) they could use during construction</p>	All	Pre-construction	SC024 SC025

Draft EES evaluation objective	Environmental Performance Requirements	Proposed mitigation measures	Precinct	Timing	Risk No.
	<p>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:</p> <ul style="list-style-type: none"> <li>• Childers Street, Kensington</li> <li>• JJ Holland Park</li> <li>• Royal Parade and Grattan Street, Parkville</li> <li>• The south western entrance of the proposed CBD South station</li> <li>• St Kilda Road boulevard</li> <li>• Edmund Herring Oval</li> <li>• Fawkner Park and Fawkner Park Tennis Facility</li> <li>• Osborne Street Reserve</li> <li>• South Yarra Siding Reserve</li> <li>• Lovers Walk</li> <li>• South African Soldiers Memorial.</li> </ul> <p>Refer also to the recommended Environmental Performance Requirements in relation to Landscape and Visual. These requirements and proposed mitigation measures are provided in Chapter 16.</p>	<p>Avoid ground improvement techniques that would preclude the reestablishment of trees</p> <p>Demonstrate to the satisfaction of MMRA that ground improvement works are optimised to reduce their footprint</p> <p>Provide a mechanism within the sub-plan governing reinstatement to incorporate community feedback in consultation with the land manager</p>	All	Pre-construction/ Construction	SC033 SC035 SC039 SC040 SC041



Draft EES evaluation objective	Environmental Performance Requirements	Proposed mitigation measures	Precinct	Timing	Risk No.
	<p>In consultation with the City of Melbourne, improve community access to open or recreational space within the CBD by identifying potential opportunities to return as much land as possible used for construction to permanent public open space at City Square and Federation Square. Plans must be in accordance with the Melbourne Metro Urban Design Strategy.</p>	<p>Consult early with open space users on project timelines and likely impacts</p> <p>Provide alternative open space in proximity to City Square that can be used for similar activities for the duration of construction</p> <p>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</p>	6 – CBD South station	Design/ Construction	SC014
	<p>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.</p>	<p>Provide a mechanism within the sub plan governing reinstatement to incorporate community feedback in consultation with the land manager</p>	5 – CBD North station	Design/ Construction	SC014

## 10.19 Conclusion

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:

- Arden 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
- 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, as well as improving access for the large number of current and future residents in the northern CBD to the rest of Melbourne
- CBD South station would 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.

A number of project activities would need to be managed carefully to meet the draft EES evaluation objectives. Achieving the recommended Environmental Performance Requirements and implementing the proposed mitigation measures – such as the development and implementation of a community and business involvement plan or the application of a relocation management framework and strategy – would reduce the social significance of most impacts to medium or lower. However, even with mitigation, two activities would still present a high social risk:

- Residential acquisition in the western portal precinct
- Modification of valued streetscapes, in particular St Kilda Road, Royal Parade and Grattan Street

These risks remain high as the impacts associated with these activities are difficult to avoid. In the first instance, this is due to the limited availability of alternative housing in the western portal precinct. In the second instance, this is due to the length of time it would take for the replacement trees to grow and restore these streetscapes.