

16 Economic and social issues

This chapter addresses the economic and social implications of the CBD Metro during construction and operation. A detailed assessment is provided in Technical Paper 6 *Economic and social*. Economic implications have also been considered as part of the justification of the CBD Metro in section 22.3, which assesses the initial viability, and economic benefits of the project.

The Director-General's requirements

The Environmental Assessment must include consideration of, and a management framework for social and economic implications, including:

- *Consideration of local community (services, access and amenity) related changes during construction and operation and proposed measures to minimise these impacts.*
- *Details of utilities or properties impacted by the project, including in relation to acquisition, access, and business viability.*

16.1 Overview

An economic or social impact affects the level of economic or social activity generated in a defined area. Impacts can be either positive or negative, or a combination of the two.

Economic impacts may directly affect the economic well-being of an area's residents, the viability of businesses, workforce availability or trade by changing factors that influence opportunities for employment or business growth, the ease of doing business and the environment in which business is conducted.

Social impacts may directly affect the social well-being of an area's residents, visitors and employees by changing the social amenity and character of an area, the degree of social interaction, the availability of employment, social perceptions and opportunities.

16.1.1 Existing environment

The CBD is Sydney's main commercial centre and is characterised by densely populated buildings for centres of commerce. It also houses major retail centres, hotels and entertainment venues. The CBD areas where metro stations are proposed are described below.

Central Station is a main transport hub in the CBD, with the existing Central Station main terminus and the bus interchange located in this area. It services the nearby educational facilities, including the University of Technology Sydney, Sydney TAFE and Curtin University of Technology, and entertainment venues such as the Entertainment Centre and the Capitol theatre.

Town Hall has a strong retail focus with a mix of commercial, residential and civic buildings. Town Hall Square would be redeveloped as part of the City of Sydney's Sustainable Sydney 2030 vision, which would provide open space in the city centre and enhance the historical precinct of the area.

Martin Place is the financial hub of the CBD, and the area with the highest density of jobs in the CBD. It is also characterised by a civic plaza ringed by office blocks.

The Barangaroo-Wynyard Station area is currently growing as a financial district, and provides the gateway to Barangaroo and East Darling Harbour. Barangaroo, which currently operates as a shipping terminal, would be significantly redeveloped to provide additional places for work, a significant new foreshore park and residences.

The Inner West areas of the project are generally typified by residential communities with smaller businesses and commercial precincts, as opposed to the high-density business environment of the Sydney CBD.

Within the Inner West, Pyrmont is a fast-developing area with professionals both living and working in the suburb. Pyrmont has been gentrified, with a former working class industrial and port community progressively replaced by high-rise buildings. However, the prominent heritage character of the area has been retained.

The White Bay and former Rozelle Marshalling Yard are typified by their industrial nature. White Bay was traditionally used for regional shipping and rail purposes. The former Rozelle Marshalling Yard is no longer in use and is adjacent to an area of residential dwellings with some industrial uses along Lilyfield Road.

Rozelle is characterised as a suburb for families and professionals, with the residences varying from detached houses to terrace and unit dwellings. Boutique businesses, community and leisure services are focused along Darling Street and Victoria Road.

16.1.2 Assessment methodology

The economic and social assessment has been broken into three components:

- The macroeconomic assessment, which focuses on the wider economic impacts of the project on Sydney's economy.
- The microeconomic assessment, which focuses on the properties affected by the project through acquisition or as a result of changes to access and business viability.
- The likely social impacts of the project, which considers the changes to services, access and amenity as a result of the project.

The assessment is supported by background research including information reviews, the analysis of demographic profiles, travel and survey data and the preparation and implementation of an extensive community, business and stakeholder consultation program.

The impacts are described and quantified as:

1. Positive or negative.
2. Significant, moderate, slight or neutral.
3. Direct or indirect.
4. During construction and/or operation of the CBD Metro.

Further description of the impact rating criteria can be found within Technical Paper 6 *Economic and social*.



16.2 Objectives and strategy

The following objectives would guide the management of social and economic impacts of the CBD Metro:

- Objective 1: Minimise the potential impact of the project to the operation of businesses and enjoyment of private and public spaces across the study area. This objective is to be achieved by proactively working with potentially affected stakeholders to identify likely impacts prior to construction, and by putting in place measures to minimise impacts. Any mitigation strategy should be regularly reviewed and monitored to ensure it is effective.
- Objective 2: Ensure businesses, services, residents and social groups are kept informed of the project and consulted in advance of major works or factors that would have a direct social or economic impact.
- Objective 3: Design stations so that their character and layout are sensitive to the local context and integrate effectively with existing uses. Ensure stations support the active use of surrounding areas and do not hinder the effectiveness of spaces as places of social congregation, activity or commuting.
- Objective 4: Work closely with owners of properties to be acquired and tenants to be relocated to minimise related concerns and anxiety as well as any likely negative financial and social impacts.
- Objective 5: Ensure the CBD Metro stations are fully accessible for persons with a range of mobility needs and have a comparable cost of use to other forms of public transport so that they represent equitable transport for all users.

To achieve this objective, the following strategies would be developed:

- A Business Management Strategy would be prepared and implemented to minimise impacts on businesses adjacent to major construction sites during construction. It would include measures to maintain vehicular and pedestrian access during business hours and the visibility of the business appropriate to its reliance on such.
- A Construction Stakeholder and Community Involvement Plan would be implemented throughout the delivery of the project. The Plan would provide procedures for regular communication with government stakeholders, for the regular dissemination of information to the community, for the community and stakeholders to provide feedback to the construction team, for the construction team responding to any enquires or feedback, and for managing the impacts due to utility service interruptions, site visits and property inspections.
- A Design Review Panel would be formed to evaluate the master planning of stations and seek to create attractive environments that integrate effectively with existing land uses.

16.3 Specific issues

16.3.1 Macroeconomic issues

Agglomeration

Improved transport systems can drive businesses to cluster together, which brings economic and social benefits. This process is called agglomeration. The CBD Metro would enhance workforce accessibility to the city, thereby allowing for greater building densities, and agglomeration.

The CBD Metro would have a moderate positive benefit, as it would create enhanced opportunities for businesses near each station to cluster together and benefit from increased productivity and innovation. This would in turn enhance Sydney CBD's capacity to support the agglomeration of businesses, and bring associated economic benefits to private business and consumers, and enhance Sydney's role as a global city.

Congestion

Traffic and transport congestion and constraints incur economic and business costs. The effect of increased road congestion during construction of the CBD Metro would have a moderate negative impact on businesses. Although the capacity of the existing transport services in Sydney would not change during construction, their operation would be hindered. Furthermore, the level of traffic congestion could increase the economic cost to businesses and the workforce. Congestion also has a personal cost through time delays, vehicle operating costs and stress.

The operation of the CBD Metro project would have a slight positive impact on businesses. There would be enhanced opportunities for safe, rapid and reliable public transport travel, which would support a modal shift away from private car use and therefore help to reduce road and transport related congestion.

Economic multipliers

Economic multipliers relate to the way economic activity in one industry can have flow-on benefits to other industries. The benefits of construction and job generation would flow through to the wider economy on commencement of the project's planning, design and construction works.

Based on construction industry multipliers (ABS 2001), the estimated \$4.3 billion construction cost of the CBD Metro would generate a further \$3.88 billion of activity in production-induced effects and \$4.14 billion in consumption-induced effects. Therefore, the construction of the CBD Metro would potentially generate total economic activity of about \$12.3 billion. This would be a moderate positive macroeconomic impact.

Land values

Transport infrastructure projects can have effects on land values. Research suggests that land values are likely to increase in response to transport infrastructure improvements in inner city areas as people are willing to pay more to live in accessible locations (Bajic 1983).

Land values surrounding the Rozelle and Pyrmont CBD Metro stations would benefit upon approval for, and confirmation of, the project. This would be a slight positive macroeconomic impact. However, it is anticipated that property prices would not completely reflect the effect of the CBD Metro until about two to three years after its commissioning.

The impact on the Sydney CBD component of the CBD Metro would be more complex to estimate. The CBD is already served by buses and the heavy rail system. The CBD Metro would ease demand for these transport modes rather than produce substantial travel time savings. For this reason, the section of the CBD Metro from Central Station to Barangaroo-Wynyard Station would not be expected to experience a significant change in land values.

Employment

The project would generate employment during construction and during operation. Slight positive employment generation benefits would occur on commencement of the project's planning, design and construction works. Based on Sydney Metro estimates, between 2010 and 2016, construction of the project would generate almost 3,000 jobs. This includes the creation of about 2,000 direct jobs and 900 indirect jobs.

An estimated 275 permanent jobs per annum would be generated by the management, operation and maintenance of the CBD Metro. New business opportunities would also be fostered by commercial outlets at the new stations. This would be a slight positive macroeconomic impact.

16.3.2 Microeconomic issues

Property acquisition

To enable the construction and operation of the project, it would be necessary to acquire about 33 properties within the project corridor. The properties comprise 21 retail buildings, four offices, three mixed retail/offices, one commercial and three residential properties, and accommodate about 175 business tenants.

Part of the former Rozelle Marshalling Yard would also be required for the Rozelle stabling and maintenance depot and part of the White Bay site would be required for the CBD Metro.

Specific properties required for acquisition are detailed in section 8.3 of Technical Paper 6 *Economic and social*.

Property acquisition would be a moderate negative economic impact for those business operations during relocation as a result of the disturbance created.

All property acquisition would be managed in accordance with the *Land Acquisition (Just Terms Compensation) Act 1991*. Every effort would be made to acquire the affected properties through negotiated purchase. Where negotiation fails, properties would be acquired through compulsory acquisition in accordance with the provisions of the Act. This requires appropriate compensation to be paid; including associated legal costs, valuation fees, relocation and removal expenses, and mortgage costs. For residential acquisitions, solatium is also applicable, which is compensation for the non-economic cost of inconvenience attributed to moving residence.

Sydney Metro would liaise with the affected parties to identify alternative location options. In some cases, it would be necessary to provide additional support owing to the age or special needs of residential tenants or the important social service provided by some facilities. These requirements would be assessed on a case-by-case basis.

In addition, a number of the properties potentially affected by the project are leased to individual business tenants. Where businesses have a lease that has a period to run after such time that the property is required, Sydney Metro would negotiate to acquire the remaining lease period from the tenant. Tenants have the same rights with respect to relocation and disturbance as property owners under the *Land Acquisition (Just Terms Compensation) Act 1991*, and would be compensated for reasonable disturbance costs if the business is required to relocate.

It would also be necessary to acquire stratum below the surface of properties for the construction of the CBD Metro. With the exception of special cases, under the *Transport Administration Act 1988*, compensation is not payable where stratum is required for the development of underground infrastructure.

Employment displacement

As a result of the necessary property acquisitions, about 175 business tenants would require relocation to facilitate the construction of the project. It is conservatively estimated that these businesses directly generate about 3,350 jobs; 94 per cent of these jobs are based within Sydney CBD. It is considered likely that the vast majority of these businesses would choose to relocate within Sydney CBD owing to the benefits of agglomeration, the prestige of the address, and the accessibility to other services, businesses and clients/customers. Accordingly, the majority of these jobs would not be lost on account of the project, but redistributed within the Sydney CBD.

Some displaced businesses within Rozelle and Pyrmont may choose to relocate to alternative commercial or retail premises. The small scale of some of these businesses may result in a minor proportion choosing not to relocate and therefore become extinguished. Given the modest scale of these businesses, the corresponding loss of jobs would be slight and should be balanced against the net increase in direct and indirect employment generated by the project.

Business viability

The likely impacts of the project on the economic viability of businesses in the study area would vary dependant on the stage of the development, the location of the business, the type of business, and the severity of the impact.

During construction, some businesses would benefit from increased local activity and demand for goods, but others would be negatively affected as a result of traffic and access and noise and vibration disturbances. Traffic and access disturbances are addressed in Chapter 10 and noise and vibration impacts are addressed in Chapter 11.

Once the metro is operating, there would be an overall slight positive impact as:

- Some businesses would benefit from faster staff travel time, reduced congestion and associated business costs, and improved customer access due to the speed and frequency of the CBD Metro.
- There would be new business opportunities generated within stations – this would be the most positive impact of the project on businesses. Spaces for new retail and service-related business opportunities would be provided in the CBD Metro stations, which would benefit from a high level of passing trade.
- There would be improved customer access and enhanced passing trade for existing businesses surrounding the stations, in particular for organisations such as the Sydney Observatory and Powerhouse Museum and smaller retailers and businesses focused around stations in Union Square, Haymarket and Rozelle.

Even so, a small number of businesses are likely to be negatively affected, as a result of increased competition from additional retailers in station locations, changed consumer behaviours during construction and land value increases.

16.4 Social issues

Accessibility and travel times

The social issue of accessibility and travel times relates to the ease of access and duration of travel for employees, residents and visitors to various destinations.

The scale and concurrency of the construction works across the study area have the potential to negatively affect the ease and duration of travel to and within the city, due to construction-related disturbances and traffic generation. The negative impacts may be exacerbated by the cumulative effects created by other major developments occurring at the same time as the project in suburbs such as Haymarket, Rozelle and Pyrmont. Increased travel times during construction are considered a moderate negative social impact and would be addressed through appropriate mitigation measures.

Once the CBD Metro is operational, the main benefits would relate to enhanced transport capacity and, therefore, improved access and reduced travel times across the city. There would be some improvement to access in parts of Sydney CBD from suburbs such as Rozelle and Pyrmont. At Pyrmont, there is currently a lack of fast, direct public transport to areas such as Wynyard and Martin Place. Travel times would also be somewhat improved for residents of Rozelle and Balmain, particularly for residents travelling across the CBD, who would be able to avoid the road-related congestion currently encountered by buses from Rozelle as they enter Sydney CBD.

An improvement to accessibility and travel time is considered to be a slight positive social impact of the CBD Metro project.

Access and social equity

The issue of access and social equity relates to the effect of the project on access across the city, to and within the stations, and to social services and needs.

During construction, there would likely be a slight negative impact as a result of congestion and disturbance associated with construction activities.

During operation, the benefits would stem from:

- Improved travel across Sydney CBD, which would help to reduce social isolation for some residents restricted in their movement owing to mobility hindrances, and enhance the ability for a range of people to access social needs such as education, shops, health services, employment, and community services.
- Enhanced access for a range of users to and within the stations.
- Better connectivity between places through new pedestrian and cycle links.
- Improved social equity, through the provision of disabled access, access for the elderly, and access for parents with young children. The CBD Metro rolling stock and stations would be wheelchair accessible and able to accommodate the needs of people with mobility and sensory impairments.

These improvements are considered a social benefit and therefore a slight positive impact.

Property acquisition

As detailed in section 16.3.2, it would be necessary to acquire residential dwellings and businesses to enable the construction of the project, some of which provide services to the community. This would have a significant negative social impact on various owners, tenants and service users owing to anxiety and stress from the acquisition process. Also, following relocation, additional social impacts would include loss of community linkages and cohesion for businesses and services that serve a

specific catchment or trade area, and for residents that may be removed from their cultural networks and local community.

Section 9.5 of Technical Paper 6 *Economic and social* describes in full the likely social impacts resulting from property acquisition. The loss of the pharmacy associated with the building to be acquired at 134 Victoria Road, at Rozelle for instance has the potential to affect services to this local area, in particular for the provision of after-hours medicine - an imperative factor in the well being of the community. It is important to note however that the pharmacy building to be acquired is presently vacant, as it has been undergoing redevelopment for over two years.

Whilst the identification of a permanent location for the Health and Beauty Pharmacy may result in a short-term closure of the business, the impact to the community would be minimised owing to the alternative pharmacies presently operating within Rozelle and within walking distance of the site to be acquired. Both of the existing alternative pharmacies operate 7 days a week however they close at 9pm at night as opposed to the 10pm closing time of the Health and Beauty Pharmacy in its temporary location. The difference in service availability during relocation, as a result of the one hour difference in operation is considered a slight negative impact.

To enable the construction of the Town Hall Square Station it would be necessary to acquire a range of retail and commercial services, which includes a Woolworth's supermarket. The Woolworths supermarket is the only supermarket operated by this retailer within Sydney CBD. Notwithstanding this, there are no less than 5 alternative supermarkets (operated by two different companies) within close proximity / walking distance of Town Hall Station. Accordingly, the impact to service provision for the community is considered slight negative.

In summary, given that the individual businesses to be relocated within the project area do not play a critical role to the economic function of the centre and have similar alternative facilities either within or surrounding the centre, the proposed acquisition and relocation of some businesses is considered a slight negative impact.

Access to public spaces and places

Various public spaces would be directly or indirectly affected by the construction works, which would affect how local spaces are used by social groups and communities, and influence the identity of localities and the ability of social groups to integrate within these areas. There would be moderate negative impacts due to the likely restrictions to the use and enjoyment of some public and open spaces during construction.

However, during operation, the metro would bring improved accessibility to public spaces and places, with opportunities to enhance their social value and appeal.

Public spaces and places that would be impacted by the project – during construction and operation – include Union Square and Union Street, Rozelle High Street, Martin Place plaza, Town Hall Square, Central Station and Belmore Park, as detailed in Table 16.1, and in the case of Union Square and Union Street below the table.

Table 16.1 Construction and operational impacts on public spaces and places

Public space	Construction and operational impacts
Central Station	A construction site is proposed at Central Station on the western side of the existing station. This site is currently used as the interstate bus terminal. Clear signage and access to the relocated facilities would be required, particularly for tourists and visitors. A clear pathway 3.5 metres wide would be provided for pedestrians from Lee and Pitt Streets to the main Central Station concourse throughout the construction period.
Belmore Park	A small portion of Belmore Park would be used for short-term construction purposes to remove the tunnel-boring machine. The park is currently used for social and recreational activities by local workers and visitors and construction works would have negative social impacts for users of the park. The park would be returned to public use upon completion of the works.
Town Hall Square	While the provision of the proposed Town Hall Square does not form part of the CBD Metro Project, it is recognised that Town Hall Square Station and the project demolition and construction process may help to facilitate the development of a successful and vibrant square. The Square would benefit a wide range of social and cultural groups.
Martin Place	The proposed construction site at Martin Place would use a central component of this space. Although access would be retained, the reduced area for passive recreation, combined with any increases in construction noise and disturbances, are likely to negatively affect the enjoyment of this space during this period.
Rozelle High Street	Rozelle centre has significant social value due to its unique character and 'village feel'. However, because the metro would significantly improve accessibility to the Sydney CBD, it would likely attract more residents and workers to the area, which could lead to development pressure and a subsequent change to the area's character. The new buildings and structures forming part of the Rozelle Station would have a prominent visual impact on the character of Rozelle, which would potentially have a negative social impact.

Union Square would not be used for construction purposes and would remain publicly accessible for the duration of works. Striking a balance with the social benefits of maintaining Union Square as a publicly accessible space during construction is the need to acquire properties at 3 - 9 Union Street. It is important to note that the two options for Pyrmont Station require the acquisition of these properties and the relocation of the existing businesses during construction.

Alternative 1 requires the complete demolition of all four buildings however Alternative 2 seeks to retain the majority of the properties at 3 – 9 Union Street and hence their contribution to the character of the streetscape.

A significant part of Union Street would be required to facilitate the construction of Pyrmont Station. The use of Union Street would influence pedestrian, bicycle and vehicular movement within and around the centre as well as access to businesses and cafes.

Pyrmont Station Alternative 2 would ensure that the station entrance is well separated from the operational activity and pedestrians in Union Square and Union Street however it is less visible from these spaces than Alternative 1.

Construction activities in Union Street would have an adverse impact on the local businesses and enjoyment of using Union Square during the construction process due to noise and reduced visual amenity and reduction of the space.

Part of Union Street, between Pyrmont Street and Union Square would be required to facilitate the construction of Pyrmont Station. Pyrmont Station Alternative 1 would require a lesser component of Union Street for these purposes maintaining some vehicle access along Union Street during the construction phase as well as cycle and pedestrian access along the façade of the buildings on the northern side of the street.

Pymont Station Alternative 2 would require a greater component of Union Street for construction purposes thereby further restricting the use of outdoor areas for dining or access. Alternative 2 would be likely to have a more intense, yet shorter construction period than Alternative 1.

The eastern entrance Alternative 2 option would also require significant underground energy utility protection and relocation works, and potential short-term interruptions to local gas and water supply. The extended use of Union Street for construction would also necessitate the removal of a greater number of trees thereby having a short-term adverse visual impact. This option would however have an overriding positive longer term impact as a result of the retention of the predominant share of the buildings of heritage character at 3 - 9 Union Street and the replanting of trees.

The use of Union Street for construction purposes would have a negative influence to pedestrian, bicycle and vehicle movement within and around the centre as well as access to businesses and cafes. Furthermore construction activities in Union Street would have a negative impact to the enjoyment of using Union Square during the construction process in addition to moving around the centre for shopping or leisure purposes.

Upon operation, Pymont Station Alternative 2 proposes the extension of the existing pedestrian space at Union Square east along Union Street to Pymont Street. This would create a social benefit for the local community through the extension of available space within the centre. For either alternative the level of social interaction within Union Square and the associated retail centre is likely to improve from the existing case, with improved transport access to the Square.

Social awareness of the Square would also improve on account of its improved accessibility. As more people would be able to access the centre (particularly through methods other than the car) the centre's pedestrian appeal and role as a local meeting and recreation space would be positively influenced.

The new buildings and structures forming part of Pymont Station would have a prominent visual impact on the character of Pymont, which would potentially have a negative social impact.

Access to community and public facilities

During construction, the project may require partial use of the Rozelle Community Neighbourhood Centre rear open space.

Rozelle Neighbourhood Centre is a not-for-profit organisation that provides a range of community uses and services for people with special needs. The facility also provides an occasional day care facility. The open space located directly to the rear of the Neighbourhood Centre is primarily used by the child care centre. Loss of access to this facility would have a moderate negative social impact on affected users, should it be necessary for construction.

Sydney Metro is currently working closely with the Rozelle Neighbourhood Centre to gain a better understanding of the potential implications of the project for the Centre, and whether use of the open space at the Centre would be necessary. Sydney Metro would continue to work with the Rozelle Community Neighbourhood Centre to minimise any potential negative impacts of the project.

The Balmain Leagues Club would be used as a construction site. The use of the site was identified as an alternative to the construction site initially proposed to the rear of the Anglican Church incorporating the Church Hall and St Thomas Child Care Centre. In August 2008, the *Leichhardt Local Environmental Plan 2000* was amended to facilitate the redevelopment of the Balmain Leagues Club site.

Prior to the public announcement of the CBD Metro project, the temporary relocation of the Balmain Leagues Club was already planned to be voluntarily undertaken by the Club as part of their planned redevelopment of their site. The existing Club premises would have to be closed to enable the redevelopment of the site by the Club. However, the Club has made arrangements to be re-

established in temporary premises nearby, in order to continue providing services and opportunities for existing members to meet and interact. Although the actual timing of the Club's own development plans are not certain, it is possible that use of the site as a construction site for the metro station would extend the period of time during which the club facilities are not available at the present location.

The location of the station entrance and exit points and the pedestrian underpass would be designed to link with the future uses on the Balmain Leagues Club site and enhance integration between the site and the existing Rozelle village centre. Upon operation of the CBD Metro, and the completion of the redevelopment site, this would have a slight positive social impact on the local business community and social groups that use the Club.

Disturbance to social amenity

The construction and operation of the CBD Metro has the potential to negatively affect the amenity of sensitive receivers, including community facilities, places of worship, residential dwellings and work places, particularly those surrounding the stations and in the vicinity of Rozelle stabling and maintenance depot as a result of noise, vibration, light and/or dust disturbances.

The likely disturbances to amenity during the construction phase would be greater than the operational phase. The moderate negative disturbances would include noise from plant, equipment and vehicles, vibration from tunnelling and excavation, air quality impacts from excavation and spoil storage, light spill from evening construction works and traffic impacts such as additional traffic movements and road closures. These impacts may be exacerbated in some locations where the construction program requires 24-hour operation in order to meet project milestones. In many areas, the impacts may be compounded by non-related developments occurring concurrently.

Specific receivers (additional to commercial, retail, service and residential occupiers surrounding the locations) in the study area determined to be vulnerable to disturbances to amenity are listed in Table 16.2.

The impacts on the amenity of residents, workers and visitors would be mostly temporary, and confined largely to the construction period.

Table 16.2 Receivers vulnerable to amenity disturbances

Locations	Receivers
Central	• Visitors and tourists to the area. • Existing users of Central Station. • Users of the bus and taxi interchange. • Users of Belmore Park.
Town Hall	• Visitors and tourists to the area. • General vehicle and pedestrian traffic around the station.
Martin Place	• Commercial, retail, service and residential occupiers surrounding the site. • People who use Martin Place each day for passive recreation.
Wynyard	• Users of nearby open space, such as Wynyard Park. • Commuters using Wynyard bus interchange.
Pymont	• Residents and businesses within and surrounding Union Square and Union Street. • Cyclists and pedestrians passing through Pymont.
White Bay	• Residences located to the north of the site in Rozelle and Balmain. • Businesses in the vicinity of the site, including Sydney Ports and those on NSW Maritime land.
Lilyfield and Annandale	• Residences along Lilyfield Road that may be affected by the construction and operation of Rozelle stabling and maintenance depot.
Rozelle	• St Thomas Anglican Church. • Rozelle Public School. • Rozelle Community Neighbourhood Centre. • Rozelle Markets, businesses and residences along Darling Street and side streets. • Commuters passing through Rozelle on Victoria Road.

The perception of safety

During construction, there would be potential moderate negative impacts on the perception of safety and security around construction sites, particularly in the areas surrounding the stations. However, in some areas, there may be improvements due to greater activity in an area as a result of construction activities.

During operation, there would be both moderate negative and positive impacts on the perception of safety. Moderate negative impacts would arise from the perception of vulnerability around and within stations in off-peak periods. Concerns for safety relate to the prospect of anti-social behaviour, theft or personal safety threats in isolated or unsupervised station areas outside of peak weekday periods. Moderate positive impacts on perceived safety would stem from greater activity around stations, which would enhance feelings of safety and security through passive surveillance.

16.5 Mitigation and management

Specific mitigation measures are recommended to minimise or ameliorate the negative economic and social impacts discussed above. In addition, standard community consultation and construction environmental management strategies would greatly reduce both social and microeconomic impacts. Mitigation measures to minimise the likely negative economic and social impacts on traffic and access, noise and vibration, air quality and visual amenity are addressed in the respective chapters of this report.

The following would be implemented to mitigate the likely social and economic impacts of the project:

- A Business Management Strategy would be prepared and implemented to minimise impacts on businesses adjacent to major construction sites during construction. It would include measures to maintain vehicular and pedestrian access during business hours and the visibility of the business appropriate to its reliance on such.
- A Construction Stakeholder and Community Involvement Plan would be implemented throughout the delivery of the project. The Plan would provide procedures for regular communication with government stakeholders, for the regular dissemination of information to the community, for the community and stakeholders to provide feedback to the construction team, for the construction team to respond to any enquires or feedback, and for managing the impacts due to utility service interruptions, site visits and property inspections.
- A Design Review Panel would be formed to evaluate the master planning of stations and seek to create attractive environments that integrate effectively with existing land uses.
- The project would take advantage of the NSW Government's Green Skills program. The program directed at apprentices and trainees opportunities requiring skills in green buildings, energy and water efficiency, recycling, and horticulture; as well as business administration trainees requiring skills in environmental advisory services, green procurement, environmental auditing accounting and design.
- The NSW Government 'Aboriginal Participation in Construction Guidelines' (2007b) aims to support and encourage more employment and business opportunities for Aboriginal people on government construction projects. The project would meet the requirements of the guidelines for Category 3 projects.

16.6 Conclusion

The CBD Metro would cause adverse economic and social impacts during construction – some of them permanent – but bring a number of long-term benefits once it is operational.

Construction of the CBD Metro would have the following unavoidable microeconomic and social impacts:

- The greatest impact would be caused by the acquisition of approximately 33 properties and/or relocation of properties and construction related disturbances. As a result of the necessary property acquisitions, about 175 business tenants would require relocation.
- Construction activities would cause impacts such as noise, dust and vibration, disruptions to traffic and pedestrian movements, and changed customer access. These would have adverse, though temporary, effects on businesses, residents, tourists and workers.

- Balmain Leagues Club property would be used as a temporary construction site. There would also be use of public spaces such as Union Street and Martin Place.

During operation, economic and social benefits would arise from:

- Improvements in travel speed, reliability, accessibility and connectivity, which would bring better access to employment and education opportunities, social and community services, and cultural activities.
- Enhanced opportunities for business agglomeration, generation of economic multipliers and the generation of jobs.

Overall, the shorter term adverse impacts of the project would be outweighed by the significant economic social benefits that would result from the introduction of a modern metro service.