Waverley Council

MARCH 2013

BONDI JUNCTION COMPLETE STREETS PROJECT

robertsday planning design place

AndersenHunterHorne

Cardno

KPMG

Waverley Council

Title: Bondi Junction Complete Streets Project
Prepared for: Waverley Council
Date: August 2013
Status: Final
Prepared by: Sam George, Roberts Day and Sascha Martin, Waverley Council
Approved by: Stephen Moore, Roberts Day and Valerie Giammarco, Waverley Council
Urban Design: Roberts Day, Waverley Council
Landscape: Andersen Hunter Horne
Traffic: Cardno
Economics: KPMG

Roberts Day
Level 4, 17 Randle Street Surry Hills NSW 2010
T: +612 8202 8000 www.robertsday.com.au
ABN 53 667 373 703 ACN 008 892 135

CONTENTS

EXECUTIVE SUMMARY

"A CITY WHICH IS CHOKING IN VEHICULAR TRAFFIC AND THERE IS NO BALANCE BETWEEN VARIOUS TRANSPORT MODES. PEDESTRIANS AND CYCLISTS ARE CONSEQUENTLY AT THE BOTTOM OF THE AGENDA... CHANGING THE CURRENT SITUATION IN SYDNEY DEMANDS A CHANGE OF MINDSET.

A MORE HOLISTIC APPROACH NEEDS TO BE USED WHERE TRAFFIC PLANNING AND PUBLIC SPACE PLANNING ARE THOUGHT AS ONE.

LOOKING AT PRACTICALITIES FIRST AND THEN FORMULATING VISIONS SECOND WILL SET THE BAR TOO LOW.

- GEHL ARCHITECTS, SYDNEY PUBLIC LIFE PUBLIC SPACES, 2007

This quote from world-reknowned urban quality expert Jan Gehl describing Sydney succinctly describes the present situation in Bondi Junction town centre.

It was with this philosphy that the Bondi Junction Complete Streets Project was conceived, with the primary aim of integrating transport, urban design, landscape and place making to realise positive improvements to the public domain.

The Complete Streets Project has analysed the issues and opportunities for all transport modes as well as the physical qualities of the town centre and liaised with stakeholders to establish a shared vision, principles and guiding framework to coordinate decisions relating to street and public space design.

The Complete Streets Project also provides conceptual designs and recommendations for each street and public space to illustrate how the vision, principles and framework can be realised. These have been prioritised and supplemented with estimated costs to assist Council in delivering positive change.

While there are challenges ahead, Bondi Junction town centre has excellent foundations to become a destination of choice; stay inviting, funtional and desirable place to live, work and visit. The Complete Streets Project provides the coordinated and integrated approach necessary to realise this potential, deliver real improvements to the public domain and to create a place loved by locals and visitors alike.

1. INTRODUCTION

SCOPE OF PROJECT

Waverley Council has a number of key objectives in planning for the future of Bondi Junction town centre:

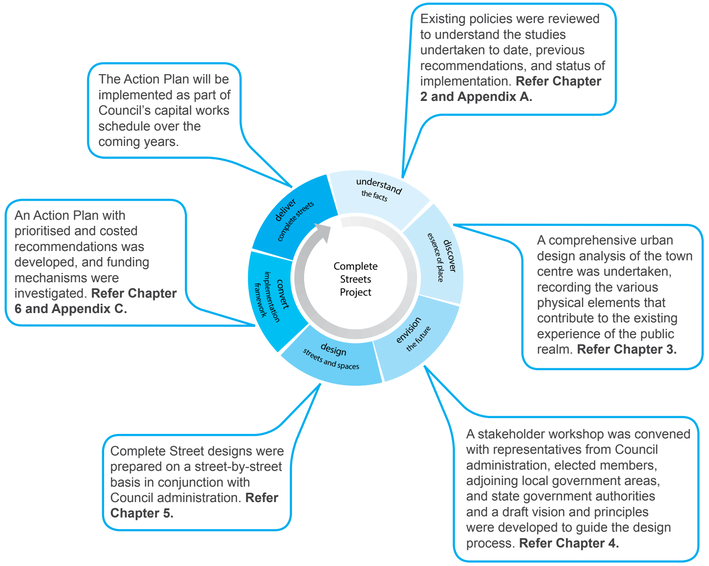
- Achieve and reinforce a sense of place for the centre;
- Integrate the various transport modes;
- Achieve a holistic approach to traffic planning and public space planning including universal access;
- Formulate a vision for the future public domain in Bondi Junction;
- Reinforce the importance of the public domain; and
- Improve the quality of the public domain.

To achieve these objectives Council commissioned a study with the following scope:

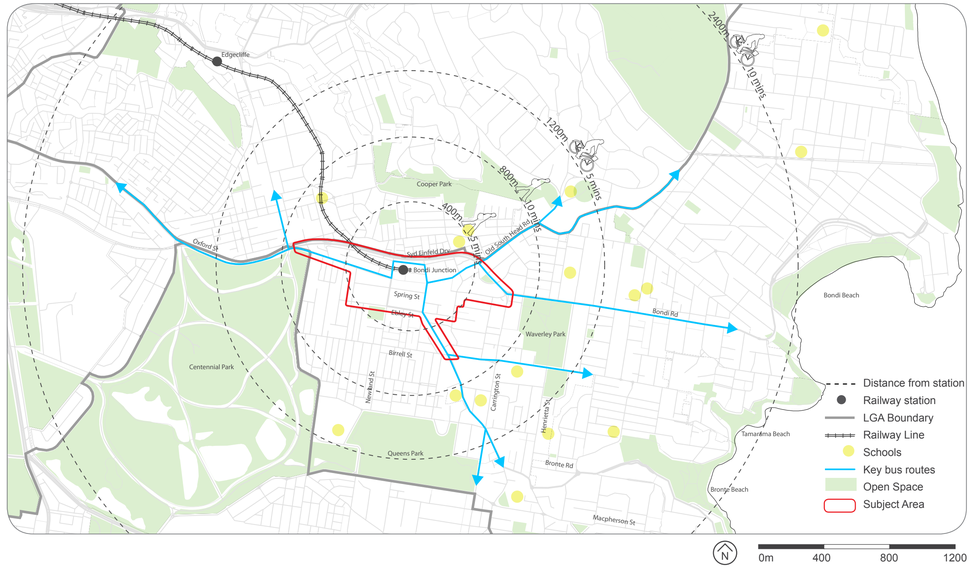
- Review previous transport and urban design studies;
- Consult with internal and external stakeholders;
- Prepare an urban design framework for the centre with a vision and guidance for public domain improvements;
- Design concepts for public domain improvements on a street by street basis;
- Prioritise the improvements;
- Cost the improvements;
- Suggest methods to raise the funds to construct the improvements.

The Bondi Junction Complete Streets Project fulfils the scope and delivers on the objectives by using the process set out in the diagram opposite.

In parallel, Waverley Council is coordinating the Bondi Junction Urban Design Review, Waverley Bike Plan Review, Light Rail Study, and Eastgate Shopping Centre Redevelopment. The studies overlap in their scope and the recommendations of each affect one another. The Complete Streets Project has considered, and where possible, integrated the work undertaken to date on these projects.



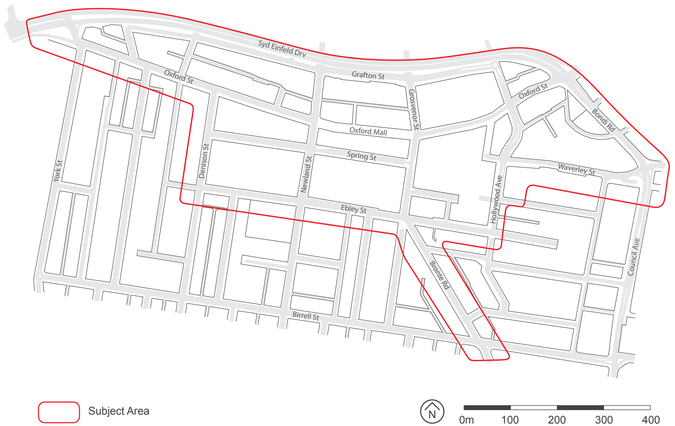
SITE CONTEXT



STUDY AREA

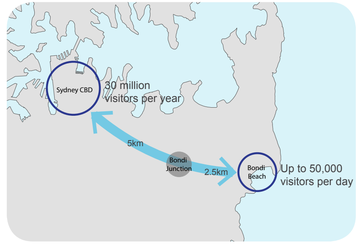
Bondi Junction is located approximately 5km from the Sydney CBD and 2.5km from Bondi Beach. The Metropolitan Plan for Sydney 2036 identifies Bondi Junction as one of 13 Major Centres in the metropolitan area, and is the only existing Major Centre servicing the eastern sub-region.

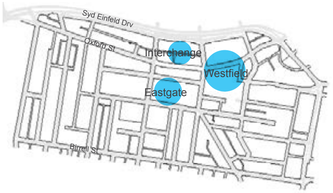
The study area comprises 43 hectares contained within a 10 minute walkable catchment. At the heart of the town centre is the bus/ rail transport interchange and Westfield's global flagship shopping centre. The town centre is surrounded by regional open spaces including Centennial Park, Queens Park, Waverley Park and Cooper Park.

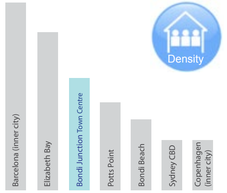


FOUNDATIONS FOR A GREAT CITY CENTRE

THERE ARE A NUMBER OF QUALITIES FORMING A SOLID FOUNDATION FOR BONDI JUNCTION TO THRIVE AS A MAJOR CENTRE FOR THE EASTERN SUB-REGION.







STRATEGIC LOCATION

Bondi Junction is one of 13 Major Centres in Sydney as defined by the State Government Metropolitan Strategy and is the only Major Centre servicing the eastern sub-region, resulting in a broad catchment area. Located between the Sydney CBD and Bondi Beach, two of Australia's most prominent icons, the centre is also well positioned to capitalise on the high volume of visitors passing between these major destinations.

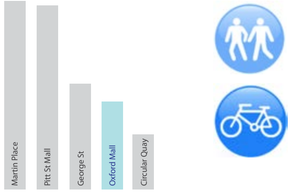
MAJOR ATTRACTORS

At the heart of Bondi Junction is the bus/ rail transport interchange which receives 39,000 passengers per day; Westfield's global flagship shopping centre which receives on average 58,000 visitors per day; and the popular Eastgate Shopping Centre. These provide anchors for activity in the town centre.

HIGH DENSITY AND GROWTH

With a density of 145 persons per hectare, Bondi Junction town centre has a density 30% higher than Potts Point (Australia's densest suburb) and 60% higher than Bondi Beach. High residential density is excellent for supporting business later into the evening, and the associated increased street activity creates an improved sense of safety after hours. The population is expected to grow 12% by 2036, and employment is targeted to increase 45% from 2006 levels with 100,000sqm of additional floorspace, suggesting high potential for major redevelopments in the town centre.

Source: Australian Bureau of Statistics 2011 Census Data (existing figures) and Metropolitan Plan for Sydney 2036 (projections)



HIGH PEDESTRIAN AND CYCLING

Lunchtime pedestrian volumes in Oxford St Mall exceed those of Circular Quay on weekdays and are comparable to the volumes found on George Street, Sydney's main street. Oxford Street is one of the busiest bike routes in Australia, with the intersection of Oxford St and York Rd rating as the 9th busiest of 1,100 intersections surveyed nationally in 2011. While these high volumes only occur during peak periods at certain locations, it demonstrates the potential that could be realised with a well considered investment in pedestrian and cycling infrastructure.

PERIPHERAL PARKING ACCESS

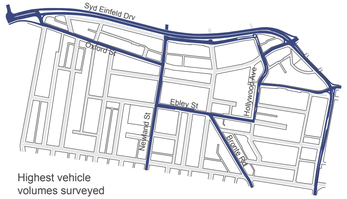
The major parking stations, which house the majority of the public parking in Bondi Junction town centre, are accessed from the periphery of the commercial area. This means there is the potential to calm traffic in the heart of the centre and create more attractive and pedestrian-friendly streets in the short term. This contrasts with the many town centres afflicted with major parking stations in the core which are costly to relocate, making it difficult to reduce traffic in those centres.

PLACE-MAKING IS WORKING

There are a number of places in Bondi Junction town centre that are performing extremely well. Oxford St Mall and Waverley Mall are buzzing with activity during the day and the public realm is of a high standard. Almost the entire length of Oxford St, as well as the streets fronting Westfield Shopping Centre have the high quality footpaths expected for main streets. New apartments, offices and heritage refurbishments are underway, and plans are being developed to transform dull and inactive frontages. The good work to date is paving the way for Bondi Junction to undergo a 21st Century transformation.

KEY CHALLENGES

DESPITE THE STRONG FOUNDATIONS, THERE ARE A NUMBER OF CHALLENGES TO OVERCOME IF BONDI JUNCTION IS TO SUCCESSFULLY EVOLVE FROM A 'STOP-OVER' INTO A TRUE DESTINATION.



VEHICLE-DOMINATED

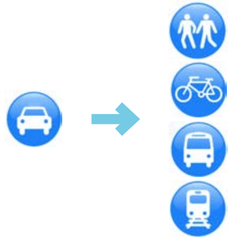
While there are discrete areas of high pedestrian amenity, such as Oxford St Mall, in general the landscape of Bondi Junction town centre is vehicle-dominated. Streets are cluttered with moving and parked cars. Wide roadways, extensive parking, overpass infrastructure, turning lanes, loading zones, signage and carpark entries are visually prominent throughout the centre. The town centre is further impacted by large numbers of buses, which are visually and audibly imposing, and bus stops and interchange entries obstructing pedestrian movement.

THROUGH-TRAFFIC IN THE CORE

Bondi Junction town centre suffers from high volumes of through-traffic, resulting in more space allocated for vehicles rather than for people. Given that alternative routes exist to by-pass the centre, and that parking stations are accessed from the periphery, traffic is unnecessary within the town centre. Unless a motorist needs to park at the door of their destination or access a driveway in the commercial core, they should be encouraged to access parking stations on the periphery, resulting in a higher quality pedestrian-friendly public domain.

PEDESTRIAN AND BIKE ACCESS

Major pedestrian - bus conflicts occur at the transport interchange causing a safety risk for pedestrians and delay for exiting buses. Pedestrian - cyclist conflicts occur in Oxford St Mall and there is not one bike path or shared path in the town centre to address cyclist - vehicle conflicts. Some of the highest volume pedestrian routes have the narrowest footpaths and dozens of trip hazards, obstructions and accessibility issues have been identified, impacting on universal access. These issues will only become more pronounced with a growing employment base and residential population generating additional pedestrians and cyclists.



MODAL SHIFT

While most residents of Bondi Junction use alternative modes of travel to work (only 36% drive), workers in Bondi Junction are far more likely to drive at 49%. The working population of Bondi Junction is higher than the residential population, around 10,000 versus 9,000 and the significant employment increases forecast must be considered in terms of increased congestion and resulting negative impacts on amenity. This reinforces the need to encourage a modal transport shift in Bondi Junction.

UTILITARIAN STREETS

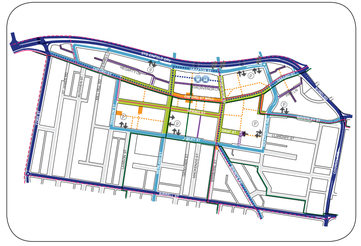
Bondi Junction does not have Complete Streets - most are designed to get vehicles into, through and around the town centre. Over the years, more and more elements to the street have been added to the streets: wider lanes, bus lanes, fencing to channel pedestrians, signage and inconsistent approaches to paving and landscape. While the interventions were well intentioned, the idea of a Complete Street has been lost and replaced with a series of solutions designed to make the streets 'less bad'.

FRAGMENTED TOWN CENTRE

The combined result of these challenges is a town centre with areas of activity and amenity fragmented by low amenity transport corridors that are difficult to negotiate, and impact on the overall experience in Bondi Junction. By reinstating the idea of Complete Streets, which cater for all users and create high amenity public spaces, the fragmented parts of Bondi Junction can be stitched together to create a continuous high quality urban fabric. This is the basis for a vastly improved Bondi Junction experience.

MAJOR RECOMMENDATIONS

THE COMPLETE STREETS PROJECT PROVIDES MANY PHYSICAL AND POLICY RECOMMENDATIONS TO ASSIST OVERCOMING THE CHALLENGES, HOWEVER THERE ARE SOME MAJOR STRATEGIC ASPECTS THAT HAVE THE POTENTIAL TO TRANSFORM THE TOWN CENTRE ON A LARGER SCALE.



VISION, PRINCIPLES & FRAMEWORK

Council is progressing work on many aspects of Bondi Junction town centre which span across multiple departments including urban design and LEP controls, traffic and parking, sustainable transport planning, place managing and landscaping,

To ensure the work is effective and efficient it is vital that there is an agreed and endorsed vision, principles and framework. This will provide a reference point for all projects in the town centre to be assessed against and ensure they contribute to the enhancement of Bondi Junction as a place in a complementary way.

OXFORD ST MALL INTERCHANGE ENTRY

Creating a main entry to the transport interchange from Oxford St Mall to a standard commensurate with a major regional centre and interchange is critical. This would significantly change the image and perception of Bondi Junction and define it as a destination of choice.

The entry could be created as part of an integrated development, or as a stand alone public works item with various funding options. It is recommended that Council, as a matter of priority, investigate the options, work closely with Transport for NSW and private landowners, and adopt a strategy for implementation.

WESTERN GATEWAY

The western entry to Bondi Junction town centre is an illegible and convoluted intersection that is difficult to negotiate by car and almost impossible without one. Redesigning this intersection and entrance to the centre will reposition Bondi Junction as a welcoming, attractive destination and strengthen its connection to Centennial Park.

Priority should be given to undertaking a complete re-design which integrates building form (including the upcoming major redevelopment at this location), traffic management and landscape.

EASTERN GATEWAY

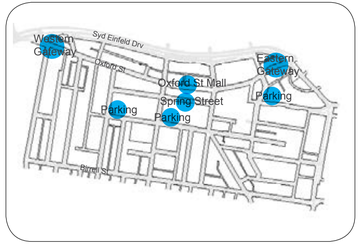
The entry to Bondi Junction from the east (Syd Einfeld Drive, Old South Head Road and Bondi Road) should clearly demark the transition from sub-urban to urban centre and attract and welcome visitors coming from the eastern suburbs and beaches.

With major redevelopments currently proposed along this section of road, Council is well positioned to create an entry reflective of a major centre with a quality streetscape and attractive, active building frontages.

SPRING STREET

There is great potential for Spring Street, which is naturally evolving into Bondi Junction's second 'main street'. Low traffic volumes and high pedestrian volumes; major shopping centres providing anchors at each end; and direct pedestrian access to Oxford St Mall and the interchange provide the basis for a successful urban street full of activity day and night.

Prioirty should be given to humanising the streetscape so that Spring St can become a major drawcard to Bondi Junction town centre and be a memorable place in its own right.



PARKING STRATEGY

To avoid growth in traffic within the town centre, the existing Council carparks on the periphery could be expanded undergound and the car spaces leased to new/ expanded commercial and residential developments. The cost of construction of the carparks would be offset by the cost savings of avoiding basement parking on each site, and with the use of developer contributions or other mechanisms, could be cost-neutral. In this way parking can be leveraged as a traffic management tool by controlling access locations and creating a market price for car spaces.

WHAT ARE COMPLETE STREETS?

A CITY'S GREATEST CIVIC SPACE IS IT'S STREETS. A COMPLETE STREETS APPROACH CONSIDERS THESE SPACES HOLISTICALLY, ACROSS ALL DISCIPLINES, TO DEVELOP AN OVER ARCHING COMPLETE STREETS FRAMEWORK FOR THE CITY CENTRE, AS WELL AS SPECIFIC COMPLETE STREET DESIGNS FOR EACH STREET. THE END RESULT IS A BETTER PLACE THAT BENEFITS EVERYONE.

Denver 16th Street Transit Mall (Source: www.flickr.com/photos/davidwilson1949)

Montreal 'pink balls' street installation (Source: Claude Cormier Associes < www.claudecormier.com/project/aires-libres-2011 >)

Paul St, Green Square, proposed (Source: City of Sydney < www.sydney2030.com.au >)

SAFE AND EFFICIENT

"Complete Streets are streets for everyone. They are designed and operated to enable safe access for all users. Pedestrians, bicyclists, motorists, and public transportation users of all ages and abilities are able to safely move along and across a Complete Street. Complete Streets make it easy to cross the street, walk to shops, and bicycle to work. They allow buses to run on time and make it safe for people to walk to and from train stations."

- Complete Streets Coalition

PLACE MAKING

Streets are the most important asset of a city. They are used by everyone, everyday, and therefore should be designed for everyone. Complete Streets are recognised as more than just transport corridors: they form the main civic space of town centres; they significantly affect the retail, cultural and leisure experience; and they can provide inspiration from spontaneous activity, public art, creative lighting and greenery. They are the backbone of a healthy, ecological and lovable city where a high quality public domain forms the setting for daily life.

ECONOMIC

Complete Streets stimulate economic growth by creating attractive places with greater street activity, increasing the number of potential customers passing shopfronts and the length of time spent in the town centre. This typically leads to increased retail spending, enhanced desirability of business and residential addresses and ultimately increased property values.

Broadway, New York (Source: NYC Department of Transport)

New Road, Brighton, constructed (Source: Gehl Architects <www.gehlcitiesforpeople.dk>)

HEALTHY

In 1970 80% of children walk or rode to school whereas today only 20% do*. Complete Streets provide safe space for walking and cycling and offer universal access, providing greater independence for children as well as the elderly and disabled and encouraging more physically active lifestyles. The enhanced social activity and spontaneous encounters supported on Complete Streets can also have positive impacts on mental health and the increased number of street trees has many benefits including improved air quality and lower ambient temperatures. Overall, Complete Streets can enhance the everyday quality of life for residents, workers and visitors by providing safe, comfortable space for public activities.

(source: ABS via www.bicyclenetwork.com.au)

WALKABLE

To remain competitive and attract people and businesses, a city must be walkable. The Complete Streets Project addresses 8 of the 10 elements to walkability as outlined in Jeff Speck's Walkable City (2012):

- ✓ Consider vehicles equally with pedestrians;
  Mix land uses (addressed in Urban Design Review);
- ✓ Design parking properly;
- ✓ Let transit work;
- ✓ Protect pedestrians;
- ✓ Welcome bikes;
- ✓ Shape public spaces;
- ✓ Plant trees;
  Create active frontages (addressed in Urban Design Review);
- ✓ Prioritise investments wisely.

STRATEGIC

The Complete Streets Project will assist Council to address 7 of the 14 Vision Elements identified in the 2013 - 25 Waverley Community Strategic Plan (WT3):

- ✓ We are safe
- ✓ Everyone welcome to participate positively in community life
- ✓ Express our essential selves through our traditions, our arts, our cultures and our lifestyles;
- ✓ The architectural landscape is cared for and developed at a human scale and design is sensitive to the natural, historical and social contexts
- ✓ Vital services are fully accessible;
- ✓ Local economic prosperity provides opportunity for all
- ✓ As a local community we have the courage to take a leading place in achieving the environmental aims of a global society

2. ACCESSING BONDI JUNCTION

COMPLETE STREETS, COMPLETE TRANSPORT

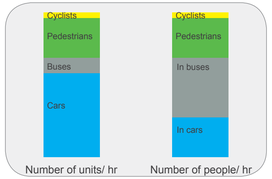
As a preface to the transport overview, there are some important notes regarding the collection and use of data for Complete Streets.

GAPS IN INFORMATION

"You can't manage what you can't measure". A complete transport assessment needs data for all modes of transport on all streets, at the same time, in order to understand the total movement system.

Currently the data for Bondi Junction is disparate, making accurate and complete intermodal comparisons difficult:

- Pedestrians: Oxford Mall weekday counts (2012); Interchange counts weekday p.m. peak (2012); and counts at several key intersections weekday pm peak (2006);
- Cyclists: counts at five intersections in the study area weekday a.m. peak (2011);
- Vehicular traffic: counts for the area bound by Newland St, Ebley St, Hollywood Ave and Grafton St weekday a.m. and p.m. peaks (2006);
- Public transport: bus volumes as per timetable (2011).



COMPARE APPLES WITH APPLES

To design streets for people, we need to measure people movement. However, traffic surveys typically measure the volume of vehicles and buses, not the number of people actually being transported within them. As illustrated in the graph above, when we consider traffic in terms of numbers of people rather than vehicles we see a more accurate picture of the modal split and the dominant user groups.

To enable a people-focussed approach, data is required on the average number of passengers per vehicle and per bus at the time the traffic survey is undertaken. Data on the volumes of passengers arriving and departing from each bus stop would also help develop of better picture of how people move about the centre and where to prioritise investment.

With complete baseline data, future surveys would provide clear empirical evidence of changes in transport patterns which can be used to measure the effectiveness of interventions, justify investments and provide the basis for value-capture assessments.

RECOMMENDATIONS

Short term (2013 - 2015):

- Undertake a complete transport survey for all modes of transport on all streets within Bondi Junction across a full day and evening time period. As a minimum the gaps in the existing data should be filled, namely pedestrian and cyclist data.

PEDESTRIANS

No matter the mode of transport used to access Bondi Junction, everyone eventually becomes a pedestrian. Therefore providing optimal conditions and amenity for pedestrians benefits everyone and should be given priority.

The highest pedestrian activity recorded in Bondi Junction is in Oxford St Mall, with 3860 pedestrians entering the mall at lunch time (1-2pm Thursday) (source: Cardno, 2012). This is 65% more pedestrians than recorded at Circular Quay at the same time, and is nearing the volume recorded on George St at lunch time (source: Gehl, 2007). In this regard Oxford St Mall is extremely successful and should support thriving businesses in this area.

Rowe St and Grosvenor St record some of the highest pedestrian flows in the centre presumably accessing the transport interchange. A significant conflict occurs between pedestrians and buses at the non-signalised Grosvenor St exit of the transport interchange.

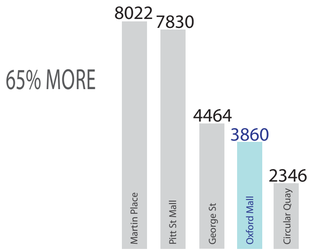
Oxford St and Bronte Rd also experience some of the highest pedestrian volumes associated with Westfield Shopping Centre. A survey by RMS recorded 20,000 pedestrians crossing Oxford St (Bronte Rd to Hollywood Ave) between 6am-6pm, not including pedestrians crossing at the signalised intersections. About 75% of these crossed at the Westfield entries.

Pedestrian activity on Spring St was observed to be consistently high across longer time periods than other streets given its wider mix of uses. On weekends the footpaths can be filled to capacity. Conflicts were also observed where pedestrians cross Bronte Rd at the Spring St intersection (Westfield entry).

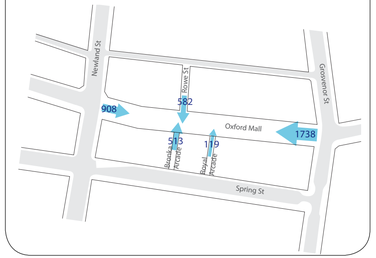
It should be noted the only available pedestrian data is a pedestrian count at key intersections from 4-6pm on a Thursday (Maunsell, 2006); a pedestrian count of the transport interchange 6-9pm on a Wednesday (Cardno, 2012); and a pedestrian count of Oxford Mall 9am-5pm on a Tuesday and Wednesday (Cardno, 2012).

A full pedestrian survey (6am – 10pm on a weekday and weekend of the full town centre) would be useful to understand when and where people are moving in more detail and to provide a benchmark to compare with in the future. Pedestrian counts do not indicate whether pedestrians are lingering, shopping, sitting, eating and enjoying the space, or simply passing through as a necessary movement from point A to B. A better measure for the quality of the space is a stationary activity survey, which has not been undertaken in Bondi Junction and should be included with the full pedestrian survey.

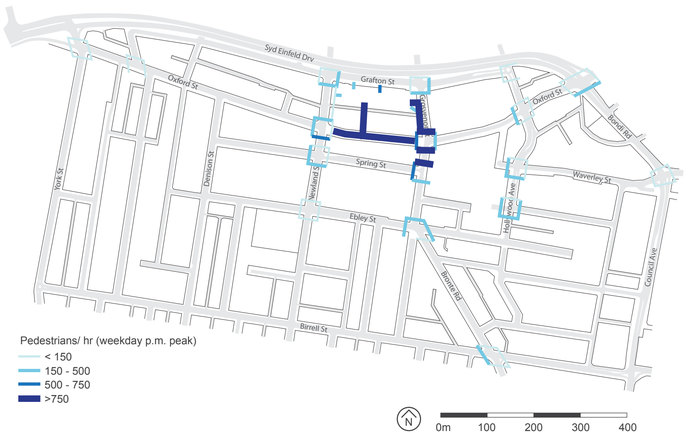
Detailed street designs will incorporate universal access and age friendly design features.



Mall comparisons
(pedestrians/ hr weekday 1 - 2pm)



PEDESTRIANS



RECOMMENDATIONS

Short term (2013 - 2015):

- Undertake a full pedestrian and public life survey;
- Implement the Pedestrian Access and Mobility Plan (integrated into Complete Streets designs);
- Universal access consultants to undertake an access audit for each Complete Streets design at the time of detailed design documentation.
- Undertake a signage and way-finding strategy coordinated with the strategy being prepared by TfNSW for the transport interchange;

Medium term (2015 - 2017):

- Undertake an arcade/ laneway extension and activation strategy for greater mid-block connections;
- Undertake a behavioural change/ marketing program to promote cycling and walking to Bondi Junction.

CYCLISTS

The SuperTuesday national bike count was undertaken in Bondi Junction in 2010 and 2011, with 30% to 60% increases in cyclist numbers recorded at 9 of the 13 sites surveyed, The greatest number of cyclists was recorded on Oxford St and the data and observations suggest most are commuting from Old South Head Road towards the city rather than stopping at the interchange and catching public transport.

The intersection of York St and Oxford St rated as the 9th busiest cycling commuter intersection of all the 1100 sites measured across 47 municipalities around Australia on SuperTuesday with a total of 428 cyclists passing through (80% inbound to the CBD). There is no bike infrastructure on Oxford St and it is a busy road for cyclists to share with vehicles - if a bike path were provided this location would likely rise even higher in the national rating.

It is likely that in addition to being the most direct route, the high number of cyclists on Oxford St is also due to the lack of vehicular traffic for a significant portion (via a bus-only lane and a pedestrian mall), thus providing the same services as a bike path – separation from vehicles. There are however conflicts with pedestrians in Oxford Mall. The growth of cycling in Waverley and the forecast growth in pedestrian traffic within the mall will only exacerbate this conflict.

Throughout Bondi Junction there is currently very little provision for cyclists. There are no bike paths or even shared paths and no continuous stretches of on-road bike lanes. Some streets are designated as bike routes by way of an occasional cyclist logo painted on the road surface, however this does not provide any enhanced safety or convenience for cyclists compared to roads without the paint marking. Parts of Birrell Street have a dedicated on-road bike lane painted on, however this appears to have been installed at the expense of the on-street parking lane width, resulting in parked cars overhanging into the bike path. As a principle, all streets should be cycle friendly, either with shared or separated lanes, and cyclists should not have to be diverted down residential streets - this is not good for the convenience of cyclists or the success of businesses.

Research suggests that it is only safe for cyclists to share travel lanes if the traffic speed is less than 40km/hr and traffic volume is less than 2000vpd. The exception to this is where the street forms part of a key bike route, in which case a bike path may be warranted even on low volume streets (such as Spring St) in order to provide for cyclists not confident to ride on the road. With this in mind Complete Streets proposes bike paths on the busier streets in Bondi Junction and assumes cyclists share vehicle lanes on the slower traffic-calmed urban streets in the commercial core. This is set out in the Complete Streets Framework in Chapter 4 and the street designs in Chapter 5.

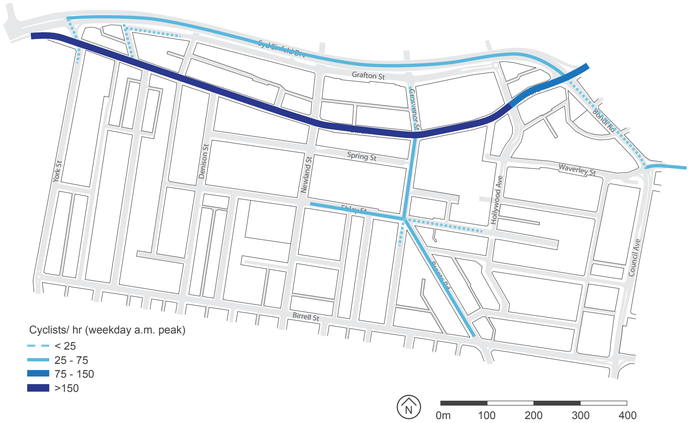
Complete Streets identifies shorter term and longer term bike paths to ensure current work being undertaken by council is implemented first, while also providing longer term vision for cycling in the town centre. The priorities relate to the Oxford St - Spring St east-west link where there are the greatest cycling volumes. In the longer term bike paths are proposed on busier roads on the periphery and on key north-south links. As discussed on page 16 there is also the opportunity to investigate dedicating some space on Syd Einfeld Drv to cyclists to provide an 'express' route from the eastern suburbs to the city with magnificent harbour views.

CYCLISTS ARE GOOD FOR BUSINESS

In a survey of thousands of shoppers at different businesses such as supermarkets, restaurants, bars and convenience retail, it was found that cyclists spent more in the course of a month than those who drive. At restaurants, for example, cyclists outspent drivers by about 20% monthly.
Source: Oregon Transportation Research and Education Consortium (2012)

A study in Melbourne estimated that one car generates $27 of economic activity per hour, whereas six bikes (the equivalent space of 1 car bay) can generate $97.20 per hour, therefore it concluded it would be economically beneficial to provide more bike racks if the demand warrants it.
(Lee, 2008).

CYCLISTS



RECOMMENDATIONS

Short term (2013 - 2015):
- Install bike paths on Oxford St west, Spring St east and Denison St as per the Complete Street concept designs in Chapter 5;
- Install bike markings on Oxford St bus lane, Bronte Rd and Oxford Mall as per the Complete Street designs in Chapter 5;
- Install continuous painted bike path each side of Birrell from Council Ave to York Rd.

Medium term (2015 - 2017):
- Install bike paths on Oxford St east, Spring St west, Denison St south, Hollywood Ave as per Complete Street designs in Chapter 5;
- Liaise with Randwick Council to provide 3.5m shared path on western grass verge of York Rd linking to the proposed Centennial Park 3.5m shared path along Oxford St;
- Add bike networks, facilities and parking information to Council website.
- Undertake a behavioural change/ marketing program to promote cycling and walking to Bondi Junction.

Longer term (2017+):
- Install bike paths on Ebley St and Bronte Rd south as per Complete Street designs in Chapter 5.
- Provide bi-directional bike path on Syd Einfeld Drive (refer p.16)

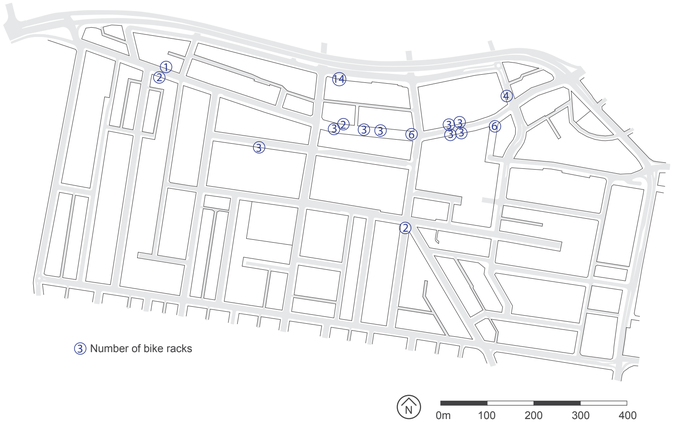
BIKE PARKING

There are 61 public bike racks within the study area, concentrated in Oxford Mall and outside the interchange. From observation there are insufficient racks with many bikes locked to poles and fences throughout the centre, particularly outside the interchange on Grosvenor St and Grafton St, in Oxford Mall and outside the Oxford St entry to Westfield.

Under the Council's DCP requirements of 1 bike rack per 150sqm of commercial GFA, the additional 100,000sqm commercial floorspace forecast by 2031 will require the installation of nearly 700 new bike racks. A policy could be prepared requiring 50% of these bike racks to be located in publicly accessible area, resolving the shortage at no cost to Council, or cash in lieu payment for bike racks already installed (pre-funded) by Council.

Signs that additional bike parking facilites are required

BIKE PARKING



RECOMMENDATIONS

Short term (2013 - 2015):

- Prepare a bike parking strategy/ policy including:
  - priority locations for bike racks and a rolling program for installation;
  - consistent design specifications;
  - inclusion of secured and weather proof facilities (bike lockers and bike compound);
  - delivery mechanisms such as percentage of bike racks required for new development to be provided in public location/ cash in lieu for pre-funded bike racks etc.

Medium term (2015 - 2017):

- Add bike networks, facilities and parking information to Council website.

PUBLIC TRANSPORT

The Bondi Interchange is classified a major interchange and rates as 7th busiest interchange in Sydney. Over the 3 hour morning peak period (6am-9.30am) nearly 18,000 passengers will arrive by bus and over 8,000 passengers will depart by train. Each day 2,400 bus services access the interchange (includes originating, terminating and passing through). Bondi Junction has an excellent level of public transport service with more than 1 bus per minute arriving from the east, west and south during peak hour, making it highly accessible to a broad catchment population.

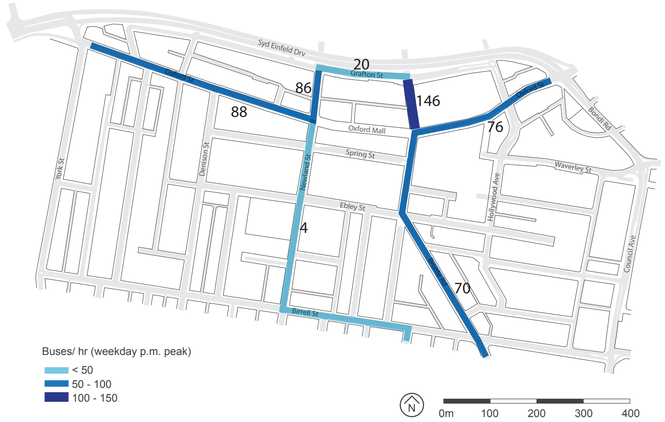
No changes are proposed to the existing bus routes and bus stop locations. The Complete Streets concept designs do not include light rail, however Council is currently undertaking a light rail study and revisions to the designs may be required to incorporate the outcomes of the study.

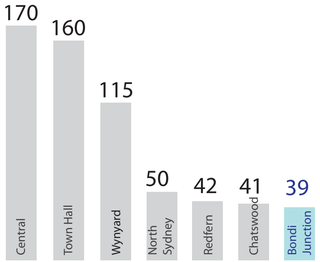
The major problem identified is the conflict between pedestrians and buses at the Grosvenor St exit from the interchange, where during peak hour 116 buses must cross the path of 1100 pedestrians. Investigation into the options to relocate this entry directly from Oxford Mall and Council adoption of a strategy should be pursued as a priority project. This may comprise an integrated development with private landowners, or a stand alone civic project, either way the entry should be integrated with the town square proposal for Oxford Mall. In the short term coloured/ textured surfaces, signals and/ or audible alerts should be installed on Grosvenor St to manage the conflicts at the exit.

The other issue is legibility and wayfinding. Better maps and real-time information is required at all bus stops as well as other locations such as Oxford St Mall and within major shopping centres. Any Council-led proposals should be integrated closely with the wayfinding strategy TfNSW is currently preparing for the interchange.

Bus - pedestrian conflicts at the Grosvenor St exit to interchange.

PUBLIC TRANSPORT





Number of passengers through interchange per day (1000's)

RECOMMENDATIONS

Short term (2013 - 2015):

- Investigate the options for direct access between Oxford Mall and the interchange, work closely with Transport for NSW and private landowners, and adopt a strategy for implementation;
- Work with TfNSW to install coloured/ textured surface across the Grosvenor St exit of the interchange and consider flashing lights/ audible alerts to pedestrians when buses are exiting;
- Lobby TfNSW to install real-time information and clear maps at all bus stops and other key locations in the centre.

BUS STOPS

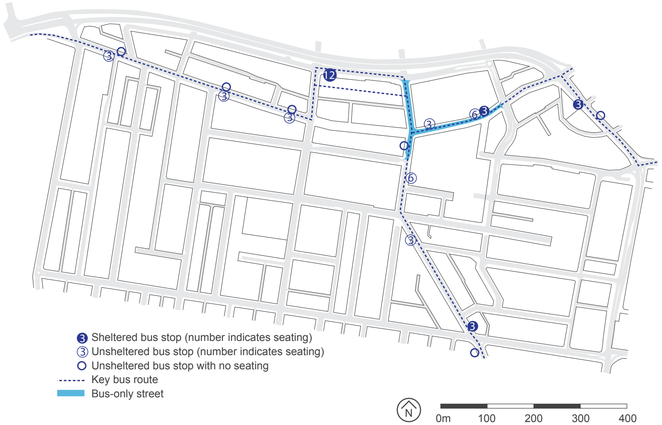
Every bus stop within the study area should have sheltered seating for the convenience of shoppers with bags, parents with children and the elderly. Of the 17 bus stops in the study area only 4 have shelter and 6 do not have any seating. The seating at all bus stops surrounding Westfield was observed to be insufficient with many waiting passengers left standing.

The design of the bus shelters and seating needs to avoid obstructing the flow of pedestrians. In many locations the bus stop seating could be located under awnings without the need for a stand alone bus shelter, requiring less footpath space.

Bus stops around Westifeld shopping centre have insufficient seating and many bus stops lack shelter.

Bus stop quality, size and the availability of real-time information should be reflective of the needs and expectations of a 21st century major centre.

BUS STOPS



RECOMMENDATIONS

Short term (2013 - 2015):

- Work with TfNSW to upgrade bus stops throughout the centre to a consistent standard that includes seating, shelter and real-time information.

VEHICLES

Syd Einfeld Drive, Bondi Road and Old South Head Road are the major connectors between the Sydney CBD and the eastern suburbs and accommodate the greatest traffic flows.

Within Bondi Junction town centre the traffic data shows the Hollywood Ave – Ebley St – Newland St as the busiest route. As well as being the most direct way around Oxford St Mall (other than Syd Einfeld Drv) this route provides access to the Westfield and Eastgate parking stations. The high volumes recorded on the south end of Newland St, which exceeded that of Bronte Rd, confirm the use of this street as a key north-south link.

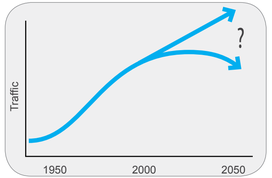
The high volume of through-traffic in Bondi Junction is impacting on the amenity of the streets and is fragmenting the active hubs in the town centre. To improve the amenity and connectivity of the commercial core, through-traffic should be encouraged to remain outside the town centre. Similarly, vehicles accessing the major parking stations can do so without traversing through the heart of the centre. On this basis the roads in the commercial area should be designed to be slow, safe for all users and focussed towards pedestrian amenity.

The 2010 Traffic and Transport Review identified four intersections at capacity and three nearing capacity (refer plan opposite). As part of the Complete Streets Project, traffic modelling was undertaken for five intersections with and without the proposed Complete Streets design recommendations and tested with future growth forecasts in commercial floorspace and residential density to 2021 (refer Appendix B). Even with the forecast growth, intersection performance remains largely unchanged except for Bronte Rd/ Ebley St which could incur 50% longer average delays.

Dozens of studies have shown the phenomenon of 'induced demand' where the increased supply of roadway encourages more people to drive, resulting in congestion. A meta-analysis of dozens of studies found that on average a 10% increase in road capacity induced a 4% traffic increase, which rose to 10% (the entire new capacity) within a few years. And a study of 70 metro areas in the United States over 15 years concluded those that invested heavily in road capacity expansion fared no better at easing congestion than those that did not.

There is a limit to how much traffic can be accommodated in Bondi Junction and this limit will depend on how much pedestrian quality the community is willing to forego. If more lanes and larger intersections are proposed it means less space for pedestrians, cyclists and landscaping. These people-attracting qualities influence the length of visitors' stay (and expenditure) and property prices; these are qualities local businesses and residents should be lobbying to protect.

The Waverley Transport Plan 2011 sets out targets for reduced car usage and increased public transport, walking and cycling rates. The Complete Streets Project fully supports this goal and does not advocate the provision of additional travel lanes or larger intersections to solve congestion. A demand management strategy that promotes other more efficient modes of transport is considered the only sustainable way to manage congestion.

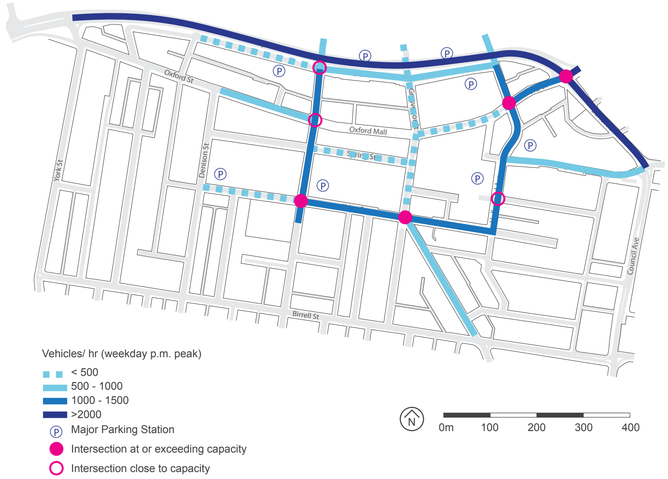


The future of vehicular traffic in Bondi Junction is a choice, not a given.

Intersection	2013 PM Peak Hour		2021 PM Peak Hour (existing road designs)		2021 PM Peak Hour (Complete Streets road designs)	
	Average Delay (sec)	Level of Service	Average Delay (sec)	Level of Service	Average Delay (sec)	Level of Service
Spring St/ Bronte Rd	14.6	B	18.7	B	16.8	B
Oxford St/ Grosvenor St	12.6	A	12.6	A	9.3	A
Bronte Rd/ Ebley St	20.6	B	34.9	C	36.5	C
Oxford St/ Hollywood Ave	44.8	D	48.7	D	56.2	D
Oxford St/ Syd Einfeld Drv	116.9	F	123.5	F	123.5	F

Level of service at intersections modelled
A = Good Operation; B = Good with acceptable delays and spare capacity; C = Satisfactory; D = Operating near capacity; E = At capacity, incidents with excessive delay; F = unsatisfactory and requires additional capacity.
(Source: Cardno, 2013, refer Appendix B for full report)

VEHICLES



RECOMMENDATIONS

Short term (2013 - 2015):

- Council to adopt the Complete Streets Vision, Principles, and Framework to complement the Waverley Transport Plan 2011 in providing guidance for transport planning decisions in Bondi Junction.

CAR PARKING

Within the study area there are approximately 4600 car parking bays within parking stations and in the order of 460 on-street bays including loading and truck zones (ie. approximately 10%).

The parking stations are accessed from the periphery of the town centre, which means that traffic calming measures could be undertaken to reduce traffic in the core area without impacting on the convenience of accessing the parking stations. In contrast, much of the on-street parking requires cars to traverse through the heart of the centre (Oxford St, Newland St, Spring St and Gray St).

There is also an economic incentive to encourage the use of the parking stations over street parking - as people walk from their car to their destination they will pass (and potentially purchase from) a greater number of businesses in the centre compared to if a customer parks on-street in front of their destination, making only one transaction.

Consistent with the objective of reducing traffic in the commercial core, and in order to boost the amount of pedestrian traffic passing in front of local businesses, no additional street parking is proposed. It is also recommended that street parking fees should remain higher than off-street parking to encourage motorists to use the parking stations instead. The existing on-street bays should be prioritised to the users that need it most, namely disabled parking, pick-up and drop-off zones (particularly near medical centres), taxi ranks, and commercial loading zones.

BALANCING OUTCOMES

Many progressive cities around the world have policies to reduce the total supply of parking within their CBDs each year, recognising the place-focussed outcomes that this will help to achieve, as well as the flow-on economic benefits that come with enhanced amenity and walkability. While no such policy is proposed, some of the Complete Street designs set out in Chapter 5 propose a net loss of street parking in order to provide more space for street trees, footpaths or cycle paths (any net loss has been noted). If all the Complete Street designs were implemented, including the long term aspirational options, a total of 122 car bays would be lost, representing a 2.4% reduction to the total public parking.

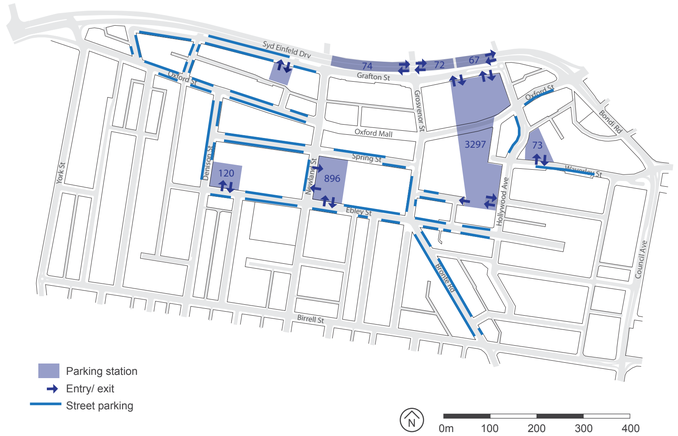
In considering the future of Bondi Junction's streets, the changes to parking supply should be considered in the context of this small percentage change, and weighed up against the benefits the street design will deliver for pedestrians, cyclists and public transport users, as well as the overall streetscape and amenity in the town centre.

OFFSETS

Looking to the future, there is a significant amount of retail, commercial and residential development forecast in the next 20 years and while the DCP sets no minimum parking requirements (only a maximum), the current reality is that tenants for all these uses typically value dedicated parking spaces being supplied.

In order to avoid additional traffic being drawn into the commercial core to access this private parking, as well as the impact caused to pedestrians from an increased number of driveways crossing footpaths, a study should be undertaken to investigate the feasibility of expanding the Council-owned parking stations underground and leasing the bays to private landowners. The cost of construction of the carparks would be offset by the cost savings of avoiding expensive basement parking on each site, and with the use of developer contributions or other mechanisms to value capture, the project could be cost-neutral. In this way parking can be leveraged as a traffic management tool by controlling access locations and creating a market price for car spaces.

CAR PARKING



RECOMMENDATIONS

Short term (2013 - 2015):

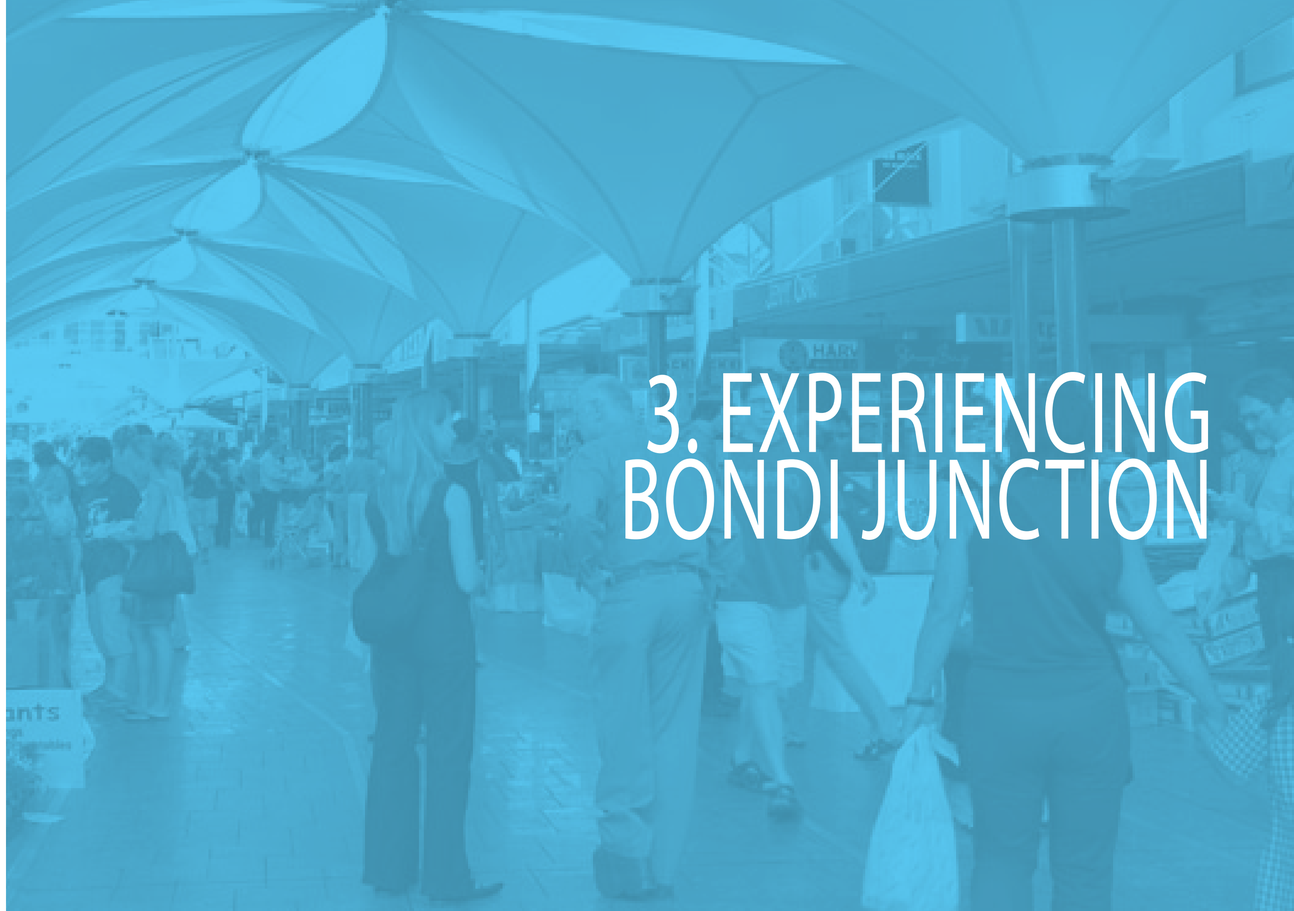
- Undertake a Bondi Junction Parking Strategy that considers:
  - parking as a traffic demand management tool;
  - feasibility assessment of expanding Council-owned carparks underground and leasing parking to private businesses as an alternative to on-site parking provision;
  - commercial loading and servicing;
  - ensure hourly prices of on street meters are higher than off street car parking spaces

Medium term (2015 - 2017):

- In order to reduce the amount of unnecessary traffic in the centre investigate opportunities to provide real-time information on parking availability at the periphery of the centre via digital signs and also mobile devices.

Long term (2017+):

- Construct underground expansion of Council carparks.



3. EXPERIENCING BONDI JUNCTION

PUBLIC SPACES

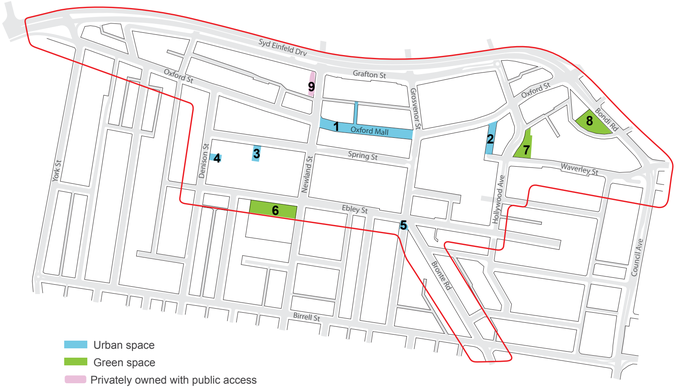
There are a range of public spaces in Bondi Junction providing for the various needs of the community. Oxford St Mall is the primary civic space in the centre, bustling with activity through the day. Waverley Mall offers a smaller but equally successful quality pedestrian space. Three small 'urban plazas' exist on Spring Street, Denison Street and Brisbane St, providing more intimately sized break-out spaces. There are three local parks in the centre - Clementson Park, Eora Park, and Fingleton Reserve - which provide turf, trees and seating as well as children's play equipment.

Overall the public spaces provide for the daily needs of visitors, workers and residents. In addition, the centre offers convenient access to regional parklands - Centennial Park, Queens Park, Waverley Park and Cooper Park which cater for more active recreation. The small urban plazas have potential to become more actively used and more accessible, and additional small plazas and laneways could be encouraged to provide a tapestry of interesting and different spaces throughout the centre. Specifc recommendations for each space are provided over page. With the growing population in the town centre, it would be worthwhile undertaking a Recreational Needs Study to determine if additional public space area or facilities will be required for the future population.

RECOMMENDATIONS

Medium term (2015 - 2017):

- Undertake a Recreational Needs Study for Bondi Junction town centre
- Design public spaces to foster cultural activities and allow for public events.



PUBLIC SPACES

OXFORD ST MALL

DAY TIME ACTIVITY

Oxford St Mall is the heart of Bondi Junction: centrally located, it provides convenient pedestrian access between the three main anchors: the transport interchange, Westfield and Eastgate shopping centres. As well as providing connections, it is a place for staying with generous seating, market stalls to meander through and lively street activity to entertain. The mall is highly sucessful in terms of its day-time pedestrian activity, rivalling the weekday pedestrian counts at Circular Quay. It has good amenity in terms of paving, seating, shade, awnings and street furniture, athough each end is quiet barren and should be improved with tree planting to provide more shade and greenery and to read as one continuous corridor. The LEP includes setback and height controls around the Rowe St ramp with the intent to create a town square when the surrounding sites are redeveloped. When implemented the square will enhance the Mall's status as the primary focal point for civic activity in Bondi Junction.

CONNECTION TO INTERCHANGE

One of the most important items to resolve in Bondi Junction is creating a main entry to the transport interchange from Oxford St Mall that directly links to both the bus and train levels and of a size and quality reflective of a major regional centre and a major interchange. This is fundamental to improving the image and perception of Bondi Junction for the thousands of visitors arriving each day by public transport, and ultimately will be critical to Bondi Junction's success in becoming a 21st century destination of choice. In practical terms a new interchange entry is essential in order to accommodate the future growth in transit usage resulting from increased number of residents, employment, visitors as well as modal splits changing in favour of sustainable transport options. Options exist for the entry to be created as part of an integrated development or as a stand alone public works item with various funding options. It should be an immediate priority for Council to investigate the options, work closely with Transport for NSW and private landowners, and adopt a strategy for implementation.

NIGHT TIME ACTIVITY

Another key issue is after-hours activity: by 6pm most shops are closed and pedestrian numbers rapidly fall, and by 7-8pm the mall is largely devoid of people, reducing the safety and amenity of the city's central hub. Evening activity is crucial for creating a true urban centre that is a destination, not just a stop-over. It creates attraction for visitors, amenity for residents and will enable businesses to capitalise on the high numbers of people using the transport interchange well into the evening. Evening activity in the Mall should be promoted by working with businesses to extend trading hours, and through regular evening event coordination such as live music, theatre, night markets, and art installations.

PUBLIC SPACES

OXFORD ST MALL

PEDESTRIAN CYCLE CONFLICT

The third key issue is pedestrian - cyclist conflicts. Oxford Street is currently the main bike route in Bondi Junction and as part of this cyclists pass through Oxford Mall. There is the option to paint a bike path through the mall to alert pedestrians, however this is not favoured because the lack of vehicles and the continous level surface creates a non-street environment where pedestrians do not think to check to cross, even with a painted bike path. Conflicts are well documented in Swanston St, Melbourne where a bike path has recently been painted in a high volume pedestrian area. The bike path would also need to pass very close to shopfonts in order to maintain adequate space for the market stalls that set up in the mall, which is not considered safe for shoppers. Another option is to ban cyclists from the mall but this is not in keeping with the Complete Streets philosophy of catering for all users, and would also be difficult to enforce. The recommended strategy is to slow cyclists in the mall with stencils confirming pedestrian priority and textured surface treatments (without compromising pedestrian access and safety objectives), and providing more convenient alternative bike routes, such as Spring St, for commuter cyclists travelling east - west.

OXFORD ST MALL RECOMMENDATIONS

Short term (2013 - 2015):

- Install signage/ pavement stencils advising slow bicycle zone and pedestrian priority (PAMP item 3). Also consider installing textured surfaces to discourage faster cyclists;
- Lobby TfNSW to create direct access from the interchange to Oxford Mall as a priority (several potential connection points to be considered by TfNSW);
- Develop a night time activation strategy including night markets, concerts, performances, buskers, creative lighting of sails and incorporate public art opportunities into the detailed design stage;
- Investigate a strategy to make the arcades open for public access 24 hours a day and the use of CCTV to improve opportunities for public art and community safety;
- Investigate free footpath leasing for restaurant seating at night.
- Implement the town square proposal (subject to redevelopment of adjoining sites);
- Consult Meriton to encourage enhanced use of Tiffany Mall to improve public accessibility to harbour views, such as a raised deck over Grafton St below.

Longer Term:

- Consider potential future light rail route.

Approximate cost of capital works: $4000

Excludes town square proposal and associated land acquisition (which could cost several million dollars), road re-surfacing, civil works beyond public domain improvements, infrastructure amplification or renewal and undergrounding of power.

WAVERLEY MALL

Waverley Mall is a high amenity public space with quality paving, tree canopy cover, awnings, seating bike racks and active frontages. The space is full of activity during the day, but like Oxford St Mall, offers little attraction in the evening. Activites could be held in the public space to leverage off the activity from the nearby Westfield cinema complex and restaurants.

RECOMMENDATIONS

Medium term (2015 - 2017):

- Coordinate and market evening activity/ events within the public space;
- Improve lighting levels and include artistic/ feature lighting.

Estimated capital works cost: $50,000

PUBLIC SPACES

NORMAN LEE PLACE

This hardscaped urban plaza is a valuable gem in the urban fabric, offering respite from the street with good northern sun access, seating, bike racks and large leafy trees providing ample shade. Its use could be enhanced with more cafes and retail opening onto the space, as well as forming part of future mid-block connection to the library and also to Clementson Park. It is proposed that with a raised paved shared zone the plaza could also extend north across Spring St.

RECOMMENDATIONS

Medium term (2015 - 2017):

- Better integrate fence, resolve entrance points and seating and planting arrangements;
- Connect the plaza with a mid-block connection to the library and Ebley St when the site to the south is developed.

Estimate capital works cost: $200,000

WAVERLEY LIBRARY

This plaza offers seating and bike racks, but little weather and landscape amenity being affected by overshadowing and wind circulation and enclosed with relatively blank walls. The space should read as a library forecourt, encouraging library/ community activity to spill out here. Like Norman Lee Place its use could be enhanced with more cafes and retail opening onto the space, as well as forming part of a future mid-block connection.

RECOMMENDATIONS

Medium term (2015 - 2017):

- Improve landscape with trees, edge planting, artwork on blank walls and new seating;
- Improve lighting;
- Connect the plaza with a mid-block connection to Norman Lee Place when the adjoining site is developed.

Estimated capital works cost: $200,000

BRISBANE ST PLAZA

This small break out space has developed from the closure of Brisbane St from Ebley St. While it has great potential as a small space it is currently cluttered with street furniture, service infrastructure, steps and low walls. A re-design could create more definition and a more useable and interesting space.

RECOMMENDATIONS

Longer term (2017+):

- Improve definition of space with a de-cluttered design, reconfigured seating, address the level change, provide a mature tree for shade, improve lighting and integrate sculptural art into the space;
- Replace planting with large quantities of hardy grasses that deter uses of the neighbouring pub from discarding litter.
- Improve lighting.

Estimated capital works cost: $200,000

PUBLIC SPACES

CLEMENTSON PARK

Clementson Park offers kick about grass areas, shaded seating and play equipment, which together with the adjoining child care centre and community garden, make it well utilitised by parents with children. The space, however, can be affected by wind.

RECOMMENDATIONS

Medium term (2015 - 2017):

- Investigate strategies to mitigate wind such as denser and taller planting along southern boundary;
- Create more access and permeability to the park via the existing lane on the western side and potentially making a right of way through to Keiran Street.

Estimated capital works cost: $250,000

EORA PARK

Eora Park is well utilised particularly by workers at lunchtime and by being raised above the street it mitigates against traffic noise on Hollywood Avenue. Its elevation could offer good views of the harbour but these are largely obscured by the landscaping. The interface to the street hides the park and makes it appear as a forecourt to the adjacent residential building rather than a public space.

RECOMMENDATIONS

Longer term (2017+):

- Improve design of street frontages to improve visibility and access and reinforce it as public space;
- Frame views to harbour;
- Trim under canopy of trees along street frontage and expand stair case and entrance to make more pronounced;
- Introduce more interesting paving materials and colour to the planting;
- Provide some play equipment for children to encourage usage beyond workers at lunch.

Estimated capital works cost: $900,000

FINGLETON RESERVE

Fingleton Reserve contains large mature trees however does not appear to be well utilised, possibly due to the sloping site and also its location on a busy and noisy road. This park is also considered unsafe in the evening due to the lack of activity, lack of immediate passive surveillance and poor lighting. Maintenance of the park could be improved.

RECOMMENDATIONS

Longer term (2017+):

- Generally maintain large canopy trees (some could be thinned/ removed for improved solar acccess) and introduce planter bed or hard surface on west side;
- Potentiallly regrade park and introduce retaining wall along Bondi Rd with seating to take advantage of long views, as well as stair access to Bondi Rd.
- Create an interesting barrier to Bondi Road to increase safety for children using the park and provide play equipment;

Estimated capital works cost: $900,000

ACTIVE FRONTAGES

The best way a building can contribute to an interesting, attractive and engaging public realm is with an active frontage that is welcoming and encourages people to slow down, look, take part, and be part of the city life. Conversely, inactive frontages can destroy street life, regardless of architectural quality.

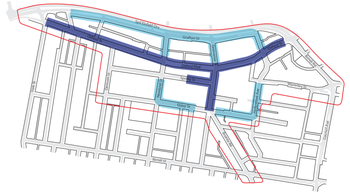
Active frontages are classified as having an opening to the street at least every 10 metres with a range of uses. In areas that are purely residential, active frontages include well articulated facades with verandahs and balconies that create street interest. Semi-active frontages include larger shops with fewer street entries and lower quality residential frontages.

Inactive frontages comprise blank walls or obscured glass walls with few openings and little variation or detail to create street interest. Semi-inactive frontages include office buildings and residential houses/apartments with little street-level interaction.

One third of all frontages in the study area were classified as active and one third classified as inactive. The remainder was equally split between semi-active and semi-inactive. This ratio is fairly poor for an urban centre and means that on average, one third of the pedestrian experience will be spent walking past blank, uninteresting walls. This figure also excludes laneway frontages. However there is no reason a regional centre like Bondi Junction couldn't have activity occurring in the laneways so in fact more than one-third of frontages are inactive.

Oxford Street, Bronte Rd and Spring St have the most active frontages, correlating to the areas with high pedestrian activity. These streetscapes will benefit most from public domain amenity enhancements - the fundamental structure of fine grain retailing exists and pedestrian numbers are healthy, with some attention to the quality of the public realm people are likely to linger longer and cafes, bars and restaurants may be more likely to establish.

The inactive frontages are most prevalent along the length of Grafton St, most of Ebley Street, Newland St and Hollywood Ave, which are the 'backs' of the large format retailing. These streets also contain the access to parking stations so in addition to being inactive the streets are dominated by cars, making for an unpleasant pedestrian experience. Improvements to the public realm will help make these streets safer and 'less unattractive', but will be unlikely to thrive as urban streets unless sleeved with liner buildings that can offer active frontages.



RECOMMENDATIONS

Short term (2013 - 2015):

- Prepare an Active Frontage Strategy that sets out design objectives for active frontages; controls/ restrictions on inactive frontages; and strategies for creative uses of unavoidable blank walls such as green buildings, vertical greenery, murals/ street art, creative lighting and art projections.
- Prepare controls to ensure design excellence for refurbishments and new development.

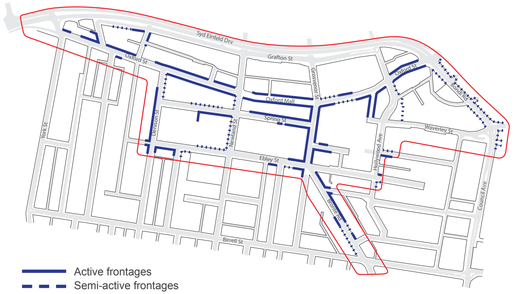
ACTIVE FRONTAGES

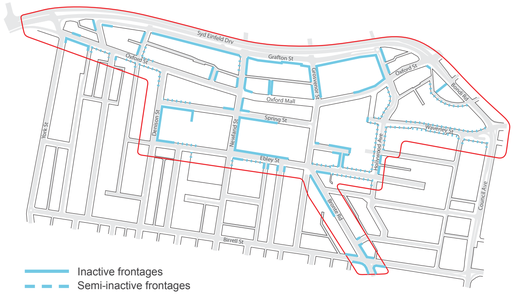

Active frontage, Oxford St Mall


Semi-active frontage, Newland St


Semi-inactive frontage, Waverley St


Inactive frontage, Grosvenor St





0m 200 400

AWNINGS

The provision of continuous awnings over footpaths is a fundamental requirement if pedestrian activity is to be encouraged year round in the centre. Oxford Street performs well in this regard with awnings along most of its length. The main areas in need of awnings are:

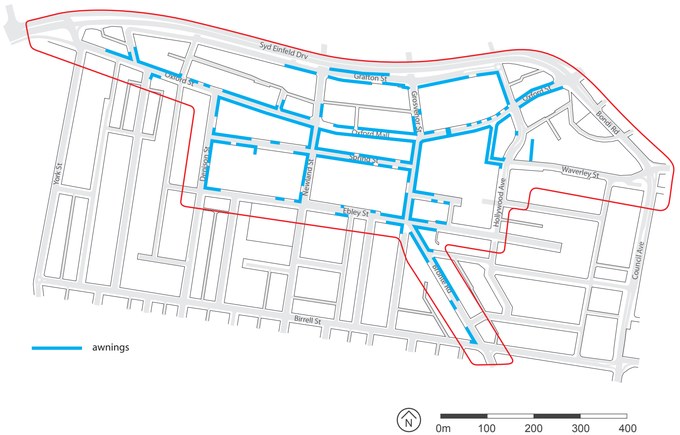
- the Rowe St ramp to the interchange;
- outside the church on Oxford Mall;
- around the Westfield entry on Oxford St;
- on the blank rear and side frontages of Eastgate shopping centre; and
- the western section of Spring St.

It is noted that the proposed DA to redevelop a portion of the Eastgate carpark into offices fails to provide awnings to Newland St and Ebley St where they are currently lacking. All new development should have a requirement to provide awnings to 100% of the street frontages. For existing areas that are lacking awnings, Council could negotiate incentives with the existing businesses to erect awnings over the footpath such as rebates or reduced rates for leasing alfresco space. To address this a Continuous Awning Strategy should be prepared for the town centre.

Lack of weather protection on Rowe St ramp.

Example of excellent weather protection on Oxford St.

AWNINGS



RECOMMENDATIONS

Short term (2013 - 2015):

- Prepare a Continuous Awning Strategy/ Policy for the town centre.

STREET TREES

There are continuous tree canopies through Waverley Mall and near the entry to this mall on Oxford St. This is perhaps the most attractive public space in Bondi Junction. Continuous tree plantings also exist on residential sections of Grafton St, Denison St and Ebley St. For the remainder of streets in the centre, however, trees are generally sparse and are of varying size and species. There is enormous potential to improve the quality and consistency of street trees and overall greenery in the town centre, and to realise the many benefits tree-lined streets can offer. The transformational effect this would have on the centre cannot be overstated. The concept designs set out in Chapter 5 show how street trees can be incorporated into each street.

THE BENEFITS OF TREES

Street trees provide many benefits to the experience of the town centre. They provide much needed shade for pedestrians in summer and reduce the heat absorption of hard surfaces and building walls. Asphalt and paved surfaces can increase urban temperatures 3-7 degrees, whereas neighbourhoods with extensive tree shading can have 15- 30% lower energy bills. Trees absorb pollutants from the air providing a healthier living and working environment. Trees can absorb up to the first 30% of precipitation and also draw moisture from the soil helping to reduce stormwater runoff and expensive infrastructure upgrades. Studies in California found tree shading added 40-60% longer life to asphalt due to reduced heating and cooling.

Trees create aesthetically pleasing dappled light and visual greenery which has been demonstrated to reduce stress levels. Trees provide spatial definition to the streets and reduce the perceived road width which naturally slows traffic. Research shows a treeless street walk is perceived to take longer than one with trees. Studies have also found businesses on tree-lined streets can yield 20% higher income than streets without.

Street trees contribute significantly to the success of Waverley Mall.

Street trees help frame Ebley Street and define Clementson Park.

Street trees are noticeably lacking from Oxford St, the town centre's main street.

The lack of street trees on Grafton St contributes to a poor pedestrian environment.

STREET TREES

RECOMMENDATIONS

Short term (2013 - 2015):

- Install street trees throughout the town centre as set out in the concept designs in Chapter 5.

Estimate cost of capital works: N/A
(included in costings for each street/ public space)

FOOTPATHS

WIDTH AND DEFICIENCIES

Almost all streets in Bondi Junction have footpaths on both sides of the street, typically 3.5 - 4m in commercial areas and 2m in residential areas. It is recommended that 4m is the minimum width that should be provided in commercial areas, but widths of 5 - 6m are preferable to cope with the pedestrian flows at peak periods. For example the 4m wide footpath on Spring St was observed to be at or exceeding capacity on Saturdays.

One of the biggest deficiencies in the path network is the section of Grosvenor St where the path has been reduced to about 1.5m due to construction on the adjoining land. After Oxford St Mall this section of footpath experiences the highest pedestrian activity in Bondi Junction, yet is the narrowest path. As a result, pedestrians walk down the side of the road, dangerously negotiating buses.

The footpath on the northern side of Oxford St near Grosvenor St is also a key deficiency. The bus stop seating and shelter causes a bottleneck in the footpath, reducing it from 4m to 2m. This stretch also experiences some of the highest pedestrian flows (up to 1250 pedestrians/ hour) and requires attention.

HOW WIDE?

There is not a fixed rule or target for the width of a path or the distribution of space to different transport modes; it varies depending on the function and context of the street. In their studies of famous boulevards around the world, Jacobs et al* concluded the pedestrian realm should occupy half to two-thirds of the total road reserve width.

For each of the concept designs set out in Chapter 5 the percentage of space dedicated to pedestrians, cyclists, buses and vehicles is provided for the existing and proposed cross-section. As a general rule the proposed street design aims to rebalance the space distribution more equally to each transport mode.

In a separate analysis of a wider variety of streets**, Jacobs found that footpath width was better correlated to pedestrian volume: walking is unrestricted up to 8 people per minute per metre of width (p/min/m), whereas overcrowding and conflicts occur at about 13.

At peak periods Oxford St Mall has 3.2 p/min/m indicating a comfortable level of pedestrians. Grosvenor St currently has 13.8 p/min/m on the west side where the path has been temporarily reduced for construction, however should ultimately have about 4.8 p/min/m when construction is completed. The northern side of Oxford St near Grosvenor St experiences 13.5 p/min/m where the path width restricted by the bus stop, indicating that widening is required.

CROSSINGS

A number of pedestrian crossings were identified as a safety issue. Six signalised intersections do not offer pedestrian crossings at one of the desire lines:

- Bondi Road/ Waverley St;
- Bondi Rd/ Oxford St;
- Hollywood Ave/ Llandaff St;
- Oxford St/ Nelson St;
- Oxford St/ York St; and
- Bronte Rd/ Birrell St.

Five non-signalised intersections are difficult to cross and require either signals or zebra crossings to be installed to improve safety:

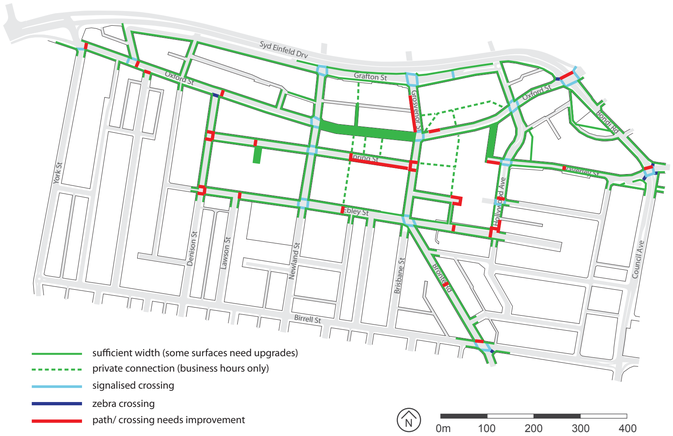
- Oxford St at Westfield entry;
- Spring St/ Bronte Rd;
- Hollywood Ave/ Ebley St;
- Ebley St/ Denison St; and
- Spring St/ Denison St).

There are 8 zebra crossings that are simply painted on without complementary design features such as kerb nibs and street trees. A coordinated approach to urban design, landscape and street design is more effective at slowing traffic than relying on signage to slow and alert motorists.

---

* Jacobs, MacDonald, Rofe. 2002. *The Boulevard Book*. MIT.
** Jacobs. 1995. *Great Streets*. MIT

FOOTPATHS



RECOMMENDATIONS

Short term (2013 - 2015):

- Improve footpaths in accordance with street designs in Chapter 5.

Estimate cost of capital works: N/A
(included in costings for each street)

FOOTPATHS

CONDITION

In terms of path quality most paths generally have an acceptable surface condition in terms of safety. Council's Pedestrian and Access Mobility Plan identifies a number of isolated repairs needed to the footpaths and pram ramps, all of which have been included in the recommendations for each street in Chapter 5.

Of note is the footpath in front of the medical centre opposite Waverley Mall, which has a split level and becomes too narrow, causing pedestrians to walk on the street. An extremely poor footpath also exists on Hollywood Ave near Ebley St; it slopes heavily to the street side and is riddled with deep cracks, making it dangerous for disabled, wheelchairs, prams and elderly.

MATERIALS

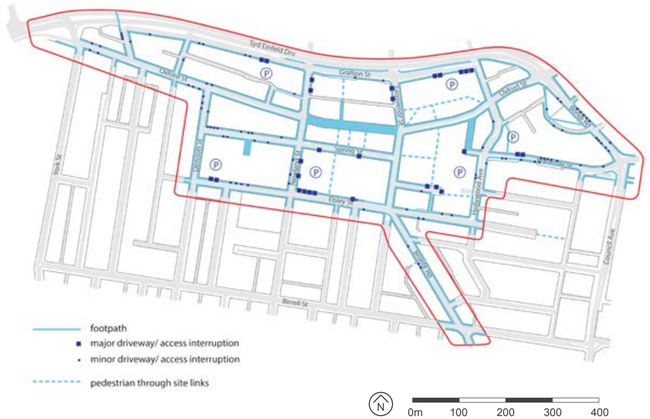
There are many inconsistencies in the paving materials used which is detriemental to the visual amenity and interrupts the character of the streets. In practical terms it is inefficient to have so many different materials. There also appears to be a habit of repairing paths and kerbs with asphalt instead of the original material which looks unsightly and often creates a trip hazard. It is recommneded that the Bondi Junction Public Domain Technical Manual be revised to simplify the pallette of materials to ensure a consistent appearance and rhythm throughout the town centre and simplify maintenance.

Also recommend a maintenaince agreement with service providers to return paving with like for like.

INTERRUPTIONS

There are a number of interruptions to the footpath network. Many are residential driveways or low frequency loading access which although not ideal, do not cause major disruptions to pedestrians. The most problematic interruptions are the bus entries/ exits to the interchange (particularly Grosvenor St), parking station entries and exits and loading zones for the large shopping centres. A parking and loading strategy should be undertaken to identify where interruptions can be reduced or consolidated, and also to limit the creation of more interruptions in the future. For example driveways should be prohibited on key pedestrian streets such as Oxford St and Spring St.

FOOTPATHS



RECOMMENDATIONS

Short term (2013 - 2015):

- Upgrade condition of paths as identified in street designs in Chapter 5.
- Update and simplify Public Domain Technical Manual;
- Incorporate footpath interruptions into Parking and Loading Strategy and prohibit vehicle crossings on high volume pedestrian routes such as Oxford St and Spring Street.
- Negotiate maintenance agreement with service providers

Estimated cost of capital works: NA
(included in costings for each street)

SEATING

Seating is concentrated in Oxford St Mall and Waverley Mall, collectively accounting for 50% of the total public seating and 75% of the outdoor restaurant seating in the town centre. This is understandable given their pedestrian-oriented amenity, active frontages and access to both shade and sun. There is also substantial public seating provided in Eora Park which is well utilised by lunching workers and Clementson Park which is frequented by parents with children.

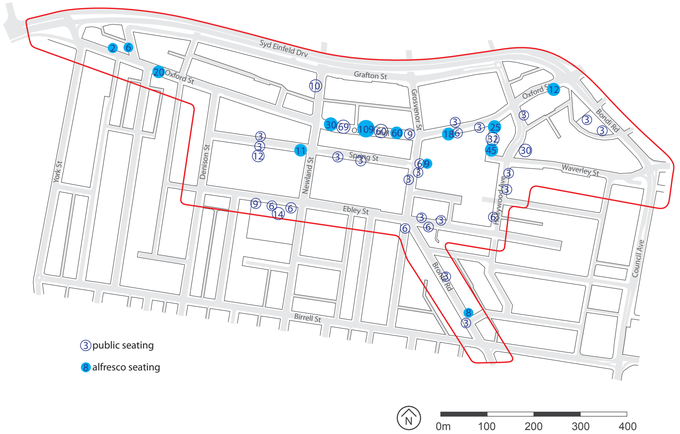
There is a noticeable under-supply of seating on Spring Street, Oxford Street east and west of the Mall. As the primary 'main street' in Bondi Junction, Oxford St should have more public seating and more alfresco dining could be encouraged outside of the mall. There are areas on both sides of Oxford St between Newland and Denison that have increased building setbacks and could be used for outdoor restaurant seating.

With low vehicle volumes and active frontages Spring St has the potential to become a great street where pedestrians will stay longer, therefore designs to enhance the amenity on this street should include additional public seating and/ or space for alfresco dining to establish. A number of public spaces also require additional seating such as Fingleton Reserve and the Waverley Library forecourt.

Outdoor restaurant seating in Oxford St Mall.

Public seating in Waverley Mall.

SEATING



RECOMMENDATIONS

Short term (2013 - 2015):

- Provide additional public seating in Oxford St and Spring St;
- Encourage footpath seating for restaurants and cafes on Oxford St and Spring St and investigate incentives.

Medium term (2015 - 2017):

- Provide additional seating in Waverley Library forecourt and Fingleton Reserve.

Estimated cost of capital works: N/A
(included in costings for each street/ public space)

PUBLIC ART

"Public art does something that neither a public space without art nor even a museum with all its art can do: it can capture the eye and mind of someone passing through our public spaces. It can make us pay attention to our civic environment; it can encourage us to question what's around us. Much of our newly built environment lacks the resonance of history or reflection of civic ownership, which makes residents proud of where they live. Carefully conceived public art installations and environments, rich with connections to our history, the natural world or the ephemeral quality of life, help make places of meaning within a community. Art can celebrate the qualities that make one place different from another. The best of public art can challenge, delight, educate and illuminate. Most of all, public art creates a sense of civic vitality in the cities, towns and communities we inhabit and visit." (Source: Americans for the Arts. Public Art Network Council Green Paper)

There are approximately 9 examples of public art in Bondi Junction Centre installed between 200 and 2011. The majority are sculptures within public plazas. They are concentrated in Oxford Street Mall. Two new examples have also recently been installed as short term demonstration projects for the Complete Streets Project.

Waverley residents have identified arts and culture as an issue of high priority, and one of the three most important categories of activities that informed their view of Waverley Council. Residents valued Council's promotion and support of the arts and cultural and arts facilities. There is no doubt that arts and culture are important and highly valued within the Waverley community. The following extract from Helen's Song aptly conveys many resident's connection to arts and culture:

"I'm a culture vulture
I cannot get enough
Of music, plays and sculpture
And all that arty stuff"

(Source: "Helen's Song" composed by the Pavilion Singers led by Cassy Darvall, as part of the Art NSW funded Bondi Wave music program).

The Benefits of Investing in Arts and Culture
Rob Adams, Director of City Design at the City of Melbourne stated that investment in arts and culture can generate an economic return of up to 11:1. It is noted that investment in roads rarely generates returns of 2:1. The figure was calculated in 2005. It was a high return because of the informal networks that artists use to seek assistance. The City of Melbourne found that for very small amounts of money artists were able to generate additional resources that equated to 11:1.

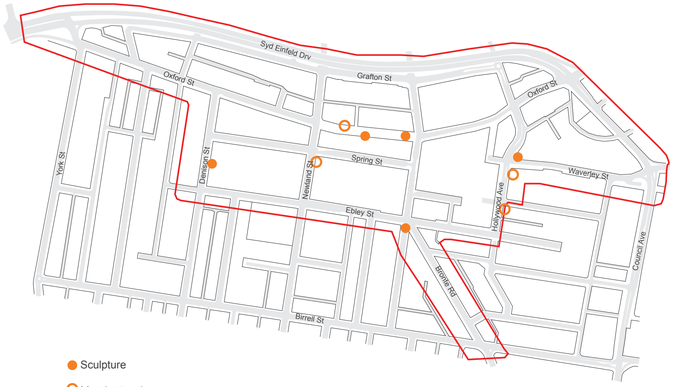
Pavement works in Oxford Street Mall inspired by the recordings of Aboriginal language in the journals of Lieutenant William Dawes befriending young Indigenous woman Patyegarang.

Sculpture: Murul: Sand, Dust and Dry Earth
Children's Playground inspired by the Bondi Tram

Sculprure: Life Teeming Life Teaming
A shoal of fish, brimming with life, beautiful to witness, is also an important food source for humanity

Mural Artwoks

PUBLIC ART



RECOMMENDATIONS

Short term (2013 - 2015):
- Map suitable locations for future public art installations in Bondi Junction and incorporate into Council's Capital Works budget and programming for Complete Streets upgrades.
- Develop a public art register.
- Develop a public art trail for Bondi Junction including a marketing strategy.
- Develop a maintenance and cleaning strategy for public art in Bondi Junction.

Medium term (2015 - 2017):
- Update Council's public art policy for Bondi Junction
- Develop a Street Arts Strategy for Bondi Junction

Estimated cost of capital works:
Under investigation.

EVENING ACTIVITY, LIGHTING & SAFETY

The level of after hours activity in the town centre is less than expected for a major centre and this would enhance Bondi Junction's attraction as a cosmopolitan evening destination. Activity, together with lighting, is also critical in order to create a safe environment for pedestrians at night.

A number of restaurants and bars have established around the eastern end of Spring St and Bronte Rd. Together with the gyms and yoga studios located on upper levels; the Coles supermarkets which remain open until midnight; and the key bus route on Bronte Rd, this area maintains the most activity into the evening.

The heart of the centre, Oxford St Mall, closes down after 6pm with only a few businesses remaining open and no regular evening events or attractions being held there. The space is well lit and lends itself to night markets, music, theatre, buskers etc.

Waverley Mall also lends itself to evening activity, being located opposite the Westfield cinema complex and restaurants. The lighting could be enhanced and incorporate feature up-lighting for the mature trees.

It is suggested that these three areas should be the focus of increased evening activation initially as they have the foundations in place to become successful evening destinations.

In general, the level of lighting of the streets and spaces throughout the town centre is sufficient, however several specific areas require improvement:

- Hollywood Ave near Ebley St;
- Waverley Library forecourt;
- Brisbane St plaza;
- Waverley Mall.

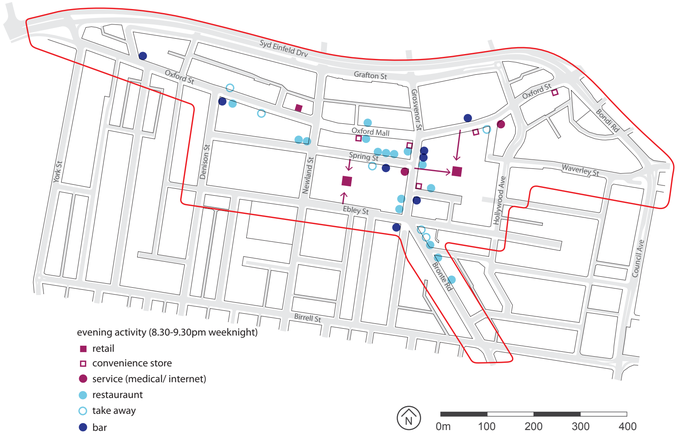
In addition to the brightness and functional purpose of the lighting, town centres can use lighting artistically to bring colour, atmosphere, and interest to the public realm at night. The growing success if the City of Sydney Vivid Light Festival is an example of this. As such it is recommended that a creative lighting strategy be undertaken for the town centre to identify opportunities to enhance evening vibrancy.

Three key areas to focus evening activation initially.

Oxford St Mall is attractive and well lit in the evening but most businesses are closed and it is devoid of activity.

The lighting in Waverley Mall could be improved and the trees could feature up-lighting.

EVENING ACTIVITY, LIGHTING & SAFETY



RECOMMENDATIONS

Short term (2013 - 2015):

- Prepare a Night Activation Strategy for Oxford Mall.
- Investigate installation of CCTV in Oxford Street Mall.
- Review parking rates after 5pm to encourage more people to frequent restaurants in the evening.

Medium term (2015 - 2017):

- Improve the lighting level of Hollywood Ave near Ebley St; Waverley Library forecourt; Brisbane St plaza; and Waverley Mall (PAMP items 12, 35, 49);
- Undertake a Creative Lighting Strategy.

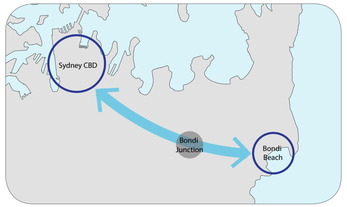
Approximate cost of capital works: N/A
(included in costings for each street/ public space).

4. PLANNING FOR THE FUTURE

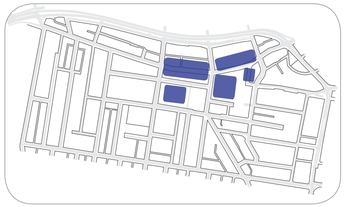
VISION

BONDI JUNCTION WILL BUILD ON ITS STRENGTHS TO BECOME A TRUE DESTINATION - AN INVITING, FUNCTIONAL AND DESIRABLE URBAN CENTRE TO LIVE, WORK, AND VISIT - A PLACE LOVED BY LOCALS AND VISITORS ALIKE.

FROM TRANSPORT FOCUSED

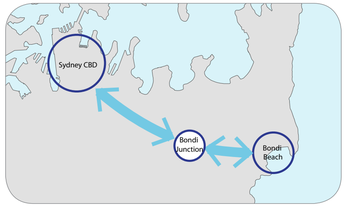


FROM STOP-OVER

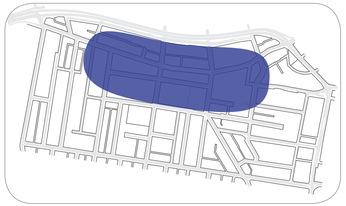


FROM FRAGMENTED TREASURES

TO PLACE FOCUSED



TO DESTINATION



TO TREASURE ISLAND

PRINCIPLES

"A GOOD CITY IS LIKE A PARTY - PEOPLE STAY MUCH LONGER THAN REALLY NECESSARY BECAUSE THEY ARE ENJOYING THEMSELVES" - JAN GEHL

CIVIC SPACES

- All civic spaces including streets and parks designed first and foremost to be the best possible places for pedestrians;
- A greener public domain with many more street trees, plants, water sensitive streets and spaces, efficient lighting and urban greening including walls and roofs;
- Sunny and sheltered spaces for people are encouraged and celebrated; (See page 46 for benefits of trees).
- An inspiring public realm with quality materials, creative lighting, sculptures, murals and street art.
- An accessible public domain

TRANSPORT

- Safe and convenient to access the centre by public transport, bicycle and on foot day and night;
- Through-traffic is discouraged through the commercial core by creating slow, pedestrian-friendly streets;
- Provision for car sharing, electric vehicle charging, real time public transport information and public wi-fi for greater efficiency and convenience.

HUMAN SCALE

- Promotion of high quality architecture that complements the public realm;
- A greater range of businesses and activities is encouraged;
- Active frontages at street level mandatory for new and renovated buildings.

ECONOMIC

- Stimulate economic growth by creating attractive places where people will visit more often and linger longer.

STRATEGIC FRAMEWORK

HOW COMPLETE STREETS ALIGNS WITH WAVERLEY TOGETHER 3

The Complete Streets Project will assist Council to address 7 of the 14 Vision Elements identified in the 2013 - 25 Waverley Community Strategic Plan (WT3):

1. WE ARE SAFE

The Complete Streets approach to continue building a safe town centre for all. Strategies include implementing better street lighting, upgrading footpaths, pedestrian crossings, creating a safe bike path network and calming traffic through 'road diets'.

A safer town centre is based on holistic planning for all transport modes with greater priority given to pedestrians. Visual enhancements to the town centre such as greenery and public art will contribute to a community that feels safe, lingers longer and attracts a diversity of users.

2. EVERYONE WELCOME TO PARTICIPATE IN COMMUNITY LIFE

The Complete Streets principles allow for the opportunity for everyone to participate in community life. Conceptual street designs have been developed in accordance to Australian standards to provide universal access for all and road safety.

Most importantly the concept designs reclaim public space to allow diverse and unique public spaces such as plazas, better public parks, finer grain laneways, and high quality streetscapes. The street designs aim to enhance the everyday environment through capital works that allow for special activity and events and better integrate all modes of transport.

STRATEGIC FRAMEWORK

3. EXPRESS OUR ESSENTIAL SELVES THROUGH OUR TRADITIONS, OUR ARTS, OUR CULTURES AND OUR LIFESTYLES

Complete Streets has formulated an over arching vision with strong guiding principles to ensure the future development of the Bondi Junction town centre accommodates expression of our essential selves and a stronger sense of identity.

Bondi Junction is one of 13 major centres in Sydney, and as the population increases the significance to high quality public space and design that facilitates the arts and culture, tradition and lifestyle is vital.

4. THE ARCHITECTUAL LANDSCAPE IS CARED FOR AND DEVELOPED AT A HUMAN SCALE AND DESIGN IS SENSITIVE TO THE NATURAL, HISTORICAL AND SOCIAL CONTEXTS

The principles of Complete Streets create more places of a human scale, facilitate social interactions and respect the historical context of the place.

5. VITAL SERVICES ARE FULLY ACCESSIBLE

Services such as transport, heath and child care, fresh produce, the Waverley library and community facilities are made more accessible in the Complete Street designs.

Widening and upgrading the quality of footpaths, implementing seating and trees will create a better experience for people to access Bondi Junction, whether this is by foot, bike or public transport.

6. LOCAL ECONOMIC PROSPERITY PROVIDES OPPORTUNITY FOR ALL

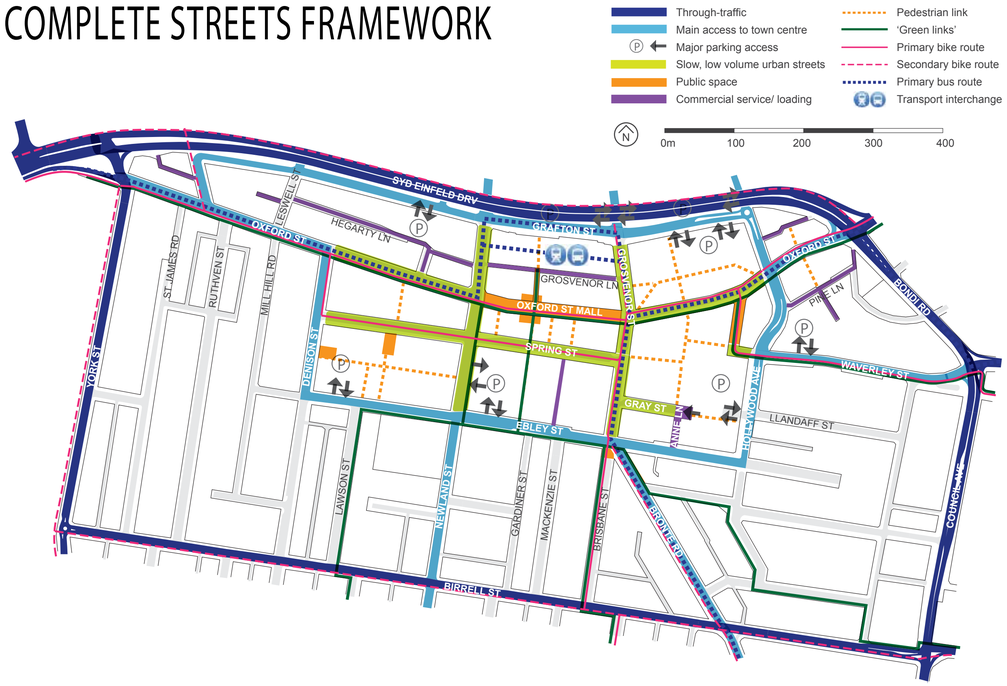
Enhancing the public domain is proven to enhance the local economy. More appealing streetscapes mean more pedestrians and more cyclists in direct proximity to shops and cafes and an increase in time spent in the town centre. This typically leads to increased retail spending, enhanced desirability of business and residential addresses and ultimately increased property values.

7. AS A LOCAL COMMUNITY WE HAVE THE COURAGE TO TAKE A LEADING PLACE IN ACHIEVING THE ENVIRONMENTAL AIMS OF A GLOBAL SOCIETY

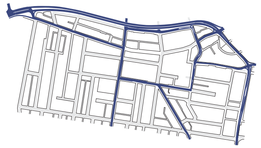
Complete Streets can help Waverley to meet set targets for a more sustainable Sydney. Complete Streets will create a more walkable town centre that is green with plenty of street trees, low level planting and water sensitive urban design.

The town centre can be accessible and inviting for public transport users, all types of bike riders and those on foot. These are values essential to becoming an environmentally responsible global society.

COMPLETE STREETS FRAMEWORK



COMPLETE STREETS FRAMEWORK



A key objective of the framework is to reduce the existing pattern of through-traffic in the commercial core, which is having a detrimental impact on the quality of the public realm and the overall experience of Bondi Junction.

Traffic not stopping in Bondi Junction will be encouraged to use the key thoroughfares on the periphery rather than traversing through the town centre.

Traffic stopping in Bondi Junction will be encouraged to access the major parking stations without traversing through the town centre.

The streets in the commercial core will be designed as slow, low-volume streets that support high pedestrian activity. They should be considered as urban spaces primarily, and transport corridors secondary.

Street designs need to cater for high pedestrian volumes on the 'main streets' (Oxford St, Bronte Rd and Spring St), existing and future arcades, and the 'green links'.

The primary bicycle routes require as a priority either bike paths (on busier streets) or streets configured for safe on-street cycling (in commercial core). These shall be completed prior to investment in the longer term secondary bicycle routes.

The existing bus lanes and key bus routes are maintained unchanged, however changes to bus stops, interchange entries and lane widths are proposed in order to improve pedestrian convenience and safety.

Key loading areas for Eastgate and Westfield remain unchanged, however Spring St changes from its existing role and appearance as a loading zone, into a 'main street' for people, with loading becoming a secondary function.

5. COMPLETE STREETS COMPLETE TRANSFORMATION

CONCEPT DESIGNS - GENERAL DESIGN TOOLS

Concept designs have been created with consideration to the following;

GREENING THE STREETS

- Street trees and low level planting provide shade and contribute to reducing the urban heat island. They reduce pollution, and have a positive impact on mental health and reducing stress levels. Street trees and low level planting opportunities have been maximised where possible within each street concept design.

- Street tree species should be chosen and maintained to a high canopy so branches are not easily knocked by bus mirrors.

- Placements of street trees at intersections complies with the RTA setback guidelines to maintain optimal sightlines for pedestrians and motorists.

FOOTPATHS

- Footpath widths have been maximised to accommodate the high number of pedestrians that access Bondi Junction, daily.

- Wider footpaths create opportunities for public seating, alfresco licencing and better universal access, encouraging a diversity of users that will increase safety and strengthen our local economy.

- Pram ramps to meet Australian standards for access and positioned strategically within the footpath.

- Raised pedestrian crossings with a high quality threshold treatment will create a continuous streetscape and provide a safer environment for pedestrians and motorists.

KERBS AND MEDIANS

- semi mountable kerbs to be unsed in ambiguous situations to avoid damage to vehicles

- Bike path median width to be maximised to accomodate opening of car doors.

SWEPT PATHS

- Swept paths at intersections (where applicable) have been tested for a large 12m rigid truck.

- Intersections meet turning circle requirements excluding the Spring and Denison Street intersection.

- All bus lane widths comply with the RMS minimum of 3 .25m .

COMPLETE STREETS CONCEPT DESIGNS

COMPLETE STREETS COULD RECLAIM 5,000SQM OF PUBLIC SPACE AND CREATE 2.3KM OF NEW BIKE PATHS IN BONDI

The reconfiguration of the existing streets into Complete Streets will have a transformational effect on Bondi Junction town centre.

Traffic will be reduced through the commercial core while maintaining convenient access to the major parking stations. It will become much more attractive, convenient and safe to walk and cycle around the city centre, promote an enhanced image of the centre as a destination to live, work and recreate.

The increased life on the streets will help existing businesses thrive and provide a catalyst for new shops, cafes and other businesses to take advantage of the increased passing trade.

At its core Complete Streets have the ability to transform Bondi Junction from a utilitarian transport/ commerce hub into a bustling town centre full of street life, a unique place loved by locals and visitors alike.

COMPLETE STREETS CONCEPT DESIGNS

This chapter provides concept designs for Complete Streets in Bondi Junction and collectively provides a master plan for the town centre, rather than streets being designed in isolation to one another. These concepts are to be used as a guide for the next phase of detailed design which will include full surveys and construction design documentation.

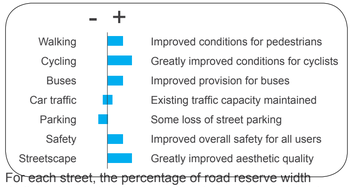
Prior to the detailed design phase it is recommended that a set of Urban Street Standards be agreed to for streets in Bondi Junction (and urban centres in general), addressing matters such as street typologies, lane widths, kerb radius, kerb profiles, path widths, tree planting, lighting, street furniture. Rather than applying a uniform set of road standards to the entire LGA, which are typically suited to more suburban contexts, a set of standards specific to urban centres would ensure that the Complete Streets are detailed appropriately for their urban context. The Urban Street Standards would be developed with a review of contemporary research and best practise on urban standards nationally and internationally; comparing this to Council's existing standards; workshopping with Council to calibrate the standards for Bondi Junction; and documenting the standards clearly.

There is no "one size that fits all" for Complete Streets, however each concept has responded to common underlying principles:

- The street's role and hierarchy in the context of the Complete Streets Framework set out in Chapter 4. For example some streets have more focus as a gateway entry to the city centre, some facilitate access to parking stations, and some are intended as slow, safe urban streets with high pedestrian volumes;
- Each concept design highlights community benefits for each street. Community benefits include greener streets by way of additional street trees and low level planting including opportunitites for water sensitive design WSUD, wider footpaths with high quality paving, dedicated bike paths, new and additional seating,lighting and public artwork.
- The use of 'road diets' to identify where surplus space can be reallocated more equally to other users. As a general rule the following minimum widths are used:
  - Footpaths 4m commercial areas/ 2m residential;
  - Bike paths 2.5m bi-directional / 1.5m one-way;
  - Vehicle lanes 2.9m without buses / 3.25m with buses*
- Issues identified in Chapter 3 such as pedestrian and cycling safety, deficiencies in footpath quality, street trees, awning cover, seating etc;
- Changes to road reserves widths (planned and/ or already acquired);
- Existing policies and plans developed for Bondi Junction, including the Pedestrian Access and Mobility Plan (PAMP);
- The outcomes of the intersection modelling;
- Opportunities to improve pedestrian and cycling convenience, access and safety;
- Opportunities to improve the visual quality and de-cluttering of streets and greening the town centre;
- Opportunities to retain existing kerbs, trees, poles and other infrastructure where practical to minimise costs.

For each street there is an existing and proposed plan and cross section and a summary of all recommendations and approximate estimated costs. Further details regarding funding methods are discussed in Chapter 6 and a breakdown of the estimated cost is provided in Appendix C.

Each Complete Street concept design is rated on the benefits it could deliver to the different users as well as safety and place-making outcomes. The centre black line is the existing condition, blue bars extending to the left indicate reduced performance, whereas blue bars to the right indicate an improved outcome:



For each street, the percentage of road reserve width dedicated to pedestrians, cyclists, buses and vehicles is provided for the existing and proposed cross-section.

*Typically 3.5m bus lanes are required in NSW, however as the entire study area is proposed to become 40km/hr, 3.25m is considered more appropriate and is within the Austroads guidelines of 3.0 - 3.3m for low speed roads with low truck volumes. For comparison, the Queensland Road Design Manual sets uses a 3.3m minimum for bus lanes. Other Queensland Department of Transport and Main Roads design guidelines for cycling use 3m minimum for bus lanes (with 1.5m cycle lane) or 3.5m maximum for shared bus and cycle lanes less than 60km/hr (wider lanes not recommended to prevent buses overtaking cyclists). In South Australia Gehl Architect's Adelaide Public Space and Public Life Study 2011 adopted 3m for bus lanes as the basis for revised street designs, which was supported with transport safety studies.

OXFORD STREET (SYD EINFELD DRV - HOLLYWOOD

As the eastern gateway to Bondi Junction, this section of Oxford Street is strategically important for reinforcing the sense of arrival into a major urban centre and welcoming for people into the town centre. As well as serving important vehicle access to the major carparks, it is a key bus route for the eastern suburbs and one of the highest volume bike routes in Sydney.

While there is currently a dedicated bus lane and generous footpaths on the south side, the footpath on the northern side is less that ideal for commercial frontages and there is no provision for cyclists on this busy road.

The existing LEP contains a 3m road widening reservation on the north side, which would be created at the time of any redevelopment.

This area is complex and will need further indepth analysis. Principles and issues have been identified to guide this process.

Existing view of Oxford St and Hollywood Ave intersection

Existing view of Oxford St looking west

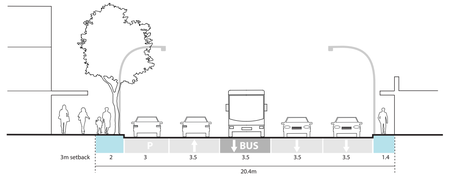
PRINCIPLES

- To create a safe and convenient environment for buses, cyclists, and pedestrians
- Eases congestion on approach to Bondi Junction
- Footpath widths adequate for high pedestrian use
- Is a safe and efficient cycling connection from Bondi Beach to the Interchange for types of bicycle users
- Incorporates additional street trees to improve the amenity of this gateway to Bondi Junction
- Incorporates timed traffic management

ISSUES

- The northern leg of Syd Einfeld Drive and Oxford Street intersection has no signalised pedestrian crossing
- Bus lanes at capacity in the morning peak
- Syd Einfeld Drive and Oxford Street intersection rated as a level F intersection (at capacity) at Thursday afternoon peak.

OXFORD STREET (SYD EINFELD DRV - HOLLYWOOD



EXISTING SECTION

28% PEDESTRIANS 15% BUSES 57% VEHICLES

EXISTING AERIAL PHOTO

COMMUNITY BENEFITS

Could include...

- 11 new street trees
- 420m² more footpaths for pedestrians
- 200m new bike paths
- 2 bike box markings
- More public seating
- More bike racks
- Continuous awnings for optimum weather protection

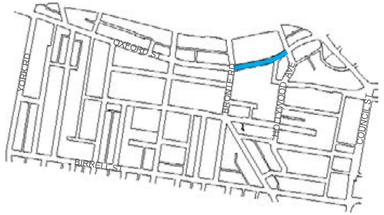
RECOMMENDATIONS

Short term (2013 - 2015):

- Reduce speed limit to 40km/hr;
- Widen pram ramp and provide tactile paving at Syd Einfeld Drive crossing (PAMP item 10);
- Install signalised pedestrian crossing at Syd Einfeld Drive intersection (PAMP item 11 - traffic modelling has confirmed there would be no impact to intersection performance).

Medium term (timing subject to redevelopment of adjoining sites to the north):

- Road reserve to be widened 3m to north as per existing LEP;
- Provide wider footpath on north side, repair footpath south side (PAMP item 8 and 9)
- Install additional street tree planting;
- Consider potential future light rail route.



OXFORD STREET (HOLLYWOOD AVE - GROSVENOR ST)

This section of Oxford St is a key part of Bondi Junction's main street, flanked by Westfield's flagship shopping centre and providing direct links to the activity hubs of Oxford Mall, the transport interchange and Waverley Mall.

This is a high frequency bus route with 76 buses per hour at peak times. This section of Oxford St is closed to all traffic except buses. The street plays an even more important role for cyclists and pedestrians: there are 176 cyclists per hour at peak time and 20,000 pedestrians cross the road between 6am-6pm (not including at signalised intersections), about 75% of which cross at the Westfield entries.

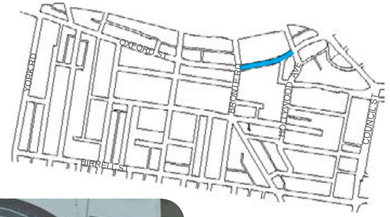
Concerns have been raised in relation to bus speeds and safety, however the data shows that bus speeds average 27km per hour and there have been 5 pedestrian accidents in the last 5 years (not including the signalised intersections), which is considered low given the significant pedestrian volumes. This street has one of the lowest overall traffic volumes in Bondi Junction and is considered safe to cross without needing to restrict pedestrians with signals, fencing or other barriers.

It is proposed that the street is formalised as a bus lane so that cyclists are legally permitted to use the street.

The north side of the street has two indented bus stops either side of the Westfield entries. The seating and shelter for the westernmost bus stop currently causes a bottleneck in the footpath, reducing it from 4m to 2m. This is a key pedestrian route with 1250 pedestrians per hour at peak times. It is therefore recommended to remove the bus shelter and replace with seating at the building line as well as a new awning. This would free up the footpath for pedestrians. making space for additional street trees, and improving wayfinding for bus passengers.

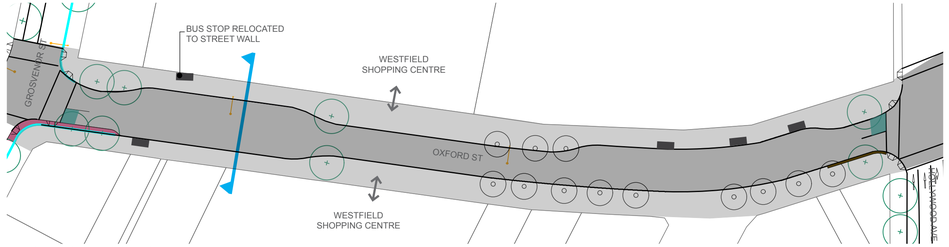
This section of Oxford St is one of the most attractive areas for pedestrians in Bondi Junction.


Bus stop obstructing pedestrians on Oxford St.



OXFORD STREET (HOLLYWOOD AVE - GROSVENOR ST)

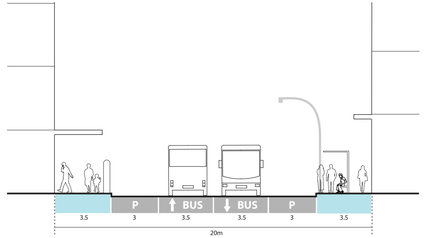
EXISTING AERIAL PHOTO



PROPOSED CONCEPT PLAN

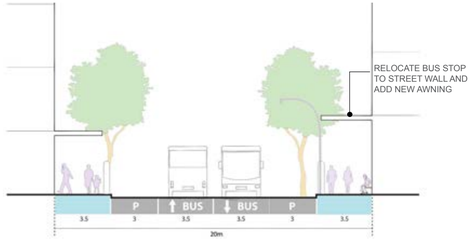
- Cross section location
- Existing road
- Existing footpath
- Existing road replaced with footpath
- Existing kerb and gutter removed
- Proposed ke gutter
- Proposed 'bike box'
- Proposed low planting / barrier to road to replace existing green fencing
- Light poles
- Pram ramps
- Existing tree retained
- Proposed 400L tree planting
- Existing bus Stops

OXFORD STREET (HOLLYWOOD AVE - GROSVENOR ST)



EXISTING SECTION

35% PEDESTRIANS 65% BUSES



PROPOSED CONCEPTUAL SECTION

35% PEDESTRIANS 65% BUSES

RATING

COMMUNITY BENEFITS

- 8 new street trees
- 2 new 'bike box'
- 35.5m² new footpaths
- 7m² new planter boxes
- Potential for new awnings outside westfields
- New public seating

RECOMMENDATIONS

Short Term (2013 - 2015):

- Provide additional seating, shelter and tactile paving (PAMP item 5 and 6);
- Remove bus shelter, construct seating against building and construct awning. (Refer to pg48. Foorpaths for more information).
- Remove existing barrier fence near Hollywood Ave and replace with fixed seating/ low planting;
- Replace pram ramps and Oxford St/ Adelaide St intersection (PAMP item 7);
- Provide additional street tree planting;
- Extend footpath and kerb at Oxford St - Grosvenor St intersection whilst accomodating adequate turning circles for buses;
- Install 'bike box' markings at signals (Hollywood Ave and Grosvenor St) so cyclists have front position and add cyclist lantern to the signals;
- Install additional bike parking;
- Formalise as a bus lane so taxis and cyclists are legally permitted to travel on the street; Time managment for night access for cars and taxis
- Formalise 30km/hr speed limit;
- Lobby TfNSW to install real time TV monitors with bus waiting times;
- Work with RMS to avoid having more barrier fencing installed;
- Require awnings over footpaths for any new developments as part of a city centre Awning Strategy/ Policy;
- Consult with Westfield to promote early provision of continuous awnings along the entire length of Oxford St frontage.

Long Term (2017+):

- Consider potential future light rail route.

Approximate cost of capital works: $151,000

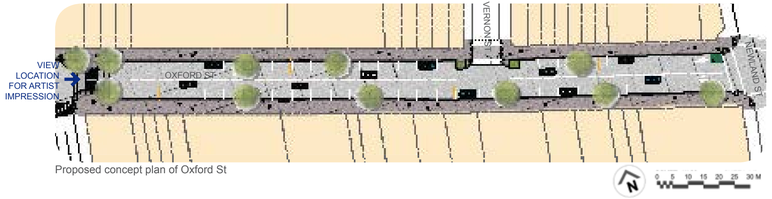
Excludes road re-surfacing, civil works beyond public domain improvements, infrastructure amplification or renewal and undergrounding of power.

OXFORD STREET (NEWLAND ST - DENISON ST)

This section of Oxford Street embodies a true mixed-used street with retail, restaurants, bars, commercial uses and apartments, with sufficiently wide footpaths, quality pavers and good lighting. Its success as a main street, however, is compromised by the heavy traffic and lack of greenery, as well as very few businesses open in the evening.

The Complete Streets Framework aims to create slow, low volume urban streets in the commercial core by encouraging vehicles to use peripheral routes to access the major parking stations rather than traversing through the centre. To assist in achieving this, right turns into Newland St are proposed to be prohibited from Oxford St and Ebley St to prevent this through-route, and the zebra crossing raised to slow vehicles. With lower traffic volume and speed the street is intended to be safe for cyclists to use without the need for separated paths. To address greenery, street trees are proposed to be planted between on-street parking bays. As well as adding greenery and shade, the trees break up the continuous stretch of parking and asphalt, reducing the perceived street width and slowing vehicles. Another option could be investigated with trees in a central median, however would likely result in loss of parking to provide the required space; must be large enough so not to inhibit views and conflict with buses; and may limit future light rail options.

Artist impression showing view of Oxford St looking east

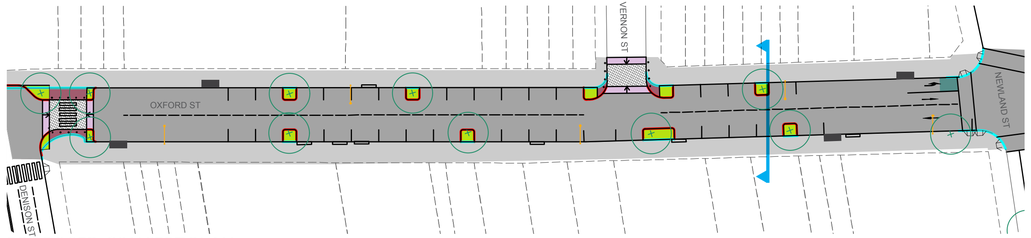


Proposed concept plan of Oxford St

Existing view of Oxford St

OXFORD STREET (NEWLAND ST - DENISON ST)

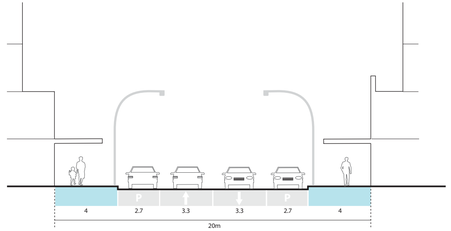
EXISTING AERIAL



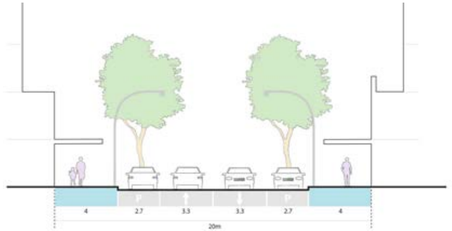
PROPOSED CONCEPT PLAN NOTE: NET LOSS OF 2 PARKING BAYS.

- Cross section location
- Existing road
- Existing footpath
- Existing road replaced with footpath
- Existing kerb and gutter removed
- Proposed kerb and gutter
- Light poles
- Pram ramps
- Proposed threshold ramp
- Interlocking road paving
- Proposed 'bike box'
- Proposed low planting
- Proposed 400L tree planting in roadway including tree grate and 2 raised segmented kerbs
- Exising bus stop

OXFORD STREET (NEWLAND ST - DENISON ST)



EXISTING SECTION 40% PEDESTRIANS 60% VEHICLES/ BUS/ CYCLISTS



PROPOSED CONCEPTUAL SECTION

40% PEDESTRIANS 60% VEHICLES/ BUS/ CYCLISTS

RATING

COMMUNITY BENEFITS

- 1 New street tree
- 107m² new planting areas
- 1 new 'bike box'
- 2 raised pedestrian priority crossings
- More seating at bus stops
- New public seating

RECOMMENDATIONS

Short term (2013-2015):

- Construct kerb nibs with street trees between on-street parking bays;
- Protect trees from large vehicles with appropriate tree guards untill they are fully established
- Paint cycling symbols on street to remind motorists cyclists share travel lane (separate bike paths not required due to intended reduced traffic on this stretch);
- Paint 'bike box' markings on streets at the Newland St intersection to give cyclists front position at lights and add cyclist lantern to the signals;
- Install a raised zebra crossing on Oxford St near Denison St and add kerb extensions to minimise crossing distance and slow oncoming vehicles. Ramps to be bus compliant;
- Provide more seating at bus stops under awnings (PAMP item 1);
- Provide tactile paving at Newland St intersection (PAMP item 2);
- Reduce speed limit to 40km/hr.

Longer term (2017+):

- Consider potential future light rail route.

Approximate cost of capital works: $420,000
Excludes road re-surfacing, civil works beyond public domain improvements, infrastructure amplification or renewal and undergrounding of power.

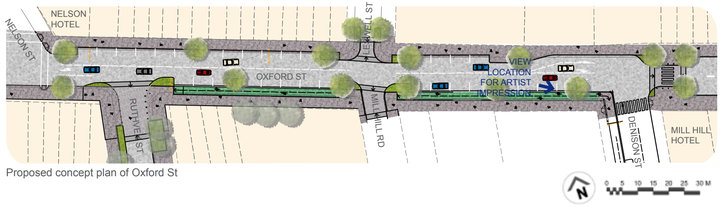
OXFORD STREET (DENISON ST - RUTHVEN ST)

As part of the gateway into Bondi Junction the quality of this streetscape is important to create an attractive image of the centre and welcome visitors. In this regard additional street tree planting is proposed to add greenery. The trees are located between parking bays to break up the expanse of asphalt and reduce the perceived street width to slow vehicles.

The re-design of the Denison St intersection with a dedicated right turn lane, in conjunction with the proposed prohibited right turn at Newland St and raised threshold on Oxford St, will encourage vehicles on-route to Eastgate/ Randwick to turn here instead of traversing through the commercial core via Newland St, helping to calm traffic in the core.

The bi-directional bike path separated from vehicles on this busy street will greatly improve safety on this key cycling route. The bike path does not continue across intersections and cyclists would cross the road like a pedestrian (in contrast to the Bourke St model). Intersections with minor side streets are proposed to be raised as shared zones to provide a seamless pedestrian

Artist impression showing view of Oxford St looking east

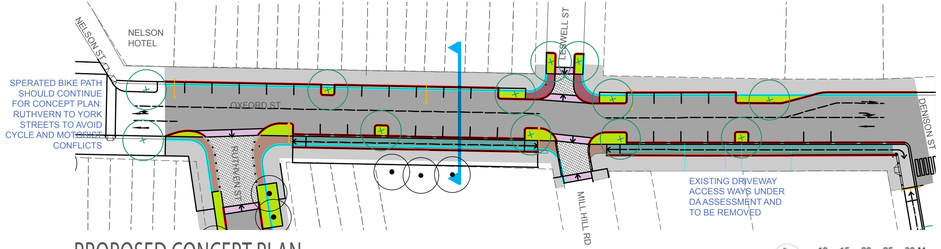


Proposed concept plan of Oxford St

Existing view of Oxford St

OXFORD STREET (DENISON ST - RUTHVEN ST)

EXISTING AERIAL

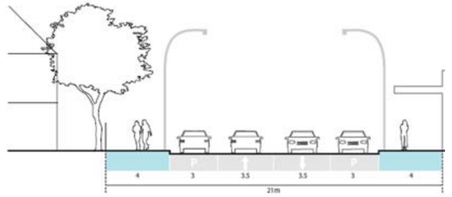


PROPOSED CONCEPT PLAN

NOTE: NET LOSS OF 2 PARKING BAYS (IF DRIVEWAY ACCESS MAINTAINED).
NO BUS STOPS / NO CONFLICT WITH BUS STOPS AND BIKE PATH

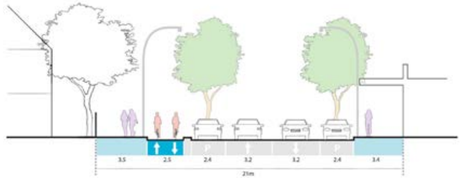
- Cross section location
- Existing road
- Existing footpath
- Existing road replaced with footpath
- Existing kerb and gutter removed
- Proposed kerb and gutter
- Light poles
- Pram ramps
- Proposed bike path
- Proposed threshold pavement
- Proposed threshold ramp
- Interlocking road paving
- Proposed garden bed
- Existing tree retained
- Proposed 400L tree planting in roadway including tree grate and 2 raised segmented kerbs

OXFORD STREET (DENISON ST - RUTHVEN ST)



EXISTING SECTION

38% PEDESTRIANS 62% VEHICLES + CYCLIST + BUS



PROPOSED CONCEPTUAL SECTION

33% PEDESTRIANS 12% CYCLISTS 55% VEHICLES + BUS

RATING

COMMUNITY BENEFITS

- 12 New street trees
- 152m² New planting areas
- 120m New bike path
- 108m² New footpath
- 3 New raised pedestrian priority crossings
- More seating at bus stops
- New public seating

Example of proposed raised 'shared spaces' at intersections with minor streets

RECOMMENDATIONS

Short term (2013 - 2015):

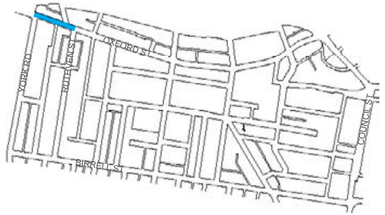
- Provide right turn lane from Oxford St into Denison St;
- Install bi-directional bike path on south side of street (linking to Denison St bike path);
- Introduce bike slowing methods when conditions change to shared zone (surface treatments, slow hazard markings etc).
- Median for bike path separation to be disjointed to accomodate gaps for universal access and storm watr drainage (as per the Bourke Street, Surry Hills model or as per appendix F). Median width to maximise safety for car doors opening
- Construct kerb nibs with street trees between on-street parking bays;
- Convert T-intersections with minor side streets to raised paved shared spaces with interlocked road paving dissimilar to footpath paving
- Reduce speed limit to 40km/hr;
- Prepare policy to ensure awnings are provided over footpath as a condition of any development.

Longer term (2017+):

- Consider potential future light rail route.

Approximate cost of capital works: $689,000

Excludes road re-surfacing, civil works beyond public domain improvements, infrastructure amplification or renewal and undergrounding of power.



OXFORD STREET (RUTHVEN ST - YORK RD)

As the main gateway to Bondi Junction from the city, this section of Oxford Street is strategically important for reinforcing the sense of arrival into a major urban centre. As well as serving important vehicle access to the major carparks, it is a key bus route for the eastern suburbs and is one of the highest volume bike routes in Sydney. The southern side of the road adjoining the bus depot has been identified in the LEP for road widening and this land is proposed to be used to accommodate a separated bi-directional bike path, as well as landscape screening of the bus depot.

Currently the intersection of Oxford St, Syd Einfeld Drive and York Rd has poor legibility and creates an unnecessary island of land that effectively hides the front door to Bondi Junction. It is recommended that as a key strategic project, a design review be undertaken to determine if there is a more efficient, legible and safer configuration for the intersection; creation of a memorable entry gateway experience; potential new public space; improved linkages to Centennial Park; screening of the bus depot; and potentially allowing right turn from York Rd northbound into Oxford St eastbound. The design review should also consider the built form and access for a potential significant redevelopment on the corner of Oxford St and York Rd.

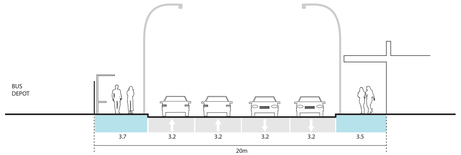
A full design review is recommended for the western gateway to Bondi Junction

Existing view of Oxford St and York Rd intersection

Existing view of Oxford St looking west

Existing aerial view of Oxford St

OXFORD STREET (RUTHVEN ST - YORK RD)



EXISTING SECTION

36% PEDESTRIANS 64% VEHICLES + CYCLIST + BUS

EXISTING AERIAL PHOTO

COMMUNITY BENEFITS

Could include...

- 10 new street trees
- 64m^2 new planting areas
- 68m new bike path
- 113m^2 new footpath
- 1 New raised pedestrian priority crossings
- More seating at bus stops
- New public seating

PRINCIPLES

- To create a safe and inviting gateway to Bondi Junction
- Install bike path on south side of Oxford Street to link with Centennial Park proposed shared path and Current RMS cycle plan to implement bike path to the Interchange and create a safe and continuous bike path network
- Incorporate additional street trees to improve the amenity of the western gateway to Bondi Junction
- Provide high quality footpath treatments, generous footpath widths and provide safe crossings for pedestrians
- Introduce travel speeds to encourage a calmed traffic environment
- Widen public domain in front of bus depot where road acquisition occurs
- Provide missing pedestrian crossing at signalised intersections

ISSUES

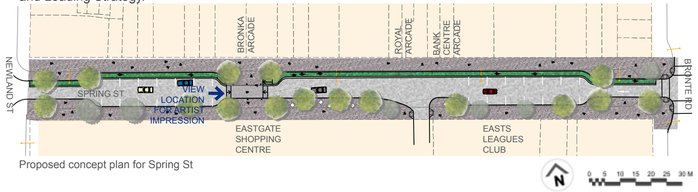
- Bus depot location and entrance / exit to Oxford Street and potential conflict with cyclists using proposed bike path

SPRING STREET (BRONTE RD - NEWLAND ST)

With the anchors of Eastgate and Westfield at each end and arcade links to Oxford St Mall and the transport interchange along its length it is no surprise that Spring Street has become a popular pedestrian route, particularly on weekends when the footpaths are filled to capacity. A number of restaurants and cafes have established, creating the basis for an 'eats street' character and together with the Easts Leagues Club, gyms and yoga studios it is one of the few places in Bondi Junction with activity both day and night. The street does not play a key role in the traffic network; it is one-way, does not provide a through-route, and has one of the lowest traffic volumes in Bondi Junction. The street is mostly used by delivery vehicles servicing premises on the north side (including premises fronting Oxford St Mall which do not have any street frontage), and vehicles exiting the Eastgate loading docks.

It is proposed that in the long term the loading areas be consolidated to the eastern and western ends of the street to enable the footpath to be widened substantially in various locations, providing more space for pedestrians, street trees and outdoor restaurant seating to strengthen street life. A separated bi-directional bike path is require. Conflicts between cyclists and delivery operations are likely to be minor and in the longer term loading areas could be relocated as part of the proposed Parking and Loading Strategy.


Artist impression showing view of Spring St looking east

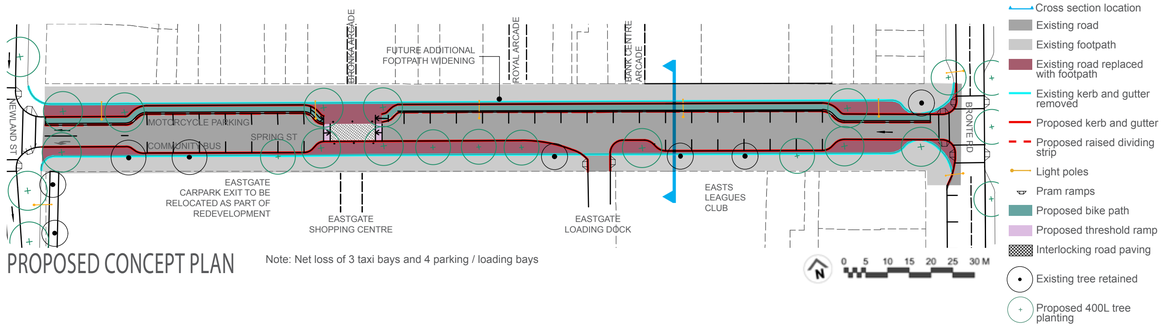


Proposed concept plan for Spring St


Existing view of Spring St

SPRING STREET (BRONTE RD - NEWLAND ST)

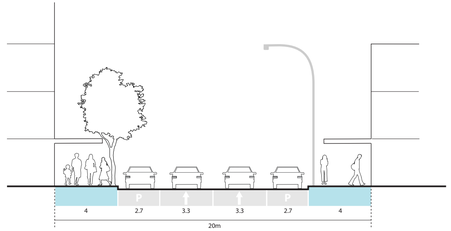
EXISTING AERIAL



PROPOSED CONCEPT PLAN

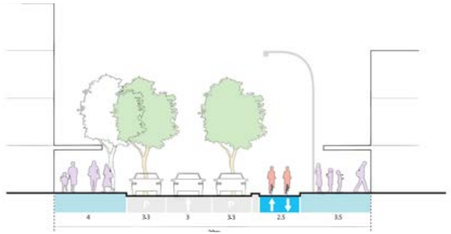
Note: Net loss of 3 taxi bays and 4 parking / loading bays

SPRING STREET (BRONTE RD - NEWLAND ST)



EXISTING SECTION

40% PEDESTRIANS 60% VEHICLES + CYCLISTS



PROPOSED CONCEPTUAL SECTION

37% PEDESTRIANS 15% CYCLISTS 48% VEHICLES

RATING

COMMUNITY BENEFITS

- 16 new street trees
- 205m new bike path
- 654m² new footpath
- 1 new raised pedestrian priority crossings
- New public seating
- Extended footpaths for footpath seating and dining

RECOMMENDATIONS

Short term (2013 - 2015):

- Reduce to one travel lane westbound (two lanes at Newland Street intersection);
- Install a separated bi-directional bike path;
- Median for bike path seperation to be disjointed to accomodate gaps for universal access (as per the Bourke Street Model or as per appendix F). Median to be sufficient in width to accomodate the opening of car doors.
- Consolidate loading areas (north side) and short term parking & taxis on south side;
- Loading Strategy for Bondi Junction to be carried out prior to implementation
- Widen footpath both sides;
- Raise and widen Eastgate pedestrian crossing and remove signals (due to slower design speeds and reduced traffic volumes) and add tactile pavement (PAMP item 28);
- Install additional street trees in the kerb extensions near travel lane to reduce sense of width and slow vehicles;
- Replace the pram ramps at the Newland St intersection (PAMP item 29);
- Reduce speed limit to 40km/hr;
- Improve street activation as part of the Council car park redevelopment plan – footpath seating for restaurants and cafes opportunities on south side;
- Work with Eastgate to restrict hours for loading vehicles;
- Prohibit any vehicle crossings/ driveways in order to avoid conflicts with the high pedestrian volumes;
- Consult with businesses to promote additional footpath restaurant seating;
- As part of a city centre parking strategy, investigate expansion of Eastgate carpark under Spring St to provide parking for future developments on north side.
- Detailed design should consider location for taxi bays so they are as close as possible to the Eastgate pedestrian entrance
- Detailed design should consider access for ambulance vehicles and drop off and pick up points for the elderly.

Medium term (2015 - 2017):

- Develop a creative lighting strategy for the town centre
- Pending loading strategy investigation, extend footpath on northern side, install street trees.

Approximate cost of capital works: $887,000
Excludes loading / parking study, underground carpark expansion, road re-surfacing, civil works beyond public domain improvements, infrastructure amplification or renewal and undergrounding of power.
* A Two Way Option was investigated and is available upon request

SPRING STREET (NEWLAND ST - DENISON ST)

The western end of Spring St currently has less intense pedestrian activity than the eastern end but provides an important link from the heart of the town centre to Waverley Library.

The street's greatest asset is Norman Lee Place, a hardscaped urban plaza with seating and bike racks as well as large leafy trees providing ample shade. With the land under Council ownership there is the potential to provide a pedestrian laneway from this space west to the library and also south to Clementson Park. It is proposed that with a raised paved shared zone the plaza could also extend north across Spring St and ultimately connect with a pedestrian laneway north through to Oxford St.

The street itself is in need of attention. It is noticeably exposed to the weather with almost no awnings and few street trees. The condition of the footpath is fairly poor, there are a number of obstructions in the path such as poles and bollards, and there are regular driveway interruptions.

Located within the commercial core and envisaged as a slow, low-volume urban street in the Complete Streets Framework, it is considered safe for on-street cycling. However, as it forms part of a key bike route through the town centre a separated bike path is warranted, particularly to attract cyclists not confident riding on the road.

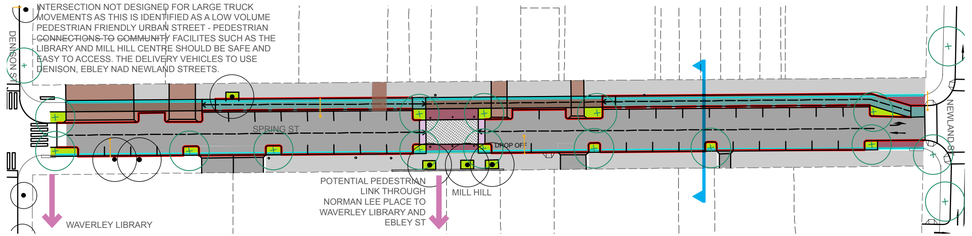
This section street lacks weather protection from awnings and trees.


Driveway interruptions on Spring St

Future mid-block pedestrian links

SPRING STREET (NEWLAND ST - DENISON ST)

EXISTING AERIAL

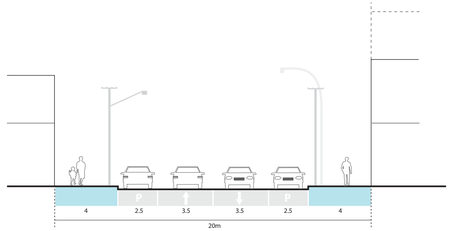


PROPOSED CONCPET PLAN

NOTE: NET LOSS OF 11 PARKING BAYS.

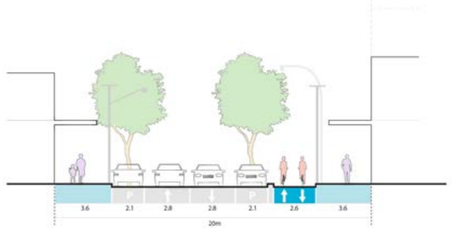
- Cross section location
- Existing road
- Existing footpath
- Existing road replaced with footpath
- Existing kerb and gutter removed
- Proposed kerb and gutter
- Light poles
- Pram ramps
- Proposed bike lane
- Proposed threshold pavement
- Proposed threshold ramp
- Interlocking road paving
- Existing tree retained
- Proposed 400L tree planting in roadway including tree grate and 2 raised segmented kerbs

SPRING STREET (NEWLAND ST - DENISON ST)



EXISTING SECTION

40% PEDESTRIANS 60% VEHICLES + CYCLISTS



PROPOSED CONCEPTUAL SECTION

36% PEDESTRIANS 13% CYCLISTS 51% VEHICLES

RATING

COMMUNITY BENEFITS

- 12 new street trees
- 72m² new planting areas
- 205m new bike path
- 53m² new footpath
- 1 new raised pedestrian priority crossings
- New public seating

RECOMMENDATIONS

Short term (2015 - 2017):

- Require awnings over footpaths for any new developments as part of a city centre Awning Strategy/ Policy.

Medium term (2015 - 2017):

- Provide bidirectional bike path;
- Upgrade footpath surface and remove bollard obstructions (PAMP item 30 and 31) and replace pram ramps at Newland St intersection;
- Provide raised paved crossing to create the effect of extending the Norman Lee Place plaza space across the street;
- Remove fencing at front of Norman Lee Place;
- Construct kerb nibs with street trees between on-street parking bays;
- Reduce speed limit to 40km/hr;
- As part of a city centre Laneway and Arcade Strategy include new pedestrian links from library forecourt to Newland Street and Norman Lee Place to Ebley Street.

Approximate cost of capital works: $753,000

Excludes extended north-south pedestrian links, road re-surfacing, civil works beyond public domain improvements, infrastructure amplification or renewal and undergrounding of power.

ISSUES

- Traffic congestion currently occurs for vehicles turning right out of Spring Street into Denison Street
- Raised paved shared space treatment to be negotiated with RMS
- Lane widths allow for small rigid vehicles only

DENISON STREET (OXFORD ST - EBLEY ST)

Denison St demarks a transition from the commercial core on the east to residential on the west. The street currently provides direct access to Waverley Library and Eastgate shopping centre, each with significant parking stations, and is planned to play an important access role to and from these destinations. To assist this a dedicated right turn lane is proposed from Oxford St eastbound into Denison St.

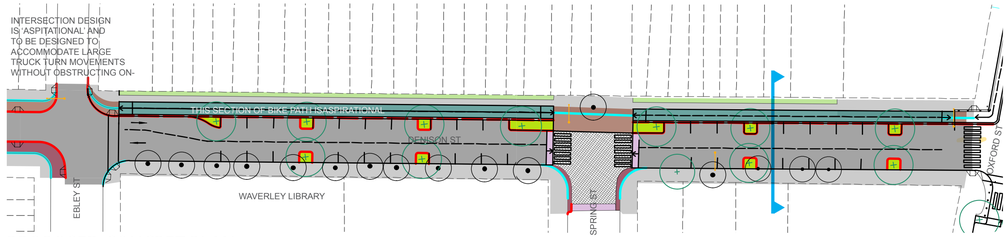
The street is also a key link in the proposed bike route connecting Oxford St east and west via Spring St and a bi-directional bike path is proposed. The bike path is recommended to be located on the west side in order to minimise delays for vehicles turning right from Oxford St into Newland St, and avoid flow-on delays to eastbound buses on Oxford St.

Existing view of Denison St from Oxford St

Artist impression showing view of Denison St from Oxford St

DENISON STREET (OXFORD ST - EBLEY ST)

EXISTING AERIAL



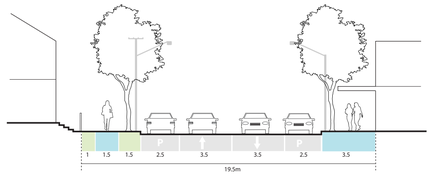
PROPOSED CONCPET PLAN

NOTE: NET LOSS OF 10 PARKING BAYS.

0 5 10 15 20 25 30 M

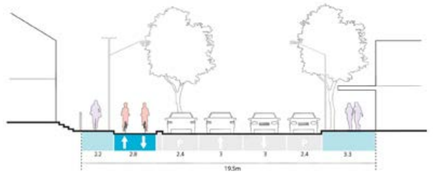
- Cross section location
- Existing road
- Existing footpath
- Existing road replaced with footpath
- Existing kerb and gutter removed
- Proposed kerb and gutter
- Proposed raised dividing strip
- Light poles
- Pram ramps
- Proposed bike path
- Proposed threshold ramp
- Interlocking road paving
- Proposed raised threshold pavement
- Existing grass verge
- Proposed grass verge
- Existing tree retained
- Proposed 400L tree planting in roadway including tree grate and 2 raised segmented kerbs

DENISON STREET (OXFORD ST - EBLEY ST)



EXISTING SECTION

41% PEDESTRIANS 59% VEHICLES + CYCLISTS



PROPOSED CONCPETUAL SECTION

28% PEDESTRIANS 17% CYCLISTS 48% VEHICLES

RATING

COMMUNITY BENEFITS

- 12 new street trees
- 115m² new planting
- 174m new bike path
- 230m² new footpath
- 3 new raised pedestrian priority crossings
- New public seating
- Safe and direct access to community facilities such as the Waverley Library

RECOMMENDATIONS

Short term (2013 - 2015):

- Install a bi-directional bike path from Oxford St to Spring St and provide a raised zebra crossing at the Spring St intersection to reduce design speed of street and improve the safety of crossing (PAMP item 34);
- Replace asphalt footpath repairs with uniform paving (PAMP item 32, 33, 36, 73, 74);
- Reduce speed limit to 40km/hr.

Approximate cost of capital works: $553,000
Excludes road re-surfacing, civil works beyond public domain improvements, infrastructure amplification or renewal and undergrounding of power.

Medium term (2015 - 2017):

- Extend the bi-directional bike path from Spring St to Ebley St; (Aspitional).
- Re-configure the Ebley St - Denison St intersection to facilitate safer crossing and accommodate the turning path of semi-trailer delivery vehicles (PAMP item 37);

Approximate cost of capital works: $546,000
Excludes road re-surfacing, civil works beyond public domain improvements, infrastructure amplification or renewal and undergrounding of power.

EBLEY STREET (HOLLYWOOD AVE - BRONTE RD)

Ebley St is an important thoroughfare in Bondi Junction providing access to two key parking stations (Waverley Library and Eastgate shopping centre). It is a convenient route for through-traffic avoiding the commercial core and provides access to the Eastgate loading docks. As such, the street experiences high traffic volumes and the streetscape is car-focussed with wide expanses of asphalt for traffic lanes and parking. The street's greatest asset is the mature trees that line the street, providing shade for pedestrians and softening the expansive hardscape.

The Complete Streets Framework recognises that Ebley St will continue to play a strategic role in providing vehicle access to Bondi Junction, however the potential also exists to better balance the needs of cyclists and pedestrians. Much of the road reserve is 23 - 24.5m wide, whereas most streets in Bondi Junction are 20m wide. This surplus width is currently expressed in paths that are disproportionately wide for the pedestrian numbers (approximately 7m, compared to 4m on Oxford St).

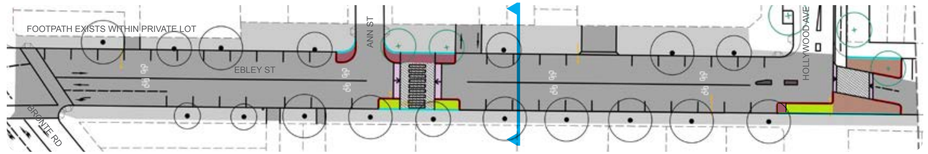
As a longer term plan, the surplus width could be used to accommodate a bike path without impacting on traffic lanes or street trees and with minimal loss of street parking. The bike path would link the library, Clementson Park, the child care and community centre and Eastgate shopping centre. In conjunction with the Hollywood Ave proposal the bike path would continue to Eora Park and Westfield shopping centre.

While bike paths on Oxford St, Spring St and Denison St remain the priority due to much higher numbers of cyclists utilising those routes, the width of this road reserve presents the opportunity to expand cycling infrastructure in the future. The bike path has been designed to end at road intersections and cyclists would cross with the same priority as pedestrians, avoiding the need to modify signals for cyclists. The bike path has been located on the opposite side to major parking stations to minimise conflicts with cars, and where it crosses minor streets a raised 'shared space' is proposed, consistent with Council's bike plan for Oxford St west.

Existing view of Ebley St looking west near Ann St.

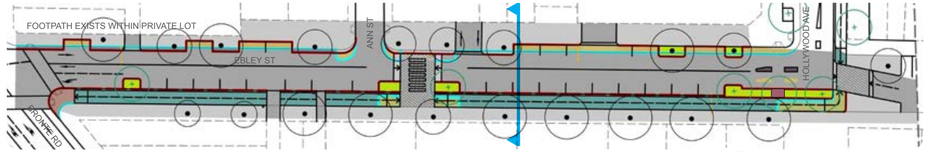
EBLEY STREET (HOLLYWOOD AVE - BRONTE RD)

EXISTING AERIAL



PROPOSED INTERMEDIATE CONCPET PLAN

NOTE: NO LOSS OF PARKING BAYS.



ASPIRATIONAL CONCEPT PLAN

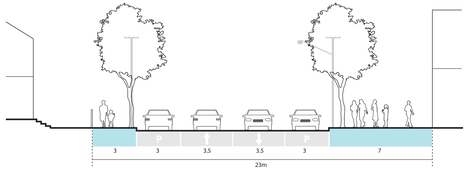
NOTE: NET LOSS OF 10 PARKING

N

0 5 10 15 20 25 30 M

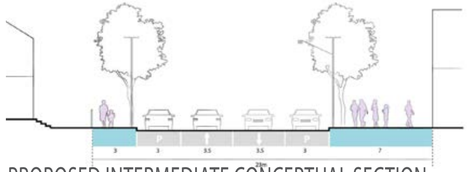
- Cross section location
- Existing road
- Existing footpath
- Existing road replaced with footpath
- Existing kerb and gutter removed
- Proposed kerb and gutter
- Proposed raised dividing strip
- Light poles
- Pram ramps
- Proposed bike path
- Proposed bike symbol
- Proposed threshold ramp
- Interlocking road paving
- Proposed raised threshold pavement
- Proposed planter bed
- Existing tree retained
- Proposed 400L tree planting in roadway including tree grate and 2 raised segmented kerbs

EBLEY STREET (HOLLYWOOD AVE - BRONTE RD)



EXISTING SECTION

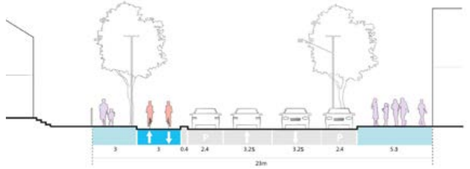
43% PEDESTRIANS 57% VEVICLES + CYCLISTS



PROPOSED INTERMEDIATE CONCEPTUAL SECTION

43% PEDESTRIANS 57% VEHICLES + CYCLISTS

RATING



ASPIRATIONAL CONCEPTUAL SECTION

37% PEDESTRIANS 13% CYCLISTS 50% VEHICLES

RATING

COMMUNITY BENEFITS

- 48m² New planting areas
- 54m² New footpath
- 1 New raised pedestrian priority crossings
- New public seating

RECOMMENDATIONS

Medium term (2015 - 2017):

- Raise existing zebra crossing near Ann St and extend kerbs with tree plantings to minimise crossing distance and slow oncoming vehicles;
- Install cycle symbols in centre of road lanes each way
- Upgrade footpath surface and install tactile paving (PAMP item 50 ad 16);
- Install improved lighting at zebra crossing;
- Install splitter islands and new pram ramps at the Ebley St - Hollywood St corner to enable safer two-stage pedestrian crossing (PAMP item 52);
- Reduce speed limit to 40km/hr;
- Consider banning right turn from Ebley St into AnnE St to assist in meeting the warrant for a shared zone on Gray St;
- Require awnings over footpaths for any new developments as part of a city centre Awning Strategy/ Policy.
- Retain traffic management signage

Approximate cost of capital works: $228,000
Excludes road re-surfacing, civil works beyond public domain improvements, infrastructure amplification or renewal and undergrounding of power.

Longer term (2017+):

- Construct bi-directional bike path on south side;
- Construct kerb nibs with street trees between on-street parking bays.

Approximate cost of capital works: $472,000
Excludes road re-surfacing, civil works beyond public domain improvements, infrastructure amplification or renewal and undergrounding of power.

Existing view of Ebley St looking west

Artist impression showing intermediate concept streetscape upgrade

Artist impression showing aspirational concept streetscape upgrade with bike path

EBLEY STREET (NEWLAND ST - BRONTE RD)

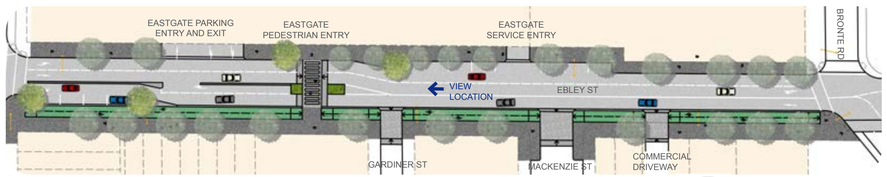
This is the most heavily congested and difficult to negotiate part of Ebley St with a high volume of traffic accessing the Eastgate parking station and a zebra crossing and traffic signal on either side. The streetscape is completely focussed toward the utilitarian function of vehicle movement. Travel lanes, parking bays, turn lanes, kerb barriers, traffic signs, and driveways are visually dominant, as is the expansive blank frontage of the Eastgate building itself.

Despite the presence of a zebra crossing this is not a place designed for people. There are long inactive frontages with limited entries to buildings; few windows and little facade articulation to create interest; fragmented awnings offering little shelter; and many interruptions to the footpath with driveways, car parks and lanes. The zebra crossing offers little median protection and the design of approaches do not effectively slow or alert motorists. The street is relatively well lined with mature street trees which offer some respite from the concrete landscape.

The Complete Streets proposal creates kerb extensions to define the zebra crossing and car bays, reducing the perceived street width and actual crossing distance. The crossing is raised to improve legibility for both pedestrians and motorists and acts as a traffic-calming device. Planter beds and additional tree planting will help to green the street and in time will offer more continuous shade for pedestrians.

Considering the presence of a major parking station on this section of street, it would be reasonable to ultimately convert some street parking into a separated bike path to improve safety for cyclists on this busy road. Consistent with the design on Oxford St, intersections with minor side streets are proposed to be treated with raised shared spaces for seamless pedestrian passage.

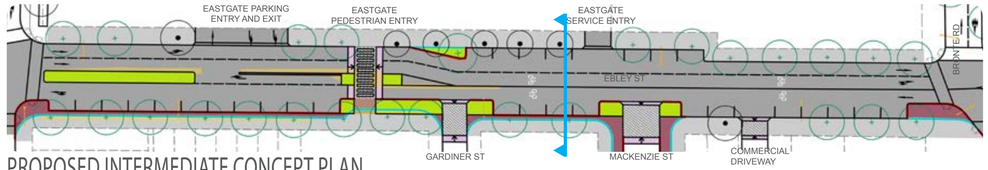
Proposed intermediate concept plan for Ebley St



Proposed aspirational concept plan for Ebley St

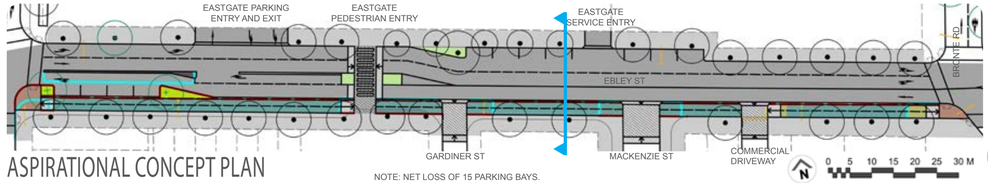
EBLEY STREET (NEWLAND ST - BRONTE RD)

EXISTING AERIAL



PROPOSED INTERMEDIATE CONCEPT PLAN

NOTE: NO LOSS OF PARKING BAYS.

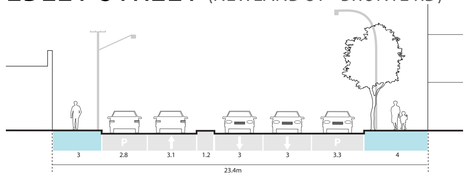


ASPIRATIONAL CONCEPT PLAN

NOTE: NET LOSS OF 15 PARKING BAYS.

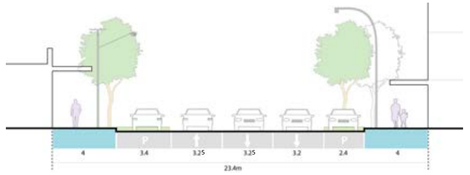
- Cross section location
- Existing road
- Existing footpath
- Existing road replaced with footpath
- Existing kerb and gutter removed
- Proposed kerb and gutter
- Proposed raised dividing strip
- Light poles
- Pram ramps
- Proposed bike path
- Proposed bike symbol
- Proposed threshold ramp
- Interlocking road paving
- Proposed raised threshold pavement
- Proposed planter bed
- Existing tree retained
- Proposed 400L tree planting in roadway including tree grate and 2 raised segmented kerbs

EBLEY STREET (NEWLAND ST - BRONTE RD)



EXISTING SECTION

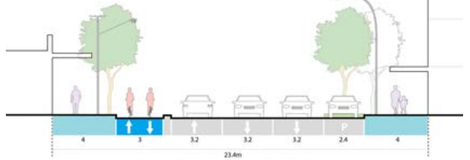
30% PEDESTRIANS 70% VEHICLES + CYCLISTS



PROPOSED INTERMEDIATE CONCEPTUAL SECTION

34% PEDESTRIANS 66% VEHICLES + CYCLISTS

RATING



ASPIRATIONAL CONCEPTUAL SECTION

34% PEDESTRIANS 13% CYCLISTS 53% VEHICLES

RATING

COMMUNITY BENEFITS

- 26 new street trees
- 238m² new planting areas
- 239m² new footpath
- 1 new raised pedestrian priority crossings
- New public seating

RECOMMENDATIONS

Medium term (2015 - 2017):

- Prohibit right turn from Ebley St westbound into Newland St northbound to discourage through traffic in commercial core;
- Install cycle symbols in centre of road lanes each way
- Raise Eastgate zebra crossings and extend kerb with tree plantings to minimise crossing distance and slow oncoming vehicles;
- Replace footpath paving in front of Eastgate and on south side of street, install tactile paving at crossing, install stop signs for vehicles exiting Eastgate (PAMP items 18, 43, 44, 48);
- Convert T-intersections with Gardiner St and Mackenzie St into raised paved shared spaces (PAMP item 47);
- Construct kerb nibs with street trees between on-street parking bays and install seating where extra width (PAMP item 46);
- Modify Eastgate carpark conversion plan to provide awnings over footpaths on Ebley St;
- Require awnings over footpaths for any new developments as part of a city centre Awning Strategy/ Policy;
- Reduce speed limit to 40km/hr.

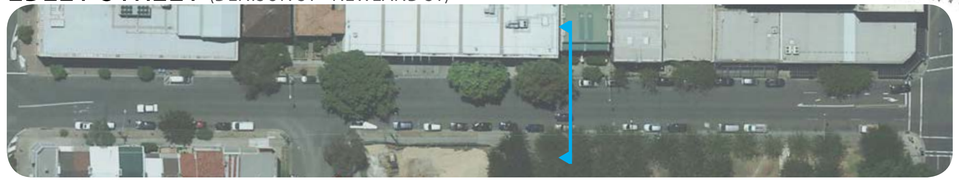
Approximate cost of capital works: $583,000
Excludes road re-surfacing, civil works beyond public domain improvements, infrastructure amplification or renewal and undergrounding of power.

Longer term (2017+):

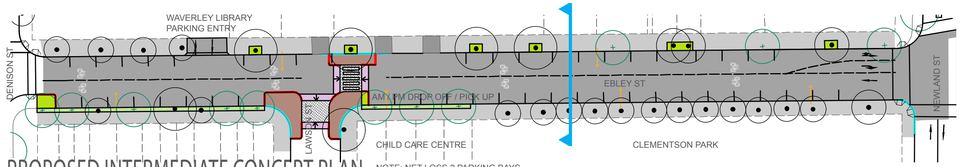
- Construct bi-directional bike path on south side.

Approximate cost of capital works: $597,000
Excludes road re-surfacing, civil works beyond public domain improvements, infrastructure amplification or renewal and undergrounding of power.

EBLEY STREET (DENISON ST - NEWLAND ST)

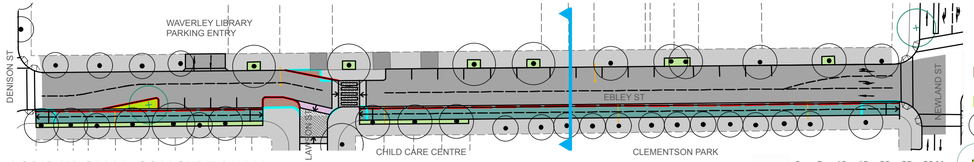


EXISTING AERIAL



NOTE: NET LOSS 2 PARKING BAYS.

PROPOSED INTERMEDIATE CONCEPT PLAN



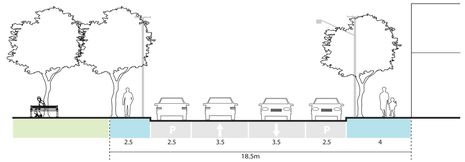
NOTE: NET LOSS OF 31 PARKING BAYS.

ASPIRATIONAL CONCEPT PLAN

- Cross section location
- Existing road
- Existing footpath
- Existing road replaced with footpath
- Existing kerb and gutter removed
- Proposed kerb and gutter
- Proposed raised dividing strip
- Light poles
- Pram ramps
- Proposed bike path
- Proposed bike symbol
- Proposed threshold ramp
- Interlocking road paving
- Proposed raised threshold pavement
- Proposed planter bed
- Existing tree retained
- Proposed 400L tree planting in roadway including tree grate and 2 raised segmented kerbs

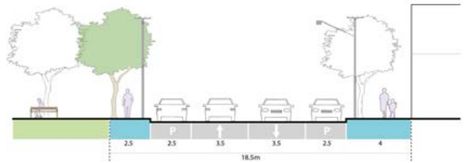
0 5 10 15 20 25 30 M

EBLEY STREET (DENISON ST - NEWLAND ST)



EXISTING SECTION

30% PEDESTRIANS 70% VEHICLES + CYCLISTS



PROPOSED INTERMEDIATE CONCEPTUAL SECTION

30% PEDESTRIANS 70% VEHICLES + CYCLISTS

RATING

ASPIRATIONAL CONCEPTUAL SECTION

35% PEDESTRIANS 15% CYCLISTS 50% VEHICLES

RATING

COMMUNITY BENEFITS

- 11 new street trees
- 102m² new planting areas
- 141m² new footpath
- 2 new raised pedestrian priority crossings
- New public seating

RECOMMENDATIONS

Medium term (2015 - 2017):

- Raise zebra crossing near Lawson St and extend kerbs with tree plantings to minimise crossing distance and slow on-coming vehicles (PAMP item 39);
- Install cycle symbols in centre of road lanes each way
- Construct kerb nibs with street trees to reduce intersection size and improve crossing safety at Newland St and Denison St;
- Convert intersections with Lawson St into raised paved shared space to slow vehicles at the intersection;
- Upgrade footpath on north side (PAMP item 38);
- Reduce speed limit to 40km/hr.

Approximate cost of capital works: $225,000
Excludes road re-surfacing, civil works beyond public domain improvements, infrastructure amplification or renewal and undergrounding of power.

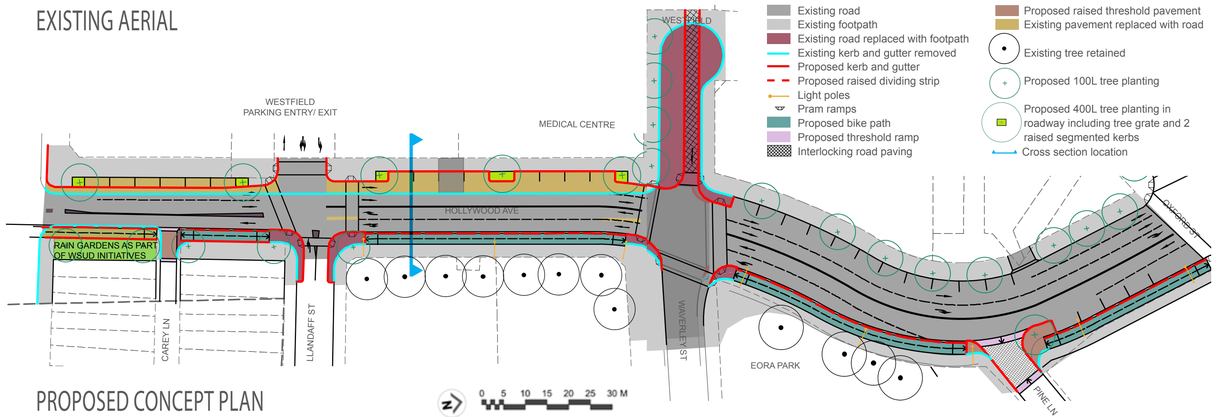
Longer term (2017+):

- Construct bi-directional bike path on south side to avoid interruptions/ conflicts with vehicles accessing parking stations on north side.

Approximate cost of capital works: $285,000
Excludes road re-surfacing, civil works beyond public domain improvements, infrastructure amplification or renewal and undergrounding of power.

HOLLYWOOD AVENUE (EBLEY ST - OXFORD ST)

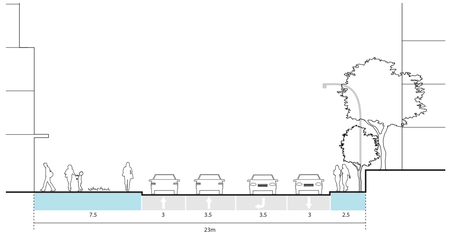
EXISTING AERIAL



PROPOSED CONCEPT PLAN

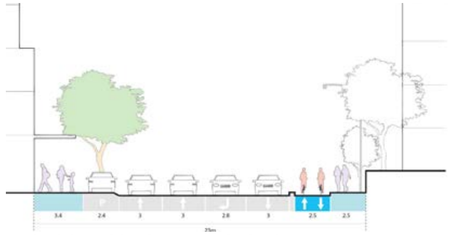
NOTE: NET INCREASE OF 8 PARKING BAYS.

HOLLYWOOD AVENUE (EBLEY ST - OXFORD ST)



EXISTING SECTION

43% PEDESTRIANS 57% VEHICLES + CYCLISTS



PROPOSED CONCEPTUAL SECTION

26% PEDESTRIANS 11% CYCLISTS 63% VEHICLES

RATING

COMMUNITY BENEFITS

- 23 new street trees
- 42m² new planting areas
- 202m new bike path
- 531m² new footpath
- 1 new raised pedestrian priority crossings
- 1 large pedestrian and vehicle shared zone
- New public seating
- New rain gardens (WSUD)
- 8 new parking bays

RECOMMENDATIONS

Medium term (2015 - 2017):

- Provide new paved parking bays level with footpath on the western side to enhance access to the medical centre and install street trees between the new parking bays;
- Relocate existing disabled parking/ loading/ drop off zone for medical centre to the new on-street parking on Hollywood Ave and either:
  a) close Westfield parking exit to Waverley St and extend Waverley Mall to Hollywood Ave; or
  b) retain the parking exit and convert to shared space with one-way eastbound to Hollywood Ave.

  For both options widen footpath and address the level change outside medical centre and ban southbound right turn from Hollywood Ave (PAMP item 13, 14, 57).
- Provide a bi-directional bike path on the eastern side;
- As part of the road reconfiguration replace the footpath on east side between Ebley St and Llandaff St (PAMP item 53), install raingarden as part of WSUD initiatives, repair west side between Oxford St and Waverley St (PAMP item 56) and pram ramp at Waverley St (PAMP item 15);
- Improve quality of street lighting between Llandaff St and Ebley St;
- Provide missing pedestrian crossing and add tactile paving at Hollywood St - Llandaff St signals (PAMP item 55);
- Convert southbound right turn lane into Waverley St into an extension of northbound right turn lane into Oxford St;
- Convert T-intersections with Cary Ln and Pine Ln into raised paved shared spaces (PAMP item 54).
- Reduce speed limit to 40km/hr.

Approximate cost of capital works: $986,000

Excludes road re-surfacing, civil works beyond public domain improvements, infrastructure amplification or renewal and undergrounding of power.

NEWLAND STREET (EBLEY ST - OXFORD ST)

COMMUNITY BENEFITS

Could include...

- 17 new street trees
- 78m new planting or rain gardens
- 667m² new footpath
- Better access to the transport interchange
- New pram ramps
- New public seating
- Safer and more inviting through new street lighting
- New awnings to provide optimum weather protection and unified streetscape

PRINCIPLES

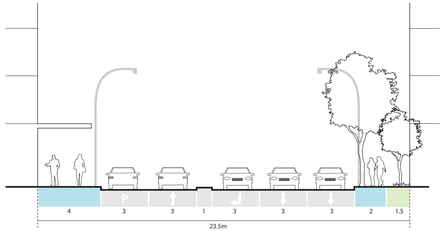
- Incorporate more street trees either in nibs in between street parking bays or within the footpath to provide shade, respite and visual relief from lengthy blank building facades
- Provide high quality footpath treatments, generous footpath widths and provide safe crossings for pedestrians
- Where possible Install rain gardens along eastern side as part of WSUD initiatives and investigate installing green wall / community mural / creative lighting/ projections on the Newland St carpark frontage;
- Require awnings over footpaths for any new developments as part of a city centre Awning Strategy/ Policy;
- Introduce travel speeds to encourage a calmed traffic environment
- Improve lighting north of Oxford St (PAMP item 70, 72);
- Improve entry to transport interchange on Newland St

ISSUES

- Pedestrian crossing at intersection of Spring street at capacity
- Vehicle route, north to south and adequate number of travel lanes and swept path widths

NEWLAND STREET (EBLEY ST - OXFORD ST)

Existing views of Newland St looking north

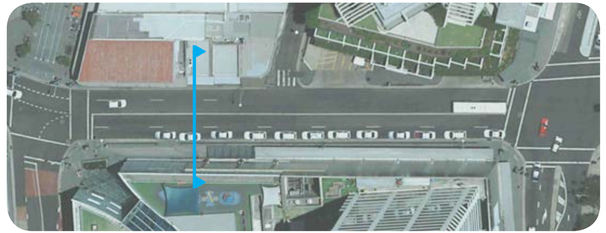


EXISTING SECTION

32% PEDESTRIANS 68% VEHICLES

EXISTING AERIAL

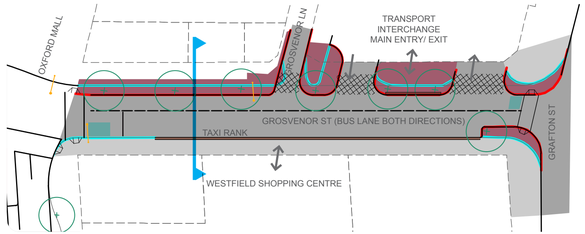
GROSVENOR STREET (GRAFTON ST - OXFORD ST)



EXISTING AERIAL

View north from Oxford St Mall

View south from interchange exit

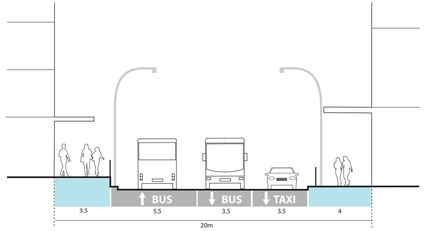


PROPOSED CONCEPT PLAN

- Cross section location
- Existing road
- Existing footpath
- Existing road replaced with footpath
- Proposed 'bike box'
- Interlocking road paving
- Proposed low planting to replace green existing fencing
- Existing kerb and gutter removed
- Proposed kerb and gutter
- Light poles
- Pram ramps
- Existing tree retained
- Proposed 400L tree planting

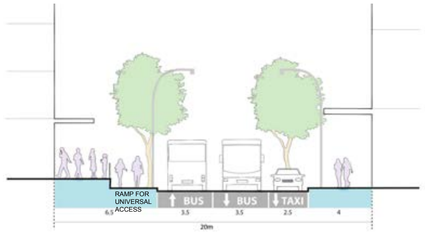
For thousands of visitors arriving by public transport each day Grosvenor Street is their first experience and mental image of Bondi Junction when emerging from the interchange. Currently they are welcomed by fenced barriers, little awning cover, large inactive frontages, no landscaping and some of the poorest footpath quality in Bondi Junction, which significantly detracts from their first impressions of the town centre. Reduced lane widths have been in effect for several months due to an adjacent development and have not impacted on bus operations, therefore can remain on a pemanent basis. This would enable a much needed increase to pedestrian capacity; enable a stairless route to Oxford St; provide space for street trees to soften the barren streetscape; seating and bike racks, for which there is a visible demand.

GROSVENOR STREET (GRAFTON ST - OXFORD ST)



EXISTING SECTION

31% PEDESTRIANS 69% BUSES



PROPOSED CONCEPTUAL SECTION

52% PEDESTRIANS 48% BUSES

RATING

COMMUNITY BENEFITS

- Better access to transport interchange
- 7 new street trees
- 469m² new footpath
- 88m new planter boxes
- Remove unsightly fencing and replace with planter boxes
- New bike racks
- Better rain protection over interchange exit
- 2 new bike box

RECOMMENDATIONS

Short term (2013 - 2015):

- Reduce northbound lane to standard 3.2m;
- Widen footpath on western side with universal access ramp and repave footpath (PAMP item 25, 26);
- Install kerb extensions and tactile paving at Grosvenor St and Oxford St intersection to reduce crossing distance for pedestrians (PAMP item 65);
- Install street trees within the widened footpaths;
- Remove existing fencing along taxi rank and interchange entry and replace with fixed seating/ planter boxes with integrated bike racks/ trolley racks (PAMP item 24;
- Provide 'bike box' markings at intersections with Oxford St and Grafton St to give cyclists front position at lights;
- Buses south bound at Oxford Street intersection set back for ease of turning, (as demonstrated during construction of 470-472 Oxford Street) and to allow for swept paths.
- Reduce speed limit to 40km/hr;
- Work with TfNSW to install coloured/ textured surface across the Grosvenor St exit of the interchange and consider flashing lights/ audible alerts to pedestrians when buses are exiting; (PAMP item 27);
- Work with TfNSW to extend awnings to cover a greater area of the footpath at interchange entry;
- Lobby TfNSW to create direct access from the interchange to Oxford Mall as a priority (either Rowe St or other potential connection points to be considered by TfNSW).

Approximate cost of capital works: $546,000

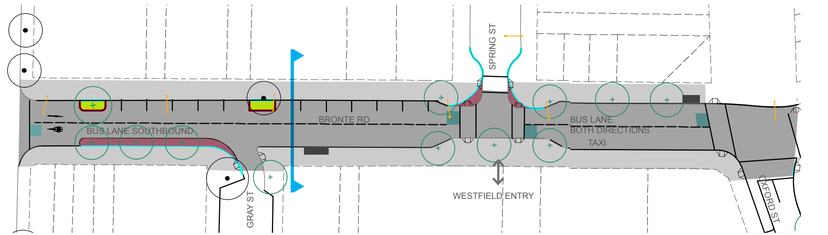
Excludes road re-surfacing, civil works beyond public domain improvements, infrastructure amplification or renewal and undergrounding of power.

ISSUES

- Safety for pedestrians at exit to interchange
- Inadequate number of bike racks
- Existing unsightly green barrier fence

BRONTE ROAD (OXFORD ST - EBLEY ST)

EXISTING AERIAL

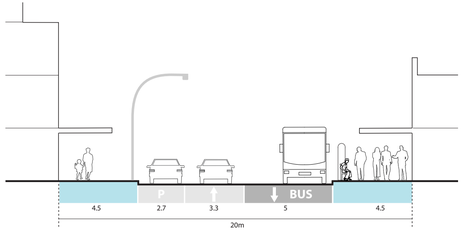


PROPOSED CONCEPT PLAN

NOTE: NET LOSS OF 4 PARKING BAYS.

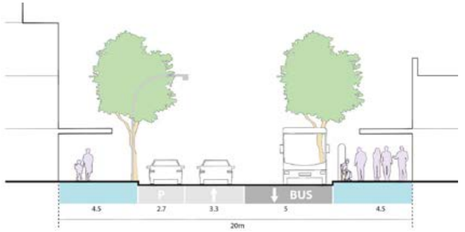
- Cross section location
- Existing road
- Existing footpath
- Existing road replaced with footpath
- Proposed 'bike box'
- Proposed garden bed
- Existing kerb and gutter removed
- Proposed kerb and gutter
- Light poles
- Pram ramps
- Existing tree retained
- Proposed 100L tree planting
- Existing Bus stop

BRONTE ROAD (OXFORD ST - EBLEY ST)



EXISTING SECTION

45% PEDESTRIANS 25% BUSES 30% VEHICLES



PROPOSED CONCEPTUAL SECTION

56% PEDESTRIANS 16% BUSES 28% VEHICLES

RATING

COMMUNITY BENEFITS

- 12 new street trees
- 28m² new planting
- 2 new bike boxes
- New public seating
- New traffic lights and increased pedestrian safety at corner of Spring St and Bronte Rd
- New safer pram ramps
- Reduce speed limit to increase safety

RECOMMENDATIONS

Short term (2013 - 2015):

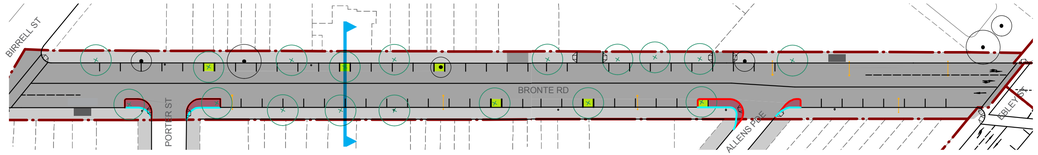
- Install signals at Spring St/ Bronte Rd intersection and coordinate with the existing Oxford St signals. Include a turn phase for cyclists (PAMP item 20);
- Provide 'bike box' markings on street at intersections to give cyclists front position at lights;
- Provide increased shelter and seating at bus stops and tactile paving (PAMP item 19);
- Construct kerb nibs with street trees between parking bays and at intersections to reduce crossing distance and align pram ramps correctly (PAMP item 17);
- Repair footpath (PAMP item 22)
- Formalise as a bus lane so taxis and cyclists are legally permitted to travel on the street;
- Reduce speed limit to 40km/hr.

Approximate cost of capital works: $768,000

Excludes road re-surfacing, civil works beyond public domain improvements, infrastructure amplification or renewal and undergrounding of power.

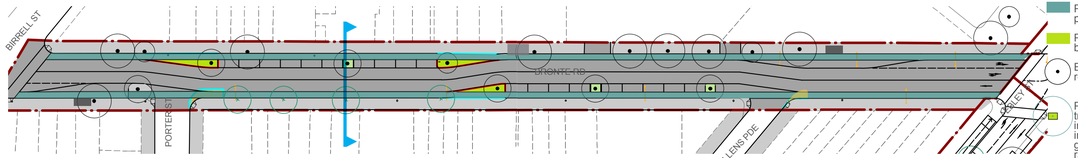
BRONTE ROAD (EBLEY ST - BIRRELL ST)

EXISTING PHOTO



PROPOSED INTERMEDIATE CONCEPT PLAN

NOTE: NO NET LOSS OF PARKING BAYS.



ASPIRATIONAL CONCEPT PLAN

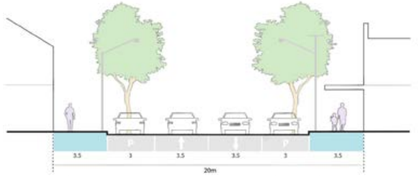
NOTE: NET LOSS OF 33 PARKING BAYS.

- Cross section location
- Existing road
- Existing footpath
- Existing road replaced with footpath
- Existing kerb and gutter removed
- Proposed kerb and gutter
- Light poles
- Pram ramps
- Proposed bike path
- Proposed planter bed
- Existing tree retained
- Proposed 400L tree planting in roadway including tree grate and 2 raised segmented kerbs
- Bus stop

BRONTE ROAD (EBLEY ST - BIRRELL ST)

EXISTING SECTION

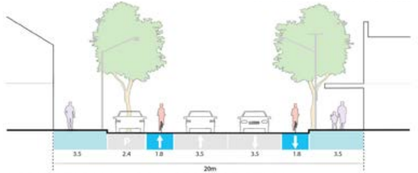
35% PEDESTRIANS 65% VEHICLES + CYCLISTS



PROPOSED INTERMEDIATE CONCEPT SECTION

35% PEDESTRIANS 65% VEHICLES + CYCLISTS

RATING



ASPIRATIONAL CONCEPT SECTION

35% PEDESTRIANS 18% CYCLISTS 47% VEHICLES

RATING

COMMUNITY BENEFITS

- 18 new street trees
- 42m² new planter boxes
- 85m² new footpaths
- New public seating
- Safer streets through reduced speed limit
- Better weather protection through new awnings

RECOMMENDATIONS

Medium term (2015 - 2017):

- Construct kerb nibs with street trees between on-street parking to create sense of narrower street and add greenery;
- Improve provision of shelter and seating at bus stop on western side near Ebley St;
- Install right turn arrows with dedicated right turn lanes on Birrell St at Bronte Rd intersection and provide the missing crossing on north side of intersection. (Note this is being funded by RMS under Blackspot Program);
- Require awnings over footpaths for any new developments as part of a city centre Awning Strategy/ Policy;
- Reduce speed limit to 40km/hr.

Approximate cost of capital works: $159,000

Excludes road re-surfacing, civil works beyond public domain improvements, infrastructure amplification or renewal and undergrounding of power.

Longer term (2017+):

- Provide bike path (painted shoulder) each side of street. Connecting Birrell St to Bondi Junction via Bronte Rd means cyclists can access the 'main street' businesses developing on this strip, rather than being diverted down a residential street (Brisbane St) as is currently the case.

Approximate cost of capital works: $229,000

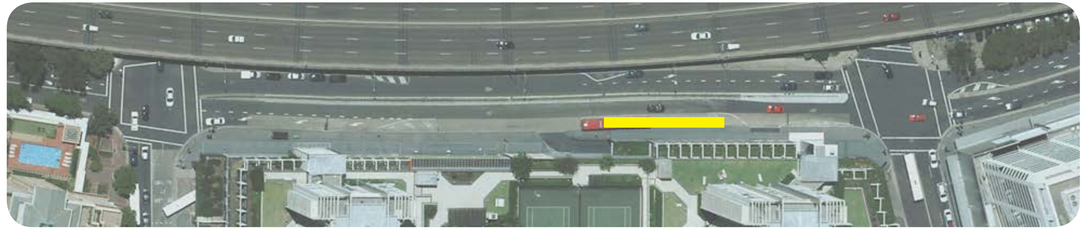
Excludes road re-surfacing, civil works beyond public domain improvements, infrastructure amplification or renewal and undergrounding of power.

GRAFTON STREET

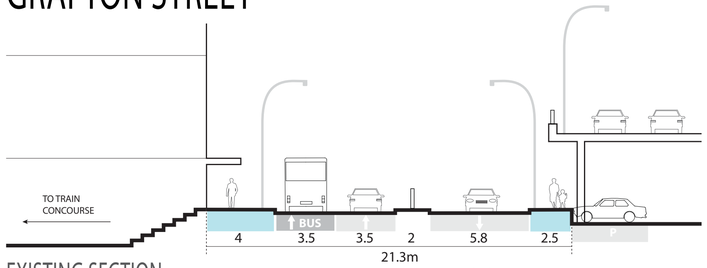

Priority area for street trees

Grafton Street plays an important role for traffic circulation including buses; vehicles dropping off passengers at the Kiss n Ride, vehicles accessing the Westfield and Wilson parking stations; and vehicles travelling east-west around Oxford Mall. However the street has become vehicle-orientated in its design with straight, wide lanes for efficient vehicle movement, pedestrian barriers in the median and the visually dominant Syd Einfeld Drive overpass blocking the harbour views. While there are sufficiently wide, and generally good condition footpaths along the street, there is little in the way of pedestrian amenity. There are over-scaled inactive frontages (the interchange and Westfield shopping centre); awnings that are too narrow and high to offer effective shade or rain protection; and no street greenery to soften the concrete landscape.

In the shorter term landscaping would assist greatly in improving pedestrian amenity and slowing vehicles, and in the longer term active liner building (shallow shopfronts/ stall etc) could be considered along the existing inactive frontages to enliven the street. Portions of space under Syd Einfeld Drive could also be considered for alternative uses to improve levels of activity and safety in this area.

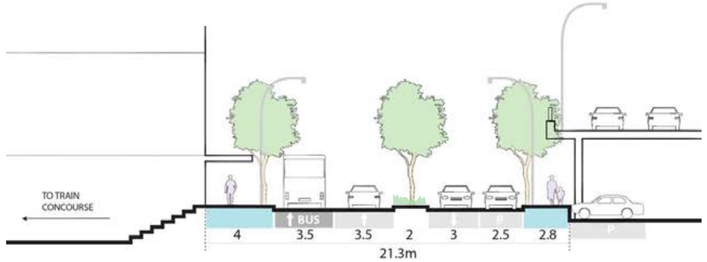

Proposed location for Kiss n Ride

GRAFTON STREET



EXISTING SECTION

31% PEDESTRIANS 16% BUSES 53% VEHICLES



PROPOSED CONCEPTUAL SECTION

31% PEDESTRIANS 16% BUSES 53% VEHICLES

COMMUNITY BENEFITS

- New street trees
- New planter boxes
- Beautify streets by replacing unsightly barrier fencing with planter boxes closer to station entry
- Drop off and pick up area
- More public seating
- New awnings to provide protection from the weather

RECOMMENDATIONS

Medium term (2015 - 2017):

- Provide regular street tree planting on both sides and in central median;
- Relocate the existing Kiss n Ride from the north side of Grafton St to the southern side to provide more direct access for pedestrians;
- Install street parking on north side within surplus road space;
- Undertake repairs to footpaths and pram ramps using the correct pavers (PAMP item 62, 67, 69);
- Provide more seating and install tactile paving at bus stop (PAMP item 68);
- Provide larger and continuous awnings the full length of interchange;
- Improve lighting and access of carparks under Syd Einfeld Drive (PAMP item 63, 64);
- Consider adaptive use of space under Syd Einfeld Drv with long term goal to reduce parking and create more street level activity.
- Remove barrier fencing and replace with fixed seating / planter boxes with intergrated bike racks

Approximate cost of capital works: $339,000
Excludes road re-surfacing, civil works beyond public domain improvements, infrastructure amplification or renewal and undergrounding of power.

GRAY STREET

Gray St is a unique small street that is more like a laneway than a street. It functions as the main loading dock for Westfield shopping centre and also provides well-located street parking. Vehicles access the street via Ann Street from Ebley St. Much of the street comprises blank walls, however the Bondi Junction RSL is located on the south side and a few restaurants open onto the north side. There is pedestrian access via stairs to Hollywood Avenue, however it is not well marked and has no passive surveillance, compromising its safety.

Subject to working closely with Westfields to understand their loading access requirements, there is potential for this intimately sized street to become a shared zone and accommodate a range of activities, particularly after hours when there is less demand for parking and loading. For example the blank walls of Westfield could be utilised as a screen for local artists to project their work digitally, or even for an urban outdoor cinema. Lanterns could be hung to create a 'roof' to an outdoor room and allow temporary food/ drink carts and music. The pedestrian access could be revitalised with colour and lighting.

These ideas could be realised without any physical changes to the street, however as a longer term plan the street could be paved level with the path to create a true shared space.

Art projection/ outdoor cinema
(Source: Waverley Council)

Pop-up urban lounge
(Source: Waverley Council)

COMMUNITY BENEFITS

- Widened footpaths
- Street paved level with footpath to accomodate events
- Art installation
- New public seating
- More alfresco dining
- Pedestrian safety connection to Hollywood Avenue

RECOMMENDATIONS

Medium term (2015 - 2017):

- Provide a legible pedestrian connection through to Hollywood Ave;
- Install creative lighting over laneway (eg. outdoor chandelier, hanging lanterns etc.), and into the new pedestrian connection;
- Investigate if warrant is met for a shared zone 10km/hr;
- Investigate closing the street at night for increased restaurant seating and for pop-up events;
- Add street trees in locations that won't limit the alternative uses for the street;
- Widen footpath for outdoor dining;
- Investigate opportunities for WSUD initiatives in the wide verge at the Bronte Rd intersection.

Longer term (2017+):

- Pave street level with footpath to create a versatile shared zone.

Approximate cost of capital works: $794,000
Excludes road re-surfacing, civil works beyond public domain improvements, infrastructure amplification or renewal and undergrounding of power.

WAVERLEY STREET (HOLLYWOOD AVE - BONDI RD)

Waverley Street offers the most direct connection from Bondi Junction to Bondi Beach, which is only a 20 minute walk away, yet there are few visual clues of this. Council's more recently constructed 'Green Link' signage improves this somewhat, however the Green Links goes to Tamarama Beach, not the more popular Bondi Beach. Rather than relying on maps or signage the street could be landscaped with a distinct beach theme or logo branding making it instantly clear that this street will lead to the beach.

The street is also part of a strategic bike link to Bronte, however has no provision for cyclists. Given its low traffic volumes shared on-street cycling is considered appropriate, and bike symbols should be painted on the road surface to assist with wayfinding for cyclists and to alert drivers.

COMMUNITY BENEFITS

- Greater Legibility for tourists
- Street trees
- Safer pedestrian crossings
- On road bike symbols for cyclists

RECOMMENDATIONS

Short term (2013 - 2015):

- Provide missing pedestrian crossing at Waverley St/ Bondi Rd intersection;
- Paint bicycle logos on street to increase awareness of this road as a part of the strategic bike network.
- New street trees

Medium term (2015 - 2017):

- Commission a landscape design for Waverley St to strengthen its identity as the main beach linkage from Bondi Junction to Bondi Beach;
- Investigate provision of a southbound right turn from Bondi Rd into Waverley St westbound to help ease traffic congestion on Oxford St and Hollywood St.

Approximate cost of capital works: $1,000
Excludes implementation of landscape design, road re-surfacing, civil works beyond public domain improvements, infrastructure amplification or renewal and undergrounding of power.

SYD EINFELD DRIVE

Syd Einfeld Drive is an elevated freeway-standard bypass of Bondi Junction. The freeway is the only section ever built of a much longer planned road known as the Eastern Freeway, a proposed freeway abandoned in the 1960s, which would have travelled between the Sydney CBD and Bondi.

Today Syd Einfeld Drive carries a comparable amount of traffic to Old South Head Road with 47,000 and 40,000 vehicles per day respectively. However Syd Einfeld Drive has 3 lanes each direction and Old South Head Road two lanes each direction, which reduces to one lane at some points.

Given that both ends of Syd Einfeld Drive (Oxford St and Bondi Road) reduce back to two lanes, the third lane in each direction is not used to its full capacity. It is possible that one lane from each side could be dedicated back to pedestrians and cyclists: the elevated roadway offers magnificent views to the harbour and the route could provide a valuable 'express' connection for commuter cyclists to the city.

The use of space under Syd Einfeld Drive could also be reviewed: currently it houses car parking which, combined with inactivity and poor lighting, impacts negatively on Grafton Street, particularly at night. Alternative uses could be considered in this location such as for low-rent floorspace for start-up companies, end of trip bike facilities, and community and welfare services.

Comparison of Syd Einfeld Drive (left) and Old South Head Road (right) which carry similar volumes of traffic.

With harbour views and direct linkages Syd Einfeld Drive could accommodate an elevated walkway and express cycle route to the city.

COMMUNITY BENEFITS

Could include...

- More direct bike route
- Less bikes in Oxford St Mall
- Activation of space under freeway
- Safety and economy

RECOMMENDATIONS

Longer term (2017+):

- Convert one traffic lane to a bi-directional bike lane and convert one traffic lane to an elevated habor view walkway;
- Investigate alternative uses for the space under Syd Einfeld Drive.

Approximate cost of capital works: $450,000

Excludes road re-surfacing, civil works beyond public domain improvements, infrastructure amplification or renewal and undergrounding of power.

The space under Syd Einfeld Drive could be considered for uses other than parking.

The High Line: transformation of an elevated rail line in New York into a pedestrian walkway could provide inspiration for a 'high line' in Bondi Junction.

6. COMMUNITY ENGAGEMENT

SUMMARY AND KEY THEMES

Pop Ups

Spring into Bondi Junction and check out Waverley's pop up - Square in Gray Street and Urban Lounge in Spring Street as part of our Complete Streets project. Recharge your phone and top up parking, plus weights and a chance to win a large wine crate and meet on the street people.

Waverley Council's Bondi Junction Complete Streets Project

The Complete Streets project is part of Council's plan to enhance the vibrancy of Bondi Junction and its spaces. It outlines our plan for the Junction's transformation over the next 10 years. Over the 20 years it will involve greening and beautifying the footpaths and public places, making meeting places more vibrant and appealing, and improving connections for cycling, walking and access to public transport.

Complete Streets is an approach to urban planning that considers the needs of all users to ensure streets are pedestrian friendly and provide for public transport, accommodate cyclists and benefit the local economy.

The Bondi Junction Complete Streets report can be viewed online at www.waverley.nsw.gov.au/bondijunction.

Have your say!

We want your feedback on the Complete Streets project as well as how you think Bondi Junction could be enhanced.

Please fill out this questionnaire and return via one of the methods outlined on the back of this page. Alternatively complete it online at haveyoursay.waverley.nsw.gov.au/bondijunction.

1. What is your age?
☐ 22 and under ☐ 22- 24 ☐ 35 - 44
☐ 45 - 54 ☐ 55 - 64 ☐ 65+

2. Your gender?
☐ Male ☐ Female

3. What is your postcode?
☐ 2032

4. How regularly do you visit Bondi Junction town centre?
☐ Daily ☐ Weekly
☐ Fortnightly ☐ Monthly ☐ Annually
☐ Other_____

5. How do you get to Bondi Junction town centre?
☐ Walk ☐ Bicycle
☐ Bus ☐ Train
☐ Taxi ☐ car

6. What is your main reason for visiting Bondi Junction town centre?
☐ Work ☐ To eat out
☐ To get to the beach ☐ Shopping
☐ Transport connection ☐ Other_____
☐ Services (e.g bank, RMS, Centrelink, medical etc)

7. Do you visit Bondi Junction at night time?
☐ Yes ☐ No

8. What would encourage you to visit Bondi Junction more often at night time?

The following three images are artist impressions showcasing examples of what some streets in Bondi Junction could look like through the Complete Streets project.

Spring Street, Bondi Junction

Oxford Street, Bondi Junction

Pop Ups

Spring into Bondi Junction and check out Waverley's pop up - Square in Gray Street and Urban Lounge in Spring Street as part of our Complete Streets project. Recharge your phone and top up parking, plus weights and a chance to win a large wine crate and meet on the street people.

Gilay Street, Bondi Junction

9. Looking at these images what are the three things that are most important to you about enhancing the streets in Bondi Junction?
☐ More greenery (trees, planting, Water Sensitive Urban Design?)
☐ More seating
☐ More public seating
☐ More outdoor restaurant seating
☐ Wider and better quality footpaths
☐ Better cycling routes and cycling infrastructure
☐ More bike racks
☐ Improve safety during day and night time
☐ More priority given to pedestrians with shared zones
☐ Better lighting (high light or shaded zones
☐ Better connections through existing arcades and laneways
☐ Improved access to public transport
☐ Reduced traffic congestion
☐ More pop up projects
☐ Other_____

* Artist Service Urban Design VISUS (magnetic water cycle management) are also producing art design.

10. According to Danish Architect Jan Gehl, "A great city is like a good party - people stay much longer than really necessary because they are enjoying themselves".

a) What places mean the most to you in Bondi Junction? What do you love about Bondi Junction?

b) What concerns do you have about Bondi Junction?

c) What dreams do you have for Bondi Junction 20 years from now?

d) What would you need to help make Bondi Junction like your dream? What action would you take?

Fill out this questionnaire and post at the letter box located in the Urban Lounge pop up in Spring Street. You can provide more detailed feedback about the Complete Streets report by emailing haveyoursay@waverley.nsw.gov.au or sending a letter to Strategic Town Planning PO Box 9, Bondi Junction NSW 2,093 or online at haveyoursayawaverley.com.au/bondijunction.

Images showing the Complete Streets feedback survey

An engagement strategy was developed for the project in conjunction with Council's Communications and Engagement team to inform the community of the draft report and pop-ups and to seek their feedback before the report was finalised and adopted as a policy document.

Key elements of the strategy included:

• Exhibiting the draft Bondi Junction Complete Streets Report for two months
• Launching pop ups on the first day of the exhibition period as an example of how Complete Streets could improve the public domain in Bondi Junction and to prompt discussions.

The community was asked for feedback on the draft report and pop ups via an online and hard copy survey, which was promoted via a fact sheet, postcards and other materials including:

• Media launch
• Letterbox drop to residential properties within the Bondi Junction postcode area.
• Letters posted to owners of retail / commercial buildings within the core area of Spring, Oxford Street Mall and Newland Street
• Council's Business Liaison Coordinator approached all retailers along Spring Street to participate in a business survey. Retailers in Spring and Gray Street were provided with on-going information prior to and during the installation of the pop ups.
• Drop in sessions at Oxford Street Mall, where Council staff are on hand to answer questions about them and the draft Complete Streets program
• Intercept surveys (staff handing out surveys in peak hours in Bondi Junction)
• Presentations to Waverley Business Forum in October and Bondi Precinct Committee in November
• Advertising in the Courier magazine as well as posters pinned up in retailers windows in Spring Street and the Waverley library.
• Pop up project information boards and weather proof brochure boxes were constructed as part of two of the Spring Street installations. The brochure boxes contained postcards and printed surveys.
• Information about Complete Streets and the pop-ups including how to make submissions and a questionnaire was announced on Council's social media pages and available to fill out on Council's website.
• A hard copy of the Complete Streets report and information about the survey and pop-ups was available to view at Council's Customer Service Centre in Spring Street.

In summary 408 people provided their feedback showing support for the Complete Streets Project and its vision for Bondi Junction.

The Community Engagement report (attached in the appendices) provides a collection of comments and feedback which contributes to an understanding of the communities aspirations and concerns for Bondi Junction.

The community engagement for Complete Streets was undertaken between Monday 22 September and Saturday 23 November 2013, a period of two months which allowed the community and government agencies to provide their feedback through online and printed questionnaires (208), postcard comments (118), email (8), written submissions (15), phone submissions (1) and a 60 signature petition.

The comments contained in the feedback were collated into themes. The top 6 reoccurring themes (in descending order) requested:

1. A better pedestrian experience (51%) - a more walkable centre, wider footpaths, better connections to the rail interchange.

2. More night time activity (49.7%) - including more diversity and better and more footpath dining, relaxing parking rates and stay lengths after 5pm to encourage more people to frequent restaurants in the evening;

3. More and better public spaces to hold cultural events (45.5%).

4. More greenery (40.6%) - street trees, hanging baskets, retain and enhance parks.

5. Greater safety (36.5%) - control drunks at pubs, better street lighting, cleaner streets, fix trip hazards in footpaths.

6. A greater diversity of shops (25.4%) - with an emphasis on creative industries and locally sourced products and the establishment of precinct for differing types of experiences (eat street etc).

With approximately half of the respondents filling out the questionnaire, the percentage breakdown of the non-open ended answers provides useful statistical information.

A summary of the breakdowns follow:

• Age: 30% of respondents were 65+, 25% were 35 - 44
• 66% of respondents were females
• The majority of respondents reside in Bondi Junction
• 68% of respondents visit the centre daily, 25% visit weekly
• 70% of respondents walk to the junction
• Respondent's main reason for visiting Bondi Junction was for shopping (67%), services (40%), transport connection (28%)
• 50% of respondents visit Bondi Junction at night
• The 3 most important things to respondents to enhance Bondi Junction were
1. More greenery (73%)
2. Wider and better quality footpaths (44%)
3. More public seating (40%)

Overall it is envisioned that Bondi Junction should be a safe and accessible place for all ages during day and night time, an urban centre that is not just a stop off but a true destination.

The Urban Lounge and Jigsaw pop ups provided a platform for engagement and were also largely supported with the view that they encourage pedestrians to take interest, linger and interact at street level.

On Monday 28 October 2013, post the launch of the pop ups, retailers in Spring Street were asked to participate in a voluntary business survey to see if customer sales had been affected since installation. Eleven retailers participated at which sixty per cent (60%) said the pop ups had a positive impact on their business.

One of four fact postcard distributed as part of the "public experience" period.

Dinosar imprint been made in the concrete jersey barriers for the Urban Lounge

Photos of "Jigsaw", interactive installation in Gray Street, Bondi Junction. The three sides of the moveable parts display noughts, crosses and photos of returned soldiers in camouflage paint..

Photo of "Arrow", a way-finding installation within through site link between Gray Street and Hollywood Avenue, Bondi Junction.

Photo of Urban Lounge in Spring Street, Bondi Junction. The installation utilises road space which was an existing no standing zone. The installation also complies with strict requirements for barriers between pedestrians and vehicles.

7. HOW TO GET THERE

COMPLETE STREETS ACTION PLAN

A QUICK REFERENCE GUIDE TO ALL THE RECOMMENDATIONS DISCUSSED IN THE REPORT

Priority	Action	Page reference	Estimated Cost	Capital works/ Operations	Implementation Responsibility
Short term (June 2013 - June 2015)	Council adoption of Complete Streets Vision, Principles and Framework	21	N/A (Council administration)	Operations	GMU/ DMSTP
	Spring St (Bronte Rd - Newland St) - street design as per Complete Streets	87	$887,000	Capital works	DMTS/ DMSTP/ DMCRS/ DMES
	Oxford Mall - signage/ pavement stencils advising slow bicycle zone and pedestrian priority	38	$4,000	Capital works	DMTS/ DMSTP/ DMCRS/ DMES/ DMEBD
	Oxford St (Newland St - Denison St) - street design as per Complete Streets	75	$420,000	Capital works	DMTS/ DMSTP/ DMCRS/ DMES
	Oxford St (Hollywood Ave - Grosvenor St) - street design as per Complete Streets	71	$151,000	Capital works	DMTS/ DMSTP/ DMCRS/ DMES
	Grosvenor St (Grafton St - Oxford St) - street design as per Complete Streets	116	$546,000	Capital works	DMTS/ DMSTP/ DMCRS/ DMES
	Denison St (Oxford St - Spring St) - street design as per Complete Streets	99	$553,000	Capital works	DMTS/ DMSTP/ DMCRS/ DMES
	Bronte Road (Oxford St - Ebley St) - street design as per Complete Streets	118	$768,000	Capital works	DMTS/ DMSTP/ DMCRS/ DMES
	Oxford St (Syd Einfeld Drv - Hollywood Ave) - PAMP item 10 and 11	67	$3,000	Capital works	DMTS/ DMSTP/ DMCRS/ DMES
	Oxford St (Denison St - Ruthven St) - street design as per Complete Streets	79	$689,000	Capital works	DMTS/ DMSTP/ DMCRS/ DMES
	Oxford St (Ruthven St - York Rd) - street design as per Complete Streets	83	$607,000	Capital works	DMTS/ DMSTP/ DMCRS/ DMES
	Birrell St bike path	28	$50,000	Capital works	DMTS/ DMSTP/ DMCRS/ DMES
	Waverley St - street design as per Complete Streets	125	$1,000	Capital works	DMTS/ DMSTP/ DMCRS/ DMES
	Formalise 40km/hr speed limits	N/A - various street	N/A (Council administration)	Operations	DMTS/ DMSTP/ DMCRS/ DMES
	Formalise bus lane classification with 30km/hr speed limit	N/A - various streets	N/A (Council administration)	Operations	DMTS/ DMSTP/ DMCRS/ DMES
	Undertake complete transport survey	19	$100,000	Operations	DMTS/ DMSTP
	Prepare Pedestrian Activity/ Public Life Survey	32	$50,000	Operations	DMSTP

COMPLETE STREETS ACTION PLAN (CONTINUED)

	Prepare Parking Strategy including Loading/ Servicing Strategy	22, 50	$70,000	Operations	DMPS/ DMTS/ DMSTP
	Commission gateway design review of Oxford St from St James Rd to Syd Einfeld Drv	83	$20,000	Operations	DMSTP/ DMEBD
	Lobby TfNSW to install real-time information at all bus stops and other key locations	24	N/A (Council administration)	Operations	DMES/ DMTS
	Work with RMS to avoid having more barrier fencing installed	71	N/A (Council administration)	Operations	DMES/ DMTS
	Prepare Continuous Awning Strategy/ Policy	44	N/A (Council administration)	Operations	DMSTP/ DMEBD
	Consult with Westfield re: provision of continuous awnings along on Oxford St frontage	71	N/A (Council administration)	Operations	DPES/ DMEBD
	Investigate options for direct access from the interchange to Oxford Mall	24,38	N/A (Council administration)	Operations	DPES/ DMSTP/ DMTS/GMU
	Prepare Night Activation Strategy for Oxford Mall	54	N/A (Council administration)	Operations	DMEBD
	Review Eastgate carpark conversion plan re: street activation, awnings and cladding	89, 114, 106	N/A (Council administration)	Operations	DMTS/ DMBSP/ DMSTP
	Liaise Eastgate re: restricting hours for loading vehicles using Spring St	22	N/A (Council administration)	Operations	DMTS/ DMBSP
	Liaise TfNSW re: surface treatments and visual/ audible alerts at interchange entry/ exit	24	N/A (Council administration)	Operations	TfNSW/ DMTS
	Liaise TfNSW re: awnings at interchange entries	44	N/A (Council administration)	Operations	TfNSW/ DMTS/ DMSTP/ DMEBD
	Gray St - Formalise as a shared zone 10km/hr	124	N/A (Council administration)	Operations	DMTS
	Annual pop up events	N/A - various streets	$60,000	Operations	DMEBD/ DMSTP
	Prepare Urban Street Standards	65	$20,000	Operations	DMSTP
	Update and simplify Public Domain Technical Manual Bondi Junction Centre	50	$20,000	Operations	DMSTP/ DMCRS
	Reduced/ free street parking after 6pm	22	N/A (Council administration)	Operations	DMPS
	Prepare public art strategy	55	Under Investigation	Under Investigation	Under Investigation

COMPLETE STREETS ACTION PLAN (CONTINUED)

	Prepare Active Frontage Strategy	42	N/A (Council administration)	Operations	DMSTP
	Lobby TfNSW re: bus stop upgrades	26	N/A (Council administration)	Operations	GMU/ DPES
	Prepare Bike Parking Policy	30	$15,000	Operations	DMES
	Prepare Signage and Wayfinding Strategy	32	N/A (Council administration)	Operations	DMSTP/ DMEBD
	Negotiate footpath maintenance agreement with service providers	51	N/A (Council administration)	Operations	DMSTP/ DMEBD
	Encourage footpath restaurant seating in strategic areas and investigate incentives	52	N/A (Council administration)	Operations	DMSTP/ DMEBD
Medium term (June 2015 - June 2017)	Oxford St (Syd Einfeld Drv - Hollywood Ave) - road reserve widening and street design as per Complete Streets (Timing subject to redevelopment of adjoining land)	67	$563,000	Capital works	DMSTP/ DMTS
	Denison St (Spring St - Ebley St) - street design as per Complete Streets	99	$546,000	Capital works	DMTS/ DMSTP/ DMES/ DMCRS
	Spring St (Newland St - Denison St) - street design as per Complete Streets	93	$753,000	Capital works	DMTS/ DMSTP/ DMES/ DMCRS
	Ebley St (Denison St - Newland St) Stage 1 - street design as per Complete Streets	110	$225,000	Capital works	DMTS/ DMSTP/ DMES/ DMCRS
	Ebley St (Newland St - Bronte Rd) Stage 1 - street design as per Complete Streets	106	$583,000	Capital works	DMTS/ DMSTP/ DMES/ DMCRS
	Ebley St (Bronte Rd - Hollywood Ave) Stage 1 - street design as per Complete Streets	103	$228,000	Capital works	DMTS/ DMSTP/ DMES/ DMCRS
	Hollywood Ave (Oxford St - Ebley St) - street design as per Complete Streets	112	$987,000	Capital works	DMTS/ DMSTP/ DMES/ DMCRS
	Newland St (Ebley St - Oxford St) - street design as per Complete Streets	114	$981,000	Capital works	DMTS/ DMSTP/ DMES/ DMCRS
	Grafton St - street design as per Complete Streets	122	$339,000	Capital works	DMTS/ DMSTP/ DMES/ DMCRS
	Bronte Rd (Ebley St - Birrell St) Stage 1 - street design as per Complete Streets	120	$159,000	Capital works	DM TS/ DMSLRP/ DMCRS/ DMES
	Norman Lee Place - upgrades as per Complete Streets	40	$150,000	Capital works	DMTS/ DMES/ DMCRS
	Clementson Park - upgrades as per Complete Streets	41	$250,000	Capital works	DMTS/ DMES/ DMCRS
	Waverley Library forecourt upgrades	40	$150,000	Capital works	DMTS/ DMES/ DMCRS
	Waverley Mall - upgrades as per Complete Streets	39	$50,000	Capital works	DMTS/ DMES/ DMCRS

COMPLETE STREETS ACTION PLAN (CONTINUED)

	Prepare Creative Lighting Strategy	54	$30,000	Operations	DMEBD/ DMES/ DMTS/ DMSTP
	Prepare Laneway and Arcade Strategy	32	$40,000	Operations	DMSTP
	Provide real-time parking information on periphery	22	$100,000	Operations	DMTS/ DMPS/ DCTS
	Undertake walking and cycling behavioural change/ marketing program	28,32	$20,000	Operations	DMES
	Undertake a Recreational Needs Study	37	$20,000	Operations	DMSTP/ DMES/ DMCRS
	Lobby Randwick Council re: York Rd shared path	28	N/A (Council administration)	Operations	DMES
	Consult Meriton to encourage enhanced public use of Tiffany Mall	38	N/A (Council administration)	Operations	DMSTP
	Add bike networks, facilities and parking information to Council website	30	N/A (Council administration)	Operations	DMES
Longer term **(June 2017+)**	Gray St - street design as per Complete Streets	124	$794,000	Capital works	DMTS/ DMSTP/ DMES/ DMCRS
	Ebley St (Denison St - Newland St) Stage 2 - street design as per Complete Streets	110	$285,000	Capital works	DMTS/ DMSTP/ DMES/ DMCRS
	Ebley St (Newland St - Bronte Rd) Stage 2 - street design as per Complete Streets	106	$597,000	Capital works	DMTS/ DMSTP/ DMES/ DMCRS
	Ebley St (Bronte Rd - Hollywood Ave) Stage 2 - street design as per Complete Streets	103	$472,000	Capital works	DMTS/ DMSTP/ DMES/ DMCRS
	Bronte Road (Ebley St - Birrell St) Stage 2 - street design as per Complete Streets	120	$229,000	Capital works	DMTS/ DMSTP/ DMCRS/ DMES
	Eora Park - upgrades as per Complete Streets	41	$900,000	Capital works	DMTS/ DMES/ DMCRS
	Fingleton Reserve - upgrades as per Complete Streets	41	$900,000	Capital works	DMCRS
	Brisbane St Plaza - upgrade as per Complete Streets	40	$200,000	Capital works	DMTS/ DMES/ DMCRS
	Syd Einfeld Drive express cycle lane	126	$450,000	Capital works	DMTS/ DMES
	Waverley St - Commission a landscape design	125	$10,000	Operations	DMSTP
	Implement town square proposal (Timing subject to redevelopment of adjoining land)	38	TBC	Operations	GMU/ DPES

Abbreviations:

DMTS	Divisional Manager Techinical Services	DMES	Divisional Manager Environmental Services
DMSTP	Divisional Manager Strategic Land Use Planning	DMBSP	Divisional Manager Business Services & Property
DMEBD	Divionsal Manager Place Management (Commercial Centres)	DMCRS	Divisional Manager Recreation Community Planning & Partnerships
DMPS	Divisional Manager Parking Services	DPES	Director Planning and Environmental Services
		GMU	General Managers Unit

COMPLETE STREETS ACTION PLAN (CONTINUED)

Summary of estimated costs of Complete Streets Project:

Short term (2013 - 2015)	Capital works	$4,679,000
	Operations	$355,000
Medium term (2015 - 2017)	Capital works	$5,964,000
	Operations	$210,000
Longer term (2017+)	Capital works	$4,827,000
	Operations	$10,000

Total: $16, 045, 000 (2012 dollars)

Excludes: Road surface milling and re-sheeting / line marking;
Civil works beyond or in addition to those directly involved in public domain improvements;
Relocation of services or powerlines;
Upgrading or relocation of traffic signals;
Infrastructure amplification or renewal including stormwater, sewer, water, gas power, telecoms;
Undergroundinf of power
Land aquisition

FUNDING AND VALUE CAPTURE

Value capture is the process whereby some or all increments in property value attributable to public sector actions (i.e. not attributable to actions of landowners) are recouped by the public sector for public purposes. In essence, value capture provides a means to monetise a project's wider economic benefits as cash returns that may either be captured and contributed, or valued and attributed towards, project cost.

The redevelopment of a major metropolitan centre such as Bondi Junction can provide an opportunity to 'capture value' that can be put towards funding the cost of the works. There have been numerous international and local studies which have demonstrated that amenity and accessibility can improve real estate values and achieve broader government planning objectives.

The beneficiaries of investments in the facilities which bring about this improvement include:

- Land owners – due to the increase in underlying land values;
- Property developers – due to the potential increase in developed real estate values and the potential for increased rates of turnover;
- Business owners – due to improved accessibility for their customers and employees; and
- Government – due to improvements in property-based revenue streams that are collected by the different levels of Government that are directly / indirectly linked to increased land values. Developing property around major centres also involves lower infrastructure costs than other locations.

As a result, it is increasingly important to examine how various parties will benefit from the Complete Streets Project and how these parties should contribute to meeting the costs of the Project.

The concept of 'value capture' to help fund the Complete Streets Project.

FUNDING AND VALUE CAPTURE OPTIONS (CONTINUED)

A high-level analysis of the potential for value capture methods to fund the Complete Streets Project was conducted, refer to Appendix D for the full report. A summary of the short-listed options worthy of further consideration is set out in the table below:

Funding option	Description	Overall assessment
Benefitted Area Levy	A levy applied to all properties in the study area based on land value uplifts resulting from the Complete Streets Project, such as from improved amenity and accessibility, applied either one-off or annually.	Moderate potential
Special Development Levy	A standard one-off levy applied to all new developments in the study area at the time of development to contribute to costs of the Complete Streets Project, applied through a Section 94 Contribution Plan.	Moderate/ high potential
Voluntary Planning Agreements	An agreement negotiated for all new development applications in the study area, either financial or in-kind works, negotiated as pasrt of future developments.	Moderate/ high potential
Parking Levy	An increase to Council parking rates, and/ or annual fees on private carpark operators to fund or repay a loan for Complete Streets Project.	Moderate/ high potential
Funding from other programs	For example the Urban Activation Precincts Program and/ or TfNSW Interchange Program.	Moderate potential

NEXT STEPS

Implement several low-cost demonstration projects in Spring St and Gray St (examples presented over subsequent pages) so the community can experience the value of reclaimed public space on a small scale and the benefits it can bring to street life and businesses. This will help to form a better understanding the transformative effect the Complete Streets Project could have when applied to the entire town centre.

↓

Council adopts Complete Streets Project as the basis for capital works program and future street design.

↓

Further investigations into funding gap and development of a detailed business case.

↓

Undertake studies, strategies, policies and detailed designs as set out in the Complete Streets Action Plan in consultation with stakeholders and the community.

↓

Establish statutory controls to facilitate funding options.

↓

Implement capital works program in accordance with Complete Streets Action Plan.