

CHATSWOOD TO SYDENHAM
**ENVIRONMENTAL
IMPACT
STATEMENT**

MAY 2016

TECHNICAL PAPER 3:
LOCAL BUSINESS



Sydney Metro Chatswood to Sydenham

Technical Paper 3: local Business

May 2016

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List of Abbreviations

ABS	Australian Bureau of Statistics
BTS	Bureau of Transport Statistics
CBD	Central Business District
CSLER	CBD and South East Light Rail project
DP&E	NSW Department of Planning and Environment
EIS	Environmental Impact Statement
FSR	Floor Space Ratio
GDP	Gross Domestic Product
GMA	Greater Metropolitan Area
JTW	Journey to Work
LEP	Local Environmental Plan
LGA	Local Government Area
NLA	Net Lettable Area
SEPP	State Environmental Planning Policy
TZ	Travel Zone

EXECUTIVE SUMMARY

Project overview

Sydney Metro is a new standalone rail network identified in Sydney's Rail Future. The Sydney Metro network consists of Sydney Metro City & Southwest and Sydney Metro Northwest.

The proposed Sydney Metro City & Southwest comprises two core components:

- The Chatswood to Sydenham project (the project), the subject of this technical paper, would involve construction and operation of an underground rail line between Chatswood and Sydenham
- The Sydenham to Bankstown upgrade would involve the conversion of the 13.5 kilometre Bankstown line to metro standards and upgrade of existing stations between Sydenham and Bankstown.

The Sydenham to Bankstown upgrade will be subject to a separate environmental impact assessment.

Investigations have started on the possible extension of Sydney Metro from Bankstown to Liverpool. The potential extension would support growth in Sydney's south west by connecting communities, businesses, jobs and services as well as improving access between the south west and Sydney's CBD. It would also reduce growth pressure on road infrastructure and the rail network, including the potential to relieve crowding on the T1 Western Line, T2 South Line and T2 Airport Line.

The Sydney Metro Chatswood to Sydenham project (the project) involves the construction and operation of a metro rail line. The project would be mainly located underground in twin tunnels extending from Chatswood on Sydney's north shore, crossing under Sydney Harbour, and continue to Sydenham.

The key components of the project would include:

- About 15.5 kilometres of twin rail tunnels (that is, two tunnels located side-by-side) between Mowbray Road, Chatswood and north of Sydenham Station (near Bedwin Road, Marrickville)
- Realignment of the existing T1 North Shore Line surface track within the existing rail corridor between Chatswood Station and in the vicinity of Brand Street, Artarmon, including a new bridge for a section of the 'down' (northbound) track to pass over the proposed northern dive structure

- About 250 metres of aboveground metro tracks between Chatswood Station and the Chatswood dive structure
- A dive structure (about 400 metres long) and tunnel portal south of Chatswood Station and north of Mowbray Road, Chatswood (the Chatswood dive site (northern))
- A substation (for traction power supply) at Artarmon
- Metro stations at Crows Nest, Victoria Cross, Barangaroo, Martin Place, Pitt Street and Waterloo; and new underground platforms at Central Station
- A dive structure (about 400 metres long) and tunnel portal between Sydenham Station and Bedwin Road, Marrickville (the Marrickville dive site (southern))
- A services facility (for traction power supply and an operational water treatment plant) adjacent to the Marrickville dive site (southern).

The project would also include a number of ancillary components, including new overhead wiring and alterations to existing overhead wiring, signaling, access tracks / paths, rail corridor fencing, noise walls, fresh air ventilation equipment, temporary and permanent alterations to the road network, facilities for pedestrians, and other construction related works.

Approach to the local business impacts assessment

This local business impact assessment (hereafter referred to as the study) has been prepared to assess the likely positive and negative impacts upon local businesses resulting from the construction and operational phases of the project.

For the purposes of this study, a local business has been defined as:

“a commercial operation which is within the vicinity of the study area that could be impacted during either the construction or operational phase”.

Specifically the study provides a profile of the geographic localities and local businesses that are likely to be affected by the project. It has then identified and considered the likely impacts to businesses located within close proximity to the proposed station precincts and ancillary sites.

In this regard impacts have been defined as either positive or negative changes to economic activity as a direct or indirect consequence of the project. Where possible these impacts have been quantified and

mitigation measures have been identified to either minimise adverse impacts to businesses or enhance the positive ones.

In taking this approach, this study addresses the relevant requirements established by the Secretary's environmental assessment requirements.

Overview of potential impacts

To inform the study, a targeted phone survey of over 80 businesses within the study area was undertaken. The survey found that the vast majority of existing businesses could be affected by the construction phase of the project owing to potential access restrictions.

Results from the survey indicated that a number of businesses across the study area rely on customer access and receive multiple deliveries and services daily. Some of these businesses received more than 30 deliveries per week, primarily in the Martin Place and Pitt Street local business precincts.

The survey also identified anticipated positive impacts during the projects construction and operational phases including increased trade.

Specific feedback from the survey relevant to elements of the project from the survey includes:

- 56 per cent of businesses surveyed received over 10 deliveries per week whilst 34 per cent received 20 deliveries per week.
- 64 per cent of employees of these businesses utilised public transport to travel to work, followed by 27 per cent who travel by car.
- The primary mode of customer transport to businesses was by walking (51 per cent) followed by car (32 per cent) and public transport (17 per cent).

Based on the business survey results, a review of the study area and associated research, the likely impacts of the project to businesses were identified. These impacts have been summarised in Table 1 below for both the operation and construction phases.

Table 1: Summary of potential impacts during construction and operation

	Potential positive impacts	Potential negative impacts
Construction	<ul style="list-style-type: none"> Increased passing trade for some businesses owing to pedestrian diversions Increased demand for business services owing to construction works and workers Stimulation of redevelopment opportunities Increased food and beverage demand 	<ul style="list-style-type: none"> Visual amenity Restrictions to servicing and delivery access Restrictions to customer access / passing trade Noise, vibration and dust Supply of and access to car parking Increased traffic congestion and travel times and therefore vehicle operating costs Interruptions to power and utilities Staff access, recruitment and retention Business turnover / viability Need for property acquisition
Operation	<ul style="list-style-type: none"> Enhanced business connectivity Enhanced access for customers Increased capacity and development opportunities Increased rental and investment opportunities for landlords Reduced congestion improving deliveries and servicing Improved land and property values Improved staff access, recruitment and retention Improved business turnover / viability Improved visual amenity 	<ul style="list-style-type: none"> Increases in commercial rents for tenants Changes in on street parking availability

As summarised above, the project would result in a range of positive and negative impacts to local businesses. The impacts would vary in their effect across the precincts and dependant on the type of business activity during the construction and operational stages of the project.

While the construction of the project is likely to stimulate broader economic benefits by way of job generation and construction

multipliers, at the more local or precinct level, businesses and property owners would experience a degree of inconvenience and other temporary negative impacts, particularly those located within close proximity to the construction sites and those that are the subject of acquisition to enable the development of the project.

There is also the potential for cumulative impacts during the construction phase for businesses located within the CBD precincts (Martin Place, Pitt Street and Central) on account of temporal and geographic overlaps with construction works associated with the CBD and South East Light Rail Project and other major site specific redevelopment projects.

Upon completion and operation, the impacts at the local and broader geographic levels would become positive. The enhanced capacity and frequency of services on the transport network would also increase the desirability and ease of visiting locations along the network such as Sydney CBD and the new work, residential and recreation hub at Barangaroo.

New stations at Victoria Cross, Crows Nest and Waterloo would also enhance the appeal of these precincts for visiting, investing, living and working.

Summary of mitigation responses

Three types of measures are recommended to address the potential local business impacts identified by this assessment:

- Measures to minimise the level of disturbance created as a result of the construction process to businesses, pedestrians, visitors and workers across the study area.
- Access management measures developed in consultation with businesses and landowners to understand their servicing and delivery requirements. These measures would aim to maintain access to businesses for deliveries and servicing during the construction phase and where possible enhance access upon operation of the project.
- Measures to ensure businesses are kept informed of the project and methods to proactively support businesses through the construction phase.

1 INTRODUCTION

Sydney Metro is a new standalone rail network identified in Sydney's Rail Future. The Sydney Metro network consists of Sydney Metro City & Southwest and Sydney Metro Northwest.

The proposed Sydney Metro City & Southwest comprises two core components:

- The Chatswood to Sydenham project (the project), the subject of this technical paper, would involve construction and operation of an underground rail line between Chatswood and Sydenham
- The Sydenham to Bankstown upgrade would involve the conversion of the 13.5 kilometre Bankstown line to metro standards and upgrade of existing stations between Sydenham and Bankstown.

"Both components are subject to assessment by the Department of Planning and Environment and approval by the Minister for Planning under Part 5.1 of the NSW Environmental Planning and Assessment Act 1979 (EP&A Act). The Sydenham to Bankstown upgrade will be subject to a separate environmental impact assessment.

Sydney Metro Northwest (formerly the North West Rail Link) is currently under construction, services will start in the first half of 2019. This includes a new metro rail line between Rouse Hill and Epping and conversion of the existing rail line between Epping and Chatswood to metro standards.

Investigations have started on the possible extension of Sydney Metro from Bankstown to Liverpool. The potential extension would support growth in Sydney's south west by connecting communities, businesses, jobs and services as well as improving access between the south west and Sydney's CBD. It would also reduce growth pressure on road infrastructure and the rail network, including the potential to relieve crowding on the T1 Western Line, T2 South Line and T2 Airport Line.

The Sydney Metro Delivery Office has been established as part of Transport for NSW to manage the planning, procurement and delivery of the Sydney Metro network.

The Sydney Metro network

The customer experience underpins how Sydney Metro is being planned and designed. The customer experience incorporates all

aspects of travel associated with the transport network, service and project including:

- The decision on how to travel.
- The travel information available.
- The speed and comfort of the journey.
- The range and quantity of services available at stations, interchanges and within station precincts.

A high quality 'door to door' transport product is critical to attract and retain customers and also to meet broader transport and land use objectives. This includes providing a system that is inherently safe for customers on trains, at stations and at the interface with the public domain; providing direct, comfortable, legible and safe routes for customers between transport modes; and provide a clean, pleasant and comfortable environment for customers at stations and on trains.

Key features of the metro product include:

- Comfortable carriages with space for customers to sit or stand.
- A 'turn-up-and-go' service, with high frequency trains reduced journey times with faster trains, and new underground routes through the Sydney CBD.
- Increased capacity to safely and reliably carry more customers per hour due to the increased frequency of trains.
- Reduced dwell times at stations as each carriage would be single-deck with three doors, allowing customers to board and alight more quickly than they can with double-deck carriages.

The Chatswood to Sydenham project would have the capacity to run up to 30 trains per hour through the Sydney CBD in each direction, which would provide the foundation for delivering a 60 per cent increase in the number of trains operating in peak periods, and cater for an extra 100,000 customers per hour.

The Sydney Metro rail network is shown in Figure 1.1

Figure 1: The Sydney Metro network



Source: Transport for NSW

1.2 Overview of the project

Location

The Sydney Metro Chatswood to Sydenham project (the project) involves the construction and operation of a metro rail line. The project would be mainly located underground in twin tunnels extending from Chatswood on Sydney’s north shore, crossing under Sydney Harbour, and continue to Sydenham.

Key features

The proposed alignment and key operational features of the project are shown in Figure 1.2 and would include:

- Realignment of T1 North Shore Line surface track within the existing rail corridor between Chatswood Station and Brand Street, Artarmon, including a new bridge for a section of the

'down' (northbound) track to pass over the proposed northern dive structure;

- About 250 metres of aboveground metro tracks between Chatswood Station and the Chatswood dive structure;
- A dive structure (about 400 metres long) and tunnel portal south of Chatswood Station and north of Mowbray Road, Chatswood (the Chatswood dive structure);
- About 15.5 kilometres of twin rail tunnels (that is, two tunnels located side-by-side) between Mowbray Road, Chatswood and Bedwin Road, Marrickville. The tunnel corridor would extend about 30 metres either side of each tunnel centre line and around all stations;
- A substation (for traction power supply) in Artarmon, next to the Gore Hill Freeway, between the proposed Crows Nest Station and the Chatswood tunnel portal;
- Metro stations at Crows Nest, Victoria Cross, Barangaroo, Martin Place, Pitt Street and Waterloo; and new underground platforms at Central Station;
- A dive structure (about 400 metres long) and tunnel portal between Sydenham Station and Bedwin Road, Marrickville (the Marrickville dive structure); and
- A services facility beside the Marrickville dive structure and tunnel portal, including a tunnel water treatment plant and a substation (for traction power supply).

The project would also include:

- Permanent closure of the road bridge at Nelson Street, Chatswood, and provision of an all vehicle right-turn movement from the Pacific Highway (southbound) into Mowbray Road (westbound);
- Changes to arrangements for maintenance access from Hopetoun Avenue and Albert Avenue, Chatswood as well as a new access point from Brand Street, Artarmon;
- Underground pedestrian links at some stations and connections to other modes of transport (such as the existing suburban rail network) and surrounding land uses;
- Alterations to pedestrian and traffic arrangements and public transport infrastructure (where required) around the new stations and surrounding Central Station;

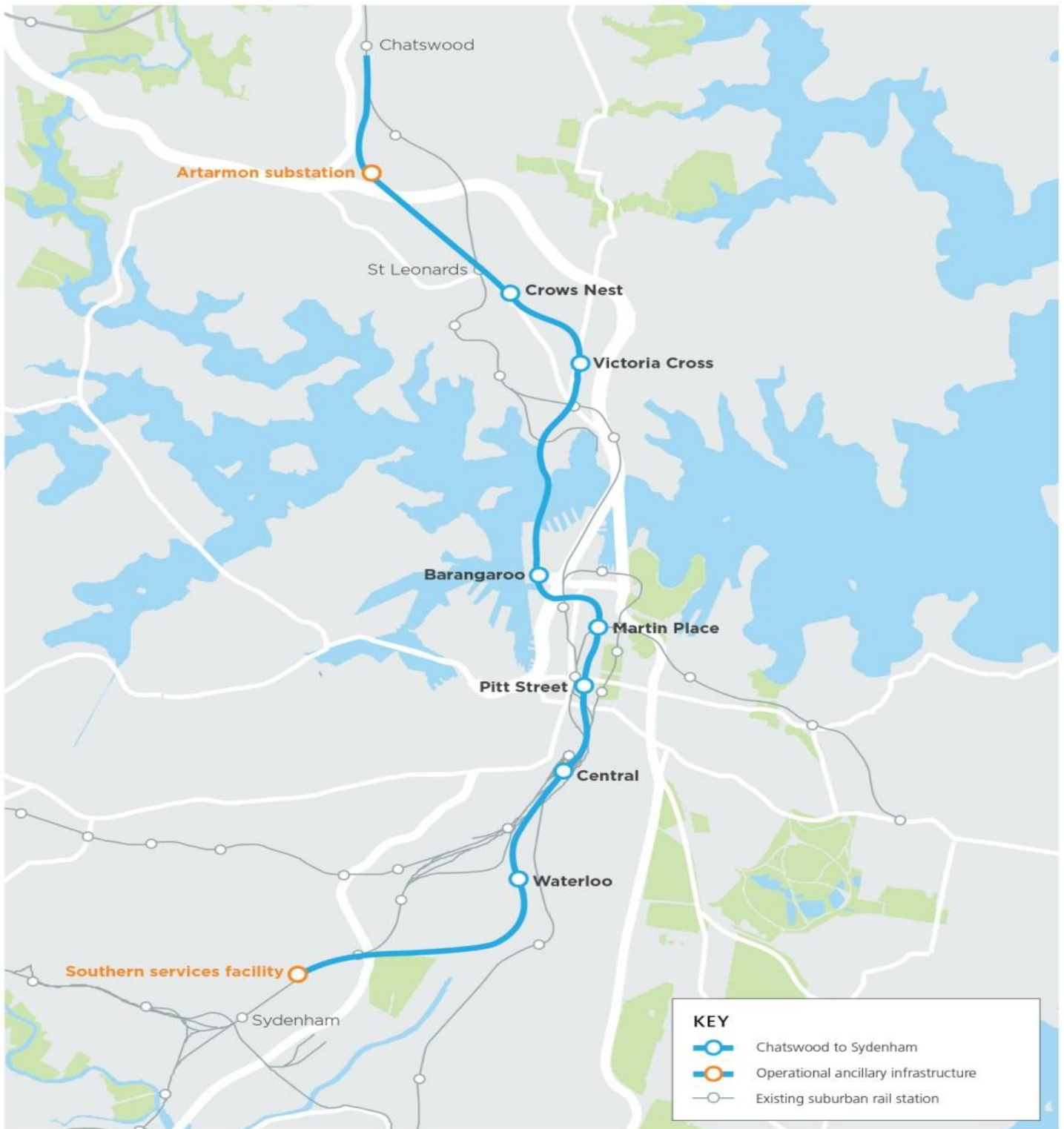
- Installation and modification of existing Sydney Trains rail systems including overhead wiring, signalling, rail corridor fencing and noise walls, within surface sections at the northern end of the project; and
- Noise barriers (where required) and other environmental protection measures.

The proposed construction activities for the project broadly include:

- Demolishing buildings and structures at the station sites and other construction sites;
- Constructing tunnels, dive structures and tunnel portals;
- Excavating, constructing and fitting out metro stations;
- Fitting out tunnel rail systems and testing and commissioning of stations, tunnels, ancillary infrastructure, rail systems and trains;
- Excavating shafts, carrying out structural work and fitting out ancillary infrastructure at Artarmon; and
- Carrying out structural work and fitting out ancillary infrastructure at Marrickville.

A number of construction sites would be required to construct the project. These include locations for tunnel equipment and tunnel boring machine support at Chatswood, Barangaroo and Marrickville as well as at station sites; a casting yard and segment storage facility at Marrickville and a temporary tunnel boring machine retrieval site at Blues Point.

Figure 2: The project alignment



Source: Transport for NSW

1.3 Purpose and scope of this study

The project has been declared State significant infrastructure and critical State significant infrastructure and therefore requires assessment and approval by the Minister for Planning under Part 5.1 of the EP&A Act, including preparation of an environmental impact statement (EIS).

This technical paper, the local business impacts assessment is one of a number of technical documents that forms part of the EIS. The purpose of this technical paper is to identify and assess the local business impacts of the project during both construction and operation. In doing so it responds directly to the Secretary's Environmental Assessment Requirements (SEARs) outlined in Section 1.4.

This technical paper considers the construction and operational impacts to local businesses located in the precincts relating to the proposed stations, ancillary facilities and construction sites.

For the purposes of defining the existing character and nature of businesses within these precincts we have used the applicable travel zones.

Owing to the nature of the project however, the main focus of the study's assessment relates to the businesses located within close proximity to the proposed stations, dive locations, ancillary facilities and construction sites. This generally relates to a 400m radius around the sites.

The assessment of local business impacts includes:

- Property acquisition
- Staff and customer impacts
- Impacts as a result of traffic and public transport disruptions / changes
- Impacts as a result of vehicular, pedestrian, and public transport access
- Impacts on parking supply and delivery capabilities
- Impacts on visual amenity
- Arrangements to ensure continuity of business access
- Measures to minimise or mitigate impacts, including an assessment of available options and the expected effect of the measures proposed, in accordance with relevant best practice guidelines.

1.4 Secretary’s environmental assessment requirements

The Secretary’s environmental assessment requirements relating to local business impacts, and where these requirements are addressed in this technical paper, are outlined in Table 2.

Table 2: Secretary’s environmental assessment requirements – local business impacts

Key Issue and Desired Performance Outcome	Secretary’s environmental assessment requirements	Where addressed
<p>The project minimises adverse social and economic impacts and capitalises on opportunities potentially available to affected communities.</p> <p>The project minimises impacts to property and business and achieves appropriate integration with adjoining land uses, including maintenance of appropriate access to properties and community facilities, and minimisation of displacement of existing land use activities, dwellings and infrastructure.</p>	<p>10. Socio-economic, Land Use and Property</p> <p>1. The Proponent must assess social and economic impacts in accordance with the current guidelines.</p> <p>2. The Proponent must assess impacts from construction and operation on potentially affected properties, approved development applications, businesses, public open space, recreational users and land and water users (for example, recreational and commercial fishers, oyster farmers), including property acquisitions/adjustments, access, amenity and relevant statutory rights.</p>	<p>An assessment of land uses and socio-economic impacts is provided in Chapters 2, 12 and 19 of the environmental impact statement.</p> <p>Chapters 3 to 4 of this study consider the potential impact to businesses as a consequence of the construction and operation of the project.</p> <p>Identification of potential impacts is detailed in Chapter 3. An assessment of these impacts is undertaken in Chapter 4.</p>

1.5 What is a local business impact assessment?

For the purposes of this study a local business is defined as:

“A commercial operation which is within the vicinity of Sydney Metro study area such that it could be impacted during either the construction or operational phase”.

Based on comparable projects in NSW, a local business impact assessment for this project has been defined as:

“A qualitative and quantitative assessment of the potential impacts on local businesses in the immediate vicinity of proposed station precincts and work sites (the study area)”.

1.6 Methodology

The study area comprises the 15.5 kilometre project corridor from Chatswood to Sydenham. The main focus of assessment relates to the businesses located near the proposed stations, dive locations, ancillary facilities and construction sites. This generally means a 400 metre radius around these project elements was considered.

The following methodology has been applied to assess impacts to local businesses.

1. **An examination of the existing business composition and function in each station local business precinct:** This step included site visits and scoping of local business uses, their operations including operating hours and their proximity to proposed dive structures and tunnel portals, stations and construction areas.
2. **Identification and consultation process with local businesses:** This provided a cross-section snapshot of a sample of local businesses to understand the general nature of existing business operations.
3. **A review of prior local business impact studies for comparable projects:** This review identified common business impacts and lessons learned from previous transport infrastructure projects.
4. **A review of community and stakeholder submissions:** having particular regard to key issues raised by local businesses.
5. **Assessment of impacts:** This step drew together the analysis, research and consultation feedback to enable a professional assessment of likely positive and negative impacts through the construction and operational phases of Sydney Metro categorised by business type and location.
6. **Development of mitigation strategies:** This step developed implementable mitigation strategies to minimise adverse impacts associated with the construction phase to local businesses and to maximise the business benefits of the Sydney Metro upon operation.

2 EXISTING AND FUTURE BUSINESSES OF THE STUDY AREA

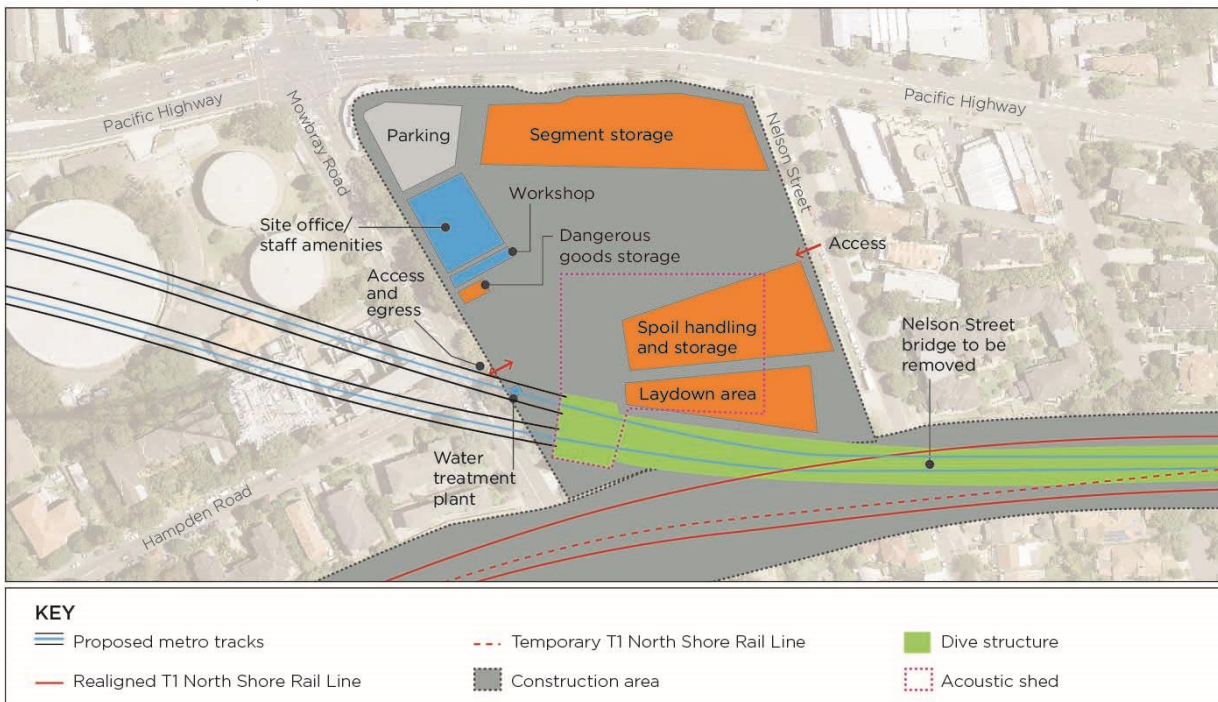
This chapter outlines the existing local business operations in each of the defined local business precincts within the study area. In order to gain an understanding of each of the local business impact areas, site visits have been undertaken in addition to desktop research in relation to the local businesses surrounding each proposed station, dive and works site.

For the purpose of defining the employment characteristics of each local business precinct, Bureau of Transport Statistics 'Journey to Work' data has been used and as such, travel zone boundaries have been adopted for the purposes of the study. As referenced in Chapter 1, these precincts have been defined using travel zone data and review of the characteristics of each station. By definition, this report is confined to 'local businesses', and has generally been confined to a 400 metre radius around each of the project elements.

2.1 Chatswood dive site (northern)

The Chatswood dive site and tunnel portal would be located to the south of Chatswood Station and north of Mowbray Road, Chatswood. Approximately 250 metres of aboveground metro tracks would be required between Chatswood Station and the Chatswood dive structure. The Chatswood dive structure and tunnel portal would be approximately 400 metres in length.

Figure 3: Chatswood dive site (northern) construction and tunnel portal location



Source: Transport for NSW

Local Businesses

Local businesses in the Chatswood dive site local business precinct are a mixture of specific destination shopping, such as Nick Scali furniture and Dulux, or government owned, the Ausgrid depot. The precinct is largely vacant, especially in the small mixed use development on the corner of the Pacific Highway and Mowbray Road. A retail strip runs from the same intersection (Pacific Highway and Mowbray Road) towards Chatswood, ending about a block past the Caltex service station at the corner of Fehon Road just outside of the local business precinct. This area is in close proximity to Westfield Chatswood. A snapshot of business uses is shown in Table 3.

Table 3: Chatswood dive site precinct: Snapshot of existing land uses, activities and tenants

Government	Ausgrid Depot.
Retail and Commercial:	Nick Scali Furniture, Firewood Display Centre, Amber tiles, Dulux, Caltex Petrol Station.
Hotels	The Great Northern Hotel.

Source: HillPDA 2015

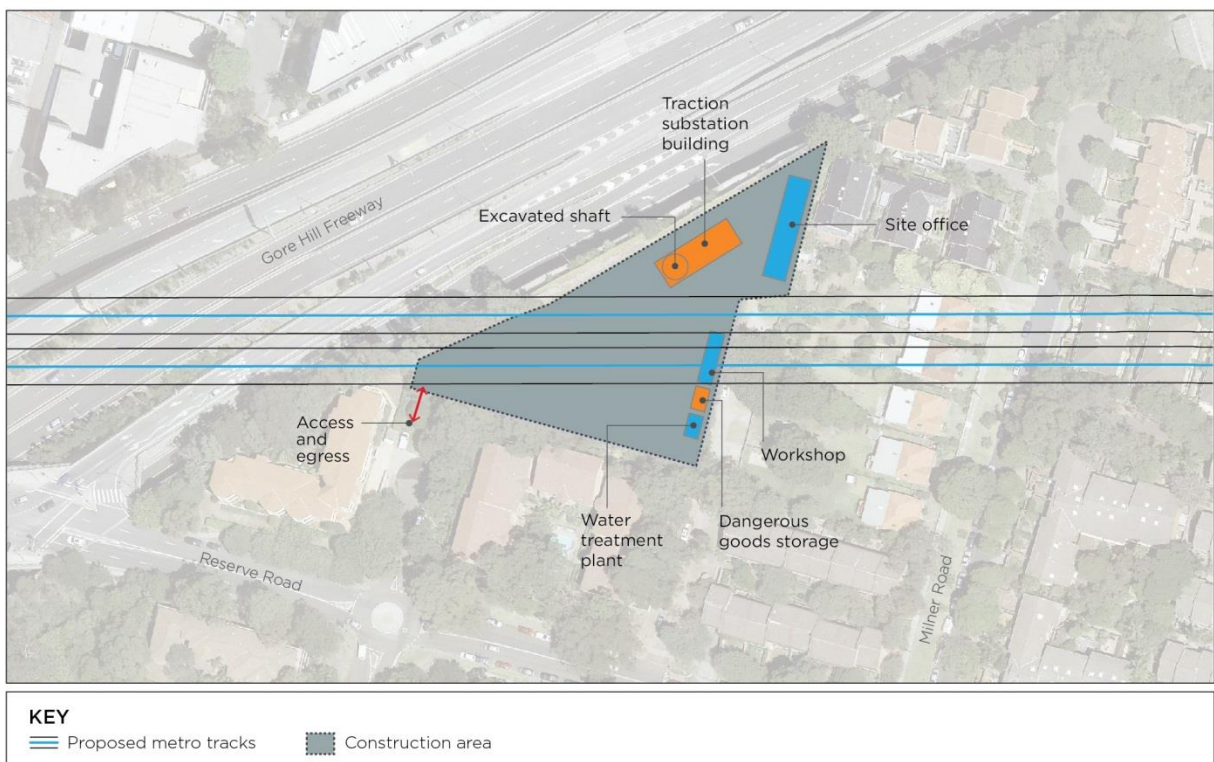
Construction of the Chatswood dive site (northern) would require property acquisition affecting several businesses, including Nick Scali Furniture and other businesses on the Pacific Highway frontage between Mowbray Road and Nelson Street.

Given that the majority of businesses affected would be affected by property acquisition, a survey of these businesses was not conducted. The impacts to surrounding businesses not affected by acquisition are assessed in Chapter 4 and mitigation measures are recommended.

2.2 Artarmon support facility

A traction power supply substation is proposed to be located in Artarmon, next to the Gore Hill Freeway between the proposed Crows Nest Station and the Chatswood dive structure. The support facility would be located on Transport for NSW owned land.

Figure 4: Artarmon substation construction layout



Source: Transport for NSW

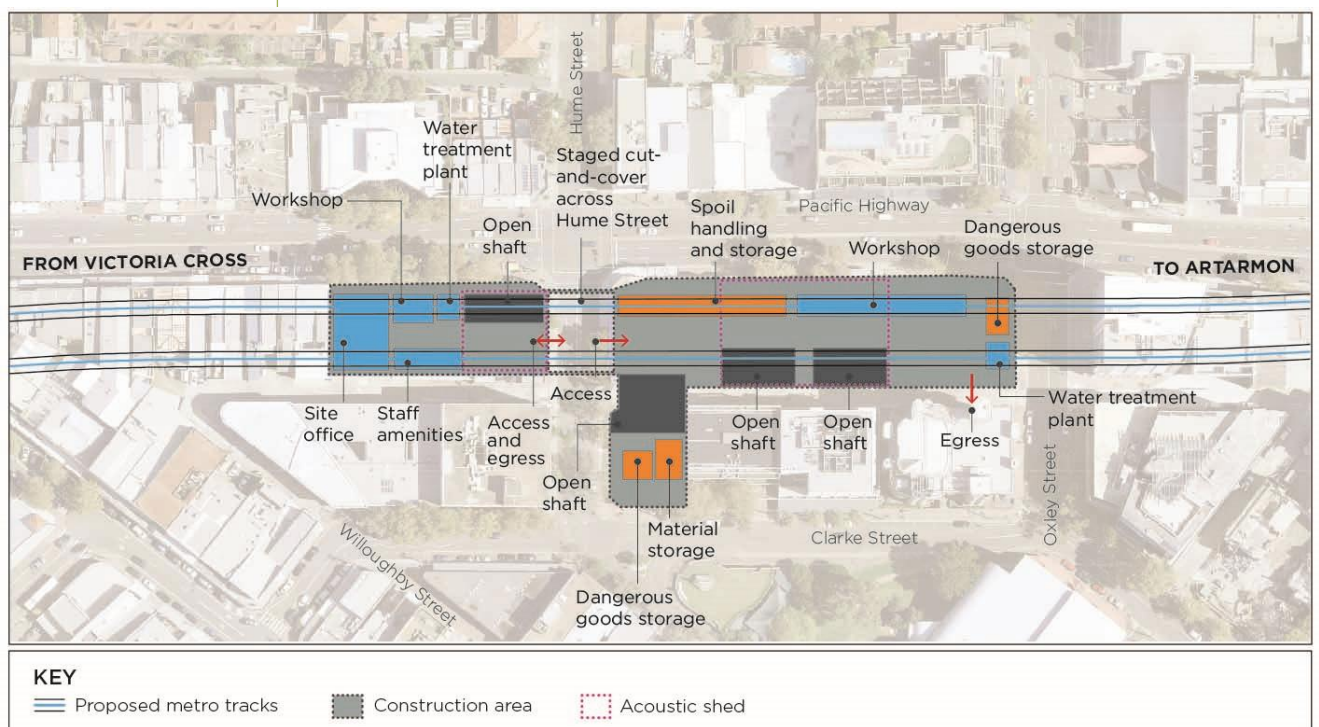
The site is currently being temporarily used by Artarmon Public School for educational facilities, although this use is expected to cease prior to the site being needed for construction. Warehouse uses are located across the Gore Hill Freeway from the site, with residential uses surrounding the site. Given that the site is

temporarily occupied and separated by the Gore Hill Freeway from warehouses and other industrial uses, impacts on local businesses are not expected and a business survey has therefore not been conducted.

2.3 Crows Nest Station

The proposed Crows Nest Station is located between the Pacific Highway and Clarke Lane (eastern side of the Pacific Highway) and in close proximity to St Leonards Station.

Figure 5: Crows Nest Station construction layout



Source: Transport for NSW

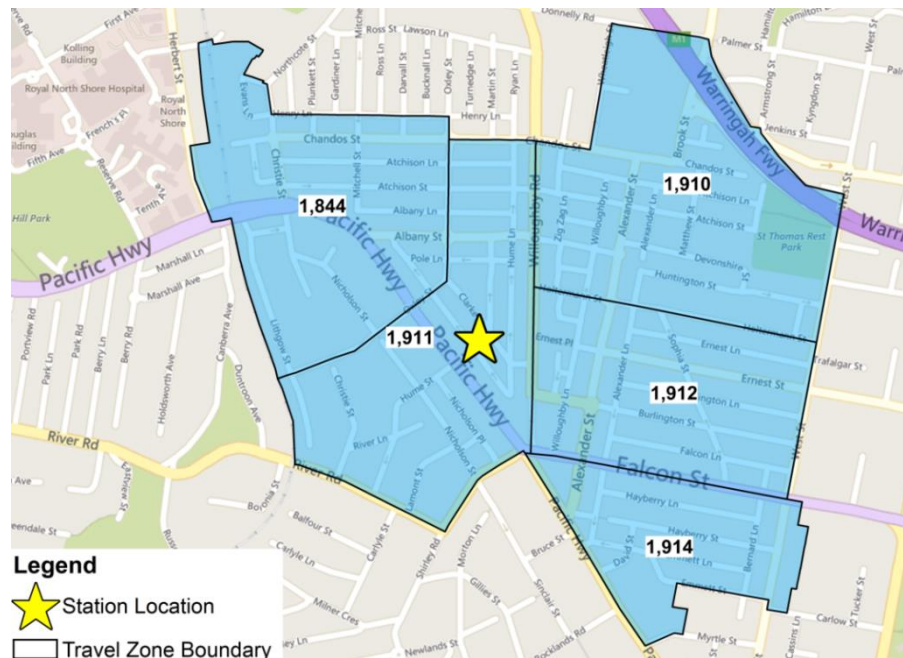
The local business precinct

For the purposes of this assessment, the local business precinct has been identified as an area which extends along the Pacific Highway and into surrounding streets from Albany Street in the north to Rockland Road in the south and is shown in Figure 6 below.

For the purposes of demographic and employment analysis, the Travel Zones that comprise the Crows Nest study have been identified as: TZ1844; TZ1910; TZ1911; TZ1912 and TZ1914.

A map of the travel zone boundaries which comprise the Crows Nest local business precinct is shown in Figure 6.

Figure 6: Crows Nest travel zones

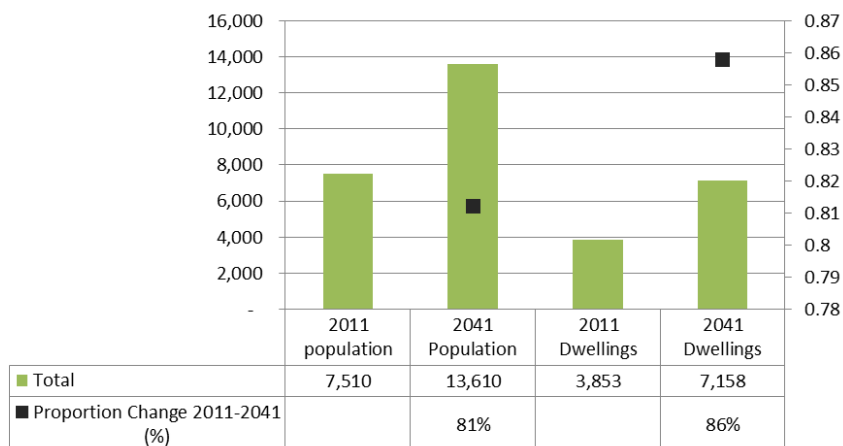


Source: HillPDA

Population and dwelling characteristics

According to NSW Bureau of Transport Statistics population and dwelling projections, the Crows Nest Station local business precinct (defined in Figure 6 above) is forecast to grow considerably in both population and dwellings from 2011 to 2041. Figure 7 shows a projected 81 per cent increase in population and 86 per cent increase in dwellings. This indicates a slight downward trend in dwelling occupancy as the dwelling increase is forecast to be greater than the increase in population.

Figure 7: Forecast dwelling and population growth 2011-2041



Source: NSW BTS Dwelling and Employment Projections

Employment

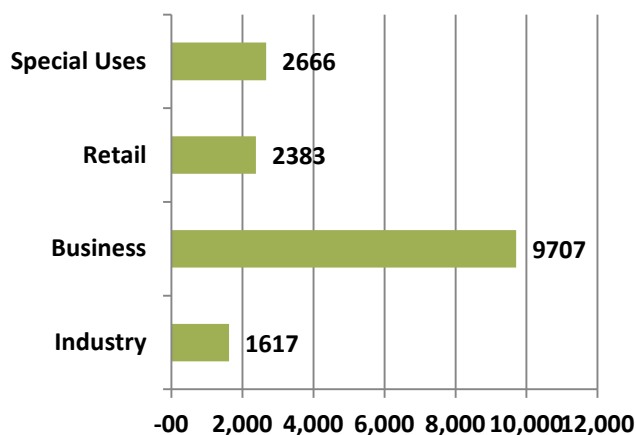
The Crows Nest local business precinct contains a diverse mixture of employment uses in terms of both industry and building use.

Crows Nest has a proliferation of small local businesses, many of which are retail, food and beverage or local commercial services. The St Leonards part of the precinct contains the southern extension of the commercial centre of St Leonards with a range of commercial office buildings. Several of these office buildings are under review for redevelopment as mixed use development with predominantly residential apartments and small amount of office-space.

There were 15,857 people employed in the Crows Nest local business precinct in 2011. Employment by Industry has been analysed at a 1 digit ANZSIC¹ code level. Dividing employment into four broad categories, Figure 8 below shows that business jobs comprise over 9,000 of the total jobs. This is followed by special uses, retail and industry.

¹ Australian and New Zealand Standard Industrial Classification (ANZSIC) is a standard classification developed by the Australian Bureau of Statistics for use in Australia and New Zealand for the analysis of industry statistics. The numbering system adopted in the ANZSIC is alphanumeric and has a hierarchical structure, where the leading alpha character denotes the industry division.

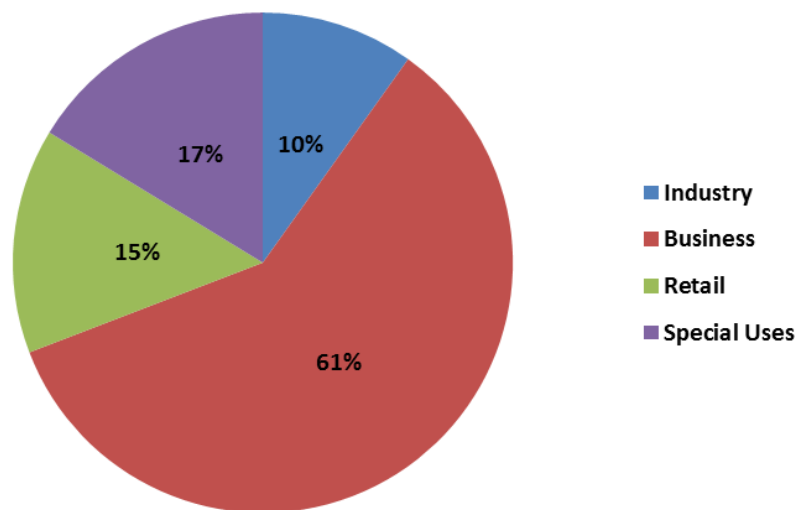
Figure 8: Employment by industry in four broad employment categories in Crows Nest local business precinct



Source: BTS 2011 JTW Destination by Travel Zone at a 1 digit level

In proportional terms, business jobs comprise 61 per cent of all jobs in the Crows Nest local business precinct. Special uses (17 per cent) and retail (15 per cent) are also considerable segments of the employment total in the precinct.

Figure 9: Proportion of jobs by broad industry grouping

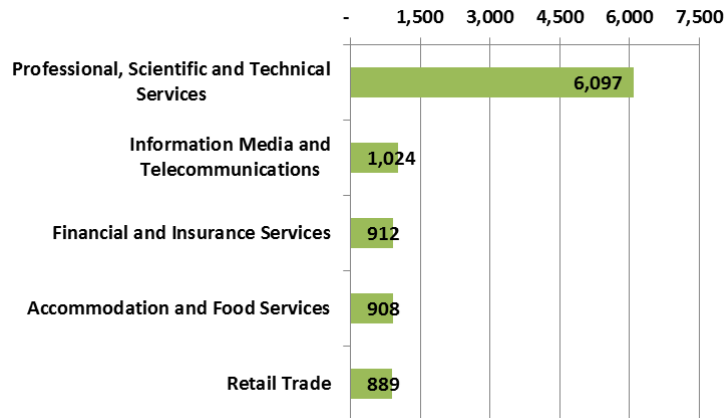


Source: BTS 2011 JTW Destination by Travel Zone at a 1 digit level

In terms of a more detailed employment breakdown, Figure 10 shows the most prominent industries of employment are professional services, IT & media and financial and insurance services. This is reflective of the commercial core of St Leonards which has a strong secondary finance sector and a major IT & media presence. Accommodation & food services (908 jobs) and retail trade (889 jobs)

reflect the intensive nature of ground floor retail, especially around Crows Nest.

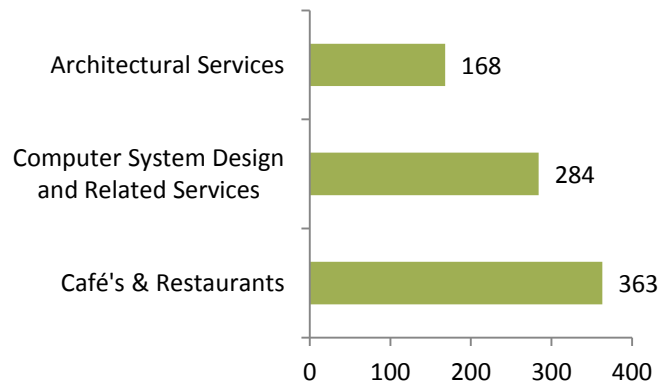
Figure 10: Five largest industries of employment



Source: BTS 2011 JTW Destination by Travel Zone at a 1 digit ANZSIC level

A breakdown of employment to an even more detailed four digit ANZSIC² code level indicates the workers at cafés and restaurants is actually the largest employer across the precinct. Figure 11 shows that the largest industries of employment in the Crows Nest local business precinct at a very detailed level are cafés and restaurants, computer design and architectural services.

Figure 11: Three largest Sectors of employment at a 4 digit ANZSIC Code



Source: BTS 2011 JTW Destination of Employment at a 4 digit ANZSIC level

Business breakdown

Local businesses in the Crows Nest local business precinct are essentially based around two core linear retail strips, the Pacific

² Australian and New Zealand Standard Industrial Classification (ANZSIC) is a standard classification developed by the Australian Bureau of Statistics for use in Australia and New Zealand for the analysis of industry statistics. The numbering system adopted in the ANZSIC is alphanumeric and has a hierarchical structure, where the leading alpha character denotes the industry division.

Highway (which mostly falls within St Leonards) and Willoughby Road (which falls in Crows Nest). These two strips meet at the corner of Falcon Street, River Road, Willoughby Road and the Pacific Highway. At present there is a distinguishable gap in the level of retail trade and demand for commercial space between the two main retail areas.

Willoughby Road

Site analysis indicates that the retail strip along Willoughby Road is a well-performing and well patronised retail sub-precinct that, for the most part, has low vacancy and a diverse mixture of businesses including restaurants, cafes, smaller clothes shop, health clubs, special use stores and multiple second and third level offices. The majority of business premises are in two storey buildings along Willoughby Road with taller, 3-4 storey office buildings behind the main retail strip.

The Willoughby Road sub-precinct is in relatively close proximity to the existing St Leonards Station, with high levels of amenity and a passive, traffic calmed main street (Willoughby Road) with shared walking / pedestrian zones.

Table 4 below provides a snapshot of existing businesses, activities and tenants for the Willoughby Road sub-precinct.

Table 4: Willoughby Road sub-precinct: Snapshot existing land uses, activities and tenants

Hotels/Bars	Crows Nest Hotel, The Stoned Crow, Coco Cubano, Small Bar
Retail and Commercial:	Scuro Espresso, St George, Bakers Delight, Westpac, North Shore Natural Therapy Centre, Ella Bache, DMK Skin Revision Clinic, Ciao Ciao Pizza, Display Direct Australia and Thomas Dux.

Source: HillPDA 2015

Pacific Highway

The retail strip along the Pacific Highway through St Leonards and south into Crows Nest is not experiencing the same level of retail business activity as Willoughby Road. Site analysis along the Pacific Highway indicated considerable vacancy from Albany Street through to the junction of the Pacific Highway with Willoughby Road.

Over the past decade, there has been a considerable shift in business functions in this precinct. Previously, there was a much more visible and active presence of furniture and homewares stores, as well as a busy

restaurant precinct near the junction with Willoughby Road and Falcon Street. A considerable number of anchor furniture retailers have moved, with a loss of tenants including Freedom Furniture, Captain Snooze and Carpet Call to Home HQ homemaker centre in Artarmon.

Similar to other major road thoroughfares, including Parramatta Road and the Princess Highway, a considerable proportion of the restaurant and café retail has moved to areas with greater amenity and away from the traffic, noise and pollution obstacles of major roads. The majority of the restaurant trade is now focussed on Willoughby Road and the surrounding streets.

Table 5 below provides a snap shot of existing businesses, activities and tenants for the Pacific Highway sub-precinct.

Table 5: Pacific Highway: Existing land uses, activities and tenants

Sample of land uses, activities and tenants along the alignment	
Retail and Commercial:	Villa Interiors, Proud Furniture, Coco Republic, Australia Post, Cutty Cellars, Jade Remedies, ARCS Australia Ltd, Oz Sports Solutions.

Source: HillPDA desktop evaluation and site inspection 2015.

Construction of the station is anticipated to result in property acquisition that would affect several businesses. At the current stage of design development, it is anticipated that the following businesses may be affected by property acquisition (though not necessarily an exhaustive list):

- Eastern Antique Furniture
- Villa Interiors
- Proud Furniture
- Zizz Furniture
- Oz Design Furniture
- Carpet Court
- Style my home pop-up
- Australia Post Office, Crows Nest.

Travel pattern in the Crows Nest Station local business precinct

The Crows Nest Station local business precinct has strong public transport connectivity to the Sydney CBD and other centres along the North Shore Line. The precinct falls within the walking catchment of the existing St Leonards Station and this constitutes a considerable

proportion of commuter trips. The precinct is serviced by buses along the Pacific Highway, Falcon Street and Willoughby Road and contains a number of Council owned parking facilities.

Table 6 below shows the method of travel to work for people employed in the Crows Nest local business precinct. It is evident that there is still a heavy reliance on private transport to the precinct with (53%) of commuter trips made by private car. This is an important consideration for business impacts (both positive and negative in this study) as interruptions to car travel may mean considerable impediments to the accessibility of local businesses and diversion of customers away from businesses that cannot be accessed by car.

Table 6: Crows Nest travel mode to work.

Travel mode to work as of 2011	
Car	53%
Rail	21%
Bus	10%
Walking	9%
Other*	7 %

Source: BTS Journey to Work DATA 2011 Destination TZ. Other Travel modes include: bicycle, motorbike, did not go to work, tram, truck, other mode, taxi, worked at home, ferry and mode not stated.

Travel by rail

St Leonards Station is approximately 700 metres (9min walk³) southwest of Willoughby Road shops and even closer to businesses along the Pacific Highway. St Leonards Station services the North Shore Line and connects to the Northern Line via Macquarie Park. Despite the proximity of St Leonards Station, only 22 per cent of the people that work in this precinct travel to work by rail as of 2011.

Travel by road

Main arterial roads such as Pacific Highway and Gore Hill Freeway (connecting to the M2 Motorway) provide easy accessibility to travel to the precinct via a car. This is evident as approximately 53 per cent of employees working in Crows Nest travel to work by car as of 2011.

³ Google Directions – measured to from Crows Nest to St Leonards Station via Albany Street and Pacific Highway.

The precinct is well serviced with buses along the Pacific Highway, Willoughby Road and Falcon Street, however only 10 per cent of people that work in the precinct travel via this mode.

Travel by walking

The precinct has good connectivity to surrounding residential areas such as Cammeray, St Leonards and Naremburn. Just over 9 per cent of commuter trips in the local business precinct were made through walking, which is a high proportion, even for a relatively inner city area. By comparison, Victoria Cross local business precinct has only 6 per cent, despite being closer to the Sydney CBD.

Future vision for this precinct

The Crows Nest Station local business precinct is likely to shift its focus as a major employment centre as economic pressures see a considerable transition to more residential uses, whilst still maintaining a solid business area. This is exemplified by two recent planning proposals in the Lane Cove Council area, for the Leighton and Charter Hall office towers, that propose to convert the majority of the land use to residential. The precinct's proximity to the Royal North Shore Hospital would ensure a retention and possible addition of commercial uses in the fields of health and education, creating a cluster of ancillary health businesses and services radiating around the Hospital.

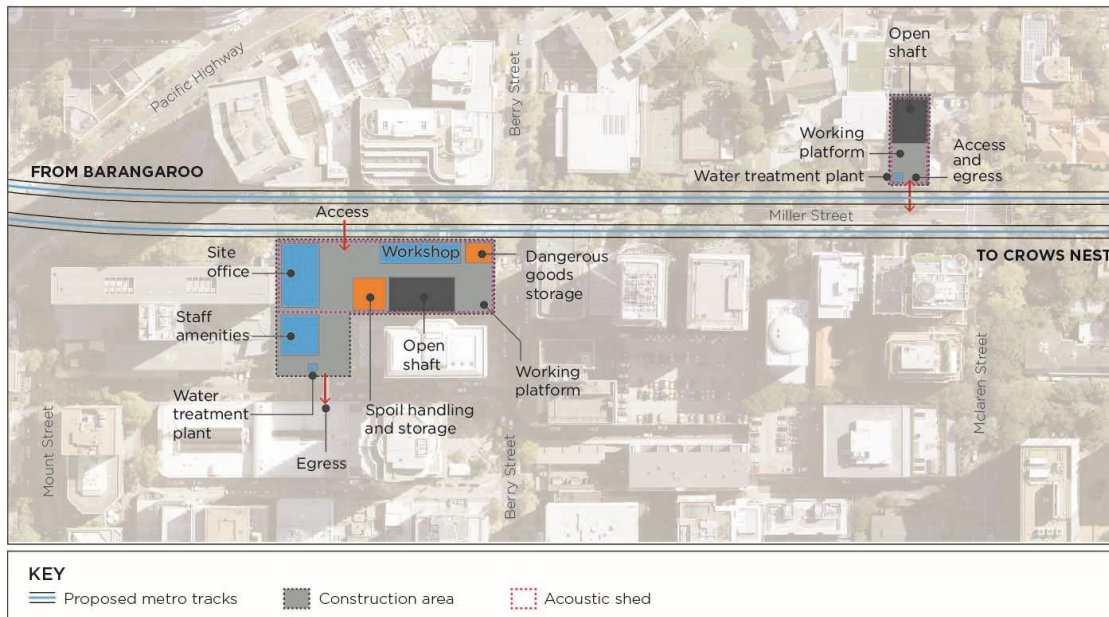
In '*A Plan for Growing Sydney*'⁴ (the plan) St Leonards is identified as a Strategic Centre in the North Subregion. The priorities in the Metropolitan Plan for St Leonards as a Strategic Centre focus on maintaining a commercial core in addition to bolstering the capacity for mixed-use development. Further, the plan outlines the need to find further capacity for additional employment space and housing around a future station at Crows Nest.

2.4 Victoria Cross (North Sydney) Station

Victoria Cross station local business precinct would be located beneath Miller Street (to the north of the Pacific Highway) between McLaren Street and south of Berry Street within the North Sydney Commercial Centre as shown in Figure 12.

⁴ The Plan was released by the DP&E and is intended to guide land use planning decisions within metropolitan Sydney for the next 20 years

Figure 12: Victoria Cross Station location

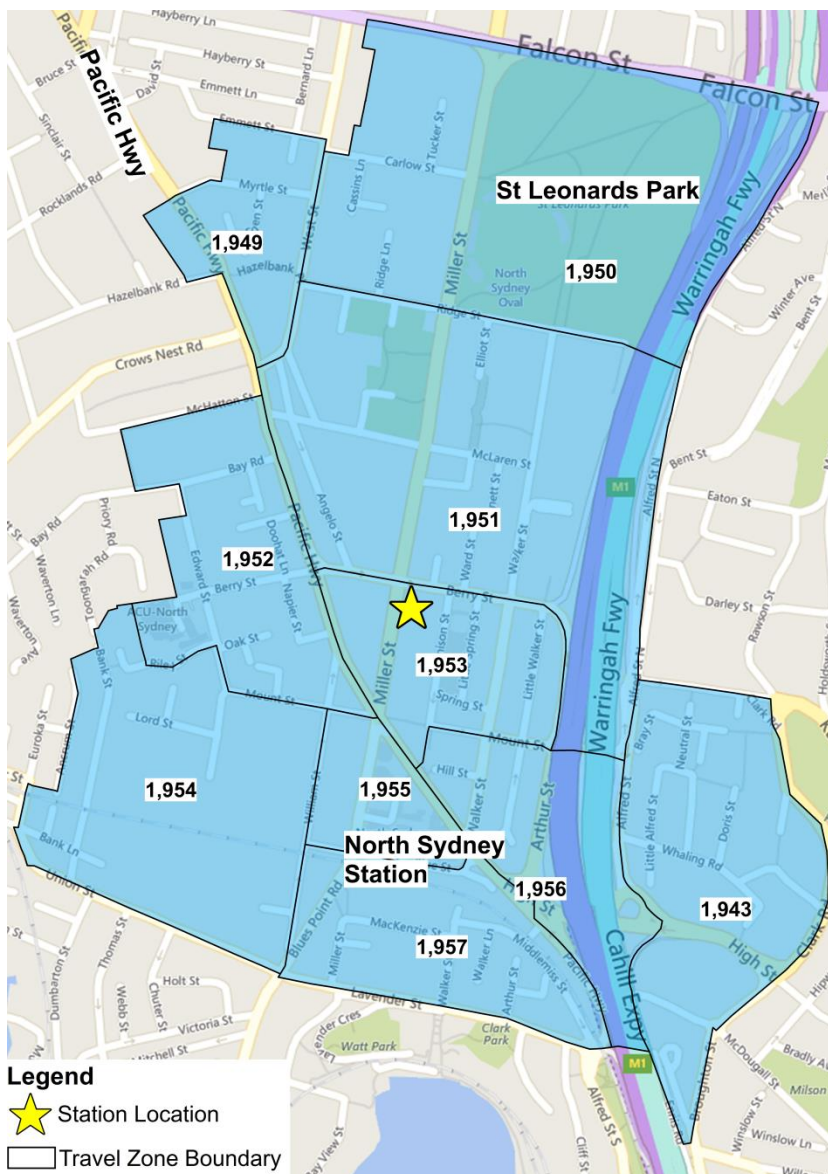


Source: Transport for NSW

The local business precinct

The local business precinct has been identified as an area which covers most of North Sydney suburb and is outlined in Figure 13 below. The most directly impacted local businesses are likely to be those which would be located close to the station box site and access points. However, given the importance and scale of the project, a broad local business area has been considered that includes a fairly wide trade capture area on the basis that once operational it would improve land values in the catchment area. The catchment area is broadly defined as the “walking distance” to the station. For the purpose of demographic and employment analysis, there are 10 identified Travel Zones which cover the Victoria Cross station local business precinct which are shown in the figure below.

Figure 13: Victoria Cross (North Sydney) local business precinct

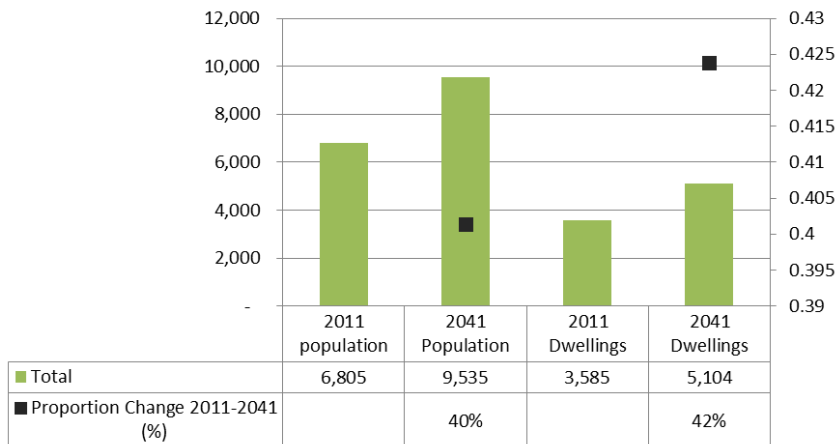


Source: HillPDA, Near Map 2015. Indicative boundary.

Population and dwelling characteristics

According to BTS population and dwelling projections, the Victoria Cross station local business precinct is forecast to grow considerably in terms of population and dwellings from 2011 to 2041. Figure 14 shows the population is forecast to increase by 40 per cent from 2011 to 2041, accompanied by a 42 per cent in private occupied dwellings during the same period.

Figure 14: Forecast dwelling and population growth 2011-2041



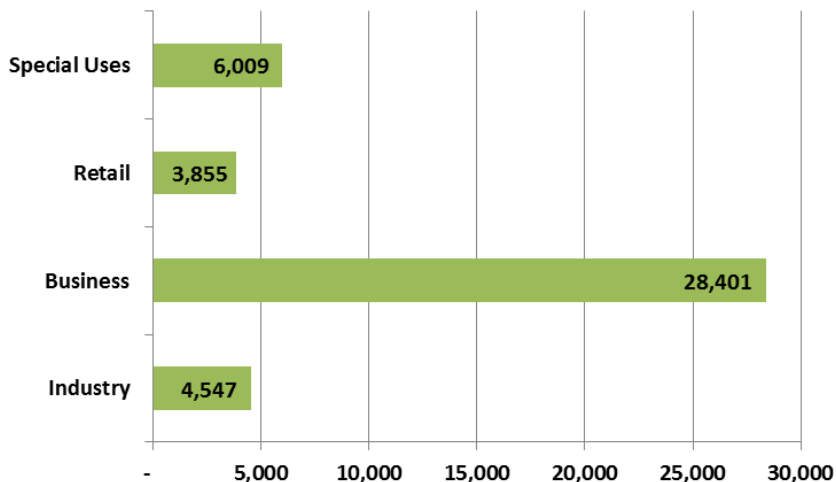
Source: NSW BTS Dwelling and Employment Projections

Employment

The Victoria Cross station local business precinct comprises much of the North Sydney commercial centre and from an employment context is heavily oriented to commercial business jobs with a considerable retail presence.

There were 41,993 people that worked in the Victoria Cross Station local business precinct in 2011. Employment by industry has been grouped into the four broad categories of industry, business, retail and special uses. Figure 15 shows that there are almost 30,000 business jobs in Victoria Cross local business precinct. Special uses, retail and industry all had a considerable employment base, though much fewer total jobs than business.

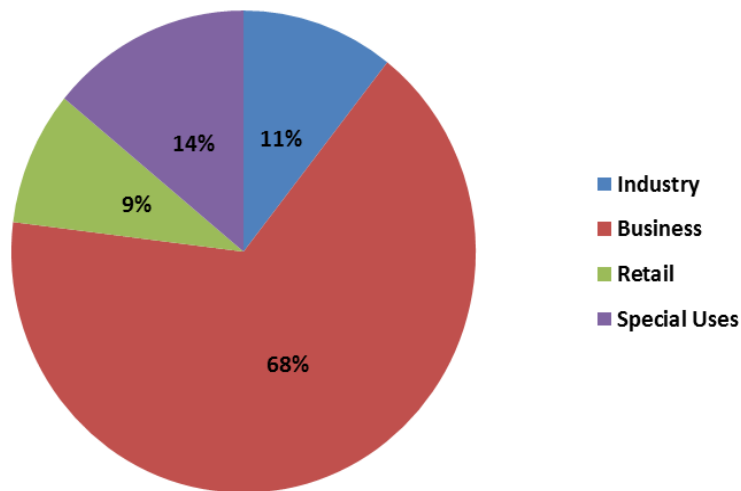
Figure 15: Employment by Industry by Broad Industry Grouping



Source: BTS 2001 JTW Destination by Travel Zone at a 1 digit ANZSIC level

Analysing the four major employment groupings proportionally, Figure 16 shows that business jobs comprise 68 per cent of all jobs, with retail comprising 9 per cent.

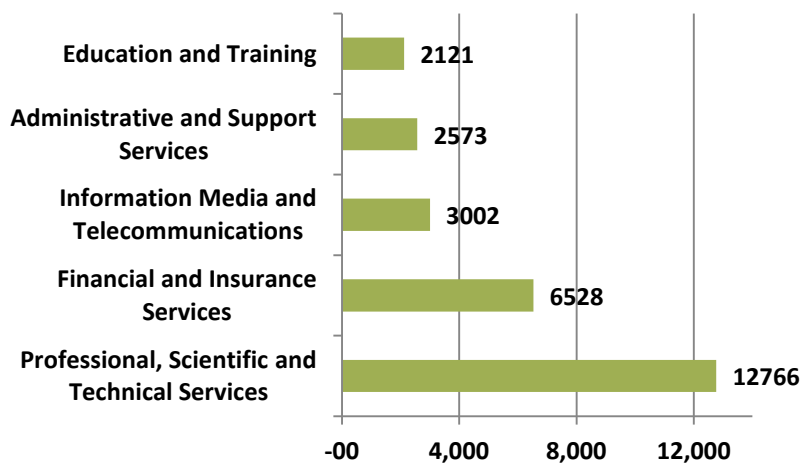
Figure 16: Proportion of jobs by Broad Industry Grouping



Source: BTS JTW Employment by Industry at a 1 digit ANZSIC level

The most common industries of employment in Victoria Cross local business precinct, identified at a 1 digit ANZSIC level, are professional, scientific and technical services. The 12,766 jobs in this industry constitute 44 per cent of business jobs and 30 per cent of jobs in Victoria Cross local business precinct. Figure 17 shows the five largest industries of employment at a 1 digit ANZSIC level.

Figure 17: Five largest industries of employment by industry at a 1 digit ANZSIC Level



Source: BTS 2011 HTW Destination by Travel Zone at a 1 digit ANZSIC level

Business breakdown

The Victoria Cross business precinct is a part of Global Sydney and located in the Global Economic Corridor. The majority of businesses are housed in commercial office buildings; however there is a considerable retail presence as well as a number of health and education uses, many of which are commercial operations.

Table 7 provides a snap shot of existing businesses in Victoria Cross local business precinct.

Table 7: Victoria Cross snapshot: existing land uses, activities and tenants

Victoria Cross precinct: Sample of land uses, activities and tenants along the alignment.	
Educational	Monte Sant Angelo Mercy College.
Hotels/Bars	McLaren Hotel, TreeHouse Hotel, Rag and Famish Hotel, North Sydney Harbourview Hotel and Firehouse Hotel.
Retail and Commercial	Westpac, Citrus and Spice, To's Malaysian Gourmet, Sushia, Phat Boys Thai Restaurant. Centres: Greenwood Plaza, North Point Plaza, Berry Square, Collopy James, North Sydney Dental, Wisdom Dental Care and Greenwood Medical Centre.

Source: HillPDA desktop evaluation and site inspection 2015.

In terms of local businesses in the precinct, there is a core activity area which is located around the station bounded roughly by Berry Street, Walker Street, Miller Street and the Pacific Highway. This area contains the most intensive ground floor uses and could potentially be impacted most by Sydney Metro.

The core activity area currently has some large existing shopping centres as well a considerable retail presence on the Pacific Highway, Miller Street and Berry Street. There is considerable street front and shopping centre vacancy throughout the area, however the geographic spread is uneven and some areas are performing better than others.

Below is a snapshot of the major retail and commercial areas:

- North Point Plaza at Victoria Cross comprises 16 specialty stores (including hair and beauty, travel agents, gifts and homewares)

and a food court. Based on site inspections, there was only one current vacancy in the centre;

- Berry Square located at 77 Berry Street, comprises 36 specialty shops across two levels and anchored by Officeworks. This centre at present is underperforming with a considerable number of vacancies, especially on the second floor. Once operational, it is possible the Sydney Metro may have a positive impact on the centre from increased foot traffic and proximity to the proposed Station.
- Greenwood Plaza is the busiest retail centre in North Sydney with direct access to the existing North Sydney Station. Greenwood Plaza is owned by Mirvac and benefits from the multiple access and egress points crossing the Pacific Highway which means many commuters pass through the centre in order to get to and from the Station.
- Montrose (213-215 Pacific Highway) and The London (156 Pacific Highway) are two recently completed mixed use development projects that both have new ground floor retail tenancies and first floor commercial tenancies of which nearly all are vacant. These two projects, coupled with Berry Square shopping centre highlight some key areas that are underperforming.
- Miller Street between Victoria Cross and Berry Street is performing comparably well. There is a range of retail trade, financial services (retail banks), cafes and restaurants fronting Miller Street. The ground floor shows relatively few vacancies with strong pedestrian foot traffic.
- The Pacific Highway between Miller Street and Berry Street is performing relatively poorly. There is considerable retail vacancy on both sides of the road as well as visible ground floor vacancy of commercial buildings. There have been a number of commercial building conversions to residential in the last five years.

Trading hours

An ongoing local business issue in the North Sydney CBD has been the lack of strong retail trading outside office hours, especially weekend trading.

Commercial business uses are very dominant in the North Sydney CBD and this has meant that it experiences retail conditions typical of such areas, where there is dearth activity outside of normal business hours.

This has been slowly changing over the past five to ten years, as there have been a number of commercial office conversions to residential dwelling uses including examples such as Montrose and The London.

Travel pattern

The Victoria Cross local business precinct has strong private and public transport connectivity to other parts of Metropolitan Sydney with three main arterial roads and a station that directly connects Sydney’s North Shore to the CBD and multiple other employment centres including Chatswood and North Ryde / Macquarie Park.

The Victoria Cross local business precinct is also well serviced by buses connecting to other Sydney regions, including the Northern Beaches and the Lower North Shore. According to BTS journey to work data, the most popular mode of travel for commuters to North Sydney is by train (46 per cent), followed by car (30 per cent) and bus (11 per cent).

Table 8: North Sydney: Travel mode to work.

Travel mode to work as of 2011	
Train	46%
Car	30%
Bus	11%
Walking	6%
Ferry	0%
Other*	6%

Source: BTS Journey to Work DATA 2011 Destination TZ. Other Travel modes may include: bicycle, motorbike, did not go to work, tram, truck, other mode, taxi, worked at home, ferry and mode not stated.

Travel by rail

North Sydney Station provides good connectivity to various regions around Sydney. Similar to St Leonards Station, North Sydney Station is on the North Shore line and connects to the Northern Line via Macquarie Park.

Travel by road

In 2011 approximately 30 per cent of workers in North Sydney travel to work by car. The precinct is also well serviced by buses, connecting to various regions that don’t have rail connections, including Mosman and the Northern Beaches. Access to the Sydney CBD and Eastern Suburbs area can be obtained via the Sydney Harbour Bridge and tunnel.

Travel by walking

Just over 6 per cent of commuter trips to the station were made by walking, which is a high proportion given the distance.

Future vision

The North Sydney CBD has been identified as part of Global Sydney and within the bounds of the Sydney CBD in *A Plan for Growing Sydney* (the plan).

North Sydney CBD is forecast to grow as one of the largest strategic centres in the wider Sydney Metropolitan Area. The Plan highlights two priorities for the strategic centre⁵:

- Retain a commercial core in North Sydney CBD for long-term employment growth; and
- Investigate potential future employment and housing opportunities associated with a station at Victoria Cross (North Sydney).

It is critical for Global Sydney, that North Sydney can increase its commercial presence in addition to becoming a successful mixed use centre in its own right. Better connectivity to multiple regions throughout Sydney as a result of Sydney Metro would significantly boost the station precinct's role within Global Sydney and the City more broadly.

2.5 Blues Point temporary site

The Blues Point temporary site would be located within Blues Point Reserve at the end of Blues Point Road. The site is currently utilised as a park and a public car park.

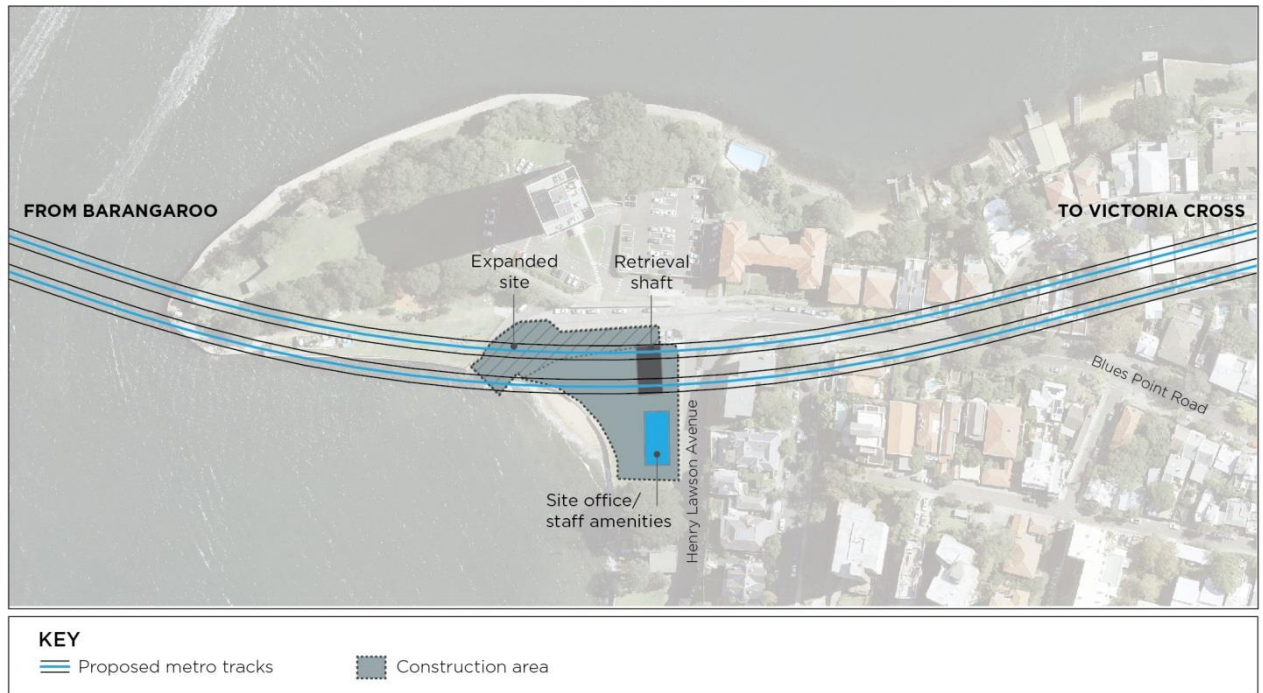
As the site is a temporary site located some distance from existing business, it is not likely that the project would result in ongoing detrimental impacts to businesses in this location. Accordingly, business surveys were not conducted.

It is noted that the transport of equipment and other associated traffic movements from the temporary site may result in some oversized loadings through Blues Point. Transportation of oversized equipment is anticipated to occur approximately four times during construction. Due to the size of the equipment to be loaded, there may need temporary traffic management measures along Blues Point Road. Delays associated with the transport of oversized machine

⁵ A Plan for Growing Sydney, NSW Planning & Environment 2014

components would be short-term and access to businesses would be maintained. Disruption to businesses along Blues Point Road is therefore expected to be minimal.

Figure 18: Blues Point temporary site

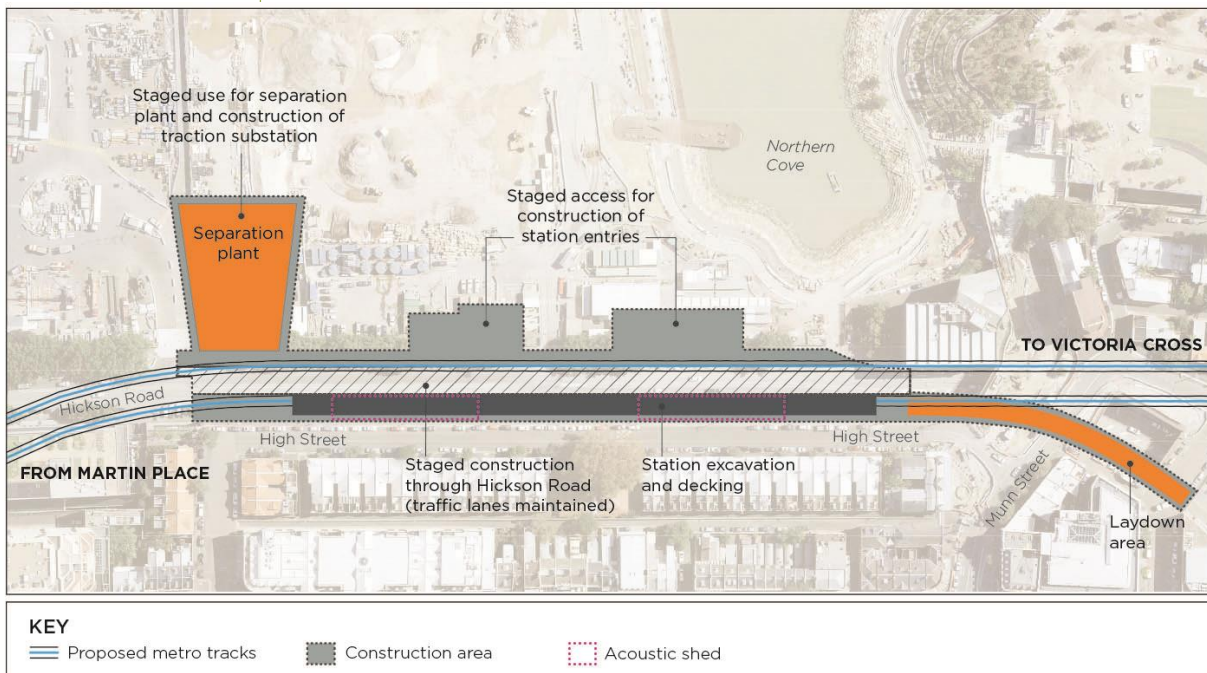


Source: Transport for NSW

2.6 Barangaroo Station

Barangaroo Station would be located beneath Hickson Road towards its northern end. It would be strategically located with a station entrance within the Barangaroo Central area providing immediate access to commercial, mixed use and entertainment areas within the Barangaroo development.

Figure 19: Barangaroo Station construction layout



Source: Transport for NSW

Existing characteristics

Barangaroo is one of the largest urban renewal projects in Australia, comprising 22 hectares of waterfront redevelopment in three defined sub-precincts. The development of Barangaroo is managed by the Barangaroo Delivery Authority. Proposed construction of the Sydney Metro would likely take place as Central Barangaroo is still being developed or in the early stages of active use.

Planning for Barangaroo / Local business precinct

Barangaroo is planned to provide over 24,000 permanent jobs once fully developed, with 33,000 people expected to visit each day⁶.

The three defined sub-precincts would have a mixture of uses, however the majority of commercial activity is planned to be developed in Barangaroo South:

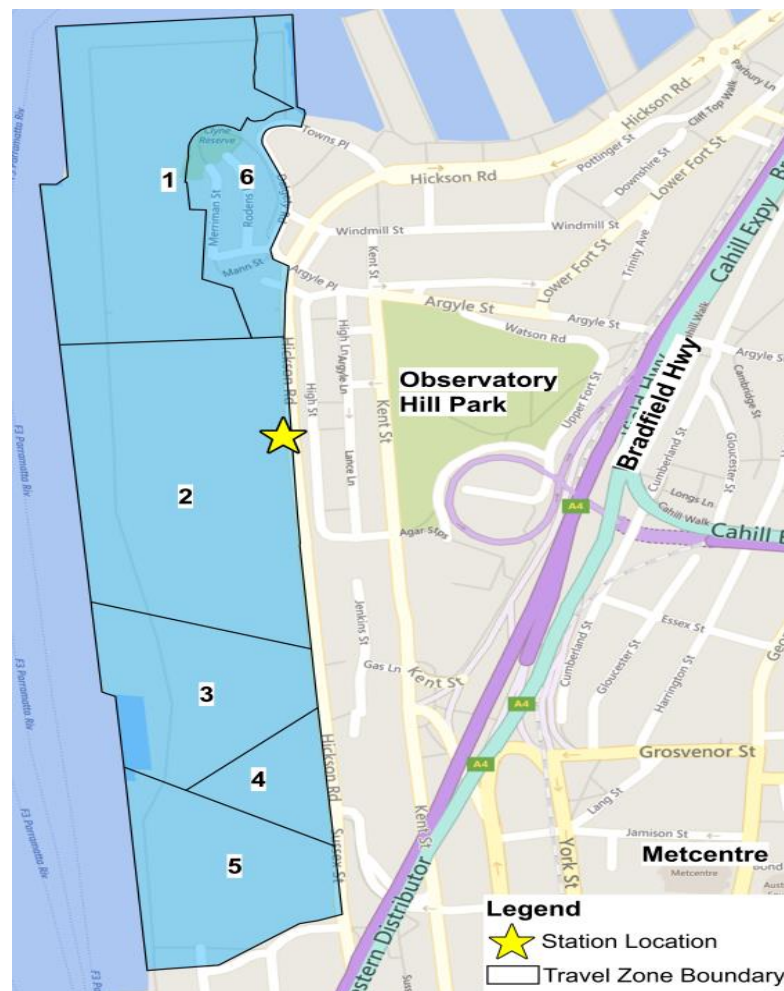
- Barangaroo South is currently under construction as a major business, tourism, residential and retail precinct. The first tower is anticipated to be completed in 2015 and over the next four years there would be over 470,000 square metres of commercial space coming online in Barangaroo.

⁶ Barangaroo Delivery Authority 2013, <http://www.barangaroo.com/>

- Central Barangaroo is planned to be a cultural and civic centre for recreation, events, festivals, entertainment and leisure activities including the Crown Casino and Hotel Tower; and
- Barangaroo Reserve has been constructed and was opened to the public in 2015 as a harbour park comprising six hectares of foreshore open space.

At present Barangaroo South is still in the construction phase and there is little existing commercial activity. Consequently, HillPDA have included adjoining areas (Travel Zones 1, 2, 3, 4, 5 and 6) which form an interface with Barangaroo and could be impacted by the development of the Sydney Metro. There are eight travel zones which comprise Barangaroo and they are shown in Figure 20 below.

Figure 20: Barangaroo travel zones



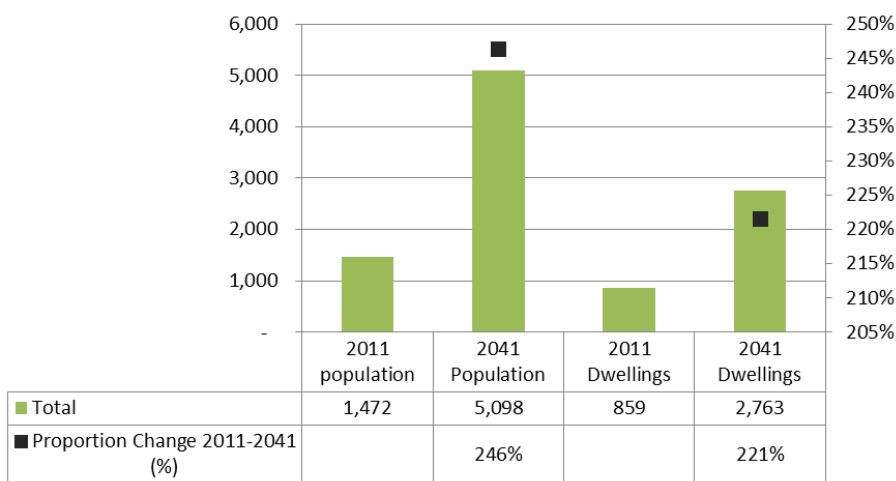
Source: BTS, Travel Zone Explorer

Population and dwelling characteristics

The area currently being developed by the delivery authority does not contain any finalised dwellings and thus any residents. The existing population (2011) in the identified Barangaroo local business precinct is in the two adjoining travel zones just to the east of Barangaroo on the eastern side of Sussex Street / Hickson Road.

Figure 21 below shows the forecast population and dwelling forecast for Barangaroo local business precinct from 2011 to 2041. Given that much of the precinct is still being developed, there is a major forecast increase in population in both population and dwellings.

Figure 21: Forecast dwelling and population growth 2011-2041



Source: NSW BTS Population and Dwelling Forecasts

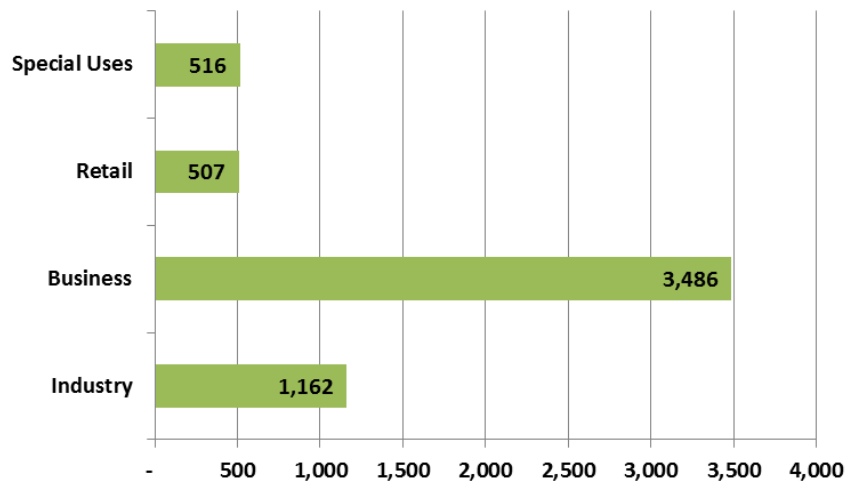
Employment

Based on the Barangaroo Master Plan, Barangaroo South would comprise the majority of commercial office space and residential units as well as the majority of local businesses in the precinct. There are planned smaller counts of proposed new businesses in the Central and few in the reserve precinct.

There is a considerable existing employment base in Barangaroo local business precinct through commercial and retail businesses on the eastern side of Hickson Road / Sussex Street. As of 2011, there were 5,659 people employed in the Barangaroo local business precinct. Figure 22 shows that at present, business uses comprise the majority of employment, followed by industry and retail.

The majority of industry jobs are in construction (971 jobs) associated with the development of Barangaroo

Figure 22: Employment by industry by broad employment category

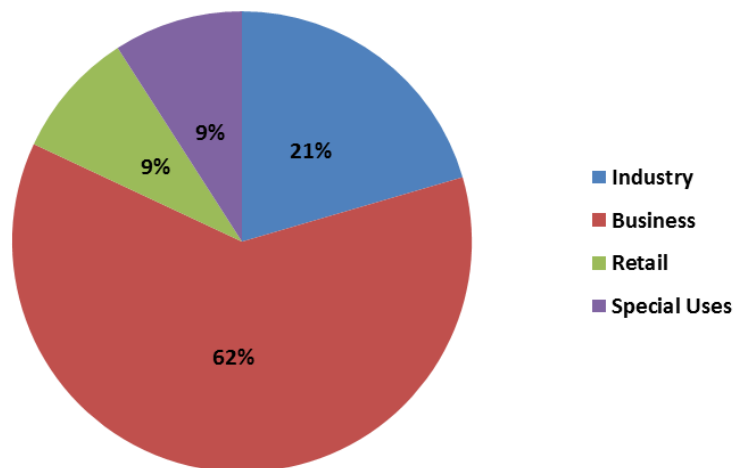


Source: NSW BTS industry by broad employment category

Figure 23 shows that 62 per cent of jobs at present in Barangaroo local business precinct can be grouped into commercial and business jobs. This proportion (in addition to the total figure) is likely to become much higher as Barangaroo would accommodate a very large commercial office-based workforce that is forecast to be in excess of 25,000 employees.

The high proportion of current employment in industry (21 per cent) is reflective of the ongoing development of Barangaroo with BTS data showing that in 2011 there were 971 construction workers in the precinct and as of June 2015, this figure is likely to be much greater.

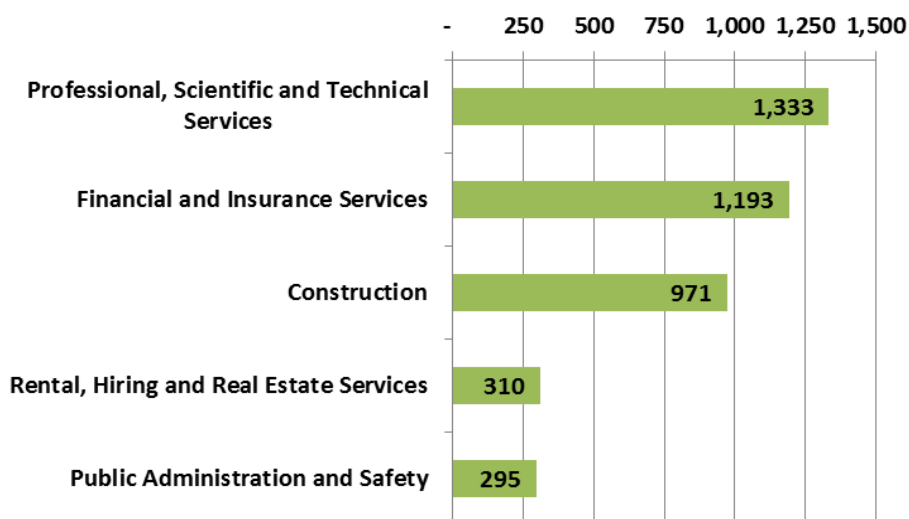
Figure 23: Proportion of jobs by broad industry category



Source: BTS 2011 JTW Destination of Employment by Travel Zone at a 1 digit ANZSIC level

At present, the most common industry of employment is “professional, scientific and technical services”. Figure 24 shows the five largest industries of employment at a more detailed 1 digit ANZSIC code level. Other major industries of employment include “financial and insurance services” and “construction”.

Figure 24: Five Largest Industries of Employment at a 1 Digit ANZSIC Level



Business breakdown

As discussed above, the business breakdown of Barangaroo is not reflective of its near future, given the ongoing construction of the precinct. As described in the Barangaroo Master plan, the area is being redeveloped concurrently in three areas, Barangaroo South, Central Barangaroo and Barangaroo Reserve. Central Barangaroo and Reserve are currently planned for public open space, cultural, civic and community uses. Central Barangaroo and Barangaroo South will also feature commercial and residential development. Finalisation of the redevelopment plans for Barangaroo Central has not yet occurred. Barangaroo South is planned to be Sydney’s new financial hub’ and site for the proposed Crown Casino. Construction has commenced on the office buildings⁷. The existing businesses which fall within the Barangaroo local business precinct are located on the eastern side of Hickson Road and primarily professional, scientific and technical service businesses.

Barangaroo Station would provide immediate access to commercial, mixed use (residential and commercial) and entertainment precincts within the overall Barangaroo development. The proposed station for

⁷ NSW Government Barangaroo Delivery Authority, www.barangaroo.com accessed 12 December 2015

Barangaroo is likely to be located within the work zone of the precinct, based on up-to-date constructability information. As such there is a need to consider:

- Of the existing businesses outside the area being developed by the Barangaroo Delivery Authority, likely impacts during the construction phase would be tempered by the fact that there has already been considerable construction over the past five years which is forecast to continue for at least another seven years;
- There would be new businesses opened in stage 1, Barangaroo South, during the construction phase of the Sydney Metro.

Table 9: Barangaroo snapshot: existing land uses, activities and tenants

Barangaroo local business precinct: Sample of land uses, activities and tenants along the alignment.	
Educational	KU Lance Preschool and Children’s Centre
Retail and Commercial:	KPMG, Lend Lease, Westpac, HSBC, Price Waterhouse Coopers (PwC)
Government	Housing NSW, Barangaroo Delivery Authority

Source: HillPDA desktop evaluation and site inspection 2015.

Travel pattern

According to BTS journey to work (JTW) data, the most popular mode of transport for workers employed in the precinct is by train (42 per cent), followed by bus (22 per cent) and car (21 per cent). The largest portion of workers employed in the precinct live in the Sydney Inner City SA3 (11.5 per cent) indicating a strong level of self-containment. Table 10 below shows the breakdown of commuter trips to work by travel mode.

Table 10: Barangaroo local business precinct: Travel mode to work.

Travel mode to work as of 2011	
Train	42%
Bus	22%
Car	21%
Walking	5%
Other mode*	7%
Ferry	3%

Source: BTS Journey to Work DATA 2011 Destination TZ. Other Travel modes may include: bicycle, motorbike, did not go to work, tram, truck, other mode, taxi, worked at home, ferry and mode not stated.

Travel by rail

Barangaroo is in close proximity to Wynyard Station, comprising eight suburban rail services, which connects to another 15 suburban and intercity rail services⁸. The Wynyard Walk when completed in 2016 will provide a fully accessible pedestrian link between Wynyard Station and Barangaroo South. The walkway will allow pedestrians travel from Wynyard transport hub to Barangaroo South in approximately six minutes, avoiding steep inclines and road crossings⁹. Wynyard Walk will also comprise an underground pedestrian link from Wynyard Station to the intersection of Kent and Napoleon Streets and a pedestrian bridge over Sussex Street.

Travel by road

The precinct is directly connected to Sydney's Orbital Motorway system through an entrance onto the Western Distributor.

Travel by walking

Margaret Street and Erskine Street experience very high pedestrian traffic due to its direct links to Wynyard Station and bus interchange and proximity to the northern commercial core of the Sydney CBD. The Wynyard Walk will further enable walking connectivity with direct and uninterrupted pedestrian access between Barangaroo and Wynyard.

Travel by ferry

According to the ABS, approximately 3 per cent of workers in the Barangaroo local business precinct travel to work via ferry. Circular Quay and Darling Harbour Wharves are approximately 270m and 1.1km from Barangaroo precinct respectively.

Also incoming to Barangaroo is the new Barangaroo Ferry Hub. Construction of the Ferry Hub will commence in 2016, directly aligned with the Barangaroo South development. At this time, access via the waterfront walkway will be open during construction and access could be obtained via Wynyard Walk pending completion. The Ferry Hub is forecast to open to the public in 2017.

Future vision

Barangaroo is envisaged to become Sydney's premier waterfront precinct and provide a hub for Sydney's financial and professional

⁸ Rail options for the Sydney Greater Metropolitan area Draft options paper November 2011, Transport for NSW

⁹ Transport NSW, <http://www.transport.nsw.gov.au/projects-wynyard-walk>

services as well as provide considerable flexible employment space for a range of local businesses.

Barangaroo will open a new commercial precinct within the existing Sydney CBD and provide space for over 24,000 permanent jobs and capacity for multiple new small and large businesses.

Barangaroo South will be one of the largest mixed use precincts in Sydney comprising commercial office buildings, residential apartments, an international hotel, shops, restaurants, cafes and cultural facilities.

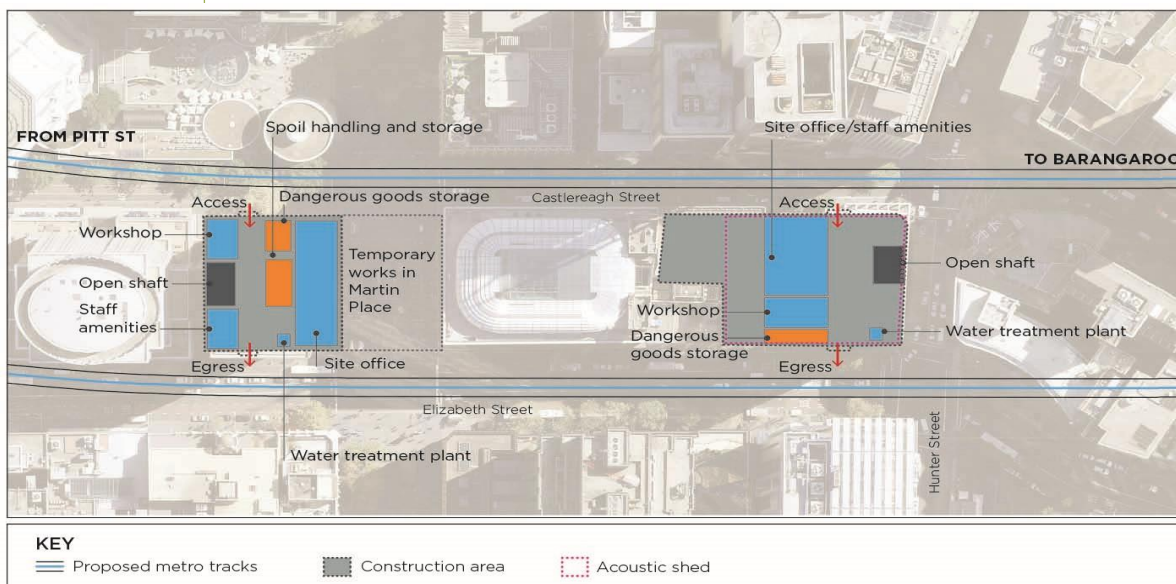
The proposed Wynyard Walk will connect to the Ferry Hub, both transport options providing major new connections for the Barangaroo precinct

The Sydney Metro would have a major influence in directly connecting Barangaroo to multiple centres across Sydney and would provide a new east-west connection across the CBD.

2.7 Martin Place Station

The project stations would be located in the commercial core of Sydney’s CBD. The proposed Martin Place Station would run between Elizabeth Street and Castlereagh Street in a north to south alignment.

Figure 25: Martin Place Station construction layout



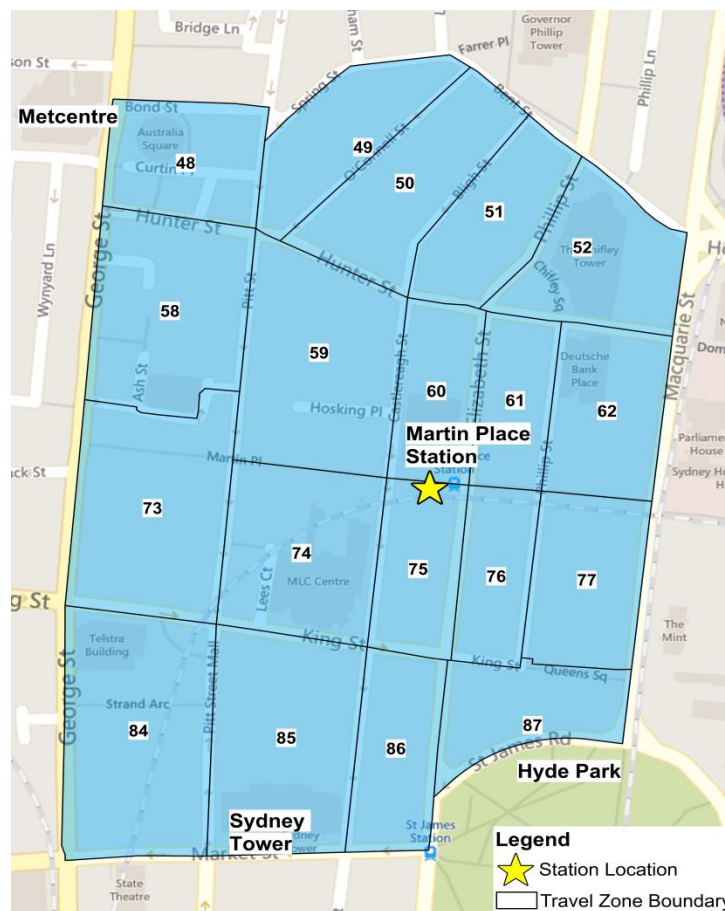
Source: Transport for NSW

The local business precinct

The local business precinct has been identified as an area which covers a walking catchment on either side of the station. This is the area that it is considered could be directly impacted by the project's construction and operational phases. The Martin Place business precinct is shown in Figure 26 below.

For the purpose of demographic and employment analysis, there are 19 travel zones which comprise the station precinct area. The travel zones are shown in Figure 26 below.

Figure 26: Travel zone catchment area for Martin Place Station



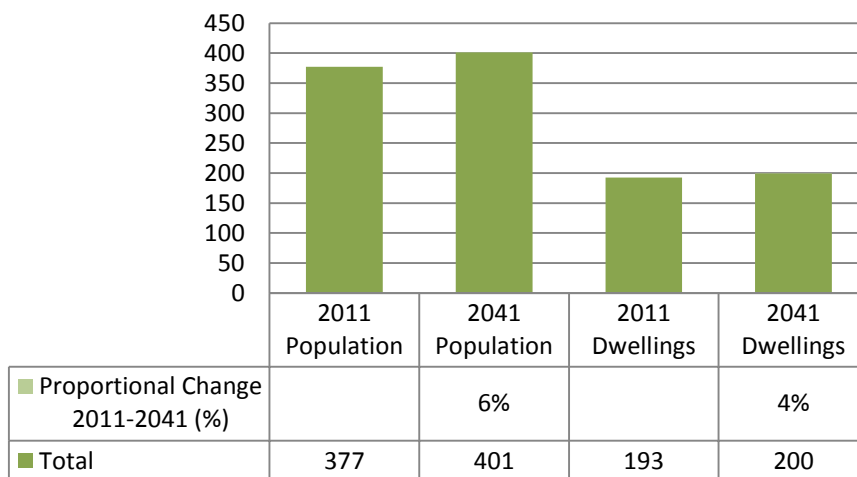
Source: BTS Travel Zone Explorer

Population and dwelling characteristics

BTS population and dwelling projections indicate that population and dwelling increase in the Martin Place local business precinct would be fairly modest. Based on current planning controls, dwelling growth is fairly restricted as the area comprises the commercial core of Sydney's CBD and as such is zoned for business uses.

Figure 27 shows that the station catchment area is forecast to increase by 6 per cent from 2011 to 2041, accompanied by a 4 per cent increase in dwellings during the same period. This indicates a slight decrease in the number of forecasts dwellings than the projected population increase.

Figure 27: Forecast dwelling and population growth 2011-2041



Source: NSW BTS

Employment

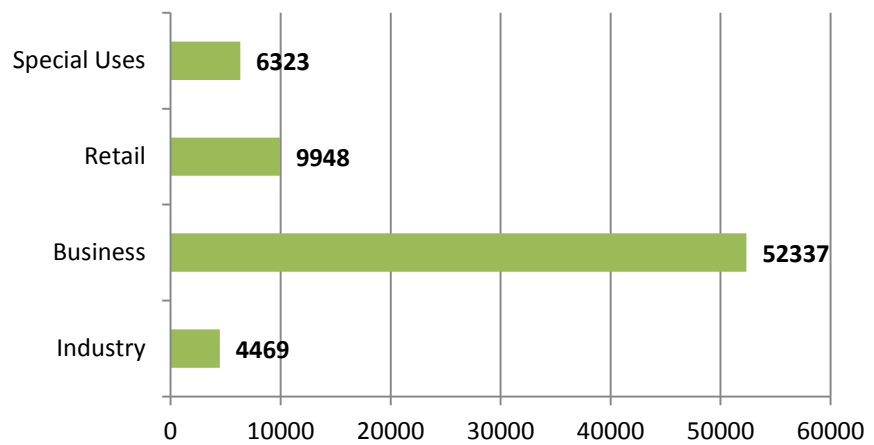
The Martin Place local business precinct comprises a considerable proportion of the commercial core of Sydney CBD. The commercial business functions of the precinct are supported by an extensive range of retail, hotel, entertainment and dining businesses, typical of a thriving city centre.

There has been a gradual increase in the level of business activity over the past 2-3 years emphasised by increased office development, sales transactions and new tenants. Martin Place is currently experiencing a revitalisation phase of new construction (including 20 Martin Place and 48-50 Martin Place) that would likely increase retail activity and foot traffic between George and Macquarie Streets.

There is a large spread of ground floor retail and shopping centres in the Martin Place Station local business precinct, of which a number of businesses could be impacted by the project

As at the 2011 Census, the identified Martin Place local business precinct employed 73,077 people. Figure 28 shows that over 52,337 are employed in business jobs, many of which are higher end commercial jobs related to finance, property and legal services.

Figure 28: Employment by Industry in broad industry grouping

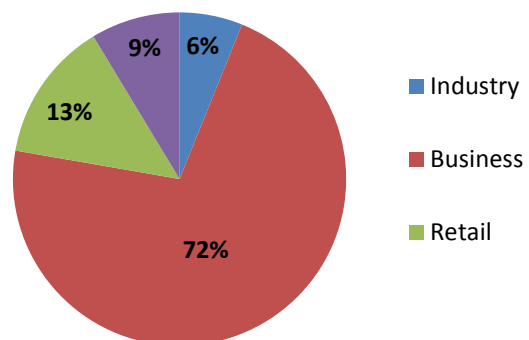


Source: BTS 2011 JTW Destination by Travel Zone at a 1 digit ANZSIC level

Figure 29 shows that business jobs comprise more than 72 per cent of all employment in the Martin Place precinct. Retail comprises 14 per cent, however is much more likely to be located at ground floor with direct street access, which is likely to mean it may face significantly greater share of any economic impacts as a result of the construction of the Sydney Metro.

Although Figure 29 shows that industry represents 6 per cent of all jobs, this needs to be clarified in terms of the role. This includes a significant number of construction jobs which fall into industry, as well as jobs that may involve an office component of an industrial sector employer.

Figure 29: Proportion of jobs by broad industry grouping

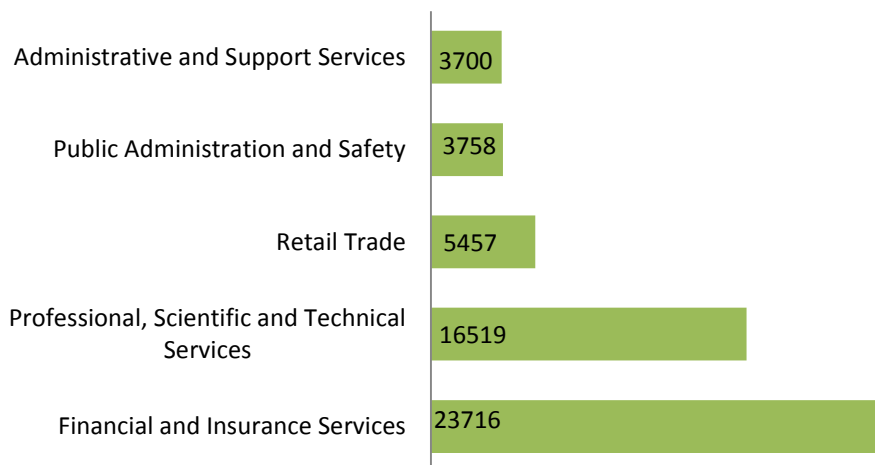


As business jobs comprise nearly three quarters of all jobs, it is not surprising that finance and professional services jobs are the two largest individual industries of employment in the precinct. Figure 30

shows the five largest industries of employment at a 1 digit ANZSIC level. Finance and professional services comprise 55 per cent of all jobs in the precinct alone.

Of note, retail is the third largest employer, with 5,457 jobs representing nearly 7 per cent of all jobs in this precinct. Retail is likely to be disproportionately impacted, as it comprises much of the commercial activity at ground floor.

Figure 30: Five largest industries of employment at a 1 digit ANZSIC level



Source: BTS JTW Destination of Employment by Travel Zone at a 1 digit Travel Zone Level

Business breakdown

The total Sydney CBD precinct, as defined by the City of Sydney Floorspace & Employment Survey 2011-2012, contained 11,287 individual businesses. This covers an area broader than the Martin Place and Pitt Street local business precinct; however it is a good indicator of different business sectors within the CBD.

The City of Sydney Floorspace & Employment Survey finds that “the predominant sectors in terms of business numbers in the CBD precinct are professional and business services, retail and personal services, food and drink and finance and financial services”. These are the market sectors which had over 1,000 commercial businesses.

The local business area around the proposed Martin Place Station at ground level is dominated by higher end retail and food and beverage retail. There are extensive underground connected shopping centres in this area, some of which are indicated in the snapshot below. These businesses are primarily food and commercial premises,

During construction, Martin Place would be temporarily closed and pedestrians would be rerouted several times as construction progresses. Those businesses that benefit from the first diversion are unlikely to benefit from the second pedestrian diversion given the opposite path. This would also impact the current bus diversions as a result of the CBD and Southeast Light Rail that have an end point at Martin Place. Community consultation with businesses during the construction period would be required.

Table 11: Martin Place snapshot: existing land uses, activities and tenants

Martin Place local business precinct: Sample of land uses, activities and tenants along the alignment.	
Educational	Martin Place Early Learning
Hotels/Bars	Martin Place Bar, Hotel Chambers,
Retail and Commercial:	McDonalds, Deli De Lite, Yummy Cuisine, Aadys Alterations, Taroo Cuts, Di Lorenzo, St George Bank, Coffee Temple, Tiffany & Co, Commonwealth Bank, Chifley Arcade Newsagency, Macquarie Bank, Specsavers, Spice Temple, Naked Duck Kitchen, Bar Bellino

Source: HillPDA desktop evaluation and site inspection 2015.

Travel pattern

The Martin Place local business precinct is extensively connected by multiple transport nodes radiating out to suburban centres. As indicated in Table 12 below, the majority of commuter trips are made by public transport including train (43 per cent), followed by bus (23 per cent) and then car (11 per cent).

Table 12: Martin Place: Travel mode to work

Travel mode to work as of 2011	
Car	11%
Train	43%
Vehicle passenger	2%
Walking	5%
Bus	23%
Other*	15%

Source: BTS Journey to Work DATA 2011 Destination TZ. Other Travel modes may include: bicycle, motorbike, did not go to work, tram, truck, other mode, taxi, worked at home, ferry and mode not stated.

Travel by rail

Sydney CBD rail network comprises six lines, which are fed by eight inner lines and in turn are fed by 15 outer lines¹⁰. This substantial rail patronage ranks three of these stations (Central, Town Hall and Wynyard) as the three busiest stations within the suburban rail network.

Travel by road

Although the majority of commuting trips are made by public transport, there is a considerable number of commuting and other trips made into the precinct by car. This is likely to be somewhat reduced due to the current and ongoing construction of the CBD and South East Light Rail project. To this end, bus routes from George Street have been rerouted to Elizabeth Street, with an end point of Martin Place. Due to the closure of Martin Place during construction, commuters will need to be rerouted and directed outbound from Martin Place.

Travel by walking

The precinct has easy walking access to many surrounding inner residential suburbs due to their close proximity and pedestrian walkways including Pyrmont, Woolloomooloo, Potts Point, Paddington, Surry Hills, Ultimo, Kirribilli, McMahons Point, North Sydney and Neutral Bay.

Future Vision

The long term future of Global Sydney, which incorporates the Martin Place local business precinct, is to continue leading Sydney's economy, culture and governance as it becomes an ever growing finance and business centre and Australia's Global City. Transport connectivity and access to other major metropolitan centres is essential and the Sydney Metro is a key component of this future infrastructure.

The CoS has four main objectives for Sydney CBD and broader LGA in 'Sydney 2030'. These objectives are greater sustainability, culture and creativity, diversity and difference and transport and access¹¹.

City of Sydney's transport and access objective aims to create an integrated transport network that can relieve the current public transport network which is often at or beyond capacity. To do this, the CoS intends to provide more sustainable travel options by:

¹⁰ Rail options for the Sydney Greater Metropolitan area Draft options paper November 2011, Transport for NSW

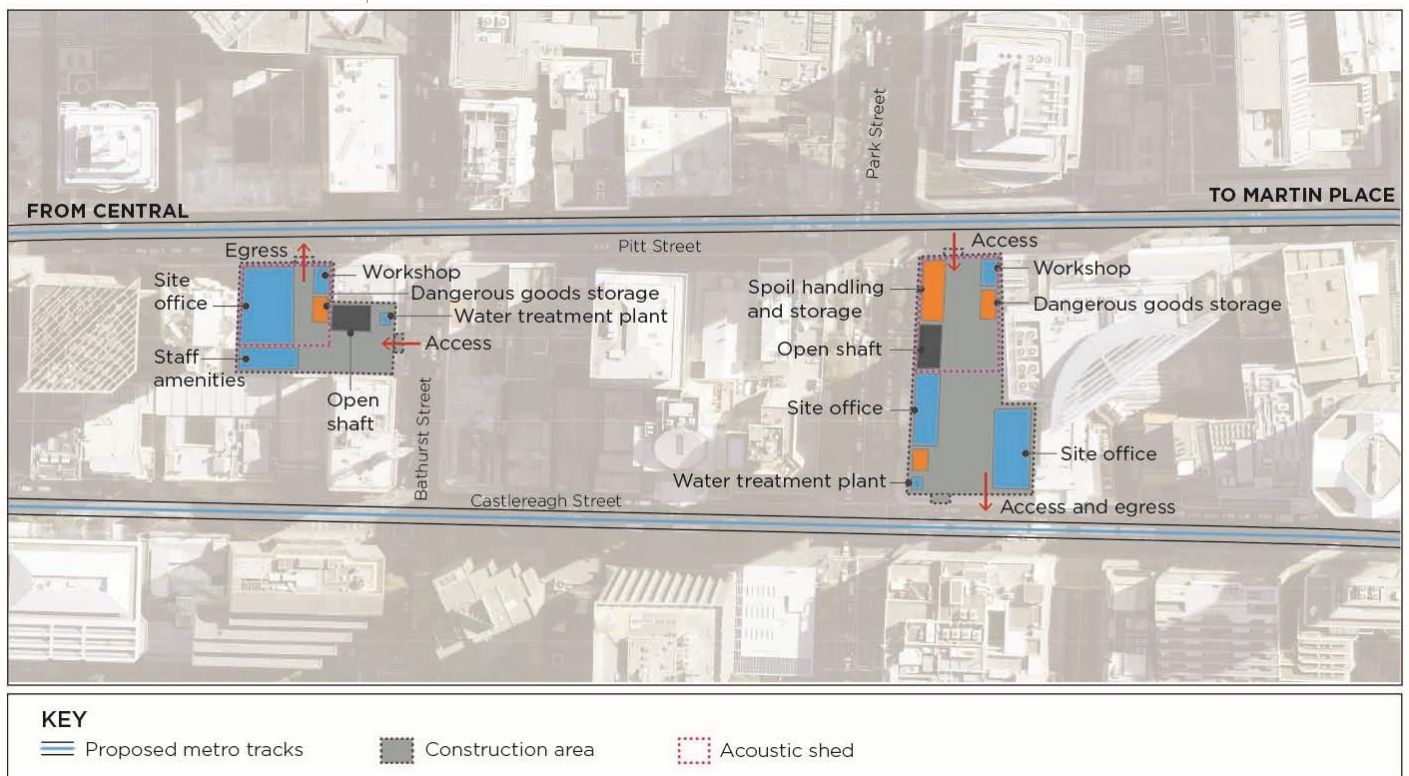
¹¹ City of Sydney Vision Objectives Transport and Access

- Making pedestrians a priority and creating wider, safer footpaths;
- Creating safe and accessible cycling paths;
- Rewarding sustainable transport, including low-emission vehicles and those taking part in car share;
- Transforming George Street into a wide, pedestrian-friendly boulevard with a light rail link that would connect three town squares at Railway Square (Central Station), Sydney Town Hall and Circular Quay; and
- Working with the State government for better public transport options that are more convenient and able to carry more passengers¹².

2.8 Pitt Street Station

The proposed Pitt Street Station is bound by Park Street to the north, Castlereagh Street to the east, Pitt Street to the west and Bathurst Street to the south.

Figure 31: Pitt Street Station construction layout



Source: Transport for NSW

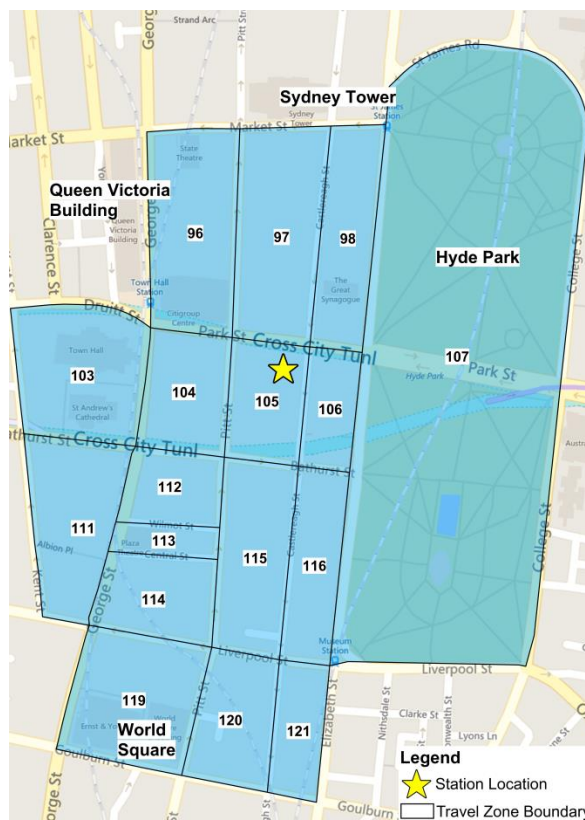
¹² Ibis World 2011-2012 Retail Projections

The local business precinct

The local business precinct has been identified as an area which covers a walking catchment on either side of the station. This is the area that it is considered could be directly impacted by the project's construction and operational phases. The Pitt Street business precinct is shown in Figure 32 below.

For the purpose of demographic and employment analysis, there are 17 travel zones which comprise the station precinct area. The travel zones are shown in Figure 32 below.

Figure 32: Pitt Street Station Travel Zones

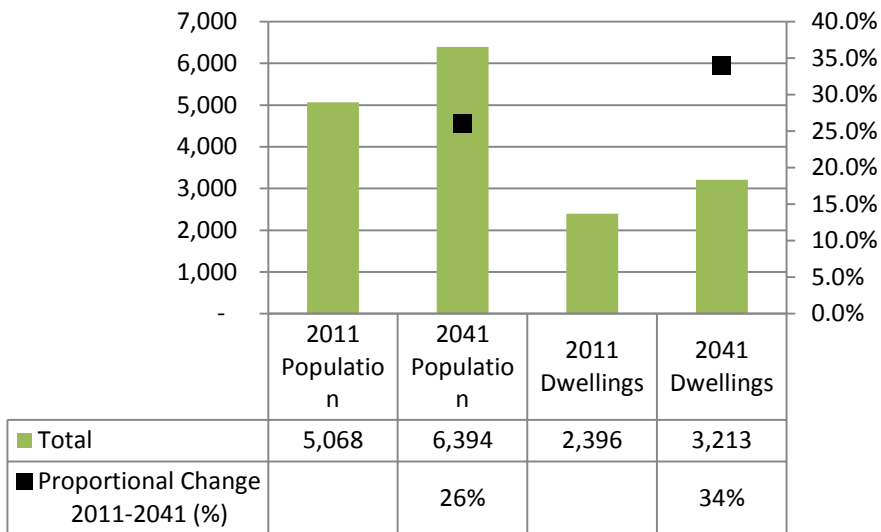


Source: HillPDA

Population and dwelling characteristics

BTS population and dwelling projections indicate that population and dwelling in the Pitt Street Station local business precinct would increase. Figure 33 shows that the catchment population is forecast to increase by 26 per cent from 2011 to 2041, accompanied by a 34 per cent increase in dwellings during the same period. This indicates a considerable proportional increase in the number of dwellings greater than the projected population increase.

Figure 33: Forecast dwelling and population growth 2011-2041



Source: NSW BTS

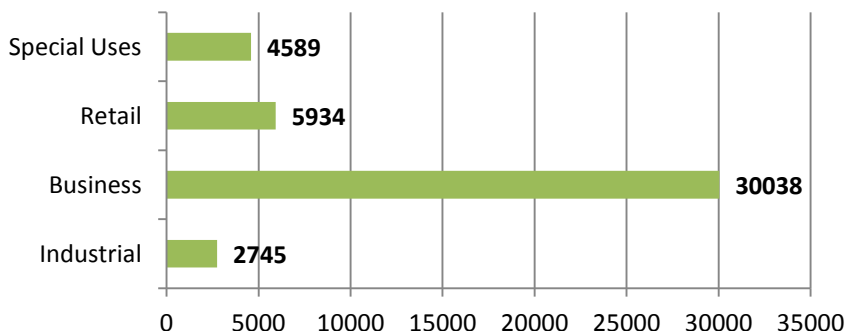
Employment

The Pitt Street local business precinct is a major component of the Sydney CBD commercial and retail core. Also partially encompassing China Town, businesses within the precinct include cultural, retail, offices, pubs, shopping centres, hotels, entertainment and food and drink premises.

Given the Sydney CBD location, Shopping centres and ground floor retail are dominant in the Pitt Street local business precinct. Accordingly a number of businesses could be impacted by the project through acquisitions, construction disturbances and pedestrian diversions.

As at the 2011 Census, the Pitt Street local business precinct employed 43,306 people. Figure 34 shows that 30,038 are employed in business jobs, whilst retail has employed 5,934 people.

Figure 34: Employment by Industry in broad industry grouping

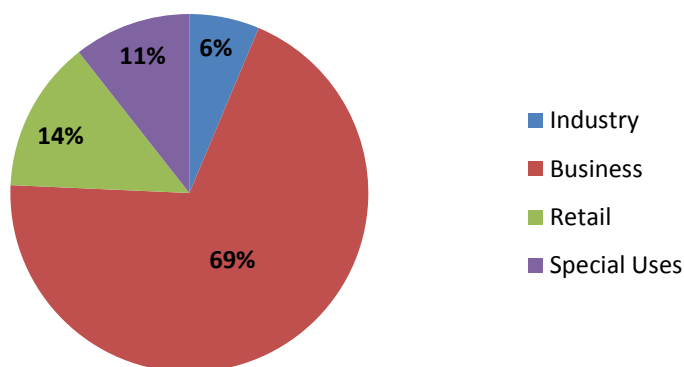


Source: BTS 2011 JTW Destination by Travel Zone at a 1 digit ANZSIC level

Figure 35 shows that 69 per cent of employment is comprised of business jobs in the Pitt Street local business precinct. Retail employs 14 per cent, however as discussed above is primarily located at ground floor level with direct street access. Given the importance of pedestrian traffic and convenient access to retail, it is likely that retail businesses may experience a significantly greater economic impact than business uses during the construction of Sydney Metro.

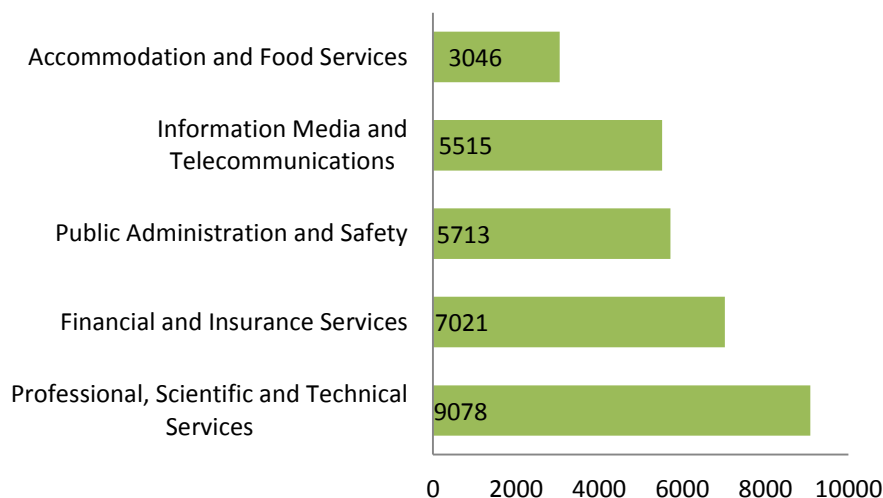
As discussed in the Martin Place local business precinct, whilst Figure 35 indicates that industry represents 6 per cent of all jobs, this is likely to represent a significant number of construction jobs which fall into 'industry'. It is also likely that 'industry' jobs may involve an office component of an industrial sector employer, as opposed to employment within industrial precincts including manufacturing and the like.

Figure 35: Proportion of jobs by broad industry grouping



As business jobs comprise nearly three quarters of all jobs, it is not surprising that finance and technical / professional services jobs are the two largest individual industries of employment in the precinct. Figure 36 shows the five largest industries of employment at a 1 digit ANZSIC level. Professional, scientific and technical comprise 21 per cent of all jobs in the precinct while financial and insurance services employ 16% of people in the precinct.

Figure 36: Five largest industries of employment at a 1 digit ANZSIC level



Source: BTS JTW Destination of Employment by Travel Zone at a 1 digit Travel Zone Level

Business breakdown

The local business area around the proposed Pitt Street Station is comparable to Martin Place in terms of the distribution and type of businesses. The proposed station is located in the core of the Sydney CBD. Due to the central location, construction and operation is likely to impact the local businesses, especially those at ground floor where there are a number of retail and dining businesses operate along Pitt Street, Park Street and Bathurst Street. Several hotels/pubs, grocery stores and a theatre also operate in the precinct.

The Pitt Street Station Precinct forms part of the city circle area and is well connected by multiple transport nodes which directly link to suburban centres. Accordingly, the majority of commuter trips are made by public transport including train (49 per cent), bus (23 per cent) and car (9 per cent), shown in Table 14 below.

Table 13: Pitt Street snapshot: existing land uses, activities and tenants

Pitt Street local business precinct: Sample of land uses, activities and tenants along the alignment.	
Educational	Pilgrim Theatre
Place of Worship	The Great Synagogue
Hotels/Bars	Castlereagh Boutique Hotel, Metro Hotel, Windsor Hotel

Retail and Commercial:	Seven Eleven, Subway, Kais Jewellery, Remedial Massage Clinic, Wholistic Medical Centre, Insomnia Kebabs, Galeries Arcade. Attik, Belle Main Hair and Beauty, Elixar Health Clubs
Government	Australia Post

Source: HillPDA desktop evaluation and site inspection 2015.

Table 14: Pitt Street precincts: Travel mode to work.

Travel mode to work as of 2011	
Car	9%
Train	49%
Vehicle passenger	2%
Walking	6%
Bus	23%
Other*	11%
Travel mode to work as of 2011	
Car	9%
Train	49%
Vehicle passenger	2%
Walking	6%
Bus	23%
Other*	11%

Source: BTS Journey to Work DATA 2011 Destination TZ. Other Travel modes may include: bicycle, motorbike, did not go to work, tram, truck, other mode, taxi, worked at home, ferry and mode not stated.

Travel by rail

As discussed under Martin Place, Sydney CBD rail network comprises six lines, which are fed by eight inner lines and in turn are fed by 15 outer lines¹³. This substantial rail patronage ranks three of these stations (Central, Town Hall and Wynyard) as the three busiest stations within the suburban rail network and nearing capacity.

Travel by road

Although the majority of commuting trips are made by public transport, there is a considerable number of commuting and other trips made into the precinct by car. This is likely to be somewhat reduced due to the current and ongoing construction of the CBD and South East Light Rail project. To this end, construction of the CBD and

¹³ Rail options for the Sydney Greater Metropolitan area Draft options paper November 2011, Transport for NSW

South East Light Rail project has resulted in rerouting of bus and car traffic away from George Street and through Pitt Street, Castlereagh Street and Elizabeth Street predominantly. In the event that construction occurs in the precinct at the same time and passage along Bathurst Street, Park Street, Pitt Street and Castlereagh Street is restricted, retail impacts in this precinct may be significant. This would be primarily due to potential restricted or congested access to the precinct and potential overcrowding on the trains, discouraging city workers to remain in the city to shop.

Travel by walking

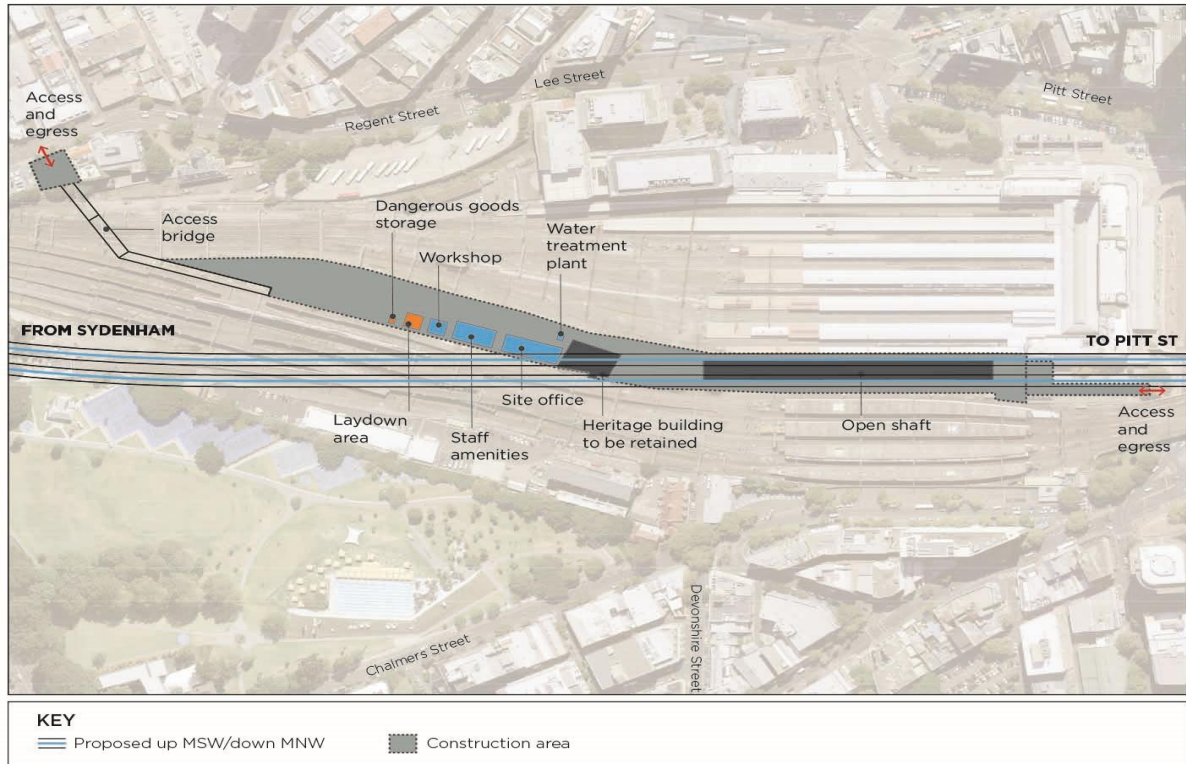
Similar to Martin Place, the precinct has strong easy walking access to many surrounding inner residential suburbs such as Pyrmont, Woolloomooloo, Potts Point, Paddington, Surry Hills, Ultimo, Kirribilli, McMahons Point, North Sydney and Neutral Bay. Due to the growing priority placed on healthy lifestyles and congestion of bus, rail and car transport, an increasing number of residents are choosing to walk to work or may consider walking in the event of multiple construction zones and increased temporary congestion.

2.9 Central Station

Central Station forms the southern edge of Sydney's CBD and is situated in the CoS Local Government Area (LGA). The Central Station local business precinct is formed around the existing Central Station, which would accommodate the proposed metro station below existing platforms 13 to 15.

The work sites for the Central Station local business precinct would involve the Sydney Yard site. Pedestrian access to Central Station is expected to be disrupted during construction including temporary closures of Devonshire Street subway, the northern entrance fronting Eddy Avenue and other Central Station subways and concourses. Acquisition of the premises located to the east of the Eddy Avenue entrance will be required. A temporary pedestrian bridge would be provided at Central Station from Platform 4 to Platform 23 to maintain interchange connectivity between the station platforms during the temporary loss of sub-surface pedestrian connections.

Figure 37: Central Station construction site



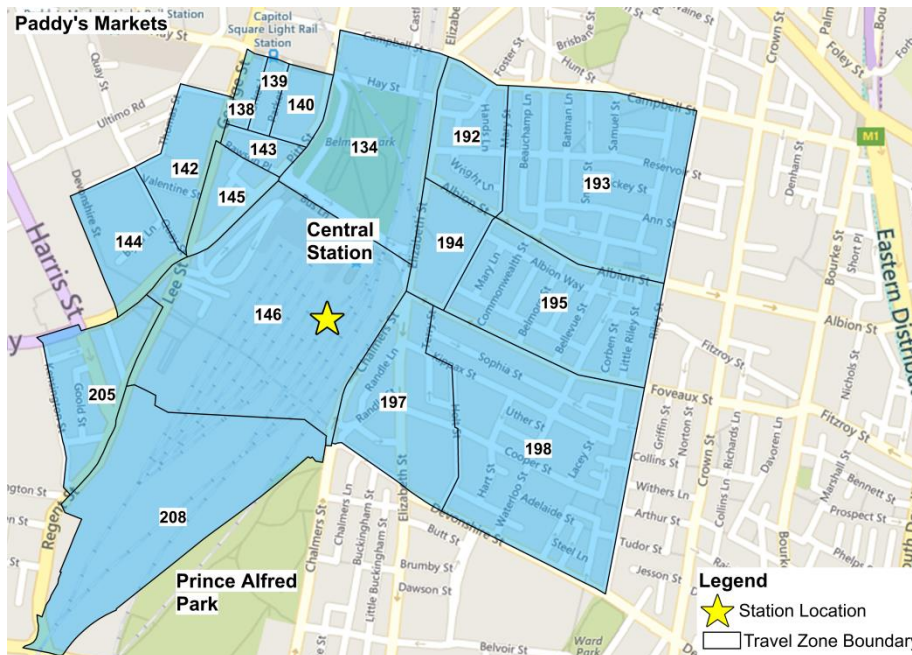
Source: Transport for NSW

The local business precinct

The local business precinct has been identified as an area which covers a walking catchment on either side of the station. This is the area that it is considered could be directly impacted by the project's construction and operational phases. The Central Station business precinct is shown in Figure 38 below.

For the purpose of demographic and employment analysis, there are 17 travel zones which comprise the station precinct area. The travel zones are shown in Figure 38 below.

Figure 38: Travel Zones for Central Station local business precinct

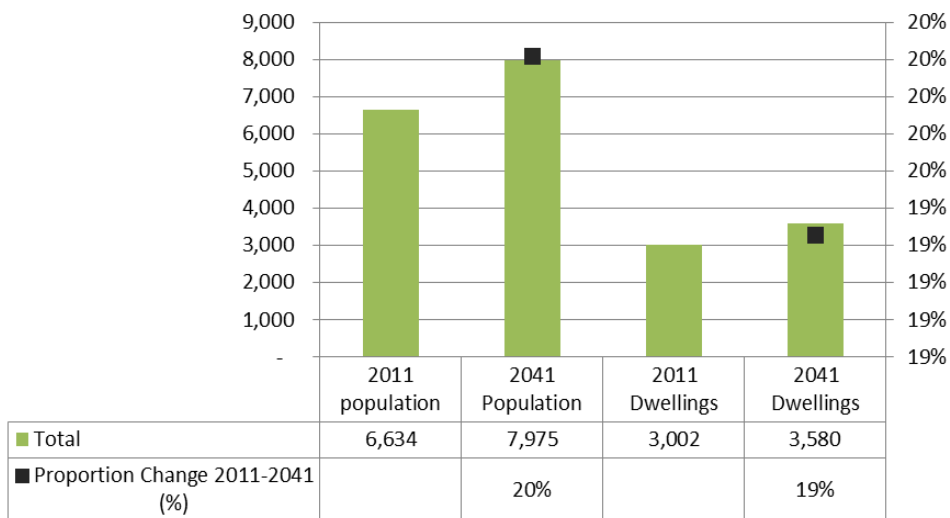


Source: NSW BTS

Population and dwelling characteristics

According to BTS population and dwelling projections, the Central Station local business precinct is forecast to grow modestly (discounting the Central to Eveleigh Urban Transformation and Transport Program). This can be attributed to the tightly held market and existing planning controls that currently limit higher density residential. Figure 39 below shows the population in the precinct is forecast to increase by 20 per cent from 2011 to 2041, accompanied by a 19 per cent increase in new dwellings over the same time period.

Figure 39: Forecast dwelling and population growth 2011-2041



Source: BTS Population and Dwelling Projections.

Employment

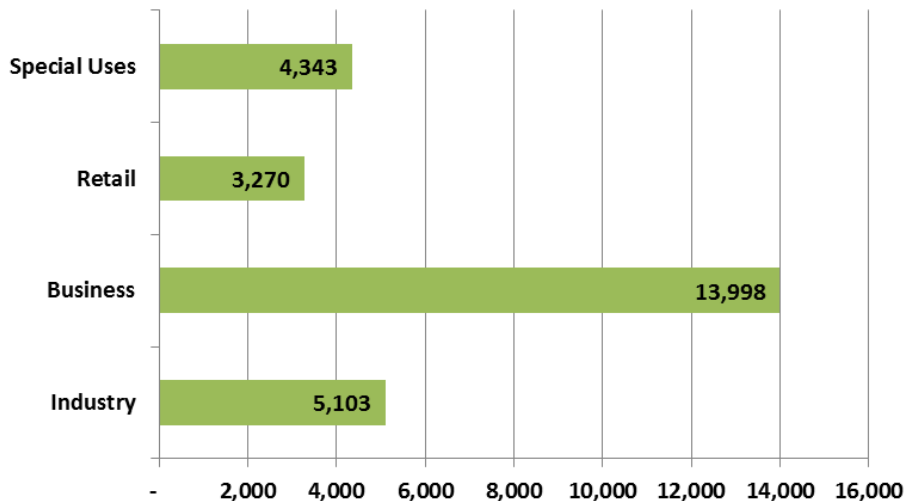
The Central Station local business precinct is separated by the station and rail corridor, which is a considerable barrier to permeability and connectivity of business areas surrounding the station. For the purpose of analysing employment, the precinct has been divided into two main areas:

- Surry Hills; located on the eastern side of Central Station is characterised by a vibrant, creative and extensive mix of local businesses including cafes, restaurants, bars, fashion stores, home wares and speciality stores. Further, there is a considerable number of small to medium sized businesses especially in communications, media, architecture, design and consulting.
- Haymarket / China Town / Chippendale; located on the western side of Central Station is characterised by a vibrant mix of Asian restaurants, bargain-shops, mini supermarkets, gift shops and food halls. Local businesses benefit from considerable trade passing through from education centres such as NSW TAFE and University Technology Sydney.

In terms of total employment, there were 25,848 people employed in the Central local business precinct in 2011. Figure 40 below shows the industry of employment grouped into the four major categories. The precinct accommodates over 3,000 jobs across all four sectors. Business jobs are dominant, reflecting its location as a hub for

creative industries and location at the southern tip of the core commercial area of Sydney CBD.

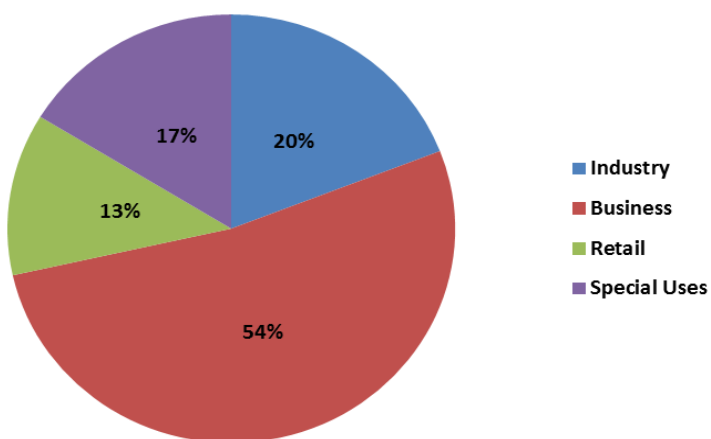
Figure 40: Industry of Employment by broad grouping in Central Precinct



Source: NSW BTS Industry by 1 digit ANZSIC level

Figure 41 below shows that proportionally, business jobs comprise 54 per cent of all jobs in Central Station. What is somewhat surprising is that jobs grouped into industry, comprise 20 per cent of all jobs. There are considerable warehousing, textiles and logistics businesses in the precinct, as well as a major construction/industry focus around the operations of the existing Central Station itself.

Figure 41: Proportion of all jobs in Central local business precinct by broad industry grouping

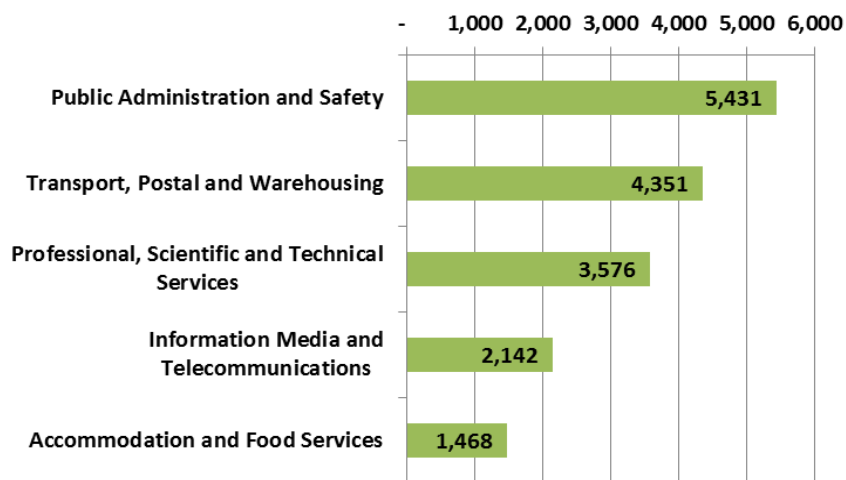


Source: NSW BTS Industry

At a more detailed level, the most common industry of employment was public administration and safety with 5,431 jobs (21 per cent of

total jobs in the station precinct). Figure 42 show the five largest industries of employment at a 1 digit ANZSIC level.

Figure 42: Five largest industries of employment



Source: BTS JTW Industry by Employment at a 1 digit ANZSIC level

Business breakdown

The Central Station local business precinct has been undergoing significant revitalisation over the past decade with the redevelopment of the Carlton United Brewery site into Central Park Sydney, multiple new projects at The University of Technology Sydney including new engineering and IT and business faculty buildings. Surry Hills on the eastern side of Central Station has also experienced a great deal of activity in terms of urban gentrification and ongoing property market increase, with conversion of older industrial buildings and warehouses into residential apartments. This has driven a marked increase in the number of small businesses in the precinct generating increasing foot traffic, destination retail and small business trade.

Central Station

Several long running businesses are located in and around Central Station, generally clustered along Eddy Avenue and the southern subway linking from the station (and effectively, Surry Hills) to Henry Deane Plaza and Railway Square. These businesses generally comprise food and drinks premises, small retail outlets (generally factory outlet / reduced stock style retail) and convenience stores. Additionally, businesses are located within the main station arena, including food and drinks premises (such as Hungry Jacks), newsagencies and convenience stores. These local food and retail

businesses benefit from the strong connectivity between the station, surrounding CBD businesses and linkages to educational establishments such as Ultimo TAFE, University of Technology and Australian Institute of Music.

Business acquisitions are anticipated onsite at Central Station. Demolition of the buildings located to the east of the main Eddy Avenue entrance would require acquisition of the businesses currently operating in that location, primarily containing food and drink outlets and a florist. Table 15 shows a snapshot of local businesses in the Central sub-precinct.

Table 15: Central Station existing land uses, activities and tenants

Sample of land uses, activities and tenants along the alignment	
Retail and Commercial:	Hungry Jacks, Crispy Crème, 7-Eleven, Oporto, SES, Bruno Rossi, NewsLink, Gong Cha Central Station Store, Heritage Express, Basement Books, Henry Deane Plaza Priceline Pharmacy, Railway Square YHA, Station Take Away.

Source: HillPDA desktop evaluation and site inspection 2015

Surry Hills

Surry Hills is known for its vibrant retail and small business activity. Bourke and Crown Streets are the two main retail strips, with considerable retail businesses between Albion, Foveaux and Devonshire Streets and Central Station itself along Elizabeth Street. These local retail businesses benefit from the surrounding commercial businesses at the southern end of the CBD, the proximity to multiple other inner city suburbs and as a walking route between Central Station and major event spaces at the Sydney Cricket Ground, Sydney Football Stadium and other attractions at Moore Park. Table 16 shows a snapshot of local businesses in the Surry Hills sub-precinct.

Table 16: Surry Hills existing land uses, activities and tenants.

Sample of land uses, activities and tenants along the alignment	
Hotels	Evening Star Hotel, Excelsior Hotel, Shakespeare Hotel, Central Private Hotel, Moira Private Hotels, Brickfield Hill B and B Inn, Clock Hotel, Dolphin Hotel, Keg and Brew Hotel, Foresters Hotel, Beresford Hotel and Dove and Olive Hotel.

Retail and Commercial:

Bars: Tipple Bar Bistro, Kippax Lounge, Button Bar, 121BC, Dove and Olive, The Wanderer, Trinity Bar.
 Cafes: Lion, Devon Café, Sample Coffee, Mohr Fish, Sly, Brooklyn Hide, Rapha Cycle Club Sydney, Gnome Café. Snog The Frog, San Trading International, Anna and Boy, Lucy in the Sky and Hussy Clothing.

Source: HillPDA desktop evaluation and site inspection 2015.

Haymarket / China Town /Chippendale

Located on the western side of Central Station, the Haymarket / China Town/ Chippendale sub-precinct is renowned for its considerable number of Asian restaurants, convenience stores, street markets, mini grocery shops and small fashion outlets. The sub precinct is very popular for the younger demographic due to the proximity to education centres (such as The University of Technology Sydney and NSW TAFE).

The local businesses benefit from this highly connected inner city suburb with transport modes such as Central Station, three light rail stations (Paddy’s Markets, Central and Capitol Square Stations) and bus links along George Street.

The local businesses in this precinct perform strongly due to adjoining suburbs such as Darling Harbour, Ultimo, Surry Hills and Sydney CBD which offer strong connectivity for pedestrian access. Table 17 below shows a snapshot of businesses in the sub-precinct.

Table 17: Haymarket / China Town existing land uses, activities and tenants

Sample of land uses, activities and tenants along the alignment	
Hotels	Palace Hotel, Aarons Hotel, Great Southern Hotel, Jey’s Hotel, Novotel, Mountbatten Hotel, BreakFree on George
Retail and Commercial:	Chinatown Noodle Restaurant, Emperor Garden BBB and Noodles, Jaipur Sweets, Dr Chau Chak Wing Building, Krispy Roll, It’s Time For Thai. Café 80.

Source: HillPDA desktop evaluation and site inspection 2015.

Travel pattern

The Central Station local business precinct is essentially an extension of the CBD and serves as a central interchange for Sydney’s rail, bus and light rail network as well as NSW’s regional and intercity rail and coach fleets. The precinct offers exceptional connectivity to other

parts of NSW and interstate. According to the BTS, the most popular mode of travel for commuters who work in the precinct is by train (54 per cent), followed by car (19 per cent) and bus (12 per cent).

Table 18: Central Station local business precinct: Travel mode to work.

Travel mode to work as of 2011	
Train	54%
Car	19%
Bus	12%
Walking	7%
Vehicle passenger	2%
Other*	4%

Source: BTS Journey to Work DATA 2011 Destination TZ. Other Travel modes may include: bicycle, motorbike, did not go to work, tram, truck, other mode, taxi, worked at home, ferry and mode not stated.

Travel by rail

The precinct contains the existing Central Station and two light rail stations (Central and Capitol Square). As discussed previously, Central Station serves as a central interchange for Sydney’s transport nodes for commuters to travel to various parts of NSW and Australia.

Sydney’s Light Rail (L1 Dulwich Hill Line) is one of Sydney’s newest transport links, connecting Central Station to Pyrmont, Lilyfield, Leichhardt and Dulwich Hill.

Once completed, Sydney’s CBD and South East Light Rail would provide public transport from Circular Quay through the CBD to Sydney’s sporting and entertainment precincts (via Central Station) and to Randwick and Kingsford.

Travel by road

Main arterial roads such as George Street, Harris Street and Elizabeth Street provide easy accessibility to travel to the precinct via car or bus. This is evident as approximately 19 per cent of workers in the precinct travel to work by car as at 2011.

The precinct is well serviced with buses along George Street linking to Parramatta Road via Broadway, however only 12 per cent of workers travel by bus as at 2011.

Travel by walking

The precinct has good walkable connectivity to surrounding suburbs that offer a wide mix of residential, commercial and retail land uses. Approximately 7 per cent of workers employed in the precinct walked to work as at 2011.

Future vision

Central Station local business precinct would continue to serve as a central interchange for suburban rail services, bus and light rail network, and intercity rail services and coach fleets.

Surry Hills, Haymarket and Chinatown would continue to grow as highly connected inner-city suburbs supporting local businesses, residents and visitors.

Recent developments have revitalised the area such as the Australian Technology Park, the expansion of The University of Technology Sydney and The University of Sydney, and the opening of the highly successful and awarded mixed use development on Broadway at Central Park Sydney.

These developments are attracting new residents, resulting in significant growth in the local residential population, with the five statistical areas located within a Trade Area of 800m radius of Central Station increasing by 26 per cent (+23,898 people)¹⁴ in total between the 2001 and 2011 Census years.

Further, the Central to Eveleigh Central to Eveleigh Urban Transformation and Transport Program is another major project that is influencing the change in the area. The project plans renewal of the rail corridor between Central Station and Eveleigh, which in turn would create an inner city location for new homes, jobs and infrastructure¹⁵.

The vision over the next five years (short term) is to provide residential housing, high quality open space, education and creative facilities in South and North Eveleigh and global industries in the Australian Technology Park. The Redfern area over the next 5-10 years (medium term) plans to provide a user friendly station, with residential and employment uses as part of the station redevelopment. Central Station redevelopment has been classified as a medium to long term project to provide a world class commercial and retail transit hub. Signature residential, commercial and retail buildings will be designed to meet the unique city location.

Urban Growth NSW has developed the Central to Eveleigh Masterplan and outlined the public benefits to be:

¹⁴ Based on SLA2 for Redfern - Chippendale; Newtown-Camperdown- Darlington; Surry Hills; Pyrmont Ultimo; Sydney-Haymarket-The Rocks

¹⁵ Central to Eveleigh Corridor: Concept Plan

- Connections over and along the Corridor, connecting neighbourhoods with transport and other attractions;
- New activated and safe public spaces;
- New dwellings and a range of housing types, including affordable and social housing;
- New local jobs;
- New community facilities, local services and shops;
- New transport infrastructure;
- Interpretation of local history and adaptive re-use of heritage buildings – expansion of the Corridor’s cultural role;
- Design excellence; and
- Significant public and private investment – attracting international investment and opportunities.

2.10 Waterloo Station

The Waterloo Station is located adjacent to Botany Road between Raglan and Wellington Streets as illustrated in Figure 43 below.

Figure 43: The Waterloo Station location



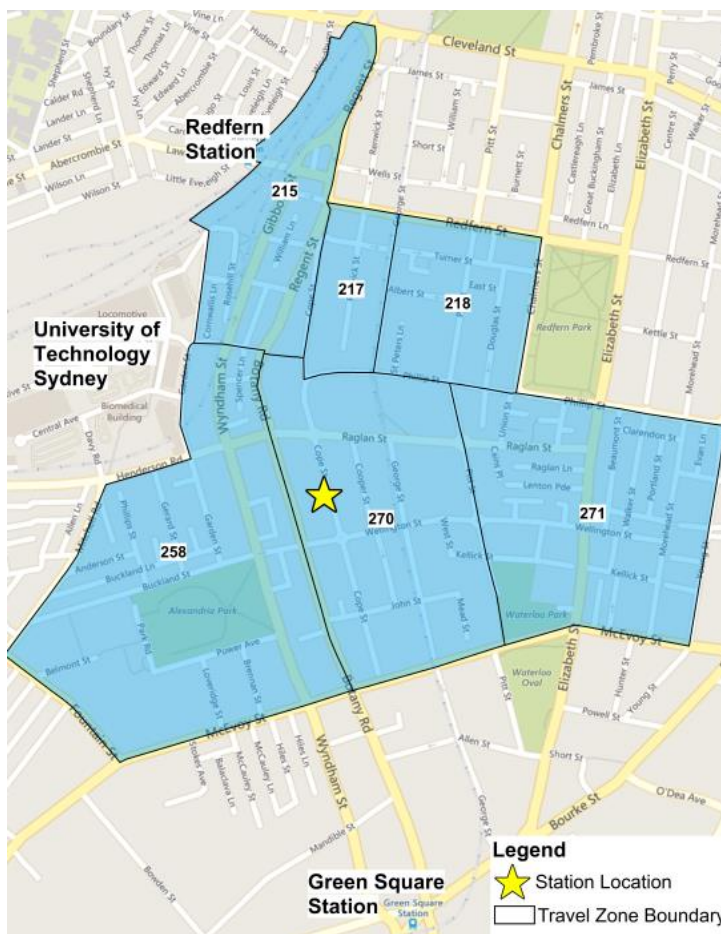
Source: Transport for NSW

The local business precinct

The local business precinct has been identified as an area which broadly encompasses the area that extends southward from Redfern Street to McEvoy Street and between Young Street (east) and Mitchell Road / Fountain Street (west) as shown in Figure 44 below.

For the purposes of demographic and employment analysis, the six travel zones that comprise the Waterloo local business precinct are shown in Figure 44 below. Specifically, the travel zones have been identified as: TZ271, TZ218, TZ217, TZ215, TZ258 and TZ270.

Figure 44: Travel zones for Waterloo precinct



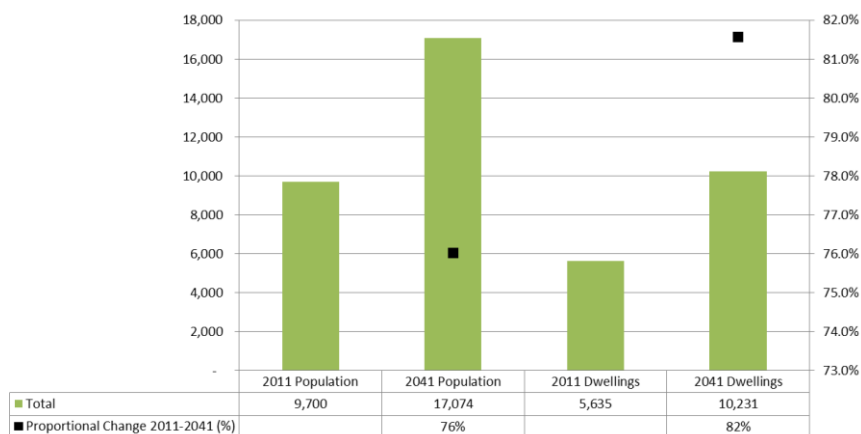
Source: BTS Travel Zone Explorer

Population and dwelling characteristics

According to BTS figures, shown in Figure 45 below, the precinct's population is forecast to increase by 76 per cent from 2011 to 2041, accompanied by an 82 per cent increase in private occupied dwellings during the same period. The significant increase in population and dwellings is the result of the precinct being within close proximity to

existing rail nodes and the existence of large single land lots. As per recent announcements from the NSW Government, redevelopment and urban renewal is to occur in the Waterloo social housing estates which would benefit from the close proximity to the proposed station.

Figure 45: Forecast dwelling and population growth 2011-2041



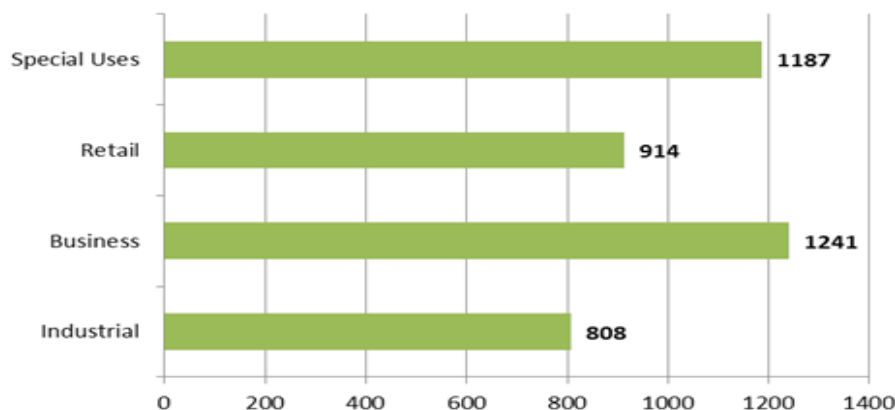
Source: NSW BTS Population Projections 2014

Employment

The precinct contains a mixture of employment uses in terms of industry and building use.

As at 2011, 4,150 workers were employed within the precinct. The largest industries of employment, as shown in Figure 46 below, were business (1,241 workers) and special uses (1,187 workers). The high number of workers within these two categories highlights the precinct's mixed use nature, with the primary employment corridor extending along Botany Road.

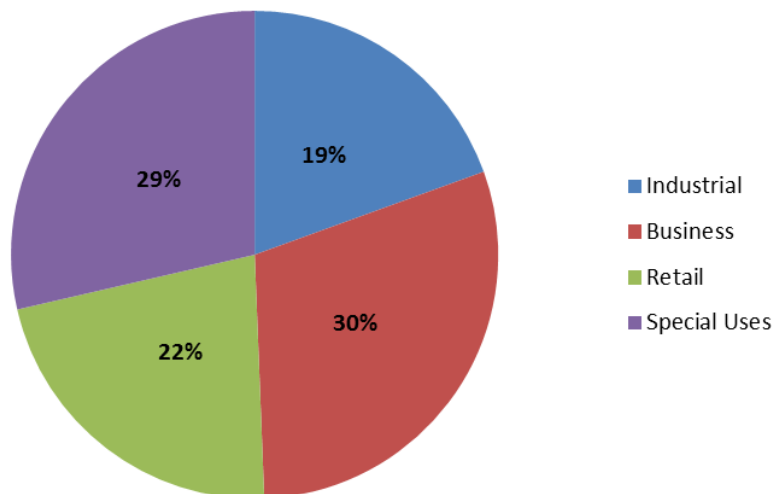
Figure 46: Industry of employment by broad category in Waterloo



Source: BTS JTW Industry of Employment at a 1 digit ANZSIC Level

In terms of the proportion of total jobs, business comprised 30 per cent of all jobs, followed by special uses (29 per cent of all jobs). The other two categories were all represented with each category comprising around a fifth of the total proportion.

Figure 47: Proportion of industry of employment by broad category



Source: BTS JTW Industry of Employment at a 1 digit ANZSIC Level

Figure 48 below illustrates the five largest industries of employment. Professional, scientific and technical services comprised 14 per cent (566 workers) of jobs within the precinct, followed by health care and social assistance representing 11 per cent (474 workers) of jobs.

Retail also comprised a significant bulk of employment within the precinct (10 per cent or 425 workers). These businesses are primarily located as strip retailing along Botany Road.

Figure 48: Five largest industries of employment at a 1 Digit Level



Source: BTS JTW Industry of Employment at a 1 digit ANZSIC Level

Breakdown of local businesses

Table 19 below provides a snapshot of local businesses within the precinct.

Table 19: Precincts existing land uses, activities and tenants

Sample of land uses, activities and tenants along the alignment	
Government and Community Facilities	Redfern Police Station, Waterloo Medical Centre, Alexandria Medical Centre.
Educational Facilities	Group Colleges Australia, Central College and National Centre of Indigenous Excellence, Sydney Film School, and Alexandria Park Community School Junior Campus.
Retail and Commercial	Cafe Valentino, Regent Redfern Hotel, Designer Labels on Sale, club Redfern, Regent Redfern Hotel, IGA Waterloo, Studio Neon, The Rag Land, No Quarter Boxing, Cauliflower Hotel, Yens Vietnamese, Blanco Negro, gallery International and Woolworths Redfern.
Industrial and Warehouse	Sunbeam Factory Outlet, O'Brien Glass, FSW Alexandria, Redback Boot, Sportscraft and Hahn Automotive Services.
Green Space	Alexandria Park.

Source: Source: HillPDA 2015

Travel pattern in the Waterloo Station local business precinct

In terms of commuting to work, as shown in Table 20 below, workers within the precinct relied significantly on private transport to work (48 per cent as at 2011).

The high frequency and reliance on private transport to work is a major consideration for business impacts (both positive and negative) in this study.

Table 20: The Waterloo Station local business precinct travel mode to work

Travel mode to work as of 2011	
Car	44%
Train	26%
Vehicle passenger	4%
Walking	6%
Bus	4%
Other*	16%

Source: Source: BTS Journey to Work DATA 2011 Destination TZ. Other Travel modes may include: bicycle, motorbike, did not go to work, tram, truck, other mode, taxi, worked at home, ferry and mode not stated.

Travel by rail

The precinct is in close proximity to the existing stations of Erskineville, Macdonaldtown, Redfern and Green Square. However, only 26 per cent of workers travelled to work by train in 2011. Travel by road

As highlighted above, travelling to work by private car represented the most popular mode of transport to work (48 per cent).

Travel by walking

The precinct has good connectivity to surrounding residential areas through small local roads and larger arterial roads. Despite this high connectivity, walking only contributed 6 per cent of all trips to work as at 2011.

Future vision

A Waterloo Station would provide the opportunity for the development and urban renewal of the Land and Housing Corporation landholdings connect the Australian Technology Park and the residents in the Waterloo / Redfern area with the Sydney Metro. This would be a catalyst for a major transformation program for the Waterloo area targeted at housing supply and social renewal. The station would work in tandem with the Redfern station precinct transformation program targeted at supporting public transport capacity for The University of Sydney, employment growth in new economy industries and mixed residential and cultural land uses.

The precinct is adjacent to the major inner city urban renewal area known as Green Square. Upon completion, the Green Square project is proposed to have:

- 30,500 residential apartments;
- A population of 19,000 by 2019;

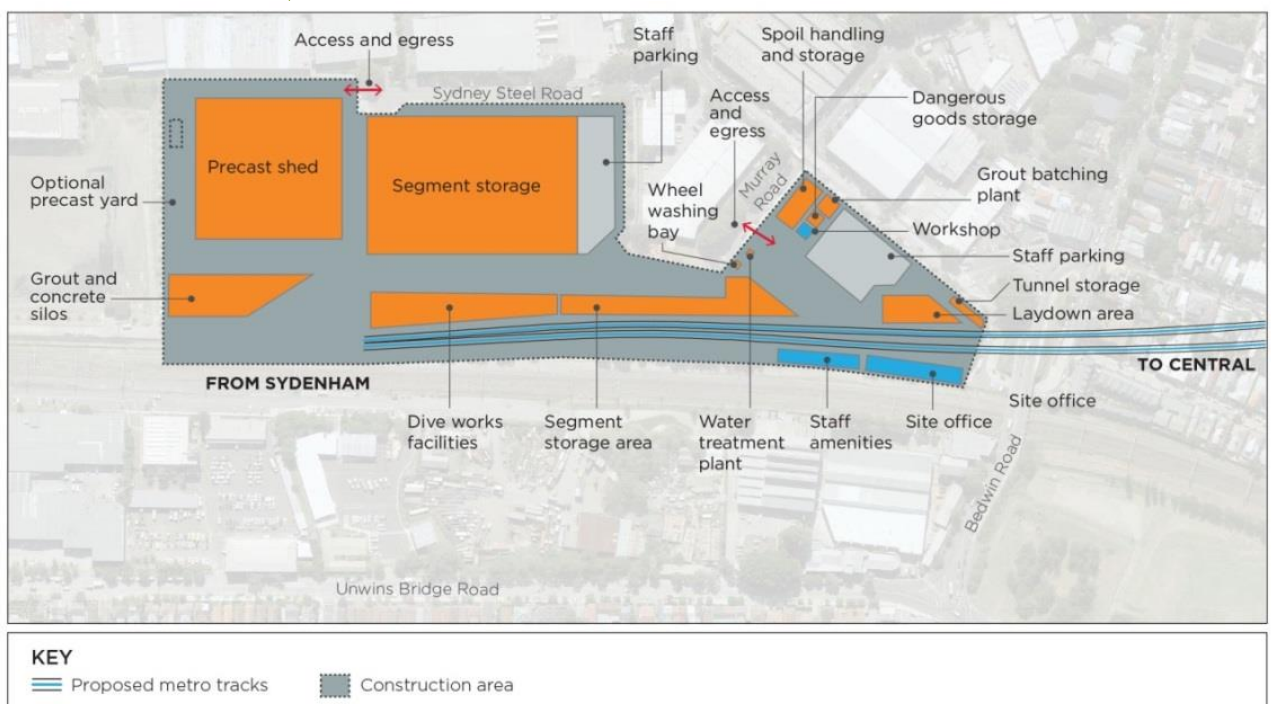
- A total population of 61,000 by 2030;
- 21,000 permanent jobs;
- Community facilities;
- Green space;
- 14,000 square metres of retail floorspace; and
- 50,000 square metres of commercial office floorspace.

Upon completion and during the various development stages of Green Square, existing and future workers and residents would benefit from an additional station located at the proposed Waterloo site. This would provide increased connectivity for persons living and working within an 800 metre catchment of the proposed station.

2.11 Marrickville dive site (southern)

The Marrickville dive site (southern) local business precinct is based around the proposed location of the dive structure and tunnel portal for the project. The dive structure and the southern tunnel portal would be located in the suburb of Marrickville, 400m from Sydenham Station and immediately south of Bedwin Road. The proposed dive structure and tunnel portal is shown in Figure 49.

Figure 49: Marrickville dive site (southern) construction layout

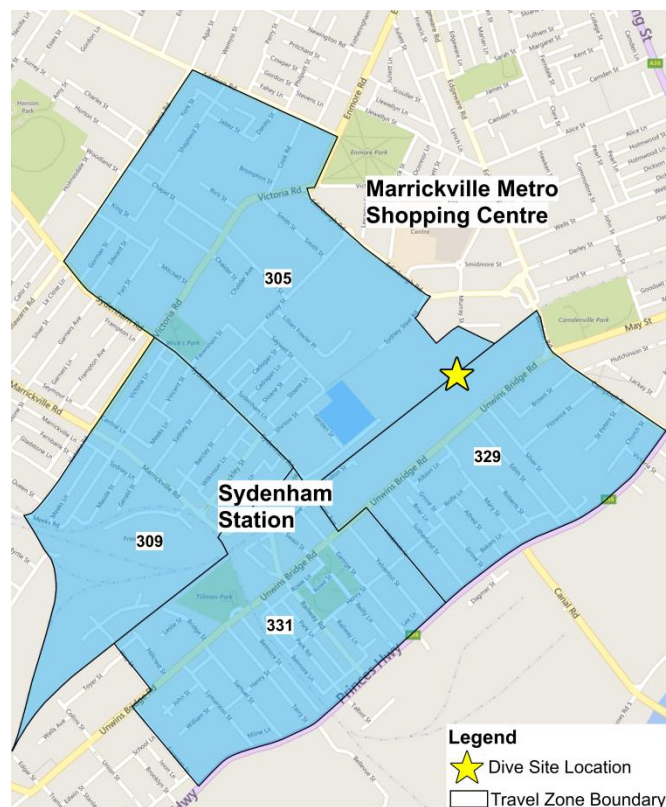


Source: Transport for NSW

The Marrickville dive site (southern) local business precinct is fairly extensive primarily due to the industrial nature of the uses and associated large floor plates required to accommodate these uses. Figure 50 shows the Marrickville dive site local business precinct.

For the purpose of demographic and employment analysis, the Travel Zones which comprise the precinct have been identified as: TZ 305; TZ 309; TZ 329; and TZ 331.

Figure 50: Identified travel zones



Source: BTS Travel Zone explorer

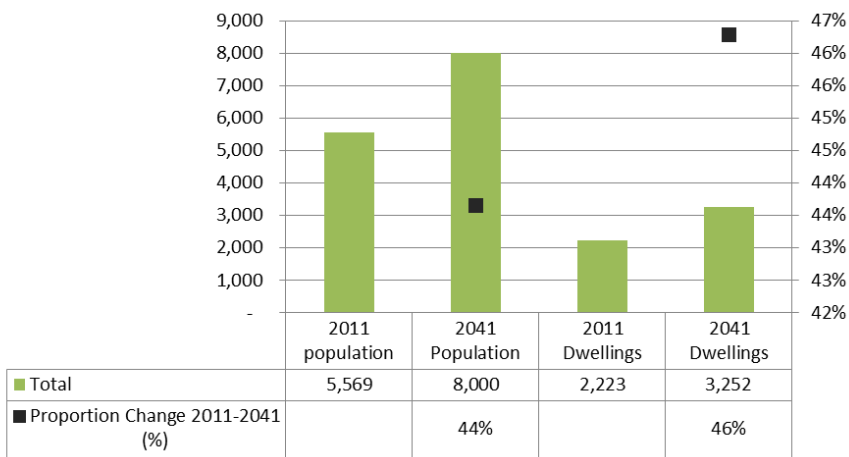
The Marrickville dive site (southern) has been divided into two local business sub-precincts which are different in terms of land uses, employment and layout. The Marrickville Industrial sub-precinct situated on the northern side of the rail corridor comprises mostly industrial land uses. This area encompasses various industrial uses that benefit from existing infrastructure and proximity to Sydney Airport, Port Botany and Sydney CBD.

The Sydenham sub-precinct is situated on the southern side of the rail corridor. Sydenham can be characterised as a typical inner west residential suburb comprising mostly medium density housing with scattered industrial land uses and small pockets of residential and commercial uses.

Population and dwelling characteristics

According to BTS population and dwelling projections, the Marrickville dive site (southern) local business precinct is forecast to grow considerably in terms of population and new dwellings from 2011 to 2041, as shown in Figure 51. The population in this precinct is forecast to increase by 44 per cent from 2011 to 2041, accompanied by a 46 per cent increase in private occupied dwellings during the same period.

Figure 51: Forecast dwelling and population growth 2011-2041

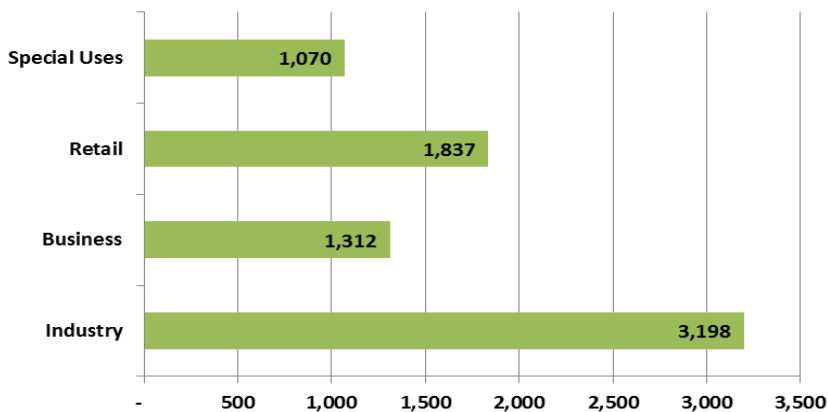


Source: NSW BTS Population and Dwelling Projections

Employment

The Marrickville dive site (southern) local business precinct, as at 2011, employed 7,417 workers. The industry of employment was fairly diverse as shown in Figure 52. Unlike all other precincts in this study, industry was the largest grouping of industries of employment.

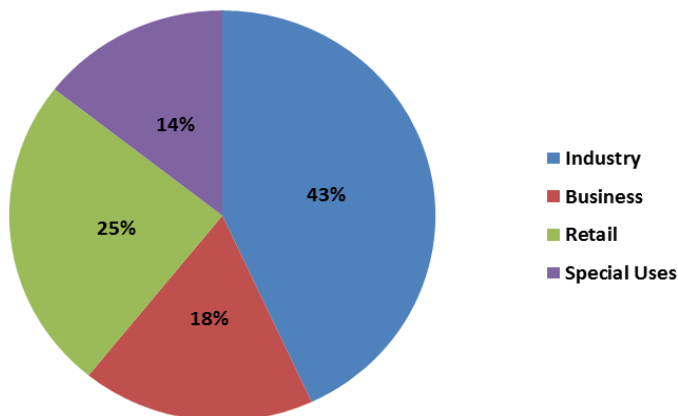
Figure 52: Industry of employment by broad category in Sydenham



Source: BTS JTW Industry of Employment at a 1 digit ANZSIC Level

In terms of the proportion of total jobs, those grouped into the broad category of industry comprised 43 per cent of all jobs. The other three categories were all represented with retail making up a quarter of jobs. Although the retail presence in the precinct is small, there is a major wholesale trade in the industrial areas which contributes heavily to the 1,827 retail jobs.

Figure 53: Proportion of industry of employment by broad category



Source: BTS JTW Industry of Employment at a 1 digit ANZSIC Level

The industrial significance of the suburb is highlighted by the fact that manufacturing (2,247 jobs), comprises nearly 30 per cent of all jobs in the precinct. As discussed above, wholesale trade (1,074 jobs) is also a major contributor to employment in Sydenham. Figure 54 shows the five largest industries of employment in Sydenham at a 1 digit ANZSIC level.

Figure 54: Five largest industries of employment at a 1 Digit Level



Source: BTS JTW Industry of Employment at a 1 digit ANZSIC Level

Breakdown of Local Businesses

The Marrickville dive site (southern) local business precinct has been divided into two sub-precincts which are vastly different in terms of land uses, employment and layout; these are referred to as the Marrickville Industrial sub-precinct and the Sydenham sub-precinct.

Marrickville sub-precinct

Table 21 provides a snapshot of local businesses in the Marrickville industrial sub-precinct.

Table 21: Marrickville sub-precinct existing land uses, activities and tenants

Sample of land uses, activities and tenants along the alignment	
Retail and Industrial:	Silverstone Australia, The Pasta Factory, Lai Shing Dim Sim Factory, Ganton, Total Image Group, S. L. Plastics, Edco, Federal Rubber Stamps Pty Ltd, R and S Danube Smallgoods, Akira Design Studio Pty Ltd, Top Cut, A A plastics, Camelot Lounge, Mastercut Gourmet Meats. Artificial Flowers Sydney, Olympus Grove, Sydney Rams Australia Pty Ltd, Batch Brewing Company, HongTai Foods Company.

Source: HillPDA 2015

Sydenham sub-precinct

Sydenham sub-precinct comprises predominantly medium density residential dwellings, light industrial land uses and scattered retail outlets. HillPDA’s site inspection indicates a limited variety of local retail and commercial businesses to service the existing residents and workers in the area. Businesses that were identified include cafés, a local pub, takeaway food shops and restaurants. A small strip of retail businesses are located near the intersection at Unwins Bridge Road and Gleeson Avenue.

Table 22 provides a snapshot of the businesses in the Sydenham sub-precinct.

Table 22: Sydenham sub-precinct existing land uses, activities and tenants

Sample of land uses, activities and tenants along the alignment	
Hotels	General Gordon Hotel
Retail and Commercial:	The Wine Society, The Innocent Kitchen, Deteki, Lotus Teas, John and Helen’s Take Away Foods, Kebab Fix, Lucy Coffee Lounge and Restaurant, Crazy Horse Espresso and Leading Labels Factory Outlet, ANJ Container Services, Trailer Trash, Sydney Ute Hire, Payless Fuel, Topp Smash City, Alexandria Body Works, Marrickville Automotive Services.
Public space:	Tillman Park, Sydenham Green

Source: HillPDA 2015

Travel pattern in the Marrickville dive site (southern) local business precinct

In terms of commuting and work trips, the Marrickville dive site (southern) precinct is fairly mixed between private car and public transport use. This is a reflection of the fact that the precinct is well connected by public transport but also has considerable private vehicle trips due to the industrial presence in the precinct.

Transport for commuting via car (66 per cent) is the preferred method of travel for people employed in this precinct, as indicated in Table 23 below. This is a consideration for business impacts (both positive and negative) in this study due to the current levels of congestion experienced in the area. However the Traffic and Transport Paper reflects some impacts for selected intersections during the PM Traffic and Transport Working Paper.

Table 23: Sydenham sub-precinct: Travel mode to work

Travel mode to work as of 2011	
Car	66%
Train	17%
Vehicle passenger	6%
Walking	4%
Bus	3%
Other*	4%

Source: BTS Journey to Work DATA 2011 Destination TZ. Other travel modes may include: bicycle, motorbike, did not go to work, tram, truck, other mode, taxi, worked at home, ferry and mode not stated.

Travel by rail

Although Sydenham Station is the major station in the precinct, only 17 per cent of the workers use this method of transport as at 2011. Sydenham Station services two suburban rail services (T3-Bankstown Line and T4-Eastern Suburbs & Illawarra Line), connecting the Precinct to Sydney's west and eastern regions. Both the T3 and T4 lines connect to Central Station linking to outer regions of Sydney and interstate.

Travel by road

This precinct is surrounded by predominantly industrial land uses and is situated close to large industrial precincts such as Botany Bay, Mascot and Marrickville. These industrial areas rely heavily on road infrastructure to transport goods and services to and from businesses and ports (such as Sydney airport and Port Botany). Sydenham sub-precinct benefits from the existing road infrastructure which can be attributed to the private car representing the most popular mode of transport (66 per cent).

Travel by walking

The precinct has good connectivity to the surrounding residential areas with the use of existing paths and open space on the southern side of Sydenham Station. However, only 4 per cent of the people employed in the precinct in 2011 walked to work.

Future vision

The Marrickville dive site (southern) and Sydenham would continue to grow as an employment centre and residential suburb. The growth in this area would be stimulated by the precinct's inherent proximity to Sydney CBD and Sydney Airport, Port Botany and the benefit of the existing Sydenham Station.

The eastern side of the station has considerable scope for development, however it is hampered by ANEF aircraft noise which is a major inhibitor to future development and is not anticipated to change.

3 POTENTIAL IMPACTS TO BUSINESSES

This chapter introduces and broadly discusses potential impacts followed by a more detailed analysis of those likely to relate to specific station locations in Chapter 4. The chapter analyses these broad potential impacts against:

- The research undertaken in the preceding chapters of this study
- The key results of the local business survey (please see Appendix A for a full summary)
- The issues raised via community and stakeholder submissions
- The experience of the authors on comparable projects to scope the potential impacts resulting from the project.

The more specific and targeted analysis in Chapter 4 also provides measures to enhance the potential positive impacts and reduce the negative.

3.1 Potential impacts to businesses during the construction phase

A range of direct impacts are likely to affect local businesses within the study area during the construction phase of the project. These impacts would be short to medium term, generally occurring in a 4 to 7 year period. The construction impacts are also likely to change and vary over time and by location however they are likely to be largely limited to those businesses located in close proximity to the identified construction sites and compounds. To this end, continual communication strategies are likely to help inform businesses of changing construction conditions.

Likely positive impacts during construction

During the construction phase potential positive business impacts were identified as:

Passing trade (also refer to likely negative impacts during construction regarding passing trade): dependant on their location, some businesses may benefit from a net gain in passing trade during construction owing to changes to pedestrian traffic and vehicle access. In the case of Sydney CBD, these improvements could be experienced by businesses that are located at pedestrian crossing points i.e. at breaks along the route corridor or by businesses located in connecting streets that would be used more frequently during the construction phase.

Trade increase: this benefit is most likely to be experienced by businesses located in close proximity to construction sites or on route to construction sites that sell goods or services to construction workers or related industries. This can include local businesses such as service stations, take-away food shops and hotels among others.

The trade generation potential from construction workers in the CBD could be considerable as a possible concurrent period of work with the CBD and South East Light Rail and the project occurs.

Likely negative impacts during construction

Servicing and delivery access: one of the key challenges identified for the construction phase relates to business deliveries and servicing. Businesses rely on deliveries for products to sell and to distribute. Businesses also rely on local services such as refuse collection.

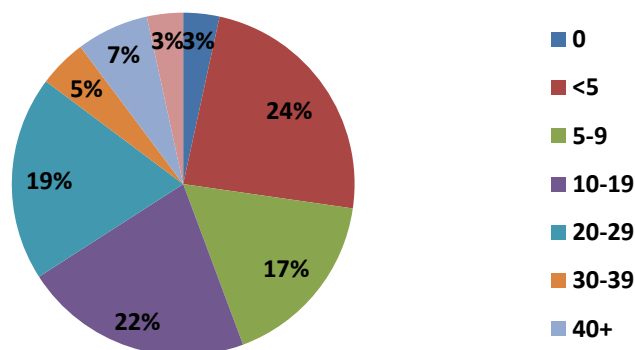
These activities are often required to occur daily, and in some cases, multiple times a day. It therefore follows those temporary street closures; the relocation or removal of car parking along the street frontage; and the location of construction sites could collectively restrict and hinder servicing and delivery opportunities across each of the precincts. This could result in time and vehicle related costs, increased traffic generation as well as lost revenue for businesses. Furthermore the interaction with other developments and major infrastructure projects with the vicinity of these businesses increases the likelihood and severity of this impact.

Results from the local business survey indicate that a number of business owners across the precincts receive multiple deliveries per week, in some cases greater than 30 deliveries.

In this respect Figure 55 is based on an aggregation of the survey results and shows that across the study area 53 per cent of businesses surveyed received over 10 deliveries per week. This frequency of delivery indicates the importance of access for local businesses in the study area and the potential adverse impacts of any disruptions.

For this reason it is necessary that the project include measures that ensure access to all buildings would be maintained.

Figure 55: Business survey results: deliveries per week



Source: HillPDA Local Business Survey 2015

Staff and customer access: the availability of public transport together with car parking provision affects the accessibility of a business to employees and customers. This can in turn affect the desirability and viability of a business and thereby its operation.

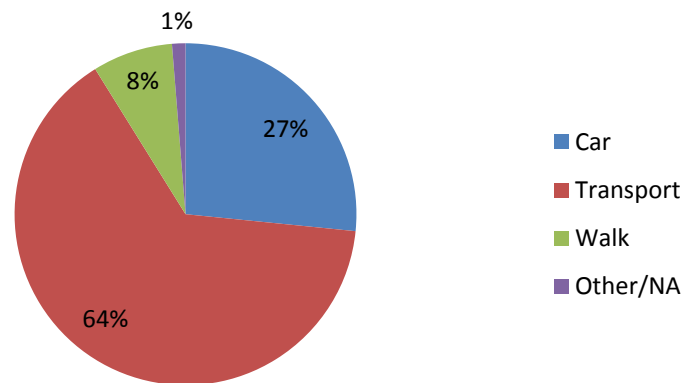
Across the study area, there is considerable variation in the supply of car parking and accessibility by public transport by station location, resulting in varying degrees of potential impact from the construction of the project.

In some of the proposed station locations, including Crows Nest, Victoria Cross and Martin Place, Pitt Street, Central and Waterloo the on and off street parking is already notably restricted or costly. Accordingly in these locations, changes to the supply of car parking may be more easily absorbed and have less impact to businesses in comparison to other more car dependant centres in Sydney.

Furthermore despite the 2011 journey to work data discussed in Chapter 2 of this assessment showing the predominant share of employees travel to areas such as Crows Nest (53%) or Waterloo (48%) via private transport, perceptions from businesses surveyed across the study area found that the most common mode of travel to work for employees was public transport (64 per cent) followed by car (27 per cent) (as shown in Figure 56).

The potential impacts of the project to each precinct as a consequence of car parking change are discussed further in Chapter 4.

Figure 56: Business survey results: primary mode of transport (employees)

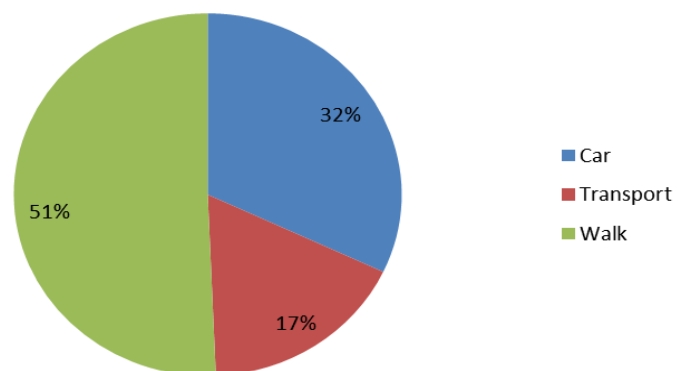


Source: HillPDA - Local Business Survey

Based on the local business surveys that represented a snapshot of perceptions across the study area, businesses perceived that the primary mode of transport by their customers to their business was by walking (51 per cent) followed by public transport (17 per cent) and car (32 per cent). This finding aligns with the project’s prioritisation of pedestrian access for each of the stations over other means of transport, together with the development of station design so that it integrates with the existing pedestrian environment (discussed in greater detail by station in Chapter 4).

Despite this it is likely that customers also used other forms of transport in connection with their primary mode to arrive at a precinct. Where appropriate the project has maintained, and where possible enhanced, interchanges with other modes of transport i.e. North Sydney, Martin Place, and Pitt Street etc.

Figure 57: Business survey results: primary mode of transport (customers)



Source: HillPDA - Local business survey

Passing trade: the construction phase of the project would result in changes to vehicle and pedestrian flows that could influence the level of trade passing businesses and subsequent customers and sales.

Some businesses could benefit as trade is re-directed towards their business (i.e. through pedestrian or traffic diversions) whilst others might not as traffic is diverted away or construction hoardings reduce the ease of access to / visibility of their business.

Traffic congestion and travel times: impacts to businesses as a result of traffic delays and congestion may be both direct and indirect. Businesses may be directly affected as a result of delayed or hindered access to work places or servicing areas owing to local traffic constraints and congestion. A business may be indirectly affected by increased traffic and therefore potentially increased travel times for staff or for deliveries could occur, especially on major thoroughfares that may be impacted. The approach for haulage of material during construction (as described by the Traffic and Transport Paper) indicate that the bulk of haulage is likely to occur on arterial road networks, minimising use of local roads in order to mitigate the traffic impacts and cumulative construction impacts, especially in the Sydney CBD.

In relation to the study area, areas likely to be affected by minor increases in construction related congestion include Artarmon, Crows Nest, Martin Place, Pitt Street, Waterloo and Marrickville. Congestion and re-routing in the Martin Place, Pitt Street and Central local business precincts would potentially be exacerbated by the construction of the CBD and South East Light Rail Project and to a lesser degree the construction of other projects such as Barangaroo.

Figure 58 shows the morning start time for businesses across the study area identified in the local business survey. The survey results show that 57 per cent of businesses across the study area start between 7.00am and 7:30am and 9.00am and 9:30am. This is likely to be the time when works could potentially cause the most traffic congestion and impact traffic times. However the Traffic and Transport Paper details that the majority of vehicle movements would occur outside of these peak periods.

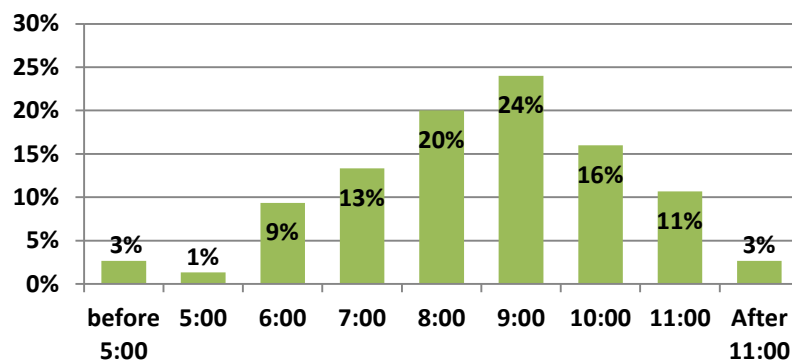
Accordingly the project proposes to use road occupancy licences and other project management measures to require bulk haulage and trucking to:

- Avoid the peak periods referenced above

- Use the most suitable and direct route to obtain access to the arterial road network
- Carry out the bulk of the spoil haulage outside of the Sydney CBD area with the majority taken out at the dive sites
- Avoid the use of routes commonly used by construction related vehicles across Sydney CBD construction sites; and avoid routes which cross Sydney CBD where possible
- Work with the relevant roads authorities and the CBD Coordination Office to minimise the potential construction traffic impacts, including cumulative impacts with other projects and events within Sydney CBD.

Local business impacts survey results (Figure 58) indicate that 49 per cent of businesses across the study area cease operation between 5.00 pm and 5:30 pm and 6.00 pm and 6:30 pm.

Figure 58: Business survey results - morning start time

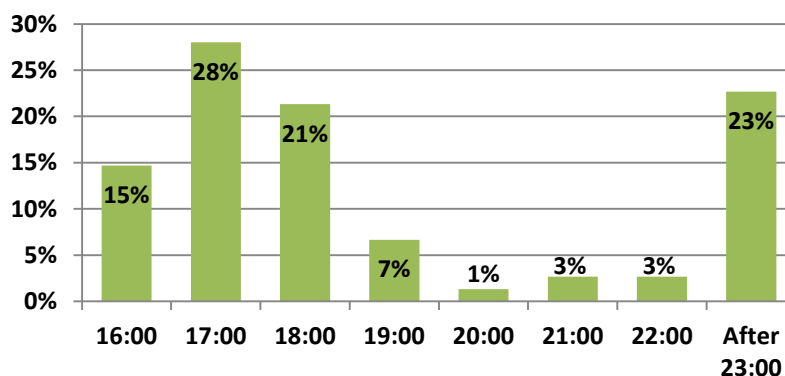


Source: HillPDA - Local Business Survey

A more detailed analysis of the results finds however, a notable difference on a precinct by precinct basis. For example precincts such as Crows Nest and Central have considerable night time trading activity and could therefore have an extended period of impact dependant on construction periods and constrained site access.

For this reason night time construction works and their associated mitigation measures need to consider the potential impacts on a precinct by precinct basis.

Figure 59: Business survey results - evening finish time



Source: HillPDA Business Survey

Vehicle operating costs: owing to potential disruptions to travel / route redirections and extended travel times, businesses could incur an increase in vehicle operating costs. This would be a particular issue for service and delivery based businesses (i.e. couriers or distributors) in more congested parts of the study area.

It is noted however that disruptions to travel and route redirections would be minimised by the project given the confined nature of the proposed construction sites particularly in locations such as North Sydney, Waterloo and Pitt Street.

Furthermore Sydney Metro will work with the CBD Coordination Office (referenced above) to ensure business experience minimal disruption to travel times in the Sydney CBD.

It is therefore unlikely that rerouted traffic or associated delays would create noticeable impacts on vehicle operating costs.

Loss of power and utilities: A review of business impact studies from previous comparable projects indicates that accidental or planned shutdowns of electricity or other utilities to enable construction work has the potential to impact business operations.

Prior notice would be given to all businesses of any power or utility shutdown.

Staff recruitment: the amenity and accessibility of a working environment are factors that can support the successful recruitment and retention of staff. Significant construction noise or changes to the visual environment visual blockage could have an impact to the appeal of a business and its ability to recruit talent.

A review of the potential impacts to the study area’s landscape and visual amenity section finds that during construction the adverse

visual impacts resulting from the project would range from minor to moderate in degree (i.e. building demolition, acoustic enclosures, loss of some trees).

Noise, vibration and dust: a noticeable level of noise is likely to be generated during the construction phase of the project at station and dive locations. A noise and vibration assessment indicates that any such impact would be generally restricted to businesses within 200m of the construction sites.

While the background noise levels in the study area are already considered higher than many locations in Sydney (particularly in the CBD) noise generated during the construction process has the potential to negatively affect employee productivity, interaction with clients and workplace ambience.

Noise associated with the construction of the project can also affect more sensitive uses (i.e. places of worship, beauticians, cinemas, therapists etc.) as well as businesses reliant on external spaces i.e. outdoor dining and retail uses that are reliant on high amenity areas.

For businesses located in the Martin Place and Pitt Street precincts, these impacts could be exacerbated owing to the likely overlap, and thereby potential cumulative impact, between construction of the project with the construction of the CBD & South East Light Rail project.

With respect to dust generation, study of air quality identified that overall the dust generated by the project would be comparable to other similar projects and the impacts could be reasonably managed through standard mitigation measures to ensure that there are acceptable levels. The risk of mobilising hazardous materials could also be managed through standard measures.

Business turnover: the cumulative effect of trading impacts to local businesses during the construction phase could adversely impact business turnover which could in turn contribute to the closure of some businesses in the study area that might already be experiencing viability challenges.

The secondary result from business turnover and closure could be a weakening of the competitiveness of certain business centres and clusters against areas that are not impacted by the project's construction (i.e. restricted access, amenity disruption and loss of on-street parking).

Property acquisition: the requirement to excavate and construct the required work sites, dive structures and tunnel portals and station entry points would require the acquisition of properties, some of which would include businesses. This has the potential to affect the operation of businesses owing to the need to relocate them or to potentially cease their operation. This can also affect surrounding businesses as a result of reduced agglomeration benefits and services in the locality.

To minimise the potential impacts to local businesses that need to be acquired Transport for NSW would:

- Make every possible effort to avoid the need to acquire private property;
- Make direct contact with affected property owners; and
- Provide ongoing communication with affected property owners to keep them informed of the project and its implications.

Should any property need to be compulsorily acquired it would be acquired in accordance with Section 55 (a) – (f) of the *Land Acquisition (Just Terms Compensation) Act 1991*. This means that any property owners affected by the project would not only be paid fair market value, but other costs and losses such as disturbances to business operation due to relocation.

The operational phase – positive impacts

During the operational phase of the project, potential positive business impacts could relate to the following:

Enhanced access for customers: upon operation the provision of more reliable public transport (that operates at a greater frequency and reduces train overcrowding) could increase the number of customers within a given precinct to the benefit of local businesses. This also has the potential to attract a larger target market to the study area and to increase the scale of peak shopping, dining and leisure times to the benefit of current and prospective new businesses.

Enhanced business connectivity: the project forms part of one of the largest infrastructure projects constructed in recent decades in Sydney.

Once operational, the project would provide much greater connectivity between major centres and direct connection to the T3 Bankstown Line, the CBD, inner north and north west. This enhanced

connectivity would support business clustering benefits whilst enhancing the attraction of locations such as Crows Nest and Victoria Cross as a place for new businesses to invest.

Increased business capacity: the project, once operational, is likely to considerably increase the demand and thus capacity for additional businesses to operate within the proposed stations local business precincts.

Within the study area, there are areas which have higher than desirable commercial vacancy levels i.e. commercial office space in Crows Nest. Once operational, the project is likely to deliver a major increase in consumer trade and an increase in demand for commercial floorspace which would thereby increase the total capacity and attraction of each precinct for new business investment.

This could also have the additional benefit of increasing the economic competitiveness of business clusters within the station local business precincts.

Development stimulus: the announcement and in turn operation of the project is likely to improve the attraction of areas to residents, workers and investors leading to greater development interest and result in residential and commercial densification around the station precincts. This is consistent with the NSW Government's directive in "A Plan for Growing Sydney" to increase residential dwellings around transport infrastructure and employment nodes to create "homes close to jobs"¹⁶.

Additional residential and commercial uses within an area are likely to have a major positive benefit to the local businesses as the increased residential dwellings would generate a major increase in demand for local retail and commercial services as well as create a critical mass to support a broader range of businesses.

Utilising the following industry standard ratios for retail and local business generation:

- 1 additional dwelling could create demand for 6 square metres of local retail space; and
- 1 additional dwelling could create demand for 3 square metres of local business space.

As a consequence 2,000 additional dwellings within a precinct could generate demand for a further 12,000 square metres of retail

¹⁶ Page 70 A Plan for Growing Sydney

floorspace supporting 480 jobs together with 6,000 square metres of additional business space supporting approximately 333 jobs.

While the project would not directly result in such an increase in development capacity in the locality, it would be one of a number of enabling factors to support such development outcomes. Other important contributing factors being planning controls, market demand together with other infrastructure improvements.

Staff access, recruitment and retention: the ongoing operation of the project could support local businesses as a consequence of the enhanced connectivity of the precincts to residential areas and employment nodes thereby enhancing their attraction to, and the retention of additional and higher quality staff. This is especially relevant to the Victoria Cross and Crows Nest precincts which are reliant upon attracting highly skilled knowledge workers and professionals from across Sydney to support their tenants.

The project would also support staff access, recruitment and retention within major business precincts such as Sydney CBD and North Sydney owing to improved connections with the broader metro network and thereby Sydney's executive belt.

Broader retail capture: a major potential benefit of the project, once operational, would be the ability to draw from a larger retail trade area. At present, there is a varying degree to which the local retail markets can attract retail consumers beyond a primary market in addition to ever-increasing competition.

- For Barangaroo – this would support a broader market capture early its retail life-cycle, thereby supporting its establishment and opportunities for growth.
- Crows Nest - is an established major food and café retail centre. Improved public transport connectivity, especially to Crows Nest is likely to help deliver a broader retail catchment area which would in turn increase the competitiveness of the area against comparable markets such as Neutral Bay and Lane Cove, which do not have any direct rail access.
- For the Sydney CBD stations (Martin Place, Pitt Street and Central), the development of the project is likely to further enhance the attraction of the CBD as a retail destination.

Building on this assessment of potential broader impacts, Chapter 4 will assess the likely business impacts by precinct in greater detail

together with measures to potentially enhance the benefits or mitigate the negative impacts.

3.2 The operational phase – negative impacts

During the project's operational phase, potential negative business impacts could relate to:

Commercial rent: as a result of the likely enhanced attraction of locating a business in close proximity to the new stations resulting in increased competition for space. As a consequence commercial rents could increase across the study area. Where this occurs there may be some negative impacts to smaller businesses that may not be able to quickly absorb higher rents.

Conversely, the added attraction of the area to tenants and in turn the ability to command higher rents would be a positive benefit for property owners. This impact is likely to be tempered by the fact that competition for space may help to improve an ailing commercial office market, especially in the North Shore metropolitan market which has seen a contraction of commercial space since 2011¹⁷.

Competition: the prospect of new retail within the station locations has the potential to impact the level of trade experienced by competing businesses. This may be a negative impact, or potentially a positive where a clustering effect is stimulated. In either case additional retail opportunities may serve to support the function of existing businesses and the attraction of the location to employees.

Changed behaviour during construction: this impact relates to the effect that a forced change in consumer behaviour (such as travel route or diversion) may lead to longer term trends. For example, an alternative pedestrian route provided during construction (that moves passing trade away from a given business) may result in a permanent change in behaviour or travel direction even when no longer enforced. This can negatively affect businesses from which trade was diverted and conversely may benefit others.

Customer access and parking: as indicated by the local business survey results discussed above, customer access across the study area is predominantly via public transport, with the exception of the Crows Nest, Waterloo and Sydenham precincts which have a greater comparative reliance on parking for destination retail. For many station locations, the changes to existing levels of parking are likely to

¹⁷ CBRE (2014) Residential Conversions Keeping Commercial In-Check: North Shore Office Market Report

be modest (i.e. Crows Nest, North Sydney, Martin Place, Pitt Street and Central) although the pedestrian environment will experience some improvements i.e. through new and / or enhanced connections. Despite this, changes to customer access and parking may remain a concern for businesses reliant on such access as distinct from public transport access.

Vibration and noise: whilst the project is predominantly located 20 to 60 metres underground, there is the potential for impacts upon operation as a result of vibration or noise to sensitive businesses i.e. theatres, cinemas and studios. Ground borne noise level predictions indicate however that levels will comply with the design objectives for all sensitive receivers.

3.3 Community and stakeholder submissions

In addition to the business surveys undertaken, numerous stakeholder and community workshops have been undertaken by Transport for NSW and other nominated authorities (insert names when made available). Community consultation utilised a variety of modes including face to face workshops, public information sessions, letterbox drops, advertisements, email correspondence and online forums. To this end, further consultation would be undertaken as part of the environmental impact statement assessment.

A review of submissions¹⁸ resulting from the consultation process undertaken for the project identifies the following:

- The majority of submissions supported a station at Crows Nest (as distinct from other locations such as St Leonards) in order to provide necessary public transport, increase accessibility to small businesses and restaurants and support population growth in the locality.
- The majority of submissions supported a station at Barangaroo to support the new development in this precinct which will in turn support local businesses.
- There was very little concern about the proposed location of the CBD stations but rather support for the improvements they would make to over-crowding in existing stations such as Town Hall.
- Some submissions raised concerns regarding the number of properties that were needed to be acquired to enable the project's development.

¹⁸ Early Community Consultation Submissions Report, November 2015 and early feedback from community groups and community facilities

- Concerns were raised regarding educational facilities and certainty for families. Further, educational / child care centres raised concerns for noise and dust on allergies and the like.
- Concerns were raised by a committee regarding total acquisition of Tower Square and local businesses.
- Some local businesses raised concerns about pedestrian diversions, public transport routes and access to existing / retained businesses.
- Some local businesses raised concerns about noise, dust and vibrations.
- Access and parking / deliveries concerns were raised by some inner city businesses.
- Some submissions raised concerns regarding the effects of construction to local businesses including property acquisitions and line closures together with the duration of these works and changes¹⁹.

As a whole, the community consultation undertaken has raised similar concerns as those businesses which participated in the business surveys. These concerns and any mitigation measures regarding the potential impacts of the project are discussed in the following chapter.

¹⁹ Further details of matters raised by community and stakeholder submissions can be found in Chapter 5 of the EIS

4 POTENTIAL IMPACTS BY PRECINCT

This chapter provides a more detailed analysis of the potential positive and negative impacts of the project during both the construction and operational phases.

The chapter also ranks the significance of the impacts in accordance with methodology set out in the Table below as either:

1. Positive or negative;
2. Significant, moderate, slight or neutral; and
3. During construction and/ or upon operation.

Table 24: Assessment rating levels

TRating Level	Description
Significant Negative	Impacts with serious, long term or possibly irreversible effects. These impacts may lead to serious damage or degradation of the environment. This category also includes more localised impacts that can only be addressed through compensatory measures (as in the case of property acquisition).
Moderate Negative	Impacts may be short, medium or long term in duration and most likely to respond to management actions.
Slight Negative	Impacts have minimal effect, could be short term, can be mitigated and would not cause substantial detrimental effects. May be confined to a small area.
Neutral	No discernible or predictable positive or negative impact.
Slight Positive	Impacts have minimal effect, could be short term. May be confined to a small area.
Moderate Positive	Impacts may be short, medium or long term in duration. Positive outcome may be in terms of new opportunities and outcomes of enhancement or improvement.
Significant Positive	Impacts resulting in substantial and long term improvements or enhancements to the existing environment.

Source: Adapted from the Strategic Merit Test, National Guidelines for Transport System Management in Australia (2nd Edition) by HillPDA

*The definitions provided in the table above have been adapted from the rating levels recommended by the Strategic Merit Test which forms part of the National Guidelines for Transport System Management in Australia (2nd Edition). The definitions have however been amended so that they are suitable for business impact assessment.

4.1 Precinct level impact assessment

Table 25: Impact assessment

Chatswood dive site (northern)		
<p>precinct is largely occupied by an Ausgrid Depot although some smaller business units are located on the corner of the Pacific Highway and Mowbray Road including a funeral service, business service and sporting use at first floor. Surrounding the precinct, largely along the Pacific Highway are a range of retail and showroom businesses as well as the Great Northern Hotel.</p>		
Potential impacts during construction	Example stakeholders influenced	Significance of Impact
<p>Servicing and delivery / access: There would be some potential impact on access to access to the Dulux premises, which is located on the corner of Nelson Street and the Pacific Highway, due additional construction traffic using Nelson Street. Light construction vehicles may occasionally use Hampden Road near the Artarmon shops, but this infrequent use is not expected to have any effect on access to businesses. These impacts may be exacerbated by the permanent closure and demolition of the Nelson Street overbridge, temporary short term closures of Frank Channon Walk as well as other temporary road closures and redirections.</p>	<p>Surrounding retail and commercial businesses, cafes, serviced apartments and hotels hosting events, hotel patron parking.</p>	<p>Slight negative</p>
<p>Noise, vibration and dust: relating to the potential disturbance created to the operation of businesses and the work environment as a result of construction work including excavation.</p> <p>A review of air quality in particular has identified the potential for commercial and industrial receivers in the Artarmon industrial area to be impacted by dust emissions in the afternoon requiring appropriate mitigation as established by the Sydney Metro Construction Noise and Vibration Strategy (CNVS).</p> <p>Where noise and vibration levels are expected to exceed guideline levels, the impacts will be managed or mitigated in accordance with the Sydney Metro Construction Noise and Vibration Strategy (CNVS).</p>	<p>Surrounding retail and commercial businesses, cafes, serviced apartments and hotels hosting events.</p>	<p>Moderate negative</p>

<p>Property acquisition: relating to the need to acquire an estimated five properties (resulting in acquisition or relocation of occupying businesses or other negotiated arrangements). The potential implications to utility provision as a result of the need to relocate the Ausgrid Depot is also a key consideration.</p>	<p>Relocation of government facilities and closure of commercial businesses in the current location.</p>	<p>Significant negative</p>
<p>Trade increase: relating to additional construction related workers in the locality requiring food and beverage services and other goods to the benefit of businesses such as the Great Northern Hotel or local food retailers around Artarmon and Chatswood stations.</p>	<p>Surrounding retail and commercial premises, cafes, hotels.</p>	<p>Moderate positive</p>
<p>Potential impacts upon operation</p>	<p>Example Stakeholders Influenced</p>	<p>Impact pre mitigation level</p>
<p>Noise and vibration: as a consequence of the operation of Project having a potential minor adverse impact to business operation and the work environment in close proximity to the dive site.</p>	<p>Nearby retail, commercial, serviced apartments and hotels.</p>	<p>Slight negative</p>
<p>Development stimulus: relating to the future redevelopment of surplus land from construction sites resulting in new housing, services and jobs.</p>	<p>Nearby retail, commercial, serviced apartments and hotels.</p>	<p>Moderate positive</p>
<p>Artarmon support facility</p> <p>This precinct relates to land located adjacent to the Gore Hill Freeway in Artarmon where it is prosed to install a traction supply power sub-station.</p>		
<p>Potential impacts during construction</p>	<p>Example stakeholders influenced</p>	<p>Significance of Impact</p>
<p>As there are no businesses located on the site or within close proximity to the precinct, no business impacts have been identified during the construction phase of the project.</p>	<p>N/A</p>	<p>N/A</p>
<p>Potential impacts upon operation</p>	<p>Example stakeholders influenced</p>	<p>Significance of Impact</p>
<p>As there are no businesses located on the site or within close proximity to the precinct, no business impacts have been identified during the operation phase of the project.</p>	<p>N/A</p>	<p>N/A</p>

Crows Nest

Crows Nest Station would be located between the Pacific Highway, Clarke Lane, Oxley Street and Hume Street. The local business precinct presently comprises a mix of commercial and retail businesses and is experiencing notable interest and activity in relation to mixed use development. It is located within close walking proximity to Crows Nest Town Centre and the St Leonards Specialised Centre.

Potential impacts during construction	Example stakeholders influenced	Significance of Impact
<p>Servicing and delivery access: potential impacts in this precinct relate to servicing and delivery constraints for business located along the Pacific Highway and in surrounding Streets such as Clarke Street, Hume Street and Oxley Street. Many businesses in this precinct have a strong reliance on servicing and deliveries as they are retail showrooms for furniture, homewares, picture framing and other bulky goods. Accordingly there are potential disruptions as a consequence of planned or temporary closures to Clark Lane or other surrounding streets.</p>	<p>Surrounding retail, commercial, café, restaurants, medical practices, serviced apartments, day surgeries, government services, hotels, gyms, offices, education facilities, community and hotel events, child care centres.</p>	<p>Moderate negative</p>
<p>Customer access / passing trade: relating to potential disruptions to pedestrian access and visibility of businesses within the precinct as a result of construction hoardings, changed access routes and perceived access challenges.</p> <p>Based on the local business survey's it is assessed that direct access, business visibility and permeability are core drivers of local retail trade in this precinct. Furthermore in accordance with the Transport and Traffic Study, the north south connection along the Pacific Highway is an important route for customers and passing trade.</p> <p>The project proposes minimising customer access impacts by retaining pedestrian access and cycle connections via the southern construction site.</p>	<p>Surrounding retail, commercial, café, restaurants, government services, hotels, community and hotel events</p>	<p>Moderate negative</p>
<p>Supply of and access to car parking: the Traffic and Transport study identifies that there are presently few unrestricted on-street parking spaces available in the broader areas. Despite this changes, to on street parking opportunities (i.e. potential loss of parking in Clark Lane and 2 to 4 spaces on Hume Street) are likely to have an impact (albeit slight) to local businesses given that the local business survey identified the majority of customers who drive and use on-street parking, especially for those using local services and bulky goods (such</p>	<p>Surrounding retail, commercial, café, restaurants, medical practices, serviced apartments, day surgeries, hotels, gyms, offices, government services, education</p>	<p>Slight negative</p>

<p>as Kelly's Child Care Centre or Coco Republic).</p>	<p>facilities, community and hotel events, child care centres and community groups.</p>	
<p>Noise and vibration: relating to the potential disturbance created to the operation of businesses and the work environment as a result of construction work including excavation. These impacts would be most noticeably experienced by amenity sensitive businesses in the precinct.</p> <p>Where noise and vibration levels are expected to exceed guideline levels, the impacts will be managed or mitigated in accordance with the Sydney Metro Construction Noise and Vibration Strategy.</p>	<p>Surrounding retail, commercial, café, restaurants, medical practices, government services, serviced apartments, day surgeries, hotels, gyms, offices, education facilities, community and hotel events, child care centres and community groups.</p>	<p>Moderate negative</p>
<p>Property acquisition: relating to the need to acquire an estimated 10 (one partial) (resulting in acquisition or relocation of occupying businesses, or other negotiated arrangements).</p>	<p>Government services, commercial and retail.</p>	<p>Significant negative</p>
<p>Increased trade for food and beverage: as a consequence of the increase in workers associated with construction of the project. This would especially be a positive impact and potential offset for businesses which may otherwise lose some regular trade around Clark Street, Oxley Street and Hume Street. The nature of small businesses in Crows Nest leans notably towards food and beverage retail together with IT, production and commercial uses.</p>	<p>Surrounding café, retail and commercial premises.</p>	<p>Moderate positive</p>
<p>Potential impacts upon operation</p>	<p>Example stakeholders influenced</p>	<p>Significance of Impact</p>
<p>Changed consumer behaviour: the construction phase is likely to impact the longer term viability of the local services and furniture retail which has been a long term use along the Pacific Highway and surrounding streets. Already these two industries have a much smaller presence than they did previously. Major disruptions, access restrictions and increased traffic congestion as a result of the construction of the project could see these businesses transition further to other locations resulting in a change in the local businesses that operate there.</p>	<p>Surrounding retail, commercial, café, restaurants, medical practices, day surgeries, government services, hotels, gyms, offices, education facilities, community and</p>	<p>Moderate negative</p>

	hotel events, child care centres.	
Competition: the redevelopment of the precinct upon completion of construction work to include new ground floor retail and / or commercial uses may increase competition with surrounding businesses having some degree of potential impact. Other businesses may benefit as a consequence of agglomeration impacts.	Surrounding retail, commercial, café, restaurants, medical practices, day surgeries, hotels, gyms, offices, education facilities, community and hotel events, child care centres.	Neutral
Improved commercial rent / land values: as a consequence of the precinct's enhanced attraction as a place to live and work and therefore invest. There is the potential for commercial rents to increase as a result of increased value uplift within prime locations around the new station. This may force businesses which are utilising the cheaper rent in the considerable B, C and D grade commercial office stock to move elsewhere where there is more affordable rent. This may have an adverse impact for tenants yet a positive impact for property owners. In the case of the latter as a consequence of land value improvements in areas benefitting from enhanced access and appeal.	Surrounding retail, commercial, café, restaurants, medical practices, day surgeries, government services, hotels, gyms, offices, education facilities, community and hotel events, child care centres. Land owners and leasers.	Moderate negative to significant positive
Development stimulus: A commitment to the project and the commencement of work would create a positive catalyst for the redevelopment of some underutilised sites and locations in the precinct. This could result in additional housing and business opportunities with the additional population supporting demand for businesses and services.	Land owners, commercial, grocery, retail, cafes, child care, medical practices, government services, gyms, hotels and offices.	Significant positive
Enhanced access for customers: the operation of the project would create a major access point to the precinct for commuters, visitors and prospective customers. Proposed improvements such as a new signalised pedestrian crossing on northern side of Pacific Highway / Oxley Street intersection, new pedestrian crossings on Clarke Street, Hume Street and Oxley Street, and provision of bike parking on Hume and Oxley Street could also benefit for businesses in this precinct and better link the precinct to surrounding areas such as Crows Nest Town Centre (which is focused along Willoughby Road). Businesses likely to benefit from this enhanced connection and accessibility include food,	Cafes, restaurants, grocery, retail, commercial businesses and medical centres, community services, hotels, offices, child care and community events.	Significant positive

<p>beverage, grocery, special uses, retail, commercial business and lifestyle uses.</p> <p>These improvements are also likely to result in enhanced business investment. The enhanced actual and perceived level of access is also likely to considerably increase passing trade between the new station and the streets to the west of Willoughby Road, which could expand the core entertainment precinct beyond Willoughby Road to Clark, Oxley and Hume Streets providing opportunities for new and expanded business clusters.</p>		
<p>Enhanced business connectivity: the project would provide significant enhanced connections between the precinct and important business and employment nodes such as Macquarie Park, Norwest, Chatswood, North Sydney, Barangaroo and Sydney CBD.</p> <p>This would enhance the appeal of the precinct as a place for businesses to invest and support the State Government’s objectives for employment and business growth in this precinct, whilst potentially reducing existing vacancy levels pertaining to commercial floorspace. It would also enhance the dining and entertainment appeal of the precinct and its accessibility to areas to Sydney’s north i.e. areas along the Sydney Metro Northwest.</p>	<p>Commercial, retail, offices and government.</p>	<p>Significant positive</p>

Victoria Cross

Located beneath Miller Street, McLaren Street and south of Berry Street, the precinct is located within the commercial core of North Sydney which forms part of Global Sydney. The precinct serves a range of commercial, retail and education uses.

Potential impacts during construction	Example stakeholders influenced	Significance of Impact
<p>Servicing and delivery access: potential impacts in this precinct relate to servicing and delivery constraints for business, schools and colleges located along Miller Street and in surrounding Streets such as Denison and Berry.</p> <p>Many businesses in this precinct rely on servicing and deliveries as they are retail and commercial uses. Accordingly there are potential disruptions as a consequence of construction work and any potential disruptions to traffic and pedestrian access. These potential disruptions will be in part reduced however given that the construction sites in this location are self-contained outside of the road corridor (Traffic and Transport Study).</p>	<p>Surrounding commercial and retail premises, education facilities, community events and community facilities.</p>	<p>Moderate negative</p>
<p>Customer access / passing trade: relating to potential disruptions to pedestrian access and visibility of businesses within the precinct as a result of construction hoardings, changed access routes and perceived</p>	<p>Surrounding commercial and retail premises,</p>	<p>Significant negative</p>

access challenges. This has been identified as a key consideration in this station location given the high proportion of existing and forecast future walking journeys in the locality and forecast by the project's Traffic and Transport specialist study upon operation.	education facilities, community events and community facilities.	
Supply of and access to car parking: changes to on street parking opportunities (i.e. potential loss of 2 to 4 spaces on Miller Street) could have a modest effect to local businesses.	Surrounding commercial and retail premises, education facilities, community events and community facilities.	Slight negative
Noise and vibration: relating to the potential disturbance created to the operation of businesses and the work environment as a result of construction work including excavation. These impacts would be most noticeably experienced by amenity sensitive businesses such as outdoor cafes, beauticians and medical facilities in the precinct. Where noise and vibration levels are expected to exceed guideline levels, the impacts will be managed or mitigated in accordance with the Sydney Metro Construction Noise and Vibration Strategy.	Surrounding commercial and retail premises, education facilities, community events and community facilities.	Moderate negative
Traffic congestion: North Sydney is a major access point between multiple suburbs of the inner north and the Sydney Harbour Bridge and Tunnel. Access restrictions in the vicinity of the construction site could to lead to local traffic congestion which could in turn have a negative impact on trading conditions. As referenced above however, these potential disruptions will be in part reduced given that the construction sites in this location are self-contained outside of the road corridor.	Surrounding commercial and retail premises, education facilities, community events and community facilities.	Moderate negative
Property acquisition: relating to the need to acquire an estimated 6 properties within the precinct to facilitate the station's development.	Commercial premises	Significant negative
Increased trade for food and beverage: as a consequence of the increase in workers associated with construction of the project. This would especially be a positive impact and potential offset for businesses which may otherwise lose some regular trade around Miller Street, Berry Street and McLaren Street.	Commercial and retail premises.	Moderate positive
Potential impacts upon operation	Example stakeholders influenced	Significance of Impact
Improved commercial rent/land values: as a consequence of the precinct's enhanced attraction as a place to live and work and therefore invest. There is the potential for commercial rents to increase as a result of increased value uplift within prime locations	Surrounding commercial and retail premises.	Slight negative to significant positive

<p>around the new station. This may force businesses which are utilising the cheaper rent in the considerable B, C and D grade commercial office stock to move elsewhere where there is more affordable rent. As a major commercial centre this enhanced access is likely to have a more positive impact by way of attracting new major commercial tenants.</p> <p>The project is also likely to result in a positive impact for property and land owners as a consequence of land value improvements in areas benefitting from enhanced access and appeal.</p>		
<p>Competition: the redevelopment of the precinct upon completion of construction work to include new ground floor retail and / or commercial uses may increase competition with surrounding businesses having some degree of potential impact. Other businesses may benefit as a consequence of agglomeration impacts.</p>	<p>Surrounding commercial and retail premises.</p>	<p>Neutral</p>
<p>Enhanced business connectivity: the project would provide significant enhanced connections between the precinct and important business and employment nodes such as Chatswood, Barangaroo and Sydney CBD. This would enhance the appeal of the precinct as a place for businesses to invest and support the State Government’s objectives for employment and business growth in this precinct whilst potentially reducing existing vacancy levels pertaining to commercial floorspace. The link with Barangaroo is considered particularly important as it would create opportunities for North Sydney to act as a more affordable business support hub for the high value global headquarters locating within Barangaroo. The link with the Sydney Metro Northwest (previously known as North West Rail Link) and its associated residential areas is also considered key to opening up further knowledge worker employee opportunities for North Sydney as part of the Global Economic Corridor.</p> <p>Importantly, upon operation the station would also provide an interchange with other transport modes (i.e. bus services along Miller Street and cycle links) enhancing business connectivity across Sydney.</p>	<p>Surrounding commercial and retail premises and education facilities.</p>	<p>Significant positive</p>
<p>Staff access, recruitment and retention: the operation of the project and its improved connectivity to employment and residential locations across Sydney would enhance the appeal of this major employment precinct to potential employees and prospectively their retention supporting business growth and productivity within the precinct.</p>	<p>Surrounding commercial and retail premises, education facilities and community facilities.</p>	<p>Moderate positive</p>
<p>Enhanced access for customers: the operation of the project would create a major access point to the precinct for commuters, visitors and prospective customers. The new station would deliver consumers to the very commercial core of North Sydney and allow a transit node (with the existing North Sydney Station) to be located on both the</p>	<p>Surrounding commercial and retail premises, education facilities, community events</p>	<p>Moderate positive</p>

<p>eastern and western sides off the Pacific Highway.</p> <p>These enhancements together with the pedestrian plaza in front of the station, direct pedestrian link to Denison Street, wayfinding and public domain improvements would support North Sydney's retail sector and in turn night-time and weekend trade enhancing the appeal of North Sydney overall.</p>	<p>and community facilities.</p>	
<p>Development stimulus: A commitment to the project and the commencement of work would create a positive catalyst for the redevelopment of some underutilised sites and locations in North Sydney – part of Sydney's Global City.</p>	<p>Surrounding commercial and retail premises.</p>	<p>Significant positive</p>

Blues Point Temporary Site

Located within the Blues Point Reserve at the Blues Point Road / Henry Lawson Avenue intersection this temporary construction site would be accessed via Blues Point Road and Henry Lawson Avenue.

Potential impacts during construction	Example stakeholders influenced	Significance of Impact
<p>Servicing and delivery access: As there are no businesses located within immediate proximity to the construction site, no major impacts have been identified as a result of the proposed works. There is the potential however for some minor short term impacts to be experienced as a result of short-term traffic management measures in the broader locality (including on Blues Point Road).</p>	<p>Retailers, cafes, public house and commercial offices along Blues Point Road and adjacent streets</p>	<p>Slight negative</p>
Potential impacts during operation	Example stakeholders influenced	Significance of Impact
<p>As this location relates to a construction site and there are no businesses located within the immediate vicinity, no impacts during operation have been identified.</p>	<p>N/A</p>	<p>N/A</p>

Barangaroo Station

Located beneath Hickson Road towards its northern end with a station entrance / exit point within the 'Barangaroo Central'. This precinct would provide direct access to an estimated 23,000 new commercial jobs in the Central Barangaroo and Barangaroo South areas as well as some employment areas in the north-western section of Sydney CBD. The station would thereby serve a mix of office, retail, residential, recreational (i.e. Barangaroo Reserve) and special uses within the heart of Global Sydney.

Potential impacts during construction	Example stakeholders influenced	Significance of Impact

<p>Servicing and delivery access: whilst the construction of the station forms part of an existing construction site, the cumulative impacts of the work and their duration could adversely affect servicing and delivery for businesses within Barangaroo that are already operating and in surrounding areas such as Walsh Bay that are located at the end of a peninsula via Hickson Road.</p>	<p>Surrounding commercial, retail and child care.</p>	<p>Moderate negative</p>
<p>Noise and vibration: relating to the potential disturbance created to the operation of commercial businesses and the work environment at the southern end of Hickson Road / Sussex Street as a result of construction work including excavation.</p> <p>Where noise and vibration levels are expected to exceed guideline levels, the impacts will be managed or mitigated in accordance with the Sydney Metro Construction Noise and Vibration Strategy.</p>	<p>Surrounding commercial, retail and child care.</p>	<p>Moderate negative</p>
<p>Supply of and access to car parking: changes to on street parking opportunities (i.e. potential loss of 125 spaces on Hickson Road) could affect local businesses. Given however that very few businesses presently operate in the central section of Hickson Road and the area is under major redevelopment, this impact is considered likely to be minor. Notwithstanding this, mitigation measures are recommended in the instance that such spaces are relied upon by businesses in the broader area.</p>	<p>Surrounding commercial, retail and child care.</p>	<p>Slight negative</p>
<p>Increased trade for food and beverage: as a consequence of the cumulative increase in workers associated with construction of the project.</p>	<p>Surrounding commercial and retail.</p>	<p>Moderate positive</p>
<p>Potential impacts upon operation</p>	<p>Example stakeholders influenced</p>	<p>Significance of Impact</p>
<p>Improved commercial rent / land values: The project would enhance the appeal of the precinct to international corporations and investors thereby improving its attraction and value as a place to live and work and therefore invest. There is the potential for commercial rents to consequently increase as a result of increased value uplift within prime locations around the new Station.</p>	<p>Land owners, leasers, commercial and retail.</p>	<p>Significant positive</p>
<p>Enhanced business connectivity: the project would provide significant enhanced connections between the precinct and the northern sections of Sydney CBD creating a more attractive business environment and enhancing agglomeration benefits.</p> <p>More broadly the project would also enhance connections with other supporting business and employment nodes such as Chatswood, North Sydney and Crows Nest.</p>	<p>Surrounding commercial, retail and child care.</p>	<p>Significant positive</p>
<p>Staff access, recruitment and retention: the operation of the project</p>	<p>Surrounding</p>	<p>Moderate Positive</p>

<p>and its improved connectivity to employment and residential locations across Sydney would enhance the appeal of this major employment precinct to potential employees and prospectively their retention supporting business growth and productivity within the precinct.</p>	<p>commercial, retail and child care.</p>	
<p>Enhanced access for customers: the operation of the project would create a major access point to the precinct for commuters, visitors and prospective customers. The new station would deliver consumers to the very heart of Barangaroo – Central Barangaroo – enhancing the appeal of the special uses and entertainment services and facilities within / to be located within the precinct. The close proximity of the precinct to Walsh Bay may also result in subsequent benefits to businesses in this area.</p> <p>Importantly the project would also provide significant improvements to the local pedestrian environment including new footpaths along Hickson Road, footpaths through Barangaroo Central, crossing facilities on Hickson Road, Little Clyde Street and Agar Street together with wayfinding signage. This will increase the appeal and ease of working, shopping and visiting the area thereby improving the number and range of customers for existing and future businesses.</p>	<p>Surrounding commercial, retail and child care.</p>	<p>Moderate positive</p>

Martin Place

The Martin Place local business precinct is located to the south of Hunter Street between Castlereagh and Elizabeth; this station would integrate with the existing rail services in Martin Place to serve Sydney CBD.

The local business survey identified that servicing and maintaining access to the major retail, financial and commercial services in this precinct is critical to the success of businesses in the CBD.

<p>Potential impacts during construction</p>	<p>Example stakeholders influenced</p>	<p>Significance of Impact</p>
<p>Servicing and delivery access: potential impacts in this precinct relates to servicing and delivery constraints for businesses as a consequence of road closures, traffic re-directions and the cumulative impacts of construction work from projects such as the CBD and South East Light Rail where they temporally and geographically overlap.</p> <p>It is understood that such impacts are most likely to occur between 2017 and 2023 especially during the overlap with CBD and South East Light Rail main work from 2017-2019.</p> <p>These impacts will be moderated to some degree as the construction sites are not expected to extend into the road corridor.</p>	<p>Surrounding banking, commercial, retail, child care, cafes, restaurants, bars, hotels, grocers, offices, cleaning services, newsagencies, offices, education and pharmacies.</p>	<p>Moderate negative</p>
<p>Customer access / passing trade: relating to potential disruptions to pedestrian access and visibility of businesses within the precinct as a</p>	<p>Surrounding commercial, retail,</p>	<p>Moderate negative</p>

<p>result of construction hoardings, changed access routes and perceived access challenges.</p>	<p>restaurants, cafes, bars, grocers, child care, dry cleaners, hotels and community events.</p>	
<p>Noise, vibration and dust: relating to the potential disturbance created to the operation of businesses and the work environment as a result of construction work including excavation. These impacts would be most noticeably experienced by amenity sensitive businesses such as outdoor cafes, bars and medical facilities in the precincts and could be exacerbated by construction work occurring for other projects in the locality.</p> <p>A review of air quality has identified the potential for morning westerly winds to present the greatest potential impacts with regards to dust, identifying facilities such as the Sydney Eye Hospital in particular.</p> <p>Where noise and vibration levels are expected to exceed guideline levels, the impacts will be managed or mitigated in accordance with the Sydney Metro Construction Noise and Vibration Strategy.</p>	<p>Surrounding banking, commercial, retail, child care, cafes, restaurants, bars, hotels, grocers, offices, cleaning services, newsagencies, offices, education and pharmacies.</p>	<p>Moderate negative</p>
<p>Property acquisition: relating to the need to acquire an estimated four properties (resulting in acquisition or relocation of occupying businesses, or other negotiated arrangements).</p>	<p>Retail and commercial premises.</p>	<p>Significant negative</p>
<p>Changed consumer behaviour: A potential impact on local businesses is the changed consumer behaviour during the construction period. As the CBD layout is generally cross form with a grid structure, this may mean businesses where there are access restrictions would lose trade to other streets.</p>	<p>Surrounding commercial, retail, restaurants, cafes, bars, grocers, child care, dry cleaners, hotels and community events.</p>	<p>Moderate negative</p>
<p>Increased trade for food and beverage: as a consequence of the increase in workers associated with construction of the project. By way of comparison to the existing number of customers in the CBD, this impact would be relatively modest during the day although demand for services may increase more noticeably during evening periods as a consequence of scheduled evening construction work.</p>	<p>Surrounding commercial, retail, restaurants, cafes, bars, grocers, dry cleaners, and hotels.</p>	<p>Slight positive</p>

Potential impacts upon operation	Example stakeholders influenced	Significance of Impact
<p>Changed consumer behaviour: relating to the longer term behavioural change of visitors and workers to the CBD and its associated retail and business services.</p> <p>Such as change could occur as a result of existing Sydney CBD customers and clients using services and facilities in alternative locations to avoid the construction work and choosing not to return to CBD locations on completion of work. Owing to the high volume of pedestrians in this location and the interchange between transport options provided by the station, this impact is at worst expected to be slight to businesses in the location.</p> <p>Additionally, any permanent closure closer of pedestrian linkages within the station area would likely result in reduced passing trade for those retailers that face or connect to these linkages.</p> <p>An example of this would be the permanent closure of the underground connection to the MLC Centre. However, given the high connectivity and pedestrian access above ground around this tunnel connection coupled with the presence of an IGA supermarket acting as an anchor tenant, the impact would be slight to minimal to businesses in this location.</p>	<p>Surrounding commercial, retail, restaurants, cafes, bars, grocers, medical premises, child care, dry cleaners, hotels and community events</p>	<p>Slight negative</p>
<p>Enhanced access for customers and visitors: in converse to the above impact, the operation of the project would create a major access point to the precinct for a wide range of commuters, visitors and prospective customers from across Sydney.</p> <p>The access improvements together with the proposed public domain and pedestrian connection improvements (i.e. new pedestrian plazas at the station entry points and underground pedestrian link between Martin Place and the metro station platforms) would support the appeal of visiting retail, services, events and businesses in this precinct for a broader catchment of resident and tourist visitors.</p>	<p>Surrounding banking, commercial, retail, child care, cafes, restaurants, bars, hotels, grocers, offices, cleaning services, newsagencies, offices, education and pharmacies.</p>	<p>Moderate positive</p>
<p>Improved commercial rent/land values: as a consequence of the precinct's enhanced attraction as a place to work and therefore invest. There is the potential for commercial rents and land values to increase as a result of increased value uplift within prime locations around the new station.</p> <p>This value uplift would be supported by the landscape improvements proposed for the location including enhancements to Hunter, Castlereagh and Elizabeth Streets as well as integration of the station and pedestrian plaza. An assessment of landscape character and visual</p>	<p>Land owners, leasers, commercial, office and retail.</p>	<p>Significant positive</p>

<p>amenity has also identified likely improvements to views into Martin Place on account of design improvements.</p>		
<p>Competition: the redevelopment of the precinct upon completion of construction work to include new ground floor retail and / or commercial uses may increase competition with surrounding businesses having some degree of potential impact. Other businesses may benefit as a consequence of agglomeration impacts.</p>	<p>Surrounding commercial, office and retail.</p>	<p>Neutral</p>
<p>Enhanced business connectivity: the project would provide significant enhanced connections between the precinct and important business and employment nodes such as Chatswood, North Sydney and Barangaroo as well as southern sections of Sydney CBD creating greater opportunity for the City's expansion.</p> <p>Improved connections would also be achieved owing to the northern station entrance locations providing a direct route to the new light rail station on George Street.</p> <p>The additional rail facilities would also help to relieve stations such as Wynyard that are already experiencing overcrowding thereby improving the customer experience of travelling by rail and further encouraging the use of this transport for employees and customers.</p>	<p>Surrounding commercial, office and retail.</p>	<p>Significant positive</p>
<p>Staff access, recruitment and retention: the operation of the project and its improved connectivity to employment and residential locations across Sydney, together with reduced train crowding and new cycle parking facilities on Castlereagh Street at both station entrances, would enhance the appeal of Sydney CBD and its tenants to prospective employees together with their retention thereby supporting business growth and productivity within the precinct.</p>	<p>Surrounding commercial, retail, restaurants, cafes, bars, grocers, medical premises, child care, dry cleaners, hotels and community events</p>	<p>Moderate positive</p>
<p>Development Stimulus: A commitment to the project and the commencement of work would create a positive catalyst for the redevelopment of some underutilised sites and locations in the precinct with the potential to provide major new commercial opportunities for tenants and investors.</p> <p>The demolition of buildings on the corners of Hunter, Castlereagh and Elizabeth Streets as well as the corners of Castlereagh street, Martin Place and Elizabeth Street to facilitate the development of the stations would also provide major redevelopment opportunities in their own right.</p>	<p>Surrounding commercial, office and retail.</p>	<p>Significant positive</p>

Pitt Street

The Pitt Street local business precinct is located between Pitt Street and Castlereagh Streets, north of the Park Street intersection and south of the Bathurst Street intersection. The Pitt Street precinct would provide important connections with light rail services and businesses located within and between the Midtown Retail and Town Hall area as well the expanding southern area of Sydney CBD.

The local business survey identified that servicing and maintaining access to the major retail, financial and commercial services in this precinct is critical to the success of businesses in the CBD.

Potential impacts during construction	Example stakeholders influenced	Significance of Impact
<p>Servicing and delivery access: potential impacts in this precinct relates to servicing and delivery constraints for businesses (particularly major retail businesses in locations such as Pitt, Park and Castlereagh Street) as a consequence of road closures, traffic re-directions and the cumulative impacts of construction work from Projects such as the CBD and South East Light Rail where they temporally and geographically overlap. These impacts will be moderated to some degree as the construction sites are not expected to extend into the road corridor.</p> <p>It is understood that such impacts are most likely to occur between 2017 and 2023 especially during the overlap with CBD and South East Light Rail main work from 2017-2019 resulting in a more significant cumulative impact during construction compared to other locations. These changes are also likely to affect other transport related businesses such as taxis that serve inner city clients requiring the relocation of taxi ranks (i.e. the taxi rank on Park Street) and the need for out of hours deliveries which could affect business operations and / or costs.</p>	<p>Surrounding retail, commercial, banking, grocers, cafes, restaurants, hotels, theatre, place of public worship, government, bars and gym.</p>	<p>Significant to moderate negative</p>
<p>Customer access / passing trade: relating to potential disruptions to pedestrian access and visibility of businesses within the precincts as a result of construction hoardings, changed access routes and perceived access challenges.</p>	<p>Surrounding retail, commercial, banking, cafes, restaurants and hotels.</p>	<p>Moderate negative</p>
<p>Noise and vibration: relating to the potential disturbance created to the operation of businesses and the work environment as a result of construction work including excavation. These impacts would be most noticeably experienced by amenity sensitive businesses such as outdoor cafes, bars and medical facilities in the precinct and could be exacerbated by construction work occurring for other projects in the locality.</p> <p>Where noise and vibration levels are expected to exceed guideline levels, the impacts will be managed or mitigated in accordance with</p>	<p>Surrounding retail, commercial, banking, grocers, government, cafes, restaurants, hotels, theatre, place of public worship, bars and gym.</p>	<p>Moderate negative</p>

the Sydney Metro Construction Noise and Vibration Strategy.		
Property acquisition: relating to the need to acquire an estimated 11 properties (resulting in acquisition or relocation of occupying businesses, or other negotiated arrangements).	Retail, government, medical, adult, grocer, hotel, gambling, cafes and commercial.	Significant negative
Changed consumer behaviour: A potential impact on local businesses in this precinct is the changed consumer behaviour during the construction period. As the CBD layout is generally cross form with a grid structure, this may mean businesses where there are access restrictions would lose trade to other streets.	Surrounding retail, commercial, grocers, cafes, restaurants, hotels, theatre and bars.	Moderate negative
Increased trade for food and beverage: as a consequence of the increase in workers associated with construction of the project. By way of comparison to the existing number of customers in the CBD, this impact would be relatively modest during the day although demand for services may increase more noticeably during evening periods as a consequence of scheduled evening construction work.	Surrounding retail and commercial.	Slight positive
Potential impacts upon operation	Example stakeholders influenced	Significance of Impact
Changed consumer behaviour: relating to the longer term behavioural change of visitors to the CBD and its associated retail and business services. Such a change could occur as a result of existing Sydney CBD customers and clients using services and facilities in alternative locations to avoid the construction work and choosing not to return to CBD locations on completion of work.	Surrounding retail, commercial, grocers, cafes, restaurants, hotels, theatre and bars.	Slight negative
Enhanced access for customers and visitors: in converse to the above impact, the operation of the project would create a major access point to the precinct for a wide range of commuters, visitors and prospective customers from across Sydney. The access improvements together with the proposed public domain (new pedestrian plazas at station entrance points in Bathurst and Pitt Streets) and pedestrian connection improvements including wayfinding signage would support the appeal of visiting retail, services, events and businesses in this precinct for a broader catchment of resident and tourist visitors.	Surrounding retail, commercial, banking, grocers, government, cafes, restaurants, hotels, theatre, place of public worship, bars and gym.	Moderate positive
Improved commercial rent/land values: as a consequence of the precinct's enhanced attraction as a place to work and therefore invest. There is the potential for commercial rents and land values to increase as a result of increased value uplift within prime locations	Land owners, leasers, commercial and retail.	Significant positive

<p>around the new station.</p> <p>Values in the area would be supported by the local amenity improvements identified by the projects Landscape Character and Visual Amenity assessment including footpath widening, street activation and legible public transport access points.</p>		
<p>Competition: the redevelopment of the precinct upon completion of construction work to include new ground floor retail and / or commercial uses may increase competition with surrounding businesses having some degree of potential impact. Other businesses may benefit as a consequence of agglomeration impacts.</p>	<p>Surrounding retail, commercial, banking, grocers, government, cafes, restaurants, hotels, theatre, place of public worship, bars and gym.</p>	<p>Neutral</p>
<p>Enhanced business connectivity: the project would provide significant enhanced connections between the precinct and important business and employment nodes such as Chatswood, North Sydney and Barangaroo as well as southern sections of Sydney CBD creating greater opportunity for the City's expansion.</p> <p>The Pitt Street station would also facilitate a major interchange between bus and rail facilities.</p>	<p>Surrounding retail, commercial, banking, grocers, government, cafes, restaurants, hotels, theatre, place of public worship, bars and gym.</p>	<p>Significant positive</p>
<p>Staff access, recruitment and retention: the operation of the project and its improved connectivity to employment and residential locations across Sydney would enhance the appeal of Sydney CBD and its tenants to prospective employees together with their retention thereby supporting business growth and productivity within the precinct.</p>	<p>Surrounding retail, commercial, banking, grocers, government, cafes, restaurants, hotels, theatre, place of public worship, bars and gym.</p>	<p>Moderate positive</p>
<p>Development Stimulus: A commitment to the project and the commencement of work would create a positive catalyst for the redevelopment of some underutilised sites and locations in the precincts with the potential to provide major new commercial opportunities for tenants and investors. The demolition of buildings to facilitate the development of the stations would also provide major redevelopment opportunities in their own right.</p>	<p>Land owners, leasers, commercial and retail.</p>	<p>Significant positive</p>

Central Station

Located within the existing Central Station below existing rail platforms 13 to 15, the new station would provide a key connection between the existing Sydney Trains (suburban) and NSW Trains (Intercity) services. Businesses located in this precinct are primarily food and drinks, retail and accommodation; primarily accessed by pedestrian footfall due to the close proximity to the CBD and educational facilities.

Potential impacts during construction	Example stakeholders influenced	Significance of Impact
<p>Customer access / passing trade: relating to potential disruptions to pedestrian access and convenience as a result of construction hoardings, changed access routes and perceived access challenges within and surrounding the station.</p> <p>It is noted that the Devonshire Street pedestrian tunnel would be closed for two weeks. This would result in some impacts to businesses reliant on this passing trade / connectivity east / west across the station and loss of revenue during this period. It is understood however that the closure of this connection would be planned for a period of two weeks only and is likely to result in moderate pedestrian disruptions and impacts to those businesses throughout the closure period only.</p> <p>Attention is also drawn to the impact of the project to businesses fronting Railway Square and the northern concourse owing to the proposed locations of the construction sites and their impacts to local amenity and connectivity.</p>	<p>Surrounding retail, commercial, sports facilities, take away food premises and newsagencies.</p>	<p>Moderate negative</p>
<p>Noise, vibration and dust: relating to the potential disturbance created to the operation of businesses within and surrounding the station as a result of construction work including excavation. These impacts would be most noticeably experienced by amenity sensitive businesses such as outdoor cafes, bars and medical facilities in the precinct and could be exacerbated by construction work occurring for other projects in the station.</p> <p>A review of air quality in particular has identified the potential for morning westerly winds to present the greatest potential impacts from dust, identifying facilities such as the multi-story accommodation in Railway Square as affected by dust.</p> <p>Where noise and vibration levels are expected to exceed guideline levels, the impacts will be managed or mitigated in accordance with the Sydney Metro Construction Noise and Vibration Strategy.</p>	<p>Surrounding retail, commercial, sports facilities, take away food premises and newsagencies.</p>	<p>Moderate negative</p>
<p>Property acquisition: relating to the need to acquire an estimated</p>	<p>Retail, cafes and</p>	<p>Significant negative</p>

five properties (resulting in acquisition or relocation of occupying businesses, or other negotiated arrangements).	commercial.	
Increased trade for food and beverage: for businesses located within and immediately surrounding the Station as a consequence of the increase in workers associated with construction of the project.	Surrounding retail, commercial, take away food premises and newsagencies.	Slight positive
Potential impacts upon operation	Example stakeholders influenced	Significance of Impact
<p>Increase in commercial rent: as a consequence of the precinct's enhanced accessibility, there is the potential for commercial rents in the locality to improve to the benefit of existing landowners. This may however have some adverse impacts to local businesses benefitting from the precincts stock of lower grade office space which is used by creative industries including media production, advertising and PR.</p> <p>Increased rail connectivity, concurrent with upgrades to the public domain and station surrounds, could mean a major increase in demand for new rental space, which could effectively price out creative industries and others in lower grade office stock which generally operate at smaller revenue margins.</p>	Land owners, leasers, retail and commercial premises.	Moderate negative to moderate positive
<p>Enhanced access for customers and visitors: whilst the precinct is already served by suburban and intercity rail services, the project would facilitate a critical interchange with intercity and suburban rail services, light rail and bus services. This in turn enhances the accessibility of the locality and its businesses to customers from across Sydney.</p> <p>The access improvements together with the proposed public domain and pedestrian connection improvements would support the appeal of visiting retail services, educational facilities, events and businesses in this precinct for a broader catchment of resident and tourist visitors.</p>	Surrounding retail, commercial, sports facilities, take away food premises, education facilities and newsagencies.	Moderate positive
<p>Enhanced business connectivity: the project would provide significant enhanced connections between the precinct and its major facilities (i.e. University of Technology Sydney, the University of Notre Dame and The University of Sydney etc.) with important business and employment nodes such as Chatswood, North Sydney, Barangaroo and the Australian Technology Park as well as southern sections of Sydney CBD creating greater opportunity for the City's expansion.</p> <p>Business connectivity would also be improved via the connection of the three light rail lines in the CBD i.e. the Circular Quay to Central line, Randwick / Kingsford to Central and Inner West (Dulwich Hill) to Central line.</p>	Surrounding retail, commercial, sports facilities, take away food premises, education facilities and newsagencies.	Significant positive

<p>Staff access, recruitment and retention: the operation of the project and its improved connectivity to employment and residential locations across Sydney would enhance the appeal of this southern section of Sydney CBD and its tenants to prospective employees together with their retention thereby supporting business growth and productivity within the precinct.</p>	<p>Surrounding retail, commercial, sports facilities, take away food premises and newsagencies.</p>	<p>Moderate positive</p>
<p>Development stimulus: A commitment to the project and the commencement of work would create a positive catalyst for the redevelopment of some underutilised sites and locations in the precincts in support of major Government programmes such as the Central to Eveleigh Transformation Urban Renewal Corridor together with improvements to Central Station in its own right. These developments would provide significant new business opportunities together with enhanced visibility and access to trade for existing businesses.</p>	<p>Land owners, commercial and retail premises.</p>	<p>Significant Positive</p>

Waterloo

This local business precinct relates to the block of land bound by Botany Road, Raglan Street, Cope Street and Buckland Street. It incorporates a broad range of businesses including a pharmacy, hairdresser and convenience store on Raglan Street; warehouse, storage and distribution uses on Cope Street and a mix of retail and showroom uses on Botany Road. The precinct is surrounded by a broader mixed retail and showroom precinct as well as residential uses.

Potential impacts during construction	Example stakeholders influenced	Significance of Impact
<p>Servicing and delivery access: potential impacts in this precinct relate to servicing and delivery constraints for business located along Botany Road or on opposing sides of Raglan and Buckland Street.</p>	<p>Surrounding hotels, retail, commercial, industries, warehousing, wholesaling, events, galleries, grocer and manufacturing.</p>	<p>Moderate negative</p>
<p>Loss of on-street car parking: The potential loss of car parking i.e. 2 to 4 spaces on Raglan Street, along Wellington and Cope Street could have an impact to surrounding local businesses and shoppers.</p>	<p>Surrounding hotels, retail, commercial, industries, warehousing, wholesaling, events, galleries, grocer and manufacturing.</p>	<p>Slight negative</p>
<p>Customer access / passing trade: the construction phase of the project would result in changes to vehicle and pedestrian flows that could influence the level of trade passing businesses and subsequent customers and sales.</p>	<p>Hotels, retail and commercial.</p>	<p>Moderate negative</p>

<p>Noise and vibration: relating to the potential disturbance created to the operation of businesses and the work environment as a result of construction work including excavation.</p> <p>Where noise and vibration levels are expected to exceed guideline levels, the impacts would be managed or mitigated in accordance with the Sydney Metro Construction Noise and Vibration Strategy.</p>	<p>Surrounding hotels, retail, commercial, industries, warehousing, wholesaling, events, galleries, grocer and manufacturing.</p>	<p>Moderate negative</p>
<p>Property acquisition: relating to the need to acquire an estimated 18 properties (resulting in acquisition or relocation of occupying businesses, or other negotiated arrangements).</p>	<p>Retail, commercial, industries, warehousing, wholesaling, events, galleries, grocer and manufacturing.</p>	<p>Significant negative</p>
<p>Trade Increase: relating to additional construction related workers in the locality requiring food and beverage services and other goods to the benefit of businesses located along Botany Road or within Raglan and Buckland Streets.</p>	<p>Hotels, retail, grocer and commercial.</p>	<p>Moderate positive</p>
<p>Potential impacts upon operation</p>	<p>Example stakeholders influenced</p>	<p>Significance of Impact</p>
<p>Competition: the redevelopment of the precinct upon completion of construction work to include new ground floor retail and / or commercial uses may increase competition with surrounding businesses having some degree of potential impact. Other businesses may benefit as a consequence of agglomeration impacts.</p>	<p>Surrounding hotels, retail, commercial, industries, warehousing, wholesaling, events, galleries, grocer and manufacturing.</p>	<p>Neutral</p>
<p>Enhanced access for customers: the operation of the project would create a major gateway for additional customers in the precinct. This would have major spin off benefits for existing businesses in this precinct as well as the investment of prospective new businesses.</p>	<p>Surrounding hotels, retail, commercial, wholesaling, events, galleries and grocer.</p>	<p>Significant positive</p>
<p>Enhanced business connectivity: the project would provide significant enhanced connections between the precinct and important business and employment nodes both within Sydney CBD and the Australian Technology Park. This would enhance the appeal of the precinct as a place for businesses to invest and support the continued growth of the economic, innovation and research clusters in the southern sections of Sydney.</p>	<p>Surrounding hotels, retail, commercial, wholesaling, events, galleries and grocer.</p>	<p>Significant positive</p>
<p>Staff access, recruitment and retention: the operation of the project and its improved connectivity to employment and residential locations across Sydney would enhance the appeal of this major</p>	<p>Surrounding hotels, retail, commercial, industries,</p>	<p>Significant positive</p>

employer to potential employees and prospectively their retention as well as job generation for local residents.	warehousing, wholesaling, events, galleries, grocer and manufacturing.	
Development stimulus: A commitment to the project and the commencement of work would create a positive catalyst for the redevelopment of both the precinct (station site) as well as locations surrounding the precinct including the existing Redfern / Waterloo Housing Estate.	Commercial, retail, industries, manufacturing, warehousing and wholesaling.	Significant positive
Land values: improved capacity and reliability of public transport is likely to create positive benefits to landowners.	Land owners, commercial and retail premises and industries.	Moderate to significant positive

Marrickville dive site (southern)

To support the construction process, multiple sites are identified in this local business precinct including work site A – located to the West of the T3 Bankstown Line in Marrickville (to the north of Sydenham Station) and work site B, located to the east of the T3 Bankstown Line on Unwins Bridge Road presently occupied by a Sydney Trains depot and Marrickville council works depot. Uses on the site are generally light industrial in nature and include warehouse and distribution uses, recreation (Sydney Trapeze Centre) and urban support services (i.e. car repairs).

Potential impacts during construction	Example stakeholders influenced	Significance of Impact
Servicing and delivery access: potential impacts in this precinct relate to constraints or restrictions to access for businesses located in close proximity to the site i.e. as a consequence of altered signals at intersections and temporary road closures and redirections etc.	Surrounding industrial, commercial and government.	Moderate negative
Loss of on-street parking: The local business impacts survey revealed that on-street parking is a major factor in business patronage in the area. As it is relatively dense for an industrial area, the on-street parking is considered an important asset both for staff parking and for customers. It is understood however that the construction work would only result in the loss of 2 to 4 car parking spaces in the precinct.	Surrounding industrial and commercial.	Slight negative
Noise and vibration: relating to the potential disturbance created to the operation of businesses and the work environment as a result of construction work including excavation. Where noise and vibration levels are expected to exceed guideline levels, the impacts would be managed or mitigated in accordance with the Sydney Metro Construction Noise and Vibration Strategy.	Surrounding industrial and commercial.	Moderate negative

Property Acquisition: relating to the need to acquire an estimated eight properties (resulting in acquisition or relocation of occupying businesses, or other negotiated arrangements).	Industrial.	Significant negative
Demand for services: As a predominantly industrial area, businesses within the precinct may benefit during the construction phase on account of demand for industrial services or construction materials.	Industrial.	Moderate positive
Trade increase: relating to additional construction related workers in the locality requiring food and beverage services and other goods to the benefit of local businesses i.e. those businesses located on the eastern side of the rail corridor.	Retail and commercial in the vicinity of the area.	Moderate positive
Potential impacts upon operation	Example stakeholders influenced	Significance of Impact
Noise, vibration and dust: as a consequence of the operation of the Project, noise and vibration from the project is not expected to exceed adopted criteria.	Surrounding industrial and commercial.	Neutral
Development stimulus: relating to the potential redevelopment of surplus land and development capacity above the construction sites as businesses.	Surrounding industrial and commercial.	Significant positive

Potential Mitigation Measures

In order to mitigate the impacts to local businesses during the construction and operation periods of the project, a range of construction, transport, traffic, air quality, noise, vibration and landscape measures have been identified and are set out in the relevant technical papers (i.e. please see Technical Paper No.1 Traffic and Transport and Technical Paper No.2 Noise and Vibration respectively).

In cases where property acquisition is unavoidable, any property would need to be compulsorily acquired in accordance with Section 55 (a) – (f) of the *Land Acquisition (Just Terms Compensation) Act 1991*. This means that any property owners affected by the project would not only be paid fair market value, but other costs and losses such as disturbances to business operation due to relocation.

Specific to business impacts however, the following mitigation measures are recommended as per the tables below.

Table 26: Mitigation measures

	Mitigation measures	Local business precincts affected
BI1	Specific consultation would be carried out with businesses potentially impacted during construction. Consultation would aim to identify and develop measures to manage the specific construction impacts for individual businesses.	All
BI2	A business impact risk register would be developed to identify, rate and manage the specific construction impacts for individual businesses.	All
BI3	Appropriate signage would be provided around construction sites to provide visibility to retained businesses.	All except metro rail tunnels

1 STW: Surface track works; CDS: Chatswood dive site; AS: Artarmon substation; CN: Crows Nest Station; VC: Victoria Cross Station; BP: Blues Point temporary site; GI: Ground improvement works; BN: Barangaroo Station; MP: Martin Place Station; PS: Pitt Street Station; CS: Central Station; WS: Waterloo Station; MDS: Marrickville dive site; Metro rail tunnels: Metro rail tunnels not related to other sites (eg TBM works); PSR: Power supply routes.

APPENDIX A: SURVEY RESULTS

In order to identify the key impacts associated with the Sydney Metro, a phone survey of local businesses (selected at random) surrounding the proposed stations was undertaken. The following Appendix provides an overview of the methods used to collect and collate the data as well as key findings. The implications of the findings and how they relate to the project have been discussed in Chapters 2 and 3.

Methodology

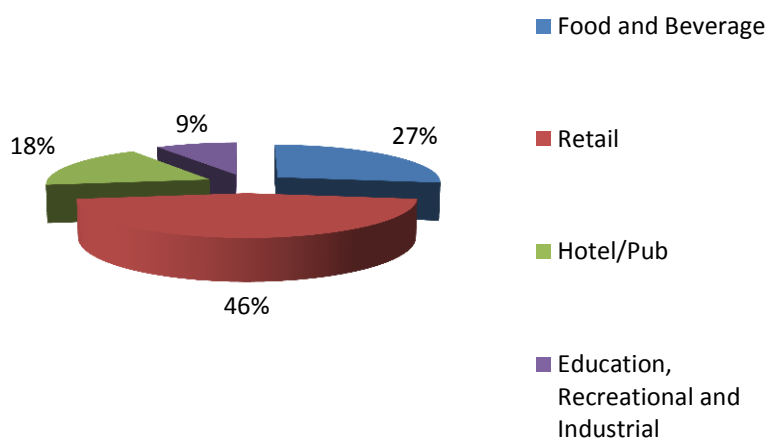
HillPDA conducted a phone business survey from a range of commercial and retail businesses located around the proposed Sydney Metro stations. The surveys encompassed a range of questions relating to the operation of the business, delivery methods used and access to the premises. A total of 83 businesses responded to the surveys across the project. A summary of the surveys and their key findings are provided below.

Business survey results

Crows Nest

Type of business?

Of the businesses that responded to this question, 27 per cent were food and beverage, 45 per cent retail, 18 per cent hotel/pub premises and 9 per cent a mix of education, recreation and industrial respectively.



What is the approximate capacity of your business, including staff and customers?

Of the businesses that responded, 90 per cent had less than 10 employees, 10 per cent had between 10-20 employees.

45 per cent of the businesses did not respond regarding the amount of patrons. Of the respondents, 50 per cent had less than 20 patrons and 50 per cent had more than 100 patrons.

What are your general trading hours or hours of operation?

Of the businesses that responded, 18 per cent operated evening hours (generally commencing either 9am or 11am) and 82 per cent operated in usual business hours.

What are your main trading days?

Of the businesses that responded, 64 per cent of the businesses traded 7 days a week, 18 per cent Monday-Saturday and 18 per cent Monday to Friday.

How do your staff usually travel to your business?

Of the businesses that responded, 55 per cent responded that their staff generally arrived by public transport, whilst 45 per cent responded by car.

How do customers usually travel to your business?

Of the businesses that responded, 55 per cent said by walking, 45 per cent said by car.

Do you receive deliveries?

100 per cent of the businesses that responded received deliveries, but none contained a loading dock. 100 per cent of business received their deliveries from the street.

91 per cent of businesses received under 10 deliveries a week, and 9 per cent received between 10-20.

What is your business' existing off-street vehicle access and loading/parking capacity?

Of the businesses that responded, 82 per cent did not have any off street parking. 100 per cent of businesses that did have car parking had more than 3 car spaces.

Is passing foot traffic off the street a considerable proportion of your business?

Of the businesses that responded, 73 per cent responded that foot traffic was a considerable proportion of their business, whilst 27 per cent said no.

If YES what proportion of customers do you estimate walk in from the street?

Of the businesses that responded to the above question, 45 per cent attributed that foot traffic contributed 25-50 per cent, 27 per cent responded with under 25 per cent and 9 per cent were unsure.

Do you think restricted pedestrian access would have a significant impact on your trade?

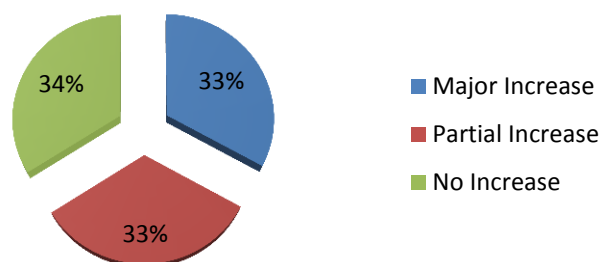
Of the businesses that responded, 82 per cent answered that restricted pedestrian access would have a significant impact on their trade, 9 per cent no impact and 9 per cent unsure.

Is visual exposure and signage of your business important to your trade?

Of the businesses that responded, 73 per cent responded that visual exposure and/or signage was 'vital' to their business, whilst 9 per cent said it was 'less' important, 9 per cent not important and 9 per cent unsure.

Do you think additional rail transport infrastructure and stations in the area would further generate business?

Of the businesses that responded, 55 per cent responded that additional rail transport infrastructure and stations in the area would result in a 'major increase in business', 36 per cent responded with 'partial increase in business', 9 per cent responded 'no, business would likely stay the same'.



Victoria Cross

Type of business?

Of the businesses that responded to this question, 10 per cent were food and beverage, 80 per cent retail, 10 per cent commercial/real estate.

What is the approximate capacity of your business, including staff and customers?

Of the businesses that responded, 80 per cent had less than 10 employees, and 20 per cent had between 10-20 employees.

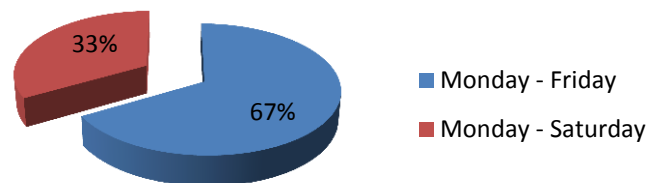
90 per cent of the businesses did not respond regarding the amount of patrons, whilst 10 per cent had more than 100 patrons.

What are your general trading hours or hours of operation?

Of the businesses that responded, 100 per cent operated in usual business hours.

What are your main trading days?

Of the businesses that responded, 50 per cent Monday-Saturday and 50 per cent Monday to Friday.



How do your staff usually travel to your business?

Of the businesses that responded, 90 per cent responded that their staff generally arrived by public transport and 10 per cent responded that their staff generally arrived by walking.

How do customers usually travel to your business?

Of the businesses that responded, 30 per cent said by walking, 50 per cent said by car whilst 20 per cent said by public transport.

Do you receive deliveries?

90 per cent of the businesses that responded received deliveries, with 10 per cent containing a loading dock. 90 per cent of business received their deliveries from the street.

40 per cent of businesses received under 10 deliveries a week, 10 per cent received between 10-20, 40 per cent received 20+ deliveries and 10 per cent were unsure.

What is your business' existing off-street vehicle access and loading/parking capacity?

Of the businesses that responded, 100 per cent did not have any off street parking.

Is passing foot traffic off the street a considerable proportion of your business?

Of the businesses that responded, 90 per cent responded that foot traffic was a considerable proportion of their business, whilst 10 per cent said no.

If YES what proportion of customers do you estimate walk in from the street?

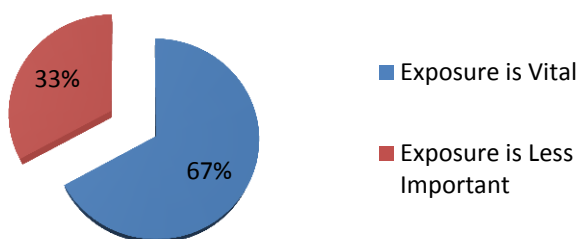
Of the businesses that responded to the above question, 20 per cent attributed that foot traffic contributed more than 75 per cent of their business, 20 per cent said between 50-75 per cent, 10 per cent said between 25-50 per cent and 20 per cent responded with under 25 per cent. 30 per cent were unsure.

Do you think restricted pedestrian access would have a significant impact on your trade?

Of the businesses that responded, 90 per cent answered that restricted pedestrian access would have a significant impact on their trade and 10 per cent no impact.

Is visual exposure and signage of your business important to your trade?

Of the businesses that responded, 80 per cent responded that visual exposure and/or signage was 'vital' to their business, whilst 20 per cent said it was 'less' important.



Do you think additional rail transport infrastructure and stations in the area would further generate business?

Of the businesses that responded, 10 per cent responded that additional rail transport infrastructure and stations in the area would result in a 'major increase in business', 30 per cent responded with

'partial increase in business', 30 per cent responded 'no, business would likely stay the same' and 30 per cent were unsure.

Barangaroo

Type of Business?

Of the businesses that responded to this question, 60 per cent were food and beverage whilst 20 per cent were retail and hotel/pub premises respectively.

What is the approximate capacity of your business, including staff and customers?

Of the businesses that responded, 20 per cent had less than 10 employees, 60 per cent had between 10-20 employees and 20 per cent had more than 20 employees.

40 per cent of the businesses were unsure of the amount of patrons, whilst 20 per cent had less than 20 patrons, 20 per cent had been 20-100 patrons and 20 per cent had more than 100 patrons.

What are your general trading hours or hours of operation?

Of the businesses that responded, 20 per cent operated 24/7, 40 per cent operated evening hours (generally commencing either 9am or 11am) and 40 per cent operated in usual business hours.

What are your main trading days?

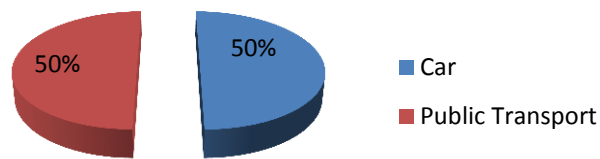
Of the businesses that responded, 60 per cent of the businesses traded 7 days a week, 20 per cent Monday-Saturday and 20 per cent Monday to Friday.

How do your staff usually travel to your business?

Of the businesses that responded, 80 per cent responded that their staff generally arrived by walking, whilst 20 per cent responded by car.

How do customers usually travel to your business?

Of the businesses that responded, 50 per cent said by car whilst 50 per cent said by public transport.



Do you receive deliveries?

100 per cent of the businesses that responded received deliveries, with 20 per cent containing a loading dock. 60 per cent of business received their deliveries from the street and 20 per cent from a side street.

40 per cent of businesses received under 10 deliveries a week, 20 per cent received between 10-20 and 40 per cent received 20+ deliveries.

What is your business' existing off-street vehicle access and loading/parking capacity?

Of the businesses that responded, 40 per cent did not have any off street parking, 40 per cent had between 1-3 car spaces and 20 per cent had more than 3 spaces allocated to them.

Is passing foot traffic off the street a considerable proportion of your business?

Of the businesses that responded, 80 per cent responded that foot traffic was a considerable proportion of their business, whilst 20 per cent said no.

If YES what proportion of customers do you estimate walk in from the street?

Of the businesses that responded, 40 per cent attributed that foot traffic contributed to more than 75 per cent of their business, 20 per cent said between 50-75 per cent and 20 per cent responded with under 25 per cent. 20% were unsure.

Do you think restricted pedestrian access would have a significant impact on your trade?

Of the businesses that responded, 100 per cent answered that restricted pedestrian access would have a significant impact on their trade.

Is visual exposure and signage of your business important to your trade?

Of the businesses that responded, 75 per cent responded that visual exposure and/or signage was 'vital' to their business, whilst 25 per cent said it was 'less' important.

Do you think additional rail transport infrastructure and stations in the area would further generate business?

Of the businesses that responded, 40 per cent responded that additional rail transport infrastructure and stations in the area would result in a 'major increase in business', 40 per cent responded with 'partial increase in business' and 20 per cent responded 'no, business would likely stay the same'.

Martin Place

Type of Business?

Of the businesses that responded to this question, 30 per cent were food and beverage and 70 per cent retail.

What is the approximate capacity of your business, including staff and customers?

Of the businesses that responded, 50 per cent had less than 10 employees and 40 per cent had between 10-20 employees. 10 per cent of businesses were unsure.

What are your general trading hours or hours of operation?

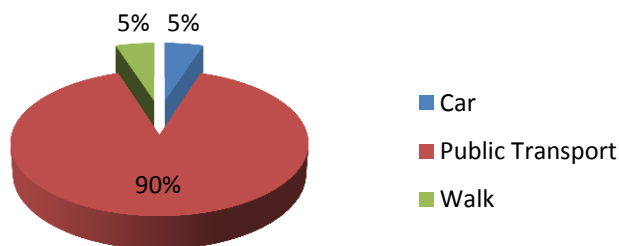
Of the businesses that responded, 10 per cent operated evening hours (generally commencing either 9am or 11am) and 90 per cent operated in usual business hours.

What are your main trading days?

Of the businesses that responded, 30 per cent of the businesses traded 7 days a week, 20 per cent Monday-Saturday and 50 per cent Monday to Friday.

How do your staff usually travel to your business?

Of the businesses that responded, 90 per cent responded that their staff generally arrived by public transport, 5 per cent responded that their staff generally arrived by walking, whilst 5 per cent responded by car.



How do customers usually travel to your business?

Of the businesses that responded, 90 per cent said by walking whilst 10 per cent said by public transport.

Do you receive deliveries?

100 per cent of the businesses that responded received deliveries, with 50 per cent containing a loading dock. 50 per cent of businesses receive their deliveries from the street.

30 per cent of businesses receive under 10 deliveries a week, 30 per cent received between 10-20 and 40 per cent received 20+ deliveries.

What is your business' existing off-street vehicle access and loading/parking capacity?

Of the businesses that responded, 80 per cent did not have any off street parking. 100 per cent of those businesses that did have car parking had less than 3 car spaces.

Is passing foot traffic off the street a considerable proportion of your business?

Of the businesses that responded, 70 per cent responded that foot traffic was a considerable proportion of their business, whilst 30 per cent said no.

If YES what proportion of customers do you estimate walk in from the street?

Of the businesses that responded to the above question, 10 per cent attributed that foot traffic contributed more than 75 per cent of their business, 10 per cent said between 50-75 per cent, 30 per cent said between 25-50 per cent and 30 per cent responded with under 25 per cent. 20 per cent were unsure.

Do you think restricted pedestrian access would have a significant impact on your trade?

Of the businesses that responded, 80 per cent answered that restricted pedestrian access would have a significant impact on their trade and 20 per cent no impact.

Is visual exposure and signage of your business important to your trade?

Of the businesses that responded, 60 per cent responded that visual exposure and/or signage was 'vital' to their business, whilst 40 per cent said it was 'less' important.

Do you think additional rail transport infrastructure and stations in the area would further generate business?

Of the businesses that responded, 40 per cent responded that additional rail transport infrastructure and stations in the area would result in a 'major increase in business', 30 per cent responded with 'partial increase in business', 20 per cent responded 'no, business would likely stay the same' and 10 per cent were unsure.

Pitt Street

Type of Business?

Of the businesses that responded to this question, 60 per cent were food and beverage, 30 per cent retail and 10 per cent were commercial premises.

What is the approximate capacity of your business, including staff and customers?

Of the businesses that responded, 90 per cent had less than 10 employees and 10 per cent had between 10-20 employees.

100 per cent of the businesses did not respond regarding the amount of patrons.

What are your general trading hours or hours of operation?

Of the businesses that responded, 30 per cent operated 24/7, 50 per cent operated evening hours (generally commencing either 9am or 11am) and 20 per cent operated in usual business hours.

What are your main trading days?

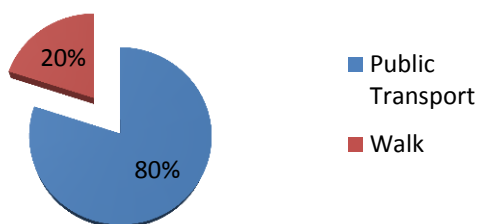
Of the businesses that responded, 80 per cent of the businesses traded 7 days a week and 20 per cent Monday-Saturday.

How do your staff usually travel to your business?

Of the businesses that responded, 80 per cent responded that their staff generally arrived by public transport and 20 per cent responded that their staff generally arrived by walking.

How do customers usually travel to your business?

Of the businesses that responded, 80 per cent said by walking whilst 20 per cent said by public transport.



Do you receive deliveries?

90 per cent of the businesses that responded received deliveries, with 10 per cent containing a loading dock. 90 per cent of business received their deliveries from the street and 10 per cent were unsure.

30 per cent of businesses received under 10 deliveries a week, 40 per cent received between 10-20 and 10 per cent received 20+ deliveries.

What is your business' existing off-street vehicle access and loading/parking capacity?

Of the businesses that responded, 90 per cent did not have any off street parking. 100 per cent of those businesses that did have car parking had less than 3 car spaces.

Is passing foot traffic off the street a considerable proportion of your business?

Of the businesses that responded, 100 per cent responded that foot traffic was a considerable proportion of their business.

If YES what proportion of customers do you estimate walk in from the street?

Of the businesses that responded to the above question, 20 per cent attributed that foot traffic contributed more than 75 per cent of their business, 20 per cent said between 50-75 per cent, 20 per cent said between 25-50 per cent and 10 per cent responded with under 25 per cent. 30 per cent were unsure.

Do you think restricted pedestrian access would have a significant impact on your trade?

Of the businesses that responded, 100 per cent answered that restricted pedestrian access would have a significant impact on their trade.

Is visual exposure and signage of your business important to your trade?

Of the businesses that responded, 100 per cent responded that visual exposure and/or signage was 'vital' to their business.

Do you think additional rail transport infrastructure and stations in the area would further generate business?

Of the businesses that responded, 30 per cent responded that additional rail transport infrastructure and stations in the area would result in a 'major increase in business', 40 per cent responded with 'partial increase in business', 10 per cent responded 'no, business would likely stay the same' and 20 per cent were unsure.

Central Station

Type of Business?

Of the businesses that responded to this question, 36 per cent were food and beverage, 10 per cent retail, 18 per cent hotel/pub premises and 36 per cent a mix of education, recreation and textiles.

What is the approximate capacity of your business, including staff and customers?

Of the businesses that responded, 73 per cent had less than 10 employees, 9 per cent had between 10-20 employees and 18 per cent had more than 20 employees.

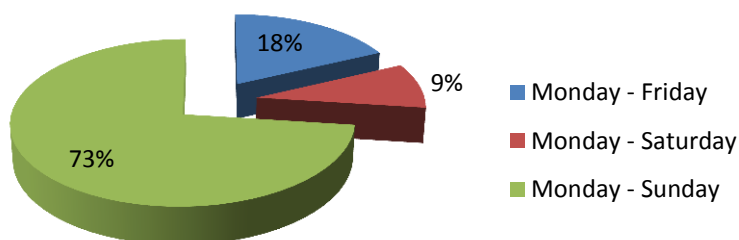
73 per cent of the businesses did not respond regarding the amount of patrons, whilst 9 per cent had less than 20 patrons, 9 per cent had been 20-100 patrons and 9 per cent had more than 100 patrons.

What are your general trading hours or hours of operation?

Of the businesses that responded, 18 per cent operated 24/7, 36 per cent operated evening hours (generally commencing either 9am or 11am) and 46 per cent operated in usual business hours.

What are your main trading days?

Of the businesses that responded, 73 per cent of the businesses traded 7 days a week, 9 per cent Monday-Saturday and 18 per cent Monday to Friday.



How do your staff usually travel to your business?

Of the businesses that responded, 73 per cent responded that their staff generally arrived by public transport, 9 per cent responded that their staff generally arrived by walking, whilst 18 per cent responded by car.

How do customers usually travel to your business?

Of the businesses that responded, 55 per cent said by walking, 9 per cent said by car whilst 36 per cent said by public transport.

Do you receive deliveries?

91 per cent of the businesses that responded received deliveries, with 10 per cent containing a loading dock. 90 per cent of business received their deliveries from the street.

40 per cent of businesses received under 10 deliveries a week, 50 per cent received between 10-20 and 10 per cent received 20+ deliveries.

What is your business' existing off-street vehicle access and loading/parking capacity?

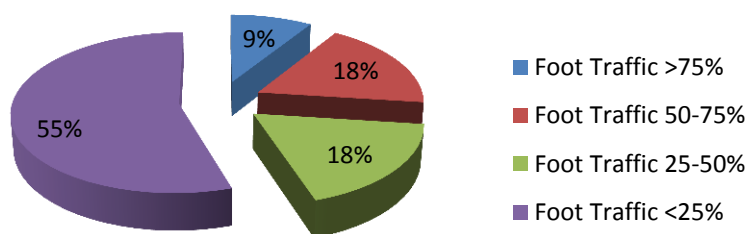
Of the businesses that responded, 91 per cent did not have any off street parking. 100 per cent of those businesses that did have car parking had more than 3 car spaces.

Is passing foot traffic off the street a considerable proportion of your business?

Of the businesses that responded, 82 per cent responded that foot traffic was a considerable proportion of their business, whilst 18 per cent said no.

If YES what proportion of customers do you estimate walk in from the street?

Of the businesses that responded to the above question, 9 per cent attributed that foot traffic contributed more than 75 per cent of their business, 18 per cent said between 50-75 per cent, 18 per cent said between 25-50 per cent and 55 per cent responded with under 25 per cent.



Do you think restricted pedestrian access would have a significant impact on your trade?

Of the businesses that responded, 91 per cent answered that restricted pedestrian access would have a significant impact on their trade and 9 per cent no impact.

Is visual exposure and signage of your business important to your trade?

Of the businesses that responded, 82 per cent responded that visual exposure and/or signage was 'vital' to their business, whilst 18 per cent said it was 'less' important.

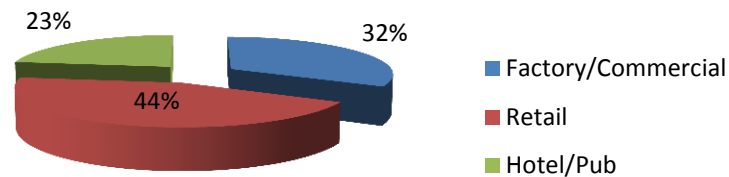
Do you think additional rail transport infrastructure and stations in the area would further generate business?

Of the businesses that responded, 18 per cent responded that additional rail transport infrastructure and stations in the area would result in a 'major increase in business', 45 per cent responded with 'partial increase in business', 27 per cent responded 'no, business would likely stay the same' and 10 per cent were unsure.

Waterloo

Type of Business?

Of the businesses that responded to this question, 45 per cent were retail, 23 per cent hotel/pub premises and 32 per cent a mix of factory and commercial.



What is the approximate capacity of your business, including staff and customers?

Of the businesses that responded, 89 per cent had less than 10 employees and 11 per cent had between 10-20 employees.

23 per cent of the businesses did not respond regarding the amount of patrons. Of the businesses that responded, 42 per cent had less than 20 patrons, 29 per cent had been 20-100 patrons and 29 per cent had more than 100 patrons.

What are your general trading hours or hours of operation?

Of the businesses that responded, 33 per cent operated evening hours (generally commencing either 9am or 11am), 55 per cent operated in usual business hours, and 12 per cent operated in the morning.

What are your main trading days?

Of the businesses that responded, 78 per cent of the businesses traded 7 days a week and 22 per cent Monday to Friday.

How do your staff usually travel to your business?

Of the businesses that responded, 33 per cent responded that their staff generally arrived by public transport, 11 per cent responded that their staff generally arrived by walking, whilst 56 per cent responded by car.

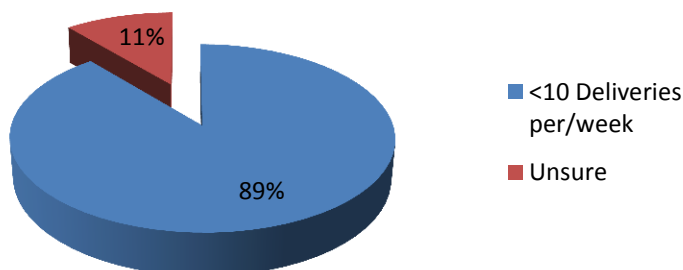
How do customers usually travel to your business?

Of the businesses that responded, 23 per cent said by walking and 78 per cent said by car.

Do you receive deliveries?

100 per cent of the businesses that responded received deliveries, with 56 per cent containing a loading dock. 89 per cent of business received their deliveries from the street.

89 per cent of businesses received under 10 deliveries a week whilst 11 per cent were unsure, however generally received deliveries all throughout each weekday.



What is your business' existing off-street vehicle access and loading/parking capacity?

Of the businesses that responded, 67 per cent did not have any off street parking. 100 per cent of those businesses that did have car parking had less than 3 car spaces.

Is passing foot traffic off the street a considerable proportion of your business?

Of the businesses that responded, 22 per cent responded that foot traffic was a considerable proportion of their business, whilst 78 per cent said no.

If YES what proportion of customers do you estimate walk in from the street?

Of the businesses that responded to the above question, 50 per cent attributed that foot traffic contributed more than 75 per cent of their business and 50 per cent said between 50-75 per cent.

Do you think restricted pedestrian access would have a significant impact on your trade?

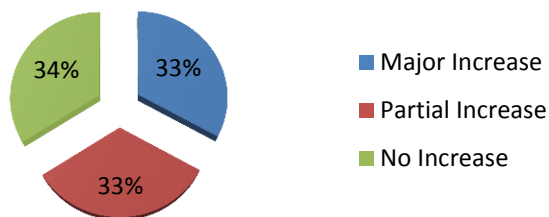
Of the businesses that responded, 22 per cent answered that restricted pedestrian access would have a significant impact on their trade and 78 per cent no impact.

Is visual exposure and signage of your business important to your trade?

Of the businesses that responded, 67 per cent responded that visual exposure and/or signage was 'vital' to their business, whilst 23 per cent said it was 'less' important and 10 per cent said not important.

Do you think additional rail transport infrastructure and stations in the area would further generate business?

Of the businesses that responded, 33 per cent responded that additional rail transport infrastructure and stations in the area would result in a 'major increase in business', 33 per cent responded with 'partial increase in business' and 34 per cent responded 'no, business would likely stay the same'.



Sydenham

Type of Business?

Of the businesses that responded to this question, 29 per cent were food and beverage and 71 per cent were Industrial.

What is the approximate capacity of your business, including staff and customers?

Of the businesses that responded, 86 per cent had less than 10 employees, and 24 per cent had more than 20 employees.

29 per cent of businesses responded to this question. Of the businesses that responded, 50 per cent had less than 20 patrons and 50 per cent had been 20-100 patrons.

What are your general trading hours or hours of operation?

Of the businesses that responded, 43 per cent operated evening hours (generally commencing either 9am or 11am) and 57 per cent operated in usual business hours.

What are your main trading days?

Of the businesses that responded, 57 per cent of the businesses traded 7 days a week, 14 per cent Monday-Saturday and 29 per cent Monday to Friday.

How do your staff usually travel to your business?

Of the businesses that responded, 86 per cent responded that their staff generally arrived by car and 14 per cent by public transport.

How do customers usually travel to your business?

Of the businesses that responded, 14 per cent said by walking and 86 per cent said by car.

Do you receive deliveries?

86 per cent of the businesses that responded received deliveries, with 43 per cent containing a loading dock. 57 per cent of business received their deliveries from the street or side lane.

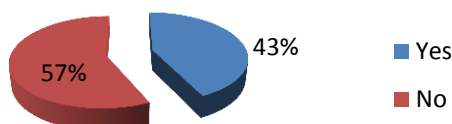
34 per cent of businesses received under 10 deliveries a week, 33 per cent received between 10-20 and 33 per cent received 20+ deliveries.

What is your business' existing off-street vehicle access and loading/parking capacity?

Of the businesses that responded, 43 per cent did not have any off street parking. 75 per cent of those businesses that did have car parking had more than 3 car spaces whilst 25 per cent had less than 3.

Is passing foot traffic off the street a considerable proportion of your business?

Of the businesses that responded, 43 per cent responded that foot traffic was a considerable proportion of their business, whilst 57 per cent said no.



If YES what proportion of customers do you estimate walk in from the street?

Of the businesses that responded to the above question, 33 per cent attributed that foot traffic contributed between 25-50 per cent and 67 per cent responded with under 25 per cent.

Do you think restricted pedestrian access would have a significant impact on your trade?

Of the businesses that responded, 58 per cent answered that restricted pedestrian access would have a significant impact on their trade and 42 per cent no impact.

Is visual exposure and signage of your business important to your trade?

Of the businesses that responded, 71 per cent responded that visual exposure and/or signage was 'vital' to their business, whilst 29 per cent said it was 'less' important.

Do you think additional rail transport infrastructure and stations in the area would further generate business?

Of the businesses that responded, 57 per cent responded that additional rail transport infrastructure and stations in the area would result in a 'partial increase in business', 43 per cent responded 'no, business would likely stay the same'.

APPENDIX B: REVIEW OF PREVIOUS LOCAL BUSINESS IMPACT STUDIES

The following is an assessment of previous local business impact studies from other major infrastructure projects in Sydney as well as nationally and globally. A core element to this appendix will be to identify any lessons learned from previous studies, major issues and successful mitigation strategies across major infrastructure projects in NSW.

The CBD and South East Light Rail

The CBD and South East Light Rail is currently under construction and when operational will extend from Circular Quay through George Street, Surry Hills, Moore Park and Randwick. From this point it will branch out along two separate lines to Kingsford and Randwick Junction.

The CBD and South East Light Rail project received planning approval in June 2014 with early works commencing in August 2014. Transport for NSW as part of the approval has committed to giving businesses and the public significant advance notice of major works in the study area.

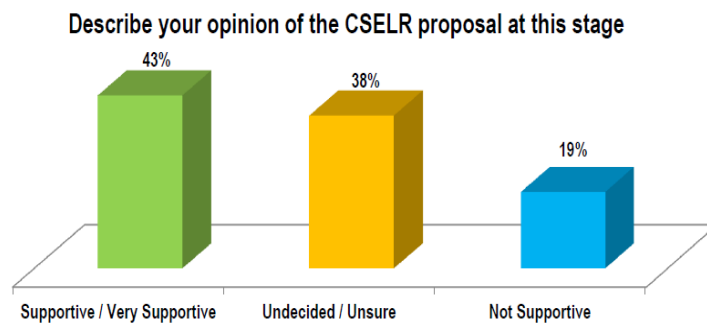
The economic impact assessment

An economic impact assessment was commissioned in 2013 to inform the environmental impact statement of the CBD and South East Light Rail project. The assessment provided a profile of the geographic localities and businesses that would be likely to be affected by the proposed CBD and South East Light Rail project. It assessed potential economic and business impacts during construction and operation. Further, the economic impact assessment identified measures to mitigate potential negative economic impacts to businesses whilst enhancing the benefits of the project.

Impacts to businesses

The economic impact assessment was built on an evidence base that includes a snapshot survey of 100 businesses located along the proposed CBD and South East Light Rail route. The survey recorded that 43 per cent of businesses surveyed were either supportive or very supportive of the project. A further 38 per cent were undecided or unsure as shown in Figure 1 below.

Figure 1: Snapshot survey of support for the CBD and South East Light Rail Project



Source: HillPDA 2013

Overall, 90 per cent of businesses considered the construction phase of the project would have a negative impact on their business whilst 93 per cent anticipated that once operational, the project would have a positive impact to their turnover and viability.

Based on the snapshot business survey results, stakeholder engagement, a review of the study area and associated research, a summary of potential impacts were scoped and these are listed in the Table below.

Table 1: Summary of potential impacts to businesses during construction and operation

	Potential negative impacts	Potential positive impacts
Construction	<ul style="list-style-type: none"> ▪ Servicing and deliveries ▪ On street parking ▪ Noise, vibration and dust ▪ Customer access / passing trade ▪ Traffic congestion and travel times ▪ Vehicle operating costs ▪ Loss of power and utilities ▪ Staff access, recruitment and retention ▪ Visual amenity ▪ Business turnover / viability 	<ul style="list-style-type: none"> ▪ Passing trade ▪ Trade increase ▪ Demand for services ▪ Stimulation of redevelopment opportunities
Operation	<ul style="list-style-type: none"> ▪ Commercial rent for tenants ▪ On street parking ▪ Changed behaviour during construction ▪ Perceived fear of crossing tracks ▪ Delivery and servicing constraints ▪ Customer access and parking ▪ Noise, vibration and dust 	<ul style="list-style-type: none"> ▪ Enhanced access for customers ▪ Increased capacity and Development opportunities ▪ Commercial rent for landlords ▪ Congestion, deliveries and servicing ▪ Land values ▪ Staff access, recruitment and retention ▪ Business turnover / viability ▪ Visual amenity

Source: HillPDA 2013

Proposed mitigation measures and commitments

The CBD and South East Light Rail economic impact assessment recommended three key plans to address the potential economic and business impacts of the project:

1. The preparation and commitment to a construction environmental management plan. Such a plan would be a comprehensive document setting out the means to minimise the level of disturbance created as a result of the construction process to businesses, pedestrians, visitors and workers across the study area;
2. The preparation and commitment to an access management plan. Such a plan would be prepared in liaison with businesses and landowners to understand their servicing and delivery requirements. The Plan would then identify and implement means of maintaining (and where possible enhancing) access to

businesses for deliveries and servicing during both the construction and operational phases of the project; and

3. The preparation and commitment to a business landowner and an engagement management plan. The engagement management plan would support the preparation and effective implementation of the access management plan. It would also identify and implement means by which to keep businesses informed of the project's progress and methods to proactively support businesses through the construction phase.

Current mitigation measures in place

HillPDA have conducted enquiries with Transport for NSW to understand the current mitigation measures that have been implemented since receiving official approval to commence the CBD and South East Light Rail project. Two ongoing initiatives have been identified:

1. Business forums: Transport for NSW has established business forums in precincts across the CBD and South East Light Rail route. The forums are broken up into three local business precinct (CBD, Surry Hills/ Moore Park and Randwick/Kingsford/Kensington). These business forums provide opportunities for information sharing, raising questions and discussion of the project's potential impacts, including the ways businesses can best prepare for the construction phase.
2. The Sydney Light Rail (SLR) Business Reference Group: was established as a consultative group to make recommendations regarding initiatives that would support businesses along the light rail route during the construction period. One initiative was to discuss the opportunity to waiver outdoor dining licences and the impact it may have to businesses²⁰.

Wyong Pacific Highway Upgrade Business Impact Assessment

NSW Roads and Maritime Services, commissioned a local business impact assessment to assess the impacts of the proposed upgrade of the Pacific Highway through Wyong town centre from a two lane to a four lane road. The proposed widening of the Pacific Highway was to be achieved by removing the existing parking spaces along the highway. An assessment was undertaken of the implications that could arise during the construction and operation of the proposed upgrade.

²⁰ Transport for NSW, Sydney Light Rail Business Reference Group, Minutes Meeting 01 (Dec-2014)

Assessed impacts

The local business impact assessment identified a number of potential business impacts as a consequence of the project. One such impact related to the loss of convenience. Albeit relatively minor, there would be a loss of convenience to customers and thereby a potential impact to businesses, as a result of the lost ability of a right hand turn from the Highway into Alison Road. Further, there would be no adverse impacts from the displacement of the two businesses fronting the Pacific Highway on the east side given that these businesses would be compensated and the existing businesses did not have any nexus relationship with them.

It was also estimated that some loss of trade was expected during the construction period, particularly for those shops fronting the highway. Loss in trade is generally attributable to inconvenience, loss of parking spaces and reduced amenity due to noise, dust, etc.

Campbelltown Road Upgrade – Business Impact Assessment

The RMS commissioned a local business impact assessment in relation to the proposed widening of Campbelltown Road from Camden Valley Way to Brooks Road through Bardia and Denham Court. The project proposed road safety measures to accommodate the forecast increase in traffic which is expected over the next decade as a result of development of the South West Growth Centre.

Assessed impacts

The Study found that only two businesses were likely to experience potential adverse impacts - the BP Service Station which relied on passing vehicles and providing convenience to its customers, together with M&A Landscapes Pty Ltd which benefitted from vehicles and main road visibility. The likely impacts to other businesses in the area were identified as likely to be minor, since they did not rely on exposure to the main road to any great extent.

Mitigation measures

The following measures have either been implemented or were recommended to minimise the potential impacts to businesses in the locality as a consequence of the project:

1. The incorporation of a roundabout at Denham Court Road intersection which would enable southbound traffic to U-turn;

2. The inclusion of a right turning lane into Blomfield Road for motorists travelling northbound;
3. Retention of left in / left out access for existing properties along Campbelltown Road;
4. A construction management plan to be implemented that minimised disruption to the road network and to businesses in the locality; and
5. The inclusion of temporary signage during the construction phase to inform southbound traffic of alternative access routes to the businesses located on the other side of the road.

The Crossrail – UK London

Crossrail is a 118km city / suburban rail line that is currently under construction in London and its surrounding suburbs. Crossrail is one of the most significant infrastructure projects ever undertaken in the United Kingdom, with a project value of \$15.9 billion. The project aims to ease congestion, improve travel times across London and offer better connections between where people live and work.

On completion Crossrail will deliver a high frequency, high capacity service to 40 stations linking the commuter belt suburbs east of London to that west of London. Similar to Sydney Metro, the centrepiece of Crossrail are twin-bore tunnels extending 21kms under central London.

An assessment of the Crossrail project has identified significant benefits to commuters and the wider economy once the project becomes fully operation by late 2018. However during construction a number of direct and indirect impacts to businesses and commuters have also been identified.

Mitigation strategies

The project team for Crossrail have implemented carefully considered management strategies to minimise disruption to local residents and businesses. These strategies included:

- The *Crossrail Act 2008* which gave power to build the railway. It also established the formal standards that the construction phase must abide by under an Environmental Minimum Requirements and the Construction Code;
- Pre-project workshops with local councils, local organisations, residents and businesses to help plan the construction work and minimise direct and indirect impacts to stakeholders;

- The engagement of community relations representatives for each construction site to distribute information about the work and provide a first contact for local communities. The local community (including businesses) were given the opportunity to sign up to receive this information electronically in order to keep them well informed about construction work; and
- The establishment of a helpdesk , which is available 24 hours a day to provide answers to questions and act on complaints from members of the public. The helpdesk staff work alongside contractors to speedily resolve any problems that might occur.

Purple Line –Washington DC and Suburbs, USA

The Purple Line is a proposed 16-mile (26km) east-west light rail line extending from Bethesda in Montgomery County to New Carrollton in Prince George's County. Similar to Sydney Metro, the Purple Line will provide a direct connection to a number of existing railway stations in addition to 21 planned new stations and local bus services. The Department of Transportation, Maryland Transit Administration (MTA) is leading this project along with several other stakeholders including local municipalities.

On completion the project will provide relief to the growing congestion on Washington Roads including the I-495 Beltway, by providing alternative transport with direct links to the city from the suburbs in Maryland. According to MTA the Purple Line is anticipated to commence in 2015 and will take approximately five years to complete.

Mitigation strategies

Prior to the commencement of the Purple Line project, the MTA successfully implemented an 'Open for Business' campaign. The campaign was tendered to inform owners, proprietors and managers of businesses directly along the Purple Line alignment to help maintain strong business vitality during construction. The campaign implemented various strategies including:

- Open for Business Packets: The MTA offered information packs which included:
 - General information about the Purple Line and potential economic benefits;
 - Strategies in place to assist local businesses affected by the construction stage of the project; and

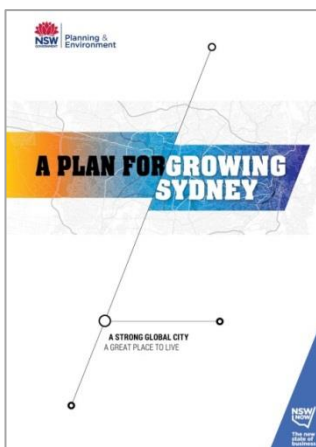
- Resources and contact information.
- Community liaisons officers allocated at specific precincts of the rail corridor provided a first point of contact for businesses that had issues, questions or concerns regarding the project; and
- Encouraging businesses to take advantage of training and development programs that are available through the Maryland Small Business Development Centre. This allows business owners and staff to be proactive and pursue business development training while construction may limit current activities.

APPENDIX C: RELEVANT GOVERNMENT POLICY

The following provides an overview and assessment of the core strategic planning policy and Government direction regarding land use in NSW and the relevance of this to the Sydney Metro.

Specifically this chapter focuses on how current planning policy and land use controls supports, governs and impacts local businesses and the relationship of the Sydney Metro to this.

NSW Government - Plans and Strategies



A Plan for Growing Sydney (2014)

'A Plan for Growing Sydney' was released by the NSW Department of Planning and Environment in December 2014. It is the primary planning policy to guide development and land use in Sydney over the next 25 years.

One of the key strategies in 'A Plan for Growing Sydney' is to bring Sydney's residents together with a common purpose and to develop a competitive economy with world-class services and transport²¹. The plan outlines future growth precincts for residential and commercial operations and the related need to preserve future transport corridors allowing for Sydney's transport networks to develop as the city's population grows.

In light of this, Section 1.11 of the paper details the commencement of a Corridor Strategy for the Sydney Metro. The NSW Government has initiated preservation of a dedicated corridor for the project and identified opportunities to maximise the delivery of jobs closer to homes and homes closer to jobs. Further, the plan identifies the potential future transport corridor for Sydney Metro connecting the Sydney Metro Northwest (previously known as North West Rail Link) to Bankstown. The plan also highlights a future potential extension of Sydney Metro to Hurstville.

The Sydney Metro would help to facilitate the NSW Government's goal to develop Sydney as a strong global city and a great place to live by better connecting one of the largest growth areas (the North West Region) with Global Sydney and other major emerging employment and cultural centres in the global economic corridor.

²¹ A Plan for Growing Sydney, NSW Planning & Environment 2014



Based on previous local business impact studies from rail projects, the construction phase would restrict the ability of some businesses to operate in several of the proposed precincts.

However, once operational the Sydney Metro would exponentially outweigh the short term negative impacts by stimulating the economy with high speed transport connectivity to employment and residential centres.

Rebuilding NSW State Infrastructure Strategy (2014)

The 'Rebuilding NSW' State Infrastructure Strategy highlights the importance of sustaining productivity growth in our major centres and our regional communities by rebuilding NSW infrastructure including transport, education, sports and arts.

The Strategy highlighted an infrastructure funding allocation, including the reservation of \$7 billion for the 'Sydney Rapid Transit' (now known as the Sydney Metro). This allocation would be funded from 2016-17 with the intention to develop a Sydney Metro harbour crossing which would facilitate the commencement and operation of the Sydney Metro project. The Strategy highlights key benefits of a Sydney Metro including:

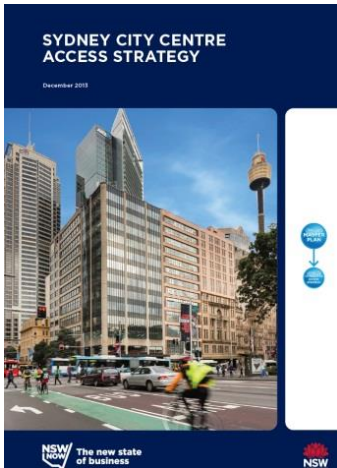
- Reduced travel times;
- Remove over 17 million car trips from the road each year;
- Enable growth of around 40,000 additional jobs in Sydney; and
- Trigger significant increase in economic 'value-add' generated by businesses along its route, reaching over \$5 billion per year.

NSW Long Term Transport Masterplan (2012)

The NSW Long Term Transport Master Plan outlines a framework for the NSW Government to deliver an integrated, modern transport system that puts the customer first. It identifies the challenges that the transport system in NSW should address over the next twenty years and sets out a series of actions to combat these challenges.

Section 4, 'Getting Sydney Moving Again' sets out a series of transport challenges facing Sydney with particular regard to keeping Sydney's most important transport corridors moving and providing travel options that support and enhance the strength and success of Sydney. The plan identifies short and long term goals in modernising Sydney's rail network, this includes undertaking detailed planning for a Sydney Metro Harbour Crossing through the CBD.





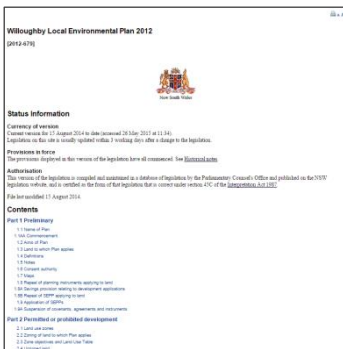
A 12 month Master Plan consultation process was conducted with customers, experts (industry, government and business) and the community. There was positive feedback on the transport plan in context of supporting businesses to provide goods and services to society and in so doing, supports jobs and economic productivity.

Sydney City Centre Access Strategy

The Sydney City Centre Access Strategy is a guide for the delivery of a fully integrated transport network that prepares Sydney’s city centre for the future. It identifies the challenges that the transport system in NSW should address over the next twenty years and sets out a series of actions to combat these challenges.

The Strategy outlines the benefits of developing a Sydney Metro Network to the City of Sydney. Specifically, the strategy points out ‘The transition to a metro transit system would offer frequent, fast, comfortable and high capacity link between suburban regions such as the North West to the city centre’.

Willoughby City Council - Plans and Strategies



Willoughby Local Environmental Plan 2012

Willoughby Local Environmental Plan 2012 is the environmental planning instrument for land use planning in Willoughby LGA. The Plan sets out a series of aims, of particular relevance i.e.:

- To provide for local and regional transport needs and promote and increase the use of active transport through walking, cycling and the use of public transport.

North Sydney Council - Plans and Strategies



St Leonards and Crows Nest Planning Study

The St Leonards and Crows Nest Planning Study (precincts 2 and 3) has been prepared by North Sydney Council to achieve a desirable and quality standard of urban renewal in St Leonards / Crows Nest. The study outlines a number of strategies including:

- Built form controls that stimulate job growth and support a modern, mixed use centre;

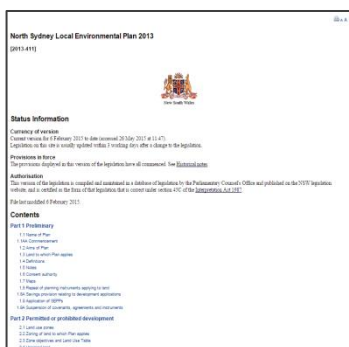
- Improved planning processes that better incorporate design considerations upfront; and
- Streetscape upgrades that encourage walking, public transport and cycle use and initiatives to reduce traffic congestion;

The Sydney Metro project would likely contribute to the revitalisation of the Crows Nest precinct. This is outlined as a goal in this study. The plans illustrate public transport and pedestrian access points as a goal from St Leonards Station to Willoughby Road retail strip as a key destination point for residents and workers in the area. The Sydney Metro project would likely provide better access to these key destinations and would help facilitate North Sydney Council's plan to achieve a higher standard of urban renewal in Chatswood / Crow Nests, which in part is somewhat falling short at present.

North Sydney Local Environmental Plan 2013

North Sydney Local Environmental Plan 2013 is the environmental planning instrument for land use planning in North Sydney LGA. The Plan sets out a series of aims, of particular relevance are:

- In relation to non-residential development: maintain a diversity of employment, services, cultural and recreational activities;
- To maximise public transport patronage and encourage walking and cycling (Objective of B3 - Commercial Core); and
- To ensure that transport infrastructure, and in particular North Sydney Station, would enable and encourage a greater percentage of people to access North Sydney by public transport than by private transport and be convenient and accessible. (6.1 Objectives of Division)

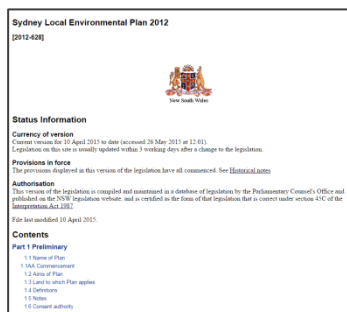


City of Sydney Council - Plans and Strategies

Sydney Local Environmental Plan (2012)

Sydney Local Environmental Plan 2012 is the relevant environmental planning instrument for land use planning within the City of Sydney. One of the overarching aims of the Plan is:

- To ensure that the pattern of land use and density in the City of Sydney reflects the existing and future capacity of the transport network and facilitates walking, cycling, and the use of public transport (Clause 1.2 2(g)).





Sustainable Sydney 2030 Community Strategic Plan (2014)

The Sustainable Sydney 2030 Community Strategic Plan is the City of Sydney’s response to the community’s ideas for creating a better Sydney. The overarching vision of the Plan is a Green, Global, and Connected City. The Plan contains ten targets, of which Target 6 identifies that by 2030, trips to work using public transport will increase to 80 per cent, for both residents of the City and those travelling to the City from elsewhere.

The Plan also identifies ten strategic directions. One of the strategic directions (Direction Three) outlines the plan for integrated Transport for a Connected City. More specifically, Objective 3.1 encourages plans to be in place to enhance access by walking, cycling and public transport from the Sydney region to the City of Sydney. In addition, Objective 3.3 states that negative impacts from transport on public space in the city centre and villages are well managed.

These strategic plans highlight the direction City of Sydney Council wants to encourage including better quality transport connectivity for Sydney. The project directly connects existing and proposed stations within City of Sydney to multiple employment and residential centres through direct transport links to North Sydney, Crows Nest, Chatswood and secondary trips to multiple centres throughout Sydney.

Marrickville Council - Plans and Strategies



Marrickville Local Environmental Plan (2011)

Marrickville Local Environmental Plan 2011 is the relevant environmental planning instrument for land use planning within the Marrickville. Overarching aims of the Plan are to:

- Support the efficient use of land, vitalisation of centres, integration of transport and land use and an appropriate mix of uses;
- Increase residential and employment densities in appropriate locations near public transport while protecting residential amenity; and
- Promote sustainable transport, reduce car use and increase use of public transport, walking and cycling.

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