



PYRMONT PENINSULA INFRASTRUCTURE DELIVERY OPPORTUNITIES STUDY

Department of Planning, Industry and Environment

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By





Contents

Executive summary	iii
1 Introduction	1
1.1 Background	1
1.2 Infrastructure delivery plan	1
1.3 Purpose of this study	2
2 Planning context	3
2.1 Study area	3
2.2 Relevant plans and policies	4
2.3 How infrastructure can support the Place Strategy	8
2.4 Development scenarios	10
3 Infrastructure types and potential delivery mechanisms	11
3.1 Infrastructure types	11
3.2 Infrastructure delivery mechanisms	15
4 Infrastructure opportunities	21
4.1 Opportunities and constraints	21
4.2 Stakeholder views on infrastructure	23
4.3 Infrastructure opportunities	25
4.4 Sub-precincts	35
4.5 Staging	37
4.6 Funding	37
4.7 Governance	38
4.8 Next steps	40
Appendices	40
Appendix A: Literature review	41
Appendix B: Infrastructure opportunities schedule	56
Appendix C: Sub-precinct infrastructure opportunities	63
Appendix D: Funding opportunities matrix	68



Executive summary

The Department of Planning, Industry and Environment is preparing the Pymont Peninsula Place Strategy. The Place Strategy is being developed at the same time as other NSW Government projects that will shape the peninsula, including planning for Blackwattle Bay and for the Sydney Fish Market. The Place Strategy will unify plans and projects for the peninsula into a cohesive strategy to ensure the area's long-term vitality, liveability and sustainability.

GLN Planning has been engaged to provide advice on the funding, coordination and delivery of infrastructure needed to support future development of the peninsula. The first stage of this advice is the preparation of this infrastructure funding and delivery opportunities study, which identifies the range of infrastructure likely to be needed in the area in the future, as well as the potential funding and delivery mechanisms for the infrastructure items.

This study, after feedback from stakeholders and the community, is intended to inform the preparation of an Infrastructure Delivery Plan setting out staging, timing and delivery responsibilities. This will inform the preparation of sub-precinct master plans.

Existing and planned infrastructure

The peninsula's population generally has access to a range of local, district and regional infrastructure. Place Strategy investigations have identified gaps including light rail over-capacity, intersection congestion, and a lack of sports fields, galleries and cultural facilities.

Located within walking distance of the Sydney CBD, the peninsula is identified in various strategic plans as a centre for jobs growth in a developing 'innovation corridor' stretching from The Bays Precinct in an arc through the Central Station area to the Eveleigh precinct at Redfern.

The peninsula's infrastructure is dominated by major traffic routes which physically divide the Peninsula's neighbourhoods. The Western Distributor / Anzac Bridge road link is a key part of Sydney's road network linking the CBD to the western suburbs. Planning and construction is well advanced for regional motorway tunnel connections north, west and south via a major interchange at Rozelle about 1 kilometre west of the Anzac Bridge. The northern and eastern parts of the peninsula are served by a light rail service which links the area to the southern CBD and the inner western suburbs.

Pymont is also being considered as the potential station location on the proposed West Metro line connecting Sydney and Westmead via Sydney Olympic Park. The NSW Government is continuing to investigate the feasibility of building a Sydney Metro West station in Pymont. This includes further industry engagement and transport and economic modelling to assess its feasibility and affordability.

Infrastructure opportunities

The Place Strategy envisages that over the next 20 years from 2021 until 2041 the peninsula's resident population will increase by approximately 8,500 new residents or 41 per cent and the daily worker population will increase by approximately 23,000 workers or 62 per cent.



This level of growth will require a significant investment in new and upgraded infrastructure including:

- improvements to the road environments that favour pedestrians and cyclists over vehicles
- new and improved public transport services
- new or upgraded active transport facilities that provide safe and attractive links to destinations both within and outside the area
- local parks and recreation facilities
- community, cultural and creative spaces
- affordable housing
- utility infrastructure
- 'green infrastructure' that support zero net carbon objectives.

Key opportunities for new and upgraded infrastructure to support the Place Strategy include:

- Sydney Metro West Station and supporting subterranean pedestrian connections
- safe, attractive, and direct east-west links between Bays Precinct, Wentworth Park, Sydney Fish Market and the city centre and Haymarket
- community and recreation facilities to be integrated into developments on key opportunity sites, such as rooftop courts, multi-purpose community space, community arts spaces, ground-level civic spaces and local parks
- use of 'leftover' spaces for public art, community use and interaction
- the area's reputation as one of Sydney's premier walkable neighbourhoods can be strengthened by widening footpaths, creating dedicated cycleways, and slowing traffic
- a continuous and wide pedestrian and cycle path along the entire harbour interface from the new Sydney Fish Market in the west to Pyrmont Bridge in the east

Opportunities for infrastructure to be situated in each of the peninsula's sub-precincts is discussed in **section 4.4**.

Funding and delivery opportunities

The study reviews the mechanisms that are generally available to State and local government to deliver growth-related infrastructure (**section 3.2**), including their opportunities and limitations, as well as their potential to deliver (partly or fully) each infrastructure item (refer **Appendix D**). The Place Strategy presents the opportunity for innovative funding and delivery mechanisms, including partnership approaches and the delivery of infrastructure on key development sites.

The mechanisms covered are listed in **Table 1**. Mechanisms in bold text are discussed in detail.

Planning system mechanisms	Other mechanisms
S7.11 contributions	General fund
S7.12 contributions	Other general income (fees, charges, rents etc)
S7.24 Special Infrastructure Contributions (SICs)	Special rate variation (LGA)
S7.32 affordable housing contributions	Special rate variation (Local)
Voluntary planning agreements	Stormwater management levy
Community infrastructure / incentive floor space provisions	Redevelopment of State Government land
Direct developer provision through planning controls	State and Federal Government grants
	City Deals funding
	Proceeds from asset sales
	Cash investment interest
	Property joint venture
	Non council providers of similar service
	Subsidised borrowing schemes



1 Introduction

1.1 Background

In August 2019, the Greater Sydney Commission (**GSC**) undertook a review of the planning framework for the Pymont/Ultimo area, identified as the Pymont Peninsula Investigation Area.

The review was completed in September 2019 and outlined three core recommendations:

- align the local planning framework with the Greater Sydney Region Plan and Eastern City District Plan
- develop a Place Strategy for the Pymont Peninsula Investigation Area, including a planning framework, master plan, economic strategy and governance plan.
- implement the Place Strategy within 9-12 months.

The Department of Planning, Infrastructure and Environment (**Department**) is preparing the Pymont Peninsula Place Strategy (**Place Strategy**).

GLN Planning (**GLN**) has been engaged to provide advice to the Department on the funding and delivery of the new and additional infrastructure that is required to meet the planned growth in Ultimo and Pymont, including preparation of an Infrastructure Delivery Plan (**IDP**) for the Place Strategy area.

1.2 Infrastructure delivery plan

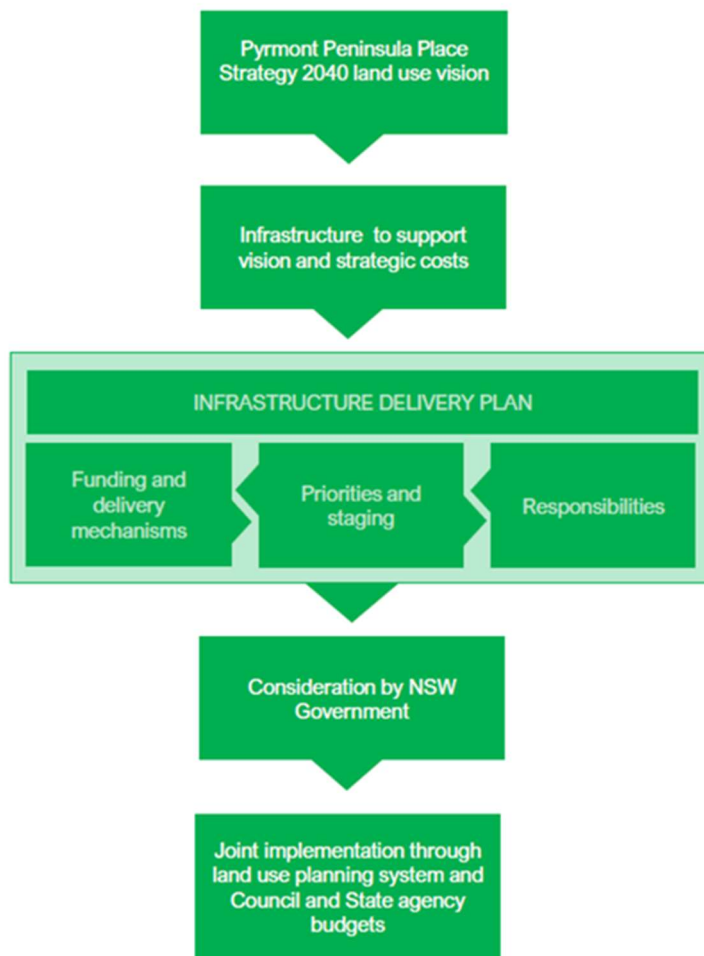
The project brief is for the IDP to address 'key infrastructure items, estimated costs, delivery timeframes, and responsibilities, as well as a forward pathway for implementation'.

The IDP:

- is to assist infrastructure agencies and the community in understanding the 'infrastructure task' needed to support the creation of great places in the Place Strategy area
- will set out what infrastructure is needed, what infrastructure will be delivered, who will deliver the infrastructure, and what mechanisms will be used to deliver the infrastructure
- will identify the potential for individual developments to incorporate infrastructure needed by residents, workers and visitors in the Place Strategy study area
- assign priorities and develop an indicative staging schedule for delivery of the infrastructure
- will provide a 'road map' that will assist agencies to collaboratively plan, prioritise, program and deliver infrastructure in the Place Strategy study area in an orderly and timely manner.

The process and role of the IDP is shown in **Figure 1** below.

Figure 1 Infrastructure Delivery Plan process and role



1.3 Purpose of this study

The purpose of this study is to identify the infrastructure issues and opportunities in the Place Strategy area and to discuss options for the funding and delivery of the infrastructure needed to make the Place Strategy vision a reality.

This study is therefore a pre-cursor to the IDP which:

- consolidates the infrastructure planning work that has been undertaken to date
- describes the existing infrastructure and planning context for the Place Strategy study area, as well as the opportunities for and constraints to the provision of new infrastructure
- discusses options and opportunities for how the Place Strategy infrastructure can be funded and delivered.

This study only indicative priorities and does not include infrastructure costs for items identified in the schedule or a staging plan or timeline for infrastructure delivery. This information will be incorporated as the Place Strategy is progressed and feedback is received about the scope of infrastructure works required and proposed.



2 Planning context

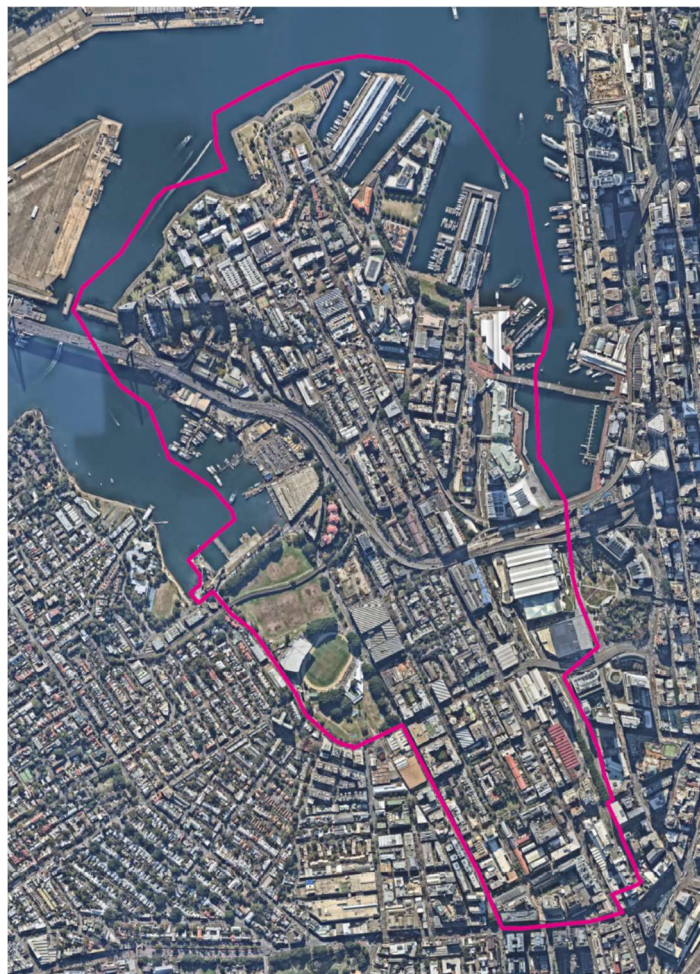
2.1 Study area

The Place Strategy will seek to identify the opportunities to strengthen and grow the importance of the Peninsula as an extension of the Sydney CBD and align with the strategic objectives of the Eastern Harbour City District Plan.

The Pymont Peninsula Investigation Area (referred to as 'the Peninsula') comprises the suburb of Pymont and much of the neighbouring suburb of Ultimo. It is largely bounded by Darling Harbour to the north and east, Broadway to the south and Wentworth Park / Wattle Street to the west. The Peninsula is characterised by a vibrant mix of land uses in an area that also has significant heritage values.

The Peninsula is one of the Sydney central business district's largest fringe office markets, whilst Ultimo accommodates several tertiary education campuses. **Figure 2** illustrates the formal boundaries of the defined Peninsula.

Figure 2 Pymont Peninsula Investigation Area (source: GSC, 2019)





The Place Strategy is exploring options to intensify development capacity where appropriate. The assessment of future development capacity is being investigated at a sub-precinct level.

The sub-precincts of the Peninsula, for the purposes of the Place Strategy are:

- Pirrama
- Pymont Village
- Darling Island
- Blackwattle Bay
- Tumbalong Park
- Wentworth Park
- Ultimo.

Infrastructure opportunities for sub-precincts are discussed later in this study.

2.2 Relevant plans and policies

This section summarises other key planning policies relevant to infrastructure planning and delivery in Pymont Peninsula. Relevant state and local planning policies include:

State planning policies

- Greater Sydney Region Plan – a Metropolis of Three Cities (Greater Sydney Commission, 2018)
- Eastern City District Plan (Greater Sydney Commission, 2018)
- Camperdown-Ultimo Place Strategy (Greater Sydney Commission, 2019)
- Pymont Peninsula Planning Framework Review (Greater Sydney Commission, 2019).

Local planning policies

- Sustainable Sydney 2030 (City of Sydney, 2019)
- City Plan 2036 – Draft Local Strategic Planning Statement (City of Sydney 2020)
- City of Sydney Baseline Infrastructure Study (Mecone and Cred Consulting, 2019)
- City of Sydney Development Contributions Plan 2015

The relevance of these policies to infrastructure planning in Pymont Peninsula is discussed in the following subsections on infrastructure types. A more detailed description of each document is provided in **Appendix A**.

2.2.1 Summary

Sydney's metropolitan plan - the Greater Sydney Region Plan (**Regional Plan**) - provides central objectives that are relevant to infrastructure planning and delivery. These include 'Objective 2 – Infrastructure aligns with forecast growth' and 'Objective 3 – Infrastructure adapts to meet future needs'. Planning Priorities E1 and E3 of the Eastern City District Plan (**District Plan**) build on the Regional Plan's objectives. The Camperdown-Ultimo Place Strategy further expands on the Region and District Plan and includes a vision for the peninsula's future character.

In terms of local policies, the City of Sydney Council's Sustainable Sydney 2030 vision is for the city to be green, global and connected. It includes 10 targets, 10 strategic directions and objectives under each direction.

City Plan 2036, the City of Sydney's Local Strategic Planning Statement, builds upon the key objectives, strategies and actions of the Greater Sydney Region Plan and Eastern Harbour City District Plan and forms a direct link between strategic State Government planning objectives and local planning instruments, that is, Sydney Local Environmental Plan 2012. In particular, Priority 2 is to ensure development and growth is aligned with supporting infrastructure.

The City of Sydney Baseline Infrastructure Study identifies existing and forecast demand (to 2036) for various types of social infrastructure including open space, community and cultural facilities, including a range of new and upgraded infrastructure that is needed and will be needed in Pyrmont Peninsula.

The City of Sydney Development Contributions Plan 2015 identifies infrastructure needed to support future development in the areas surrounding the CBD from 2015 until 2030, contributions required from development to help pay for this infrastructure, and the infrastructure that the City of Sydney will provide using the contributions. In the Pyrmont Peninsula, contributions required from residential development range up to \$20,000 per dwelling. Infrastructure that the City of Sydney will provide in Pyrmont using contributions includes a range of new and upgraded open space works.

2.2.2 Transport

Regional planning

The Regional Plan prioritises infrastructure investments to enhance cycling connectivity within 5 kilometres of strategic centres or 10 kilometres of the Harbour CBD. It recognises the need to balance the function of streets as places for people and movement and enhance walkability surrounding the centres and ensure parking availability considers the level of access by public transport.

The District Plan notes that improving mobility connections should be considered in response to both students and job growth. The Camperdown-Ultimo Place Strategy includes a number of actions to address transport issues, improving amenity and connectivity for different forms of mobility.

Local Planning

Sustainable Sydney 2030 prioritises integrating transport modes to support a more connected city with a focus on walking and cycling. City Plan 2036 identifies collaboration initiatives for community benefits and support for delivering specific project proposals including new Sydney Metro West stations and light rail from the Bays Precinct to Central Sydney.



Local Planning

Sustainable Sydney 2030 emphasises the importance of equitable access to community facilities and places. It highlights Sydney's distinctive cultural precincts and the necessity for supporting the cultural sector and creative industries.

The City of Sydney Baseline Infrastructure Study found that various types of community and cultural facilities works will be needed to meet demand in the Pymont Peninsula by 2036. This includes new library floor space, new local community facilities, new neighbourhood service centres, arts and cultural facilities, additional childcare places, new primary care clinics and new ambulance stations.

2.2.5 Green infrastructure

Regional Planning

The Regional Plan, District Plan and Camperdown-Ultimo Place Strategy aim to increase tree canopy in the public realm. Priority locations in the Camperdown-Ultimo Place Strategy include the Powehouse precinct, Harris Street and Broadway.

The Regional Plan and Camperdown-Ultimo Place Strategy also aim to increase renewable energy generation, efficiency, and water recycling. They include similar objectives such as identifying partnership projects and research to direct low-carbon initiatives, improve energy, waste and water efficiency, and improve health outcomes through design excellence and best practice in building and public domain projects.

The Camperdown-Ultimo Place Strategy also encourages consideration of power and energy bank sharing, peer to peer trading, precinct solutions for energy, water, waste management, loading and servicing; and infrastructure investment and sharing.

Local Planning

Sustainable Sydney 2030 includes targets for greenhouse emissions, electricity, water and tree canopy. For greenhouse, it targets a 70 per cent reduction in greenhouse gas emissions based on 2006 levels by 2030 and achieving a net zero emissions city by 2050. It targets 50 percent of electricity demand met by renewable sources; zero increase in potable water use from 2006 baseline, achieved through water efficiency and recycled water, and total canopy cover increased by 50 per cent from 2008 baseline.

2.2.6 Affordable housing

The Camperdown-Ultimo Place Strategy includes two actions related to affordable housing. First, it seeks to require the provision of affordable housing in and close to the Collaboration Area, including in mixed use developments. Second, it encourages consideration of initiatives to provide diverse housing, including affordable housing for key workers and students.

Sustainable Sydney 2030 targets 7.5 per cent of all housing to be provided as affordable housing.

As part of the early stakeholder engagement process for the development of the Place Strategy, the Department developed the 10 Directions to inform the Place Strategy process. The role of infrastructure in supporting each of the 10 Directions is discussed in **Table 2**.

Direction	How infrastructure can support the direction
<p>1. Development that complements or enhances the area</p>	<p>Infrastructure including improved walking, cycling and public transport connections, new and upgraded open space and community facilities will need to connect or be collocated with new development.</p> <p>The alignment of the development of land and provision of supporting infrastructure will be important in ensuring the livability of the area.</p> <p>This study collates information on forecast growth, key development sites, development-generated infrastructure demand, opportunities for particular infrastructure to be provided, funded and delivered.</p>
<p>2. Jobs and industries of the future</p> <p>Investment and innovation to boost jobs, creativity, tourism and night life</p>	<p>The infrastructure demand generated by employment-generating development is different to the infrastructure demand generated by residential development. As an example, one worker typically generates more demand for traffic works but less demand for open space and community facilities than one resident.</p> <p>This study outlines opportunities to fund and deliver infrastructure that relates to worker demands. As an example, improved access via walking, cycling and public transport, and upgraded parks including Wi-Fi can support emerging innovation and technology areas.</p>
<p>3. Centres for residents, workers and visitors</p> <p>New, lively and attractive centres for everyone to enjoy</p>	<p>The places where people congregate are also places which need effective local transport links, such as walking and cycling facilities. They are also hubs that will be the focus of community life and wellbeing.</p> <p>The study identifies opportunities for transport and community facilities, as well attractive in terms of greenspace, that can make these centres lively and attractive.</p>
<p>4. A unified planning framework</p> <p>Clearer rules delivering greater certainty and investment</p>	<p>A range of different infrastructure standards and funding mechanisms are currently used in the various planning administration areas.</p> <p>This study takes a unified precinct-wide approach both in terms of the infrastructure that is needed as well as the types of mechanisms that can be used to fund and deliver new and upgraded infrastructure.</p>



Direction	How infrastructure can support the direction
5. A tapestry of greener public spaces and experiences Better spaces, streets and parks; a rich canopy of trees; and access to the foreshore	This study collates information on open space needed to support the future population and opportunities to provide new and upgraded open space. It also identifies who is responsible for delivering the open space and how it can be funded and delivered.
6. Creativity, culture and heritage Celebrating Pymont Peninsula's culture, heritage and connections to Country	This study collates information on the types of cultural infrastructure needed together with opportunities to fund and deliver this infrastructure. It also identifies opportunities to provide new and upgraded open space as well as improved walking, cycling and public transport infrastructure that will support culture, heritage and connections to Country.
7. Making it easier to move around Safer, greener streets integrating with new public transport	This study collates information on opportunities to deliver safer, greener streets integrated with public transport together with potential funding and delivery mechanisms, to assist with realising this direction.
8. Building now for a sustainable future An adaptive, sustainable and resilient built environment	This study collates information on opportunities to provide green infrastructure together with potential funding and delivery mechanisms, to assist with realising this direction. Green infrastructure opportunities identified include the provision of green hubs, green streets (including footpath widening, landscaping, tree planting, furniture and rain gardens), green buildings (improved building energy and water performance requirements, beyond current requirements) and potential recycle water infrastructure.
9. Great homes that can suit the needs of more people A diversity of housing types, tenure and price points	The infrastructure demand generated by residential development is slightly different to the infrastructure demand generated by employment-related development, for example, residents typically generate higher demand for open space and community facilities than workers whereas workers typically generate high traffic demand. This study collates information on the infrastructure demand anticipated to be generated by forecast residential development and identifies opportunities to provide infrastructure to address this demand.
10. A collaborative voice A cohesive, agreed approach to bring about the best outcomes for Pymont Peninsula	This study identifies a range of infrastructure delivery opportunities that will be delivered by and affect a range of stakeholders. A collaborative approach is critical to ensure limited resources are allocated in the most efficient and effective manner and the right type of infrastructure is provided in the right location at the right time.



3.1.2 Open space and recreation

Description

Open space is commonly defined as land that is publicly owned and used for recreation, leisure and outdoor entertainment purposes. This includes recreation spaces (such as parks and play spaces), sports grounds, community/civic spaces (such as urban public space and plazas that form part of our public domain), linkage parks (such as recreation trails) and natural areas.

Open space is essential to the healthy functioning of the community and its urban environment. It provides a range of benefits including exercise, recreation, relaxation, escape, exploration, contemplation, interaction, connection, celebration, biodiversity, cooling, ventilation, tourism, identity and community well-being.

Recreation includes a broad range of passive and active leisure activities that we participate in for fun, relaxation, health and wellbeing and to connect to our families and communities. This includes casual activities like going for a walk or a picnic with friends, fitness activities, and social, organised and elite sporting activities.

Recreation ranges from passive recreation such as visiting gardens or enjoying nature, through to personal fitness such as using outdoor gym equipment through to organised, representative and elite sport.

Recreation facilities are the built infrastructure that supports recreation activities. It includes facilities in open space, for example, barbecues, play spaces, furniture, sports fields and courts. It also includes indoor leisure centres, aquatic centres, recreation trails, and water-based recreation such, for example, sailing clubs.

Responsibilities

Parks are commonly classified according to their size, quality or catchment and commonly include local, district and regional open space. Councils are typically responsible most parks except certain regional parks such as Royal Botanic Garden, The Domain and Centennial Park. The City of Sydney is responsible for some regional open spaces such as Sydney Park, Pirrama Park and Bicentennial Park.

Aquatic centres and indoor recreation centres are commonly owned and managed by councils however they can also be owned and managed privately.

3.1.3 Community and cultural facilities

Description

Community and cultural facilities include community centres, libraries, museums and galleries, studios (for artists, sound, creative), creative arts centre, theatre and performance spaces, early education and care, education, health, seniors housing, and emergency services.

Community facilities are vital to the fabric of urban life and how people feel connected to each other. They provide spaces for the City's diverse communities of residents and workers to enjoy entertainment, creative and recreational pursuits, education and training, and rest and respite, in an increasingly dense inner-city environment.



The City of Sydney's recognition of the critical importance of community facilities for supporting city life is embedded in its long-term vision, Sustainable Sydney 2030.

Most community and cultural facilities serve a local catchment, such as the Pymont Peninsula. Some larger facilities, such as a large theatre or performance space, may serve a large sub-regional or district catchment.

Responsibilities

Responsibility for the provision of community and cultural facilities is shared between the City of Sydney, State Government, and private sector.

The City of Sydney can provide all facilities except education (schools), health, seniors housing and emergency housing.

The State Government is responsible for education (schools), health, seniors housing and emergency housing.

The private sector can provide childcare, museums and galleries, studios (for artists, sound, creative), theatre and performance spaces, early education and care, education, health services and seniors housing.

3.1.4 Green infrastructure

Description

Green infrastructure can be defined in different ways however in the context of this study and the Pymont Peninsula Place Strategy it includes green streets, green buildings, green utility perimeter hubs and recycled water.

Green streets include footpath widening, tree planting and landscaping and public furniture including seats, lighting and drinking water fountains (bubblers).

Green buildings are buildings with improved energy and water performance, beyond current requirements.

Green hubs are precinct perimeter hubs for car parking, energy generation and storage, waste, active transport, and end-of-trip facilities. They may also be wrapped or 'sleeved' with affordable workspace, community and cultural use.

Recycled water is the collection of rainwater from the public domain (roads, parks etc), treatment and supply to new or renovated buildings to flush toilets, wash clothes etc, instead of using potable (drinking) water.

These facilities have a local catchment, such as the Pymont Peninsula, rather than a regional or sub-regional catchment.

Green hubs can be delivered by councils, by the private sector, or via a partnership approach. As an example, the Pace Strategy may lead to changes in planning controls enabling some landowners to obtain increased development potential. In this case, a developer may seek to demolish an existing building and build a new podium and tower structure with non-residential uses in the podium and residential uses in the tower. The developer may offer to dedicate floor space in the podium to council which the council can then use for the purpose of a green utility hub.

The schemes may be implemented through council or state planning controls. In areas where a scheme applies, developers typically pay affordable housing contributions to the Department which then passes the contributions on to authorised community housing providers.

3.2 Infrastructure delivery mechanisms

This section discusses the ways in which growth infrastructure can be funded or delivered (either directly or otherwise facilitated) by planning authorities.

The discussion focuses on mechanisms available to the City of Sydney Council as it is likely that the Council will be responsible for delivering much of the infrastructure in the Place Strategy area.

3.2.1 Planning system mechanisms

Table 3 summarises contributions and other planning system mechanisms that are available to deliver infrastructure that is linked to development growth.

Table 3 Planning system infrastructure funding and delivery mechanisms

Mechanism	Brief description of mechanism
S7.11 contributions	A contribution of money or land imposed as a condition on a development consent or complying development certificate. The contribution cannot be more than an amount that reflects the relationship (or nexus) between the particular development and the infrastructure the subject of the contribution.
S7.12 levies	Fixed rate levy imposed as a condition on a development consent or complying development certificate. Maximum levy rate is set by regulation and is generally 1% of development cost.
S7.24 Special Infrastructure Contributions (SICs)	Contribution of money or land imposed as a condition on a development consent or complying development certificate to be applied toward the provision of public infrastructure determined by the Minister for Planning.
S7.32 affordable housing contributions	Contribution of money or land imposed as a condition of on a development consent to be applied toward affordable housing.
Voluntary planning agreements	An agreement voluntarily negotiated between a developer and the one or more planning authorities in which the developer commits to providing contributions of land, works or money for public purposes.
Local area density bonus scheme/Value sharing	An arrangement where a developer shares with the community some of the uplift in land value created by a planning decision. The value sharing is usually effected by the developer providing money, land, works or other contributions for the provision of infrastructure up to the agreed share of value uplift. The contributions are formalised through a voluntary planning agreement.
Direct developer provision through planning controls	The developer is required to provide, replace or upgrade infrastructure as a condition on a development consent. The works are usually required directly as a result of the development works.



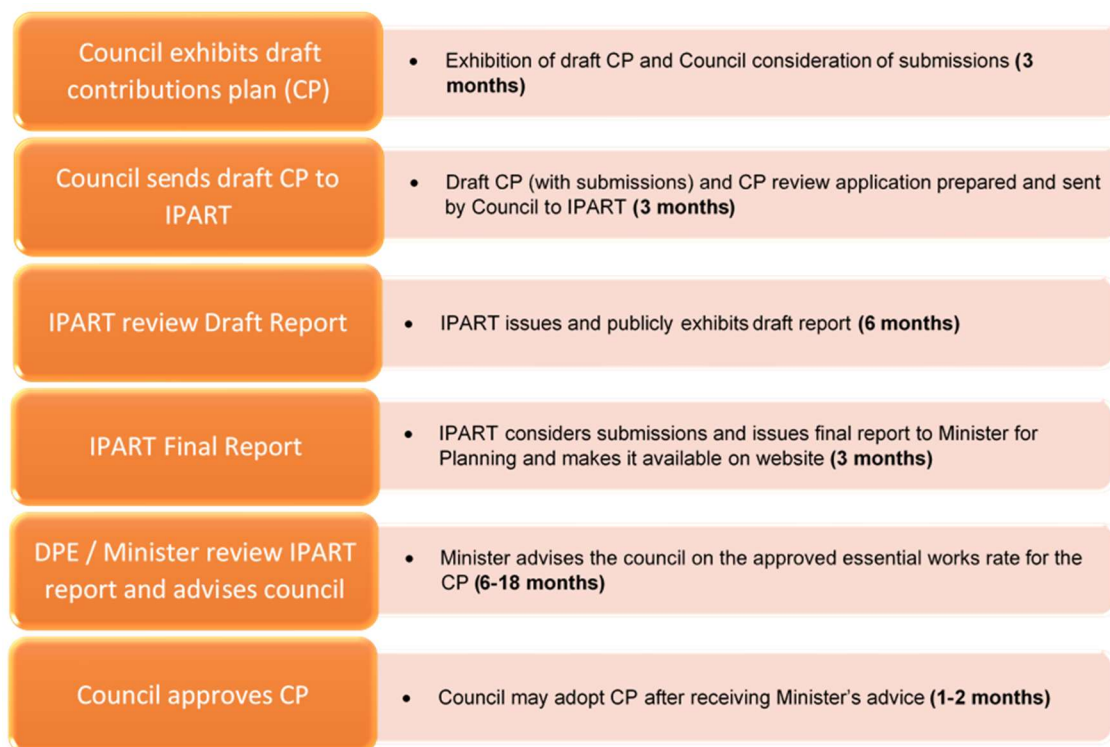
Restrictions on local infrastructure contributions

Much of the infrastructure opportunities for the Place Strategy area (which are discussed in section 4) will likely be the responsibility of the Council. Local infrastructure contributions managed by the Council (i.e. s7.11 and s7.12 contributions) will play a significant role in infrastructure delivery.

For section 7.11 contributions the current State Government policy is that unless a contributions plan has been reviewed by IPART, the maximum contribution amounts applying to residential development are \$20,000 per dwelling or lot. The council can only levy contributions above this amount cap if the contributions plan has been reviewed by IPART and the council has implemented any advice given by the Minister. Presently, no corresponding limit applies to contributions imposed on non residential development.

The review process is extensive (see **Figure 5**) and infrastructure in a plan must be on the 'essential works' list in order for it to be developer-funded. Essential works do not include community buildings, indoor sports centres and streetscape works¹ – works that are likely to be needed in the Place Strategy area.

Figure 5 Steps in the IPART review process and indicative timings



The Department has recently issued a discussion paper proposing three options for increasing the \$20,000 cap. Options include new caps of \$24,200 (representing backdating of CPI inflation to 2010 when the unindexed \$20,000 cap commenced); \$35,000 and \$45,000 per dwelling. The Department is currently considering submissions on these proposals.

¹ *Secretary's Practice Note: Local Infrastructure Contributions*, January 2018, pp 14-15.

For section 7.12 levies, the current maximum levy rates that are applicable to development in the Place Strategy area are:

- 0.5% levy for development cost between \$100,001 and \$200,000.
- 1% levy for development cost greater than \$200,000

The standard maximum 1% levy yields much less income for infrastructure upgrades than if the same developments were subject to s7.11 contributions. The trade-off for lower income is that the contributions plans for s7.12 levies are relatively simple to prepare and administer.

Any council can apply to the the Department / Minister to have a higher fixed-rate levy apply to part or all of their area. The Department has recently issued a discussion paper that proposes criteria that would need to be met for a council to obtain the Minister's approval for a levy being increased to 2% or 3% of development cost.

Key principles for a request for a higher levy to be even considered include:

- The area being proposed for a higher maximum percentage levy must be identified in a strategic plan as a strategic centre, local centre or economic corridor.
- The area must have an existing or identified potential for significant employment growth.

The Place Strategy area would likely satisfy these requirements, suggesting that a section 7.12 levy could feasibly be approved for the Place Strategy area developments.

Community infrastructure contributions / density bonus scheme for key sites

A delivery strategy that has in the past been used to a wide effect by the City of Sydney Council is the inclusion of provisions in the LEP that give the opportunity for developers of land to deliver community infrastructure - in cash, in kind, or via land dedication - in exchange for approval to develop the land in excess of the prescribed building height and floor space controls.

So-called 'community infrastructure' provisions linked to additional floor space allowances appear in many planning instruments, but no more so than in the Sydney Local Environmental Plan 2012.²

Community infrastructure provisions are usually additional to mandatory section 7.11 / 7.12 contributions that are authorised to be imposed on the development under Council's contributions plans. The provision of community infrastructure as part of a development of a 'Key Site' is formalised through the Council and the developer entering into a planning agreement with the council.

Examples of infrastructure items that could be delivered in this manner include:

- civic plazas and local open spaces integrated with developments on consolidated large sites
- new laneways or improvements to existing laneways (also on consolidated sites)
- through-site links that improve pedestrian/cycle connectivity

² Clauses 6.14, 6.23, 6.24, 6.25, 6.26, 6.27, 6.30, 6.32, 6.37, 6.39, 6.40, 6.45, 6.46, 6.48 relate to provision of amenities in exchange for additional floor space on either key sites, or throughout a wider area (such as Green Square Town Centre).

- ### 3.2.2 Other mechanisms

Summary descriptions of 13 possible other mechanisms are shown in **Table 4** below.

Mechanism	Description
General fund	Ordinary rates revenue that is collected by the council on an annual basis to fund the operations of the council.
Other general income (fees, charges, rents etc)	Fees and charges for various services and facilities provided by the council; usually set by regulation under the Local Government Act and other Acts.
Special rate variation (LGA)	Additional council rates pursuant to section 495 of the Local Government Act for works or services that will service the LGA. An application is required to be made and approved by IPART.
Special rate variation (Local)	Additional council rates pursuant to section 495 of the Local Government Act for works or services limited to a specific area (e.g. land release or suburb) that will benefit from the proposed infrastructure. An application is required to be made and approved by IPART.
Stormwater management levy	Levy imposed pursuant to section 496A of the Local Government Act for the provision of stormwater management services for each parcel of rateable land for which the service is available.
Redevelopment of State Government land	Opportunities to have infrastructure, facilities, affordable housing or other public benefits incorporated into the redevelopment of State-owned land that is surplus to agency needs.
State and Federal Government grants	Funds that are available for the provision of infrastructure via an application process. Most schemes require co-funding/cash contribution for projects. Projects without co-funding tend to score lower against the merit criteria.
City Deals funding	Partnership between Federal, State and local governments for agreed outcomes. Funds are available to deliver specific projects/objectives over a 20-year timeframe. A recent example is the Western Sydney City Deal .
Proceeds from asset sales	Sale of council owned assets (usually land e.g. depots) that are surplus to needs or are otherwise redundant and are no longer required. Proceeds of sales are used to co-fund other council projects.

Mechanism	Description
Cash investment interest	Use of interest earned on cash investments such as term deposits to provide co-funding for projects.
Property joint venture	A business arrangement between two or more partners to combine resources to accomplish a specific task. Generally, one party will provide the land – such as a council - and the other(s) the development of that land.
Non council providers of similar service	Facilities and services that have been traditionally provided by councils but are also provided by other organisations. Examples include childcare centres (increasingly provided by for-profit companies), indoor recreation centres (increasingly provided by registered clubs and NGOs such as PCYC).
Subsidised borrowing schemes	Low cost loan financing offered by the NSW Government (e.g. Low- Cost Loans Initiative, LCLI). All councils are eligible to apply for a maximum loan period of 10 years. Programs tend to support 'enabling infrastructure' that may include community facilities, parks and playing fields.

Special rates levy and low-cost loan financing

A special rate imposed on certain LGA households (i.e. the development areas) would provide a funding mechanism by which a council can hypothecate revenue from the rateable properties in an area for the infrastructure needs, thereby eliminating, or at least reducing, any unnecessary burden on the broader community.

Special rates must be made pursuant to section 495 of the Local Government Act. They may be levied for works or services provided or proposed to be provided by a council which includes growth infrastructure for urban release or renewal areas. Such rates should not be levied on properties that will not benefit from the purpose for which the funds are collected.

If Council wishes to introduce a special rate on a certain set of households, it must also consider if it needs to apply to IPART for a special variation in order to increase its general income. A special rate funded through a special rates variation would ensure that other ordinary rates revenue does not need to decline (in real terms) to offset the special rates revenue collected.

The case study of Shoalhaven Council funding growth infrastructure with a special rate allowed for in a special variation decision by IPART in 2014/15 is outlined in Box 1 over page.

The special rates income would provide an annual revenue stream, usually over a set period of time, to fund the infrastructure.

The timing of the introduction of the special rate levy and its duration depend on the timing of development and infrastructure delivery within the LGA.

As the example of Shoalhaven Council shows, the levy can work well with a loan to forward fund certain infrastructure.

Loan financing will enable Council to forward fund the community infrastructure, and still spread the cost of repayments over the rates base over 10 to 20 years. Borrowing carries a level of risk to a



council but the option is made less risky by the low-cost loans that are periodically offered by Treasury Corporation (T-Corp), on behalf of the NSW Government.

Box 1 Case Study - Shoalhaven Council use of a special rate to fund growth infrastructure

Shoalhaven Council requested a special variation of 3.89% (from IPART) in 2015/16, consisting of a 1.49% increase to service a loan to fund infrastructure works in the Jerrerra Estate, and the rate peg of 2.4%.

Under the granted special variation, the council's permissible general income increased from \$56.7m in 2014/15 to \$59.0m in 2015/16. The increase was to be held in the rate base for 10 years.

The increase generated \$0.84 million in additional revenue in 2015-16 and \$9.68 million over the subsequent 10 years.

The purpose of the additional revenue was to service a loan to fund infrastructure works required to enable development in the Jerrerra Estate.

The council introduced a special rate to levy only the landowners in the Estate.

During the 10-year special variation period, the additional revenue generated from the special levy is servicing the principal and interest repayments on a loan of \$7.2 million. Any residual funds at the end of the project is to be used to adjust the special rates being charged to landowners.

The impact is significant but limited to the landowners of the Jerrerra Estate (a total of 138 landowners).

Shoalhaven Council also introduced different special rate levies to different landowners in the Estate. It split the proposed special rate into three components across two groups (A and B) of landowners. The council identified the groups as:

Group A - properties that can be developed, and

Group B - properties that are not developable.

The special rate was then split into Road Infrastructure Group A and Road Infrastructure Group B, and Electricity Infrastructure Group A. The council's rationale behind the distinction was that the electricity infrastructure will only benefit those properties that can be developed, whereas road infrastructure will benefit all properties in the Estate, however to a lesser extent than the nondevelopable properties.

Source: IPART, Special rate 2014/15. Shoalhaven City Council's application for a special variation for 2015-16, Determination report, May 2015.

3.2.3 Matching infrastructure types to delivery mechanisms

It will be rare that one delivery mechanism will provide the funding solution for each infrastructure category. Both planning system and other mechanisms should be tested and matched to particular infrastructure items and categories so that a sustainable funding mix can be applied to provide and maintain infrastructure over its life cycle.

A high-level matching opportunities analysis for the Place Strategy infrastructure is shown in **Appendix D**.



4 Infrastructure opportunities

This section discusses the existing infrastructure commitments in the study area, and outlines the infrastructure opportunities for the Place Strategy area. These have been collated from various studies commissioned to support the Place Strategy.

4.1 Opportunities and constraints

The opportunities for new infrastructure on the Peninsula are tied to existing infrastructure and developments, new developments, opportunity development sites, and the study area's close proximity to the Sydney CBD.

Some of the main opportunities include the following:

- Building on the existing infrastructure network (refer to the map in **Figure 6** over page).
- New Sydney Fish Markets – this will be key destination / anchor use on the western side of the study area with significant increase in visitors expected over the current market.
- Blackwattle Bay development is partly government-, partly privately-owned land. The redevelopment will incorporate new foreshore links for pedestrians and cyclists, and potentially allow an uninterrupted harbourside active transport link between Glebe and the CBD.
- The Bays West proposal affords the opportunity to re-open the historic Glebe Island Bridge to provide a low-level active transport link to Rozelle and Balmain.
- Possible Sydney West Metro station in Pymont which, if provided, will have a profound positive effect on the rate of take-up of commercial and other employment development opportunities. Combined with the above projects, the scale and intensity of pedestrian movement in the northern part of the Place Strategy area will ramp up significantly from existing levels if the Metro station proceeds.
- Potential opportunity for an east-west pedestrian tunnel linking both sides of Peninsula (Fish Market and Pymont Bridge) if a Metro station is provided – if constructed, this would provide relatively level (albeit subterranean) access between the Blackwattle Bay / Sydney Fish Market development and the Pymont Bridge pedestrian / cycle connection to the CBD.
- Powerhouse Museum site - which the Government has announced will be retained and remain as a cultural attraction - presents an outstanding opportunity for community and cultural facilities.
- Key sites identified in the Place Strategy have the potential to accommodate Place Strategy infrastructure – e.g. rooftop / podium outdoor courts, open space, civic plazas, community floor space.
- The area already has a strong walkable neighbourhood character. Upgrades to the amenity and usability the street network will be a priority. For example, Harris Street can be enhanced as a people-focused main street.
- The study area currently has many local open space facilities, although district parks and active outdoor recreation areas are a current and growing gap. The Place Strategy will explore whether new district or active recreation facilities can be provided.

- The leftover and forbidding places under the Western Distributor Road provide opportunities for their enclosure and use for community and creative arts spaces.

Figure 6 Existing infrastructure in the peninsula



- High land costs in the area severely limit the ability for the Council or State Government to acquire large parcels of land for open space and recreation purposes.
- The topography of the area (i.e. north-south ridge) constrains the ability to provide convenient east-west pedestrian and cycle links.
- Private ownership of waterfront wharf areas constrain the ability to create a continuous waterfront pedestrian and cycle path through the study area.
- Some areas of the Peninsula have heritage buildings which limit the ability of these sites be redeveloped for other purposes including community and recreation infrastructure.
- Conflicts between traffic and pedestrians including high traffic speeds on the one-way pair of Harris Street and Wattle Street. The Western Distributor is a major physical barrier for east-west active transport in the north – west of the study area.

4.2 Stakeholder views on infrastructure

In early 2020 the Department consulted stakeholders on the '10 directions' that had been developed to inform the Place Strategy. Stakeholders participated via an online survey, interactive online social pinpoint map, and by making individual submissions.

The online survey provided opportunities for participants to express what they “loved most” and what they “would like to change” within Pymont Peninsula alongside specific feedback on the 10 Directions. The social pinpoint approach collected location specific information about improvements needed and great places around the Pymont Peninsula.

Overall, infrastructure emerged as an important theme in many of the survey responses, social pinpoint comments and individual submissions. This includes in relation to transport, open space and community facilities.

A tapestry of greener public spaces and experiences (Direction 5) and making it easier for people to move around (Direction 7) stood out as the two most important directions for the future of Pymont, based on the stakeholder input.

Infrastructure issues drawn from the early consultation on the Place Strategy are summarised in **Table 5** overleaf.

Table 5: Stakeholder infrastructure responses by direction

Infrastructure that people love	Infrastructure changes / actions people would like
Direction 5: A tapestry of greener public spaces and experiences	
the waterfront greenbelt the area's parks, reserves, pocket parks and community gardens Pirrama Park	additional high quality green spaces, especially further away from the foreshore line Wentworth Park improvements access to Blackwattle Bay, an improved link between Pyrmont Bridge and Union Square and beautification of the foreshore walk improvements at Pirrama Park and Bank Street, as well as additional playgrounds and parkland on the west side of the harbour
Direction 7: Making it easier to move around	
the area's accessibility, public transport, particularly the ferry and 389 bus route the wide range of destinations within walking distance	reducing car use reduced impact on local streets from major arterial roads fewer cars, with solutions for motorways that cut through the area, particularly the congested intersection leading to Anzac Bridge reallocating road space for sustainable modes including public transport and cycleways increased parking, wayfinding facilities and improved pavements improved public transport, particularly more frequent light rail and a ferry running to Barangaroo and Fish Markets Improved pedestrian, cycling and public transport facilities Increased light rail capacity extending the ferry services to run to the Fish Markets and Pirrama Park prioritising pedestrians and increased cycle connections including rerouting cycleways around the waterfront to avoid traffic pedestrian accessibility around light rail infrastructure cycleway connections, particularly through Glebe Island Bridge Harris Street pedestrian upgrades and parking facilities
Direction 3: Centres for residents, workers and visitors / Direction 6: Creativity, culture and heritage	
Powerhouse Museum International Convention Centre (ICC) local community facilities	the need for community facilities such as performance spaces and community rooms greater emphasis on the Powerhouse Museum



4.3 Infrastructure opportunities

This section summarises infrastructure opportunities identified as part of the Place Strategy under each of the key infrastructure categories, for example, transport, open space, and community facilities. It also includes a map showing the locations and extent of the various infrastructure items.

A more detailed schedule of infrastructure opportunities is included in **Appendix B**. In addition to listing the infrastructure opportunity items, it also identifies relevant delivery authorities and indicating staging or delivery timeframe.

Infrastructure opportunities identified in the peninsula are shown in the map at **Figure 7** over page. Reference to the map indicates the Place Strategy provides the opportunity for a range of infrastructure items to be provided. The indicative timeframe for delivery of each infrastructure item and potential funding and delivery mechanisms are discussed in subsequent sections of this report.

The range and types of infrastructure, need, feasibility, opportunities, costs, staging, funding and responsible delivery authority for each infrastructure item will need to be confirmed as the Place Strategy is progressed.

4.3.1 Transport

As indicated in section 3.1.1, transport infrastructure includes infrastructure to support different ways of moving including walking, cycling, public and private transport.

Transport intervention opportunities identified for further investigation as part of the Place Strategy are summarised in **Table 6** on the following pages. These are summarised from the transport strategy report prepared as part of the Place Strategy and included as part of the public exhibition package.

Reference to table indicates that the Place Strategy provides the opportunity for a range of transport interventions to be considered. This includes potential changes affecting all modes of transport, including walking, cycling, public and private transport.

The transport strategy is informed by transport principles established for the study that align with the outcomes identified in Future Transport 2056. Key components of the transport strategy include:

- Reinforce the existing centre in northern Pymont around the location of a Sydney Metro West station around Union Square
- Complete connections to the primary centre around Union Square via active transport connections across the peninsula between Pymont Bridge and Glebe Island Bridge and by extending the Good Line link north to Union Street and south to Central
- Strengthen and extend the existing transit along Harris Street by connecting to The Bays precinct to the north west and to Redfern in the south east by creating an intermediate public transport route along this alignment
- Reconfigure existing streets to reduce the barriers created by the existing through-traffic function and improve local access reducing lane capacity, widening footpaths and converting one-way streets to two-way operation.

Figure 7 Infrastructure opportunities





Proposed public transport interventions are based around a public transport concept centred around a potential Sydney Metro West station in the northern portion of the Peninsula. The proposed public transport network provides for a future connection to The Bays precinct, Redfern and Parramatta Road.

Interventions proposed to improve the active transport network within Pymont is primarily focused on closing existing gaps in the network and would be beneficial to connecting open spaces. Closing these gaps in the active transport network will improve access to a potential new Sydney Metro West station and may present further opportunities to strengthen the active transport network, particularly around Union Square and Pymont Bridge.

Changes in policy regarding parking, land use and travel demand management will be required to support further growth in population and employment in the Pymont peninsula and ensure that development occurs in line with the specified principles.

Key considerations in nominating indicative delivery timeframes for each transport intervention opportunity include:

- Links to developments, for example, Blackwattle Bay, Harris Street crossing, extension of Good Line cycleway north, removal of Pymont Street ramp
- The time required to undertake business case studies/environmental approvals and design, for example, Glebe Island Bridge, conversion of existing road space, and potential Sydney Metro West station
- Links to other projects, for example, intermediate transit corridor, potential Sydney Metro West Station, and Western Harbour Tunnel.

Additional information about each transport intervention opportunities is included in the infrastructure opportunities schedule at **Appendix B**. It lists the transport intervention opportunities and includes information on staging and responsible delivery authorities.

Table 6: Transport intervention opportunities for investigation

Short term, years 1-10	Medium term, years 6-10	Long term, years 10-20
Investigate removal of the Pyrmont Street ramp	Reallocate road space on Wattle Street south of Fig Street	Potential new Sydney Metro West station at Pyrmont
Investigate converting local streets around UTS and TAFE Ultimo to shared zones	Contra-flow bus lane northbound on Harris Street and Regent Street (Thomas Street to Lee Street)	Extend Goods Line north to Pyrmont Street and Murray Street
Investigate closure of Jones Street between Thomas Street and Broadway	New intermediate transit corridor from the Bays to Australian Technology Park via Harris Street	Prepare for autonomous vehicles
New signalised crossing on Harris Street	Extend Good Line south through existing tunnel to Central station	
New bus route from Parramatta Road corridor	Extend Jones Street cycleway north to Pyrmont Bridge Road	
Rationalisation and relocation of bus stops	New commuter cycleway through Blackwattle Bay development	
Investigate new ferry wharf at Cadi Bay Wharf	Extend Foreshore active transport link through Blackwattle Bay development	
Investigate active transport crossing of Pyrmont Bridge Road	Localised widening of footpaths along key pedestrian routes	
Extend Union Street cycleway to Bank Street	Pursue shared-parking across land uses	
Investigate underground active transport link to Sydney Fish Market	Encourage transport management associations	
Investigate Glebe Island Bridge link for public and active transport	Encourage more car-sharing and ride-sharing	
Investigate parking pricing		
Investigate alternative freight arrangements		

4.3.2 Open space and recreation

Open space infrastructure includes parks, civic plazas, linkages and natural areas. Recreation infrastructure includes barbeques, play spaces, furniture, sports fields, sports courts, indoor leisure centres, aquatic centres and recreation trails.

Open space intervention opportunities identified for further investigation as part of the Place Strategy are summarised in **Table 7** overleaf. These are summarised from the transport strategy report prepared as part of the Place Strategy and included as part of the public exhibition package.

Like transport, the Place Strategy also provides the opportunity for a range of open space and recreation interventions to be considered. Key findings from the social infrastructure study that have informed the open space and recreation opportunities are summarised after the table below.

Table 7: Open space and recreation intervention opportunities for investigation

Open space through development

29

Around 63 per cent of parks are less than 0.3 hectares in size and are of little recreational value. There are opportunities to increase capacity of what is there already. A number of actions are included in the City's Open Space, Sports and Recreation Study including increasing capacity of existing larger parks to accommodate casual active recreation including Metcalfe Park, and investigating returning Wentworth Park greyhound track land as newly activated, publicly accessible open space as part of a larger and enhanced parkland, once its terms expires.

Linkages to parks, to increase capacity and connectivity

Aligning with the City of Sydney's actions in City Plan 2036, Open Space and Recreation Needs Study, Greening Sydney and Liveable Green Network Implementation Plan, new recreational walkable linkage parks, with amenities including shade, seating, bubblers and toilets, connecting to large parks, should be created. This includes:

- Links to Wentworth Park, Pirrama Park and Tumbalong Park
- The Bays Precinct from Bank Street foreshore access around Pyrmont to Blackwattle Bay Park and Glebe Island
- Wentworth Park to Central Pyrmont/Ultimo.

Open space for innovation clusters and workers

Parks near innovation and creative industry clusters should be upgraded with Wi-Fi, power points and recreational facilities like table tennis, half courts and skate friendly furniture. For new innovation clusters developers can deliver public open space that supports the needs of their workers and the local community.

Outdoor fitness

Opportunities to provide a mixture of dynamic and static outdoor fitness stations along the Blackwattle Bay border should be considered.

Environmental stewardship and leadership and protection of biodiversity

Initiate partnership to increase biodiversity along transport/utility corridors. Promote and enhance endemic species planting in the utility corridors, including Pymont Light Rail Corridor.

A network of play

To meet a gap of 5 play spaces, there is opportunity to incorporate elements of play creatively across the precinct. This includes the opportunity to create a linked play network to regional and neighbourhood play through additional play spaces in pocket parks, and child-friendly public domain treatments that make the Pymont Peninsula a more fun and friendly place for children and adults alike.

While there are two existing regional play spaces within the peninsula, future development also presents opportunities to enhance existing play opportunities to include inclusive play. This can happen at a range of scales from local, through to regional. The City of Sydney already has plans to introduce inclusive play at Pirrama Park.

Indoor and outdoor courts

Within the peninsula there is a need to supply an additional two indoor, and five outdoor multi-purpose courts which require larger footprints than basketball courts of around 38 metres by 22 metres and can accommodate a range of users.

As land is highly constrained, the use of rooftops and podiums within both public and private developments should be explored. A precedent for this is Ultimo Community Centre. There may be opportunities to explore public roof top recreation

Sports fields

At least one additional synthetic sports field should be provided in the precinct. Further capacity and utilisation data analysis will provide further detail on sports field needs.

Opportunities to increase public access to the existing Wentworth Park sports complex will assist in fulfilling sporting field needs.

Harbour swim opportunities

Foreshore areas in the peninsula generally don't have easy walking access to Ian Thorpe Aquatic Centre. The opportunity for a new regional harbourside pool and/or designated swimming areas in Blackwattle Bay should be explored. This draws on recreation trends indicating growing demand for swimming and capitalises on the peninsula's waterfront setting.

Youth recreation

With such a high population of young people in the peninsula, particularly in Ultimo, there is a need for a youth precinct within the Peninsula. Opportunities to create a unique space for skating, basketball and gathering should be investigated in the underpasses that cut through the area.

Increased access to water recreation in harbour

As the peninsula benefits from good access to Sydney Harbour, there are opportunities to better use the water for recreation. This includes exploring additional opportunities for passive boating and potentially swimming. The City of Sydney's Open Space and Recreation Needs Strategy indicates that where appropriate, landing sites for passive craft, such as ramps, pontoons and seawall steps, should be provided. There is also the opportunity to develop public boating facilities at Bank Street to accommodate passive-use boating activities including dragon boat racing.

4.3.3 Community and cultural facilities

Community and cultural facilities include community centres, libraries, museums and galleries, studios (for artists, sound, creative), creative arts centre, theatre and performance spaces, early education and care, education, health, seniors housing, and emergency services.

Community and cultural facilities opportunities identified for further investigation as part of the Place Strategy are summarised in **Table 8** below. These are summarised from the social infrastructure study.

Additional information about each transport intervention opportunities is included in the infrastructure opportunities schedule at **Appendix B**. It lists the transport intervention opportunities and includes information on staging and responsible delivery authorities.

Short, years 1-5	Medium, years 6-10	Long, years 11-20
	<p>400m2 community venue hire</p> <p>Affordable and quality medical centre</p> <p>Refurbish and enhance public access to existing auditoriums/lecture theatres within the Powerhouse Museum to allow for local performances and theatre rehearsals.</p>	<p>Up to 3,000m2 of new library floor space through either:</p> <p>New library facility</p> <p>Wi-Fi ready lounge/foyer space in commercial buildings</p>
<p>Ground level cultural spaces for participation/exhibition as part of new private development</p> <p>New production and rehearsal space to support local production of creative and performing arts</p>		
<p>Communal rooms for community activities as part of future residential development</p> <p>Encourage work based childcare as part of any future large commercial redevelopment</p> <p>Creative live/work spaces within new residential development</p>		

To meet a future gap 2 to 3.4 local community centres and to close the proximity and access gap in the Pyrmont Peninsula, there is an opportunity to deliver a new local multi-purpose community centre connected to redevelopment of the existing Sydney Fish Market site. The City of Sydney sets a minimum floor space requirement of 400 m2 per facility for local community centres.

Support the growing culturally and linguistically diverse (CALD) community with community space for opportunities for social connection with each other and the wider community, and for seeking information and support. City engagement indicated a need expressed for shop-front information services for people with limited English skills.

Libraries

While there is 1 City library and 1 library link they only total 258m² of floor space – and at least 2,174m² of library floor space is required currently, increasing to 2,670m² by 2041.

Potential to relocate the Ultimo library to a new larger space more centrally located to the Study Area and servicing growth areas around the Fish-markets, and re-imagining the space at Ultimo Community Centre for community uses.

Museums and galleries

Provision of a local community gallery as part of a local creative arts centre to service the Pymont Peninsula and aligning with the City's goals in its Creative City Policy and Action Plan.

Studios – artists, sound, creative

The Study Area is a centre for arts, culture and creativity culture and creativity at a metropolitan and regional level. But there are no local level artists or creative spaces here for artists to practice and produce arts and culture.

There are opportunities through future development to deliver artists' studios and creative arts spaces for practice and production, particularly on NSW Government-owned land.

There are opportunities to deliver creative live/work spaces as part of future residential development.

Creative arts centre

There is the opportunity to deliver one new community creative arts centre (similar to existing City of Sydney Pine Street facility in Chippendale) on the Powerhouse Museum site or as part of the Fishmarkets redevelopment. This could be co-located with a local community centre space.

Theatre and performance

Local level purpose built theatre and performance space within the Powerhouse site or as part of future new developments such as the redevelopment of the existing Sydney Fish Market site at Blackwattle Bay.

Early education and care

The area is well serviced but that additional childcare may be required as part of the fish-market redevelopment.

Health

The Baseline Infrastructure Study found that there is a gap of 1 primary healthcare centre for the Harris Street Village. As the area is ageing, there may also be greater demand for senior's housing and health services by 2041.

4.3.4 Green infrastructure

Green infrastructure opportunities identified for further investigation as part of the Place Strategy are summarised in **Table 9** below. These are summarised from the sustainability report commissioned as part of the Place Strategy.

Reference to the table indicates that the Place Strategy provides the opportunity for a range of green infrastructure to be considered. This includes green streets, green buildings, recycled water and green perimeter utility hubs.

Further information about each green infrastructure opportunity is included in the infrastructure opportunities schedule at **Appendix B**. Potential funding mechanisms are discussed in section 0.

As noted in the sustainability study, Pyrmont Peninsula has the key foundations of being able to 'move the needle' on sustainability, affordability and inclusiveness, playing an active role in supporting the urbanism of the Sydney CBD and creating a better and richer urban experience for residents, workers and visitors.

Improved environmental performance is often cited in both State and local government policy directions. Pymont is the appropriate scale and size to prototype and validate what this actually looks like, including the partnerships, governance and technology to make it happen.

Table 9 Green infrastructure opportunities

Item	Description
Green hubs	<p>Potentially 1-3 hubs located around the perimeter of the peninsula</p> <p>Parking, waste, energy generation and storage, shared storage (e.g. bikes and canoes) potential rooftop courts</p> <p>Shared parking provides opportunity to moderate parking in new developments</p> <p>Reduction in on-street parking, to free up space for public domain improvements</p> <p>Could be a standalone structure or in the podium of a podium and tower development</p>
Green streets	<p>Public domain improvements including footpath widening, trees, landscaping etc</p> <p>Relocation of some on-street parking into green perimeter utility hubs will help support footpath widening, where appropriate</p>
Green buildings	<p>Energy and water performance requirements above existing requirements</p>
Recycled water	<p>Scheme comprises the collection of rainwater from the public domain (roads, parks etc), treatment in a treatment plant, and supply of treated water to new or upgraded buildings to flush toilets, wash clothes etc, instead of using potable (drinking) water</p> <p>An example of an existing recycle water scheme is the water scheme at nearby Central Park in Chippendale</p> <p>Infrastructure needed comprises the installation of trunk infrastructure in streets, construction of a treatment plant, and connection of new and upgraded buildings to the trunk infrastructure in the street</p> <p>Developers are required to pay the cost of connecting their developments to the trunk infrastructure installed in the street adjoining the development.</p>

4.3.5 Affordable housing

Affordable housing is housing provided to very low, low and moderate-income households.

As part of the Place Strategy, the Department engaged an economic consultant to prepare a housing study focusing on affordable housing. The housing study included a review of the context of affordable housing policy and contributions frameworks in the peninsula, namely the Revised City West Affordable Housing Program. It also considered affordable housing policies across Australia and internationally to form a view on 'best practice' approaches for consideration as part of the Place Strategy.

The housing study identified a number of opportunities for further consideration, including the rationalisation of the revised City West Affordable Housing Program with State policy and the City of Sydney's approach. This will be further explored as part of the detailed master planning process.

The housing study found that the peninsula represents one of the earliest, if not the earliest, areas targeted for affordable housing in Australia. This long history in providing affordable accommodation is one of the fundamental drivers behind the unique character of the area, particularly as the area has gentrified over the past two decades.

The history and embedded nature of affordable housing policy in the local planning framework presents an opportunity for future planning of the Peninsula. Leveraging existing affordable housing policy, whilst introducing new mechanisms for securing affordable housing, should be considered as a core objective of the Place Strategy.

The provision of affordable housing is included in the infrastructure opportunities schedule at **Appendix B**.

4.4 Sub-precincts

A list of all infrastructure opportunity items and the sub-precinct(s) each item is located in is shown in **Appendix C**. A summary of key infrastructure opportunities located in each sub-precinct is shown in **Figure 8** overleaf.

A number of infrastructure opportunity items are located in the Ultimo sub-precinct and Blackwattle Bay sub-precinct. In the Ultimo sub-precinct many of the opportunities are related to the Powerhouse Museum (which the Government has announced will be retained), Goods Line, University of Technology Sydney, and TAFE. Opportunities include closure of part of Jones Street for new open space, extension of the Goods Line for active transport purposes, localised footpath widening along Harris Street and Wattle Street, and theatre and production space at the Powerhouse Museum.

In the Blackwattle Bay sub-precinct many of the opportunities are related to the new Sydney Fish Market and redevelopment of the existing Sydney Fish Market site. Opportunities include a new foreshore link and open space, potential reconnection of Glebe Island Bridge, a potential pedestrian tunnel linking to the existing light rail stop and potential Sydney Metro West station access, cycling links along Pyrmont Bridge Road, Miller Street and Bank Street, and new community and library floor space.



Figure 8: Key infrastructure opportunities by sub-precinct

Ultimo Reallocate road space on Wattle St south of Fig St Contra-flow bus lane northbound on Harris St and Regent St (Thomas St to Lee St) New shared zones near UTS and TAFE Jones St - close part for new open space New Harris St pedestrian crossing Harris St intermediate transport corridor Rationalise Harris St bus stops Goods Line southern active transport extension Harris St and Wattle St localised footpath widening Jones St new linear park Mary Ann St park upgrade New half court/multi-purpose court at Goods Line/Powerhouse New indoor courts Theatre and performance space New production and rehearsal space	Pymont Village Potential Sydney Metro West station and access New bus route Intermediate transport corridor Rationalise Harris St bus stops Goods Line north cycling extension Miller St and Bank St cycleway Harris St localised footpath widening
	Darling Island Potential Sydney Metro West station and access New bus route Indoor courts
	Tumbalong Park Investigate Western Distributor Pymont St ramp removal Goods Line northern cycling extension New urban park/plaza at Allen St
	Pirrama Intermediate transport corridor - Harris St Rationalise and relocate Harris St bus stops Cadi Bay Wharf upgrade Glebe Island Bridge link Expand Carmichael Park
Blackwattle Bay Potential Sydney Metro West station and access New bus route Pymont Bridge Rd crossing Cycling - Miller St, Bank St Cycling - Blackwattle Bay Blackwattle Bay foreshore - active transport New district park Glebe Island Bridge link Skate etc beneath overpass Community space New library floor space Medical centre New production and rehearsal space Harbour pool	Wentworth Park Wattle St reallocate road space Pymont Bridge Rd cycleway Wattle St localised footpath widening Investigate returning Wentworth Park greyhound track as newly activated open space ³

³ Investigate returning Wentworth Park greyhound track land as newly activated, publicly accessible open space as part of a larger and enhanced parkland, once its term expires

The Place Strategy is based on a 20-year horizon from 2021 until 2041. Development enabled by the Place Strategy will occur progressively over this period and it is important that the right infrastructure is provided in the right location at the right time to maximise benefits and amenity for both the existing and future population.

The delivery timeframe for many infrastructure items is influenced by the delivery timeframe of key development sites as well as major infrastructure projects. A graph showing anticipated growth in residents and workers in each sub-precinct is included in **section 2.4** of this report. Reference to this indicates the most significant resident and worker growth will be in the Ultimo precinct followed by the Blackwattle Bay precinct. There will be more new workers than new residents.

It is important that infrastructure is provided at the same time as development. A range of infrastructure is needed to support development in each of the sub-precincts including UTS-related development, and development along the Blackwattle Bay foreshore. Infrastructure opportunities identified include various public transport, active transport, open space, community and cultural facilities opportunities.

The staging of infrastructure opportunity items will be refined as the Place Strategy is progressed. This includes once the preferred development scenario is confirmed so that infrastructure demand and required infrastructure can be more accurately quantified. It also includes consideration of feedback obtained in response to the public exhibition process and ongoing consultation with relevant government agencies.

Opportunities for different infrastructure types to be funded and delivered by different mechanisms is shown in **Appendix D**.

The prioritisation and programming of infrastructure to create the new places will respond to many factors, including:

- 37



- the property and infrastructure investment climate, including the availability and affordability of finance for both private and public sectors
- the health of the wider economy, particularly the construction and housing sectors
- the availability of funding from a range of sources for different types of infrastructure
- recognition that catalyst sites will have the most capacity to contribute towards precinct-enabling infrastructure that delivers significant public benefits.

The determination of a sustainable funding mix for required infrastructure will necessarily consider all these factors and will culminate in an assessment of opportunities for different funding mechanisms to deliver individual infrastructure items.

The steps that would need to be followed in identifying a preferred funding mix to meet the cost of the infrastructure priorities established in the Place Strategy area are as follows:

- **Place Strategy:** following a public exhibition and consultation process, the Place Strategy should be finalised. This should be done with the involvement of the community, key stakeholders and city partners, and infrastructure agencies. It should establish a clear vision and an intended outcome based on understanding of the place that is underpinned by an evidence base.
- **Infrastructure schedule responsibilities and priorities:** the preliminary infrastructure schedule included in this report should be refined to confirm responsible authorities priorities for the state, local, utilities and other infrastructure that is needed to implement the Place Strategy vision, priorities and strategies.
- **Infrastructure costs, funding and coordination:** relevant state and local delivery authorities will need to coordinate the planning, prioritisation, programming, budgeting, procurement and delivery of state and local infrastructure linked to its life cycle asset management systems. The emphasis will be on tailoring the funding mix to suit each class of infrastructure, which is discussed further below.
- **Infrastructure delivery:** state and local infrastructure projects will then be designed, specified, tendered and overseen, ideally by place-based project managers.

Different funding sources are available for different projects. Relevant delivery authorities will need to match different mechanisms to particular infrastructure items and categories so that a sustainable funding mix can be applied to provide and maintain infrastructure over its life cycle.

4.7 Governance

The effective planning, funding and delivery of the infrastructure required to support the Pymont Peninsula Place Strategy can only occur with effective governance and decision-making.

Governance refers to the way an organisation or business harnesses and allocates its resources to achieve its objectives effectively and efficiently.

Similarly, governance of an area or place is about how the different participants who shape the area make decisions and allocate resources to conserve and celebrate the place's natural areas, improve the wellbeing of the population, and support the local economy for the benefit of all.



Precincts are complex, with hundreds and sometimes thousands of individuals and organisations making decisions reflecting their own aspirations and priorities. A key challenge in creating a great area is the way different authorities make decisions and ensuring they do not make decisions which spill over effects in isolation from each other.

To avoid the 'silo' planning approach an appropriate governance model needs to be pursued.

A good city governance model is one that:

- focuses on creating great places through the coordinated effort of many, rather than providing services in isolation from each other
- effectively involves and engages residents and the broader community
- enables genuine collaboration between state and local government, and city-shaping institutions and businesses
- effectively aligns infrastructure delivery with development and population growth
- includes a logical 'road map' for traveling from plan into reality, including the use of multiple funding and delivery mechanisms to deliver the infrastructure that is needed to support growth (i.e. the 'funding mix').

Major infrastructure priorities as well as many of the smaller projects require a collaborative approach to plan and deliver. Collaboration occurs with a wide group of stakeholders including the community, State agencies and cross boundary technical and professional disciplines.

Realising the strategic vision in the Pymont Peninsula Place Strategy will require a high degree of collaboration between local and state government including but not limited to the City of Sydney, Transport for NSW, Sydney Metro, Department of Planning, Industry and Environment, Greater Sydney Commission, and Infrastructure NSW.

There are also other organisations in Pymont Peninsula that, due to their size and reach into the Peninsula, will be active partners in the Peninsula's development including University of Technology Sydney, TAFE NSW and major businesses.

Regular engagement and collaboration with planning and development partners, other agencies and stakeholders will be needed to promote fundamental strategic planning (e.g. reserving land for community uses and other network infrastructure) and ensure infrastructure programs and investment plans can be aligned as much as possible.



4.8 Next steps

The next steps in the planning and delivery of Place Strategy infrastructure will include:

- Confirmation of the preferred development outcome at the sub-precinct level and anticipated resident and worker population increases, so that infrastructure demand can be more accurately quantified, that will in turn inform the preparation of contributions plans and other delivery mechanisms
- Further investigation of the infrastructure opportunities identified in this study to determine their need, timing and feasibility
- Prioritisation of the infrastructure list, based on need, feasibility and opportunity
- Ongoing consultation and collaboration with relevant infrastructure delivery authorities, including the City of Sydney and relevant agencies, regarding benefits, costs, funding, staging and priorities
- Scenario testing to assess income that could potentially be generated under different funding approaches, for example, section 7.11 and section 7.12 contributions
- Detailed analysis of potential value uplift on each development site to assess the potential for development to deliver infrastructure and other place incomes, either on-site or through a broader incentive floor space contributions scheme or other mechanism
- Preparation of an Infrastructure Delivery Plan that clearly sets out infrastructure costs, funding sources, delivery mechanisms, responsibilities and facility staging
- Establishment of an effective governance framework for coordinated infrastructure delivery between the State government, the City of Sydney, infrastructure providers, land developers and the community.

APPENDIX A: LITERATURE REVIEW

This appendix provides an overview of the key State planning policies and statutory instruments which apply to the Peninsula in the context of infrastructure planning and delivery.

A.1: Greater Sydney Region Plan – A Metropolis of Three Cities

The Greater Sydney Region Plan (the Regional Plan) seeks to accommodate the needs of Sydney's growing population in a metropolis of three cities: Western Parkland City, Central River City and Eastern Harbour City, building on a vision where most residents live within 30 minutes of their jobs, education and health facilities.

Infrastructure is a central theme of the Regional Plan which outlines a series of directions, objectives and strategies that are relevant to this. Objectives and strategies relevant to infrastructure planning and delivery are summarised as follows:

- **Objective 2** – Infrastructure aligns with forecast growth – growth infrastructure compact
 - Strategy 2.1 - Align forecast growth with infrastructure.
 - Strategy 2.2 - Sequence infrastructure provision across Greater Sydney using a place-based approach.
- **Objective 3** – Infrastructure adapts to meet future needs
 - Strategy 3.1 – Consider the adaptability of infrastructure and its potential shared use when preparing infrastructure strategies and plans.
 - Objective 4 – Infrastructure use is optimised
 - Strategy 4.1 – Maximise the utility of existing infrastructure assets and consider strategies to influence behaviour changes, to reduce the demand for new infrastructure, including supporting the development of adaptive and flexible regulations to allow decentralised utilities.
- **Objective 6** – Services and infrastructure meet communities' changing needs
 - Strategy 6.1 – Deliver social infrastructure that reflects the needs of the community now and in the future.
 - Strategy 6.2 – Optimise the use of available public land for social infrastructure.
- **Objective 7** – Communities are healthy, resilient and socially connected
 - Strategy 7.1 – Deliver healthy, safe and inclusive places for people of all ages and abilities that support active, resilient and socially connected communities by:
 - providing walkable places at a human scale with active street life
 - prioritising opportunities for people to walk, cycle and use public transport
 - co-locating schools, health, aged care, sporting and cultural facilities
 - promoting local access to healthy fresh food and supporting local fresh food production.

- **Objective 8** – Greater Sydney’s communities are culturally rich with diverse neighbourhoods
 - Strategy 8.1 – Incorporate cultural and linguistic diversity in strategic planning and engagement.
 - Strategy 8.2 – Consider the local infrastructure implications of areas that accommodate large migrant and refugee populations.
- **Objective 9** – Greater Sydney celebrates the arts and supports creative industries and innovation
 - Strategy 9.1 – Facilitate opportunities for creative and artistic expression and participation, wherever feasible with a minimum regulatory burden, including:
 - arts enterprises and facilities and creative industries
 - interim and temporary uses
 - appropriate development of the night-time economy.
- **Objective 12** – Great places that bring people together
 - Strategy 12.1 – Using a place-based and collaborative approach throughout planning, design, development and management, deliver great places by:
 - prioritising a people-friendly public realm and open spaces as a central organising design principle
 - recognising and balancing the dual function of streets as places for people and movement
 - providing fine grain urban form, diverse land use mix, high amenity and walkability in and within a 10-minute walk of centres
 - integrating social infrastructure to support social connections and provide a community hub
 - Strategy 12.2 – In Collaboration Areas, Planned Precincts and planning for centres:
 - investigate opportunities for precinct-based provision of adaptable car parking and infrastructure in lieu of private provision of car parking
 - ensure parking availability takes into account the level of access by public transport
 - incorporate facilities to encourage the use of car sharing, electric and hybrid vehicles including charging stations.
- **Objective 18** – Harbour CBD is stronger and more competitive
 - Strategy 18.1 – Prioritise infrastructure investments, particularly those focused on access to the transport network, which enhance cycling connectivity within 5 kilometres of strategic centres or 10 kilometres of the Harbour CBD.
 - Strategy 18.2 – Develop and implement land use and infrastructure plans which strengthen the international competitiveness of the Harbour CBD and grow its vibrancy, including by providing a wide range of cultural, entertainment, arts and leisure activities

- **Objective 21** – Internationally competitive health, education, research and innovation precincts
 - Strategy 21.1 – Develop and implement land use and infrastructure plans for health and education precincts that create the conditions for the continued co-location of health and education facilities, and services to support the precinct and growth of the precincts have high levels of accessibility
- **Objective 24** – Economic sectors are targeted for success
 - Strategy 24.2 – Consider the following issues when preparing plans for tourism and visitation:
 - encouraging the development of a range of well-designed and located facilities
 - enhancing the amenity, vibrancy and safety of centres and township precincts
 - supporting the development of places for artistic and cultural activities
 - improving public facilities and access
 - incorporating transport planning to serve the transport access needs of tourists.
- **Objective 25** – The coast and waterways are protected and healthier
 - Strategy 25.2 – Enhance sustainability and liveability by improving and managing access to waterways, foreshores and the coast for recreation, tourism, cultural events and water-based transport.
- **Objective 30** – Urban tree canopy cover is increased
 - Strategy 30.1 – Expand urban tree canopy in the public realm.
- **Objective 31** – Public open space is accessible, protected and enhanced
 - Strategy 31.1 – Maximise the use of existing open space and protect, enhance and expand public open space, including by
 - requiring large urban renewal initiatives to demonstrate how the quantity of, or access to high quality and diverse local open space is maintained or improved
 - delivering shared and co-located sports and recreational facilities including shared school grounds and repurposed golf courses
 - providing walking and cycling links for transport as well as leisure and recreational trips.
- **Objective 32** – The Green Grid links parks, open spaces, bushland and walking and cycling paths
 - Strategy 32.1 – Progressively refine the detailed design and delivery of:
 - Greater Sydney Green Grid priority corridors
 - opportunities for connections that form the long term vision of the network
 - walking and cycling links for transport as well as leisure and recreational trips.

- **Objective 34** – Energy and water flows are captured, used and re-used
 - Strategy 34.1 – Support precinct-based initiatives to increase renewable energy generation and energy and water efficiency especially in Planned Precincts and Growth Areas, Collaboration Areas and State Significant Precincts.

The infrastructure objectives for Greater Sydney detailed in the Regional Plan are further outlined in each respective District Plan.

A.2: Eastern City District Plan

Building on the strategic aims and objectives in the Regional Plan, the Eastern City District Plan (District Plan) is a 20-year plan for the Eastern Harbour City to manage growth in the context of economic, social and environmental matters.

The District Plan contains planning priorities and actions to deliver the infrastructure, livability, productivity and sustainability outcomes envisioned in The Greater Sydney Region Plan at a district level. Planning priorities relevant to infrastructure planning and delivery include:

- **E1** – Planning for a city supported by infrastructure
- **E3** – Providing services and social infrastructure to meet people’s changing needs
- **E4** – Fostering healthy, creative, culturally rich and socially connected communities
- **E6** – Creating and renewing great places and local centres, and respecting the District’s heritage
- **E8** – Growing and investing in health and education precincts and the innovation corridor
- **E14** – Protecting and improving the health and enjoyment of Sydney Harbour and the District’s waterways
- **E17** – Increasing urban tree canopy cover and delivering Green Grid connections
- **E18** – Delivering high quality open space.

The District Plan also refers specifically to the Ultimo part of Pyrmont Peninsula study area in the context of innovation corridors, under Planning Priority E8 to grow and invest in health and education precincts in the innovation corridor.

It notes that Ultimo is part of the Camperdown-Ultimo health and education precinct, which is an important part of an innovation corridor emerging along the western and southern fringes of the Harbour CBD. The health and education sectors, creative, cultural and digital industries, business support services and start-ups are referred to as the innovation ecosystem.

Camperdown-Ultimo health and education precinct contribute to internationally competitive economic sectors and precincts; support changing technologies; grow knowledge-intensive jobs; and help create a 30-minute city. With support, it will help consolidate Greater Sydney’s economic future and its national and international competitiveness.

Key infrastructure requirements identified as being needed to support this important role include:

- supporting the growth of creative industries
- improving transport, walking and cycling connections between key hubs, particularly in response to students and job growth

- upgrading the public domain through new place-making initiatives.

A.3: Camperdown-Ultimo Place Strategy

Ultimo at the south end of the Pyrmont Peninsula, falls into the Camperdown-Ultimo Place Strategy. The strategy sets a strong vision of what the area will be like into the future, supported by objectives and actions: “By 2036, Camperdown-Ultimo Collaboration Area is Australia’s innovation and technology capital. Industry, business, health, education and skills institutions work together, and talent, creativity, research and partnerships thrive. Low carbon living, green spaces, places for people and easy connections support resilience, amenity, vitality and growth.”

Key objectives to achieve the vision relating to infrastructure include:

- excellent public transport, walking and cycling, and great places
- authenticity, character, outstanding architecture, engaging streetscapes and built environment
- resilient local community and businesses
- diverse local community
- attractiveness, liveability and reliance on sustainable shared resources.

Key challenges identified for the area relating to infrastructure include:

- unequally distributed public transport, pedestrian and cycling links within and beyond the area, particularly a mass transit system to connect Camperdown activity node
- poor pedestrian amenity on high-traffic volume roads
- heavily congested roads and limited transport modal options
- the conversion of industrial and commercial building stocks to residential or mixed-use developments, limiting availability of employment land and affordable spaces for innovation, research, creative industries and artists, and collaborative projects
- lack of affordable housing for the community, students, key and creative workers, and limited short-term accommodation for academic and health visitors
- the need for investment in public and private infrastructure
- the lack of and growing demand for local open space and community facilities and services and limited capacity to provide these services and facilities.

Key actions in the Place Strategy, relating to infrastructure planning and delivery include:

- **Action 1:** Develop a strategy for transport investigations and initiatives, underpinned by the principles of movement and place, to enhance safety, accessibility and permeability within and surrounding the Collaboration Area by prioritising pedestrian safety and amenity, encouraging cycling, and planning for public transport, freight movements and parking
- **Action 3:** Advocate for a mass transit system that strengthens connections between the Collaboration Area and Greater Sydney’s economic corridors.
- **Action 4:** Advocate for a Sydney Metro West station in Camperdown activity node.

- **Action 5:** Facilitate the renewal of Central Station and surrounding lands to improve pedestrian and cycling connectivity within and surrounding the Collaboration Area and integrate the transport interchange with the surrounding area.
- **Action 7:** Improve public transport, pedestrian and cycling connectivity between the three activity nodes:
 - Haymarket to Camperdown along the Ultimo axis
 - Camperdown to Eveleigh along the Darlington axis (particularly Redfern Station to University of Sydney)
 - Haymarket to Eveleigh along the Surry Hills axis.
- **Action 8:** Implement a pilot project along Broadway and Parramatta Road to reallocate road space and prioritise pedestrians between Central Station and key land uses on the Ultimo axis, while achieving an acceptable level of service for vehicles at the gateway to the Harbour CBD.
- **Action 9:** Identify shared partnership transport solutions to optimise connectivity within the Collaboration Area.
- **Action 11:** Consider piloting a Smart Places program in the Collaboration Area
- **Action 14:** Require the provision of affordable housing in and close to the Collaboration Area, including in mixed use developments, consistent with government targets.
- **Action 15:** Explore initiatives to provide diverse housing, including affordable housing for key workers and students.
- **Action 16:** Encourage active street frontages and prioritise pedestrians and cyclists along identified streets with a high place value, such as Steam Mill Lane, sections of Harris Street and City Road.
- **Action 17:** Foster vibrant places by activating night-time precincts, activating ground floor areas, and developing and promoting meeting places and cultural assets.
- **Action 20:** Integrate and connect existing institutional campuses to provide shared open space and access to amenity for the area's communities and encourage weekend use.
- **Action 21:** Develop an Infrastructure Strategy that identifies the open space, social and civic infrastructure needed for growing resident, worker, student and visitor populations.
- **Action 28:** Advocate for and deliver a minimum percentage requirement for affordable space in developments for tech start-ups, innovation, creative industries, cultural uses, community uses and artists within and beyond the Collaboration Area.
- **Action 29:** Identify, prioritise and implement projects that enhance the Liveable Green Network and Greater Sydney Green Grid, increase tree canopy cover and vegetation, encourage health and activity, and optimise access to multi-use, shared green spaces, including:
 - Broadway and Parramatta Road
 - City Road
 - Harris Street and the Powerhouse Precinct
- **Action 30:** Promote community use and activities in shared or public open spaces.

- **Action 31:** Identify partnership projects and research to direct low-carbon initiatives, improve energy, waste and water efficiency, and improve health outcomes through design excellence and best practice in building and public domain projects.
- **Action 33:** Investigate power and energy bank sharing; peer to peer trading; precinct solutions for energy, water, waste management, loading and servicing; and infrastructure investment and sharing.

A.4: Pyrmont Peninsula Planning Framework Review

In August 2019, the Minister for Planning and Public Spaces requested the Greater Sydney Commission (the Commission) undertake an independent review of the planning framework for the Western Harbour Precinct, including the Pyrmont Peninsula.

The Review provided ten findings to the Minister for Planning and Public Spaces under four categories. Findings relevant to infrastructure planning and delivery are summarised as follows:

- **Finding 1:** More comprehensive and detailed planning at the local level is required to deliver the Innovation Corridor vision for the Western Harbour Precinct and Pyrmont Peninsula.
- **Finding 2:** The current planning framework promotes a project-based approach over a place-based approach to planning outcomes.
- **Finding 3:** There is no coordinated spatial plan to guide assessment of competing project priorities to deliver place-making outcomes.
- **Finding 4:** Regional traffic and freight routes have an impact on the quality of the place.
- **Finding 5:** There are barriers to a connected and reliable transport network supported by a fine grain pedestrian network.
- **Finding 6:** Community infrastructure facilities, such as swimming pools and sports fields, are in high demand serving a growing number of residents, workers, students and visitors.
 - Growth over the past 20 years has increased pressure on community facilities in Pyrmont and Ultimo. Sports fields at Wentworth Park and other local sports facilities are experiencing longer periods of high demand due to the limited number of facilities being used by both workers and residents.
 - City of Sydney Council has indicated that additional community facilities are programmed for delivery in 2024.
 - Growth in population has also required an upgrade and construction of a new primary school. The new Ultimo Public School will have capacity for 800 students. Construction is underway and is set to be completed by early 2020. Temporary use of the Wentworth Park to facilitate the upgrade of the Ultimo Public School has provided a solution in an otherwise constrained location.
 - The needs of the residents, workers and visitors to Pyrmont/Ultimo are changing as the resident and worker population increases and patterns of activity change. The demand for community services, facilities and public open space in the Review Area are increasing and expected to continue to increase in the future.
 - Enhancing liveability and enabling diversity among contributors to innovation is a key element of successful Innovation Corridors. The Eastern City District Plan recognises the importance of accessible and culturally-appropriate social

infrastructure to serve a changing population, encourage creative and cultural expression and support social connections.

- **Finding 9:** A number of major projects, on the edge of the Review Area, are being planned but are disconnected from each other

One of the three recommendations, was to develop a Place Strategy for the Review Area (of which this Study contributes to) that includes a master plan, economic strategy and simplified planning framework; is supported through collaborative and inclusive arrangement across levels of Government, and community and considers the individual character of sub-precincts

A.5: Sustainable Sydney 2030

Adopted in 2008 following extensive community consultation, and updated every four years, Sustainable Sydney 2030 is the City of Sydney's highest level strategic plan and vision for the city to be green, global and connected. All the City's work follows from this plan – its strategies and action plans set out the commitments, projects and services needed to achieve the vision.

Sustainable Sydney 2030 includes 10 targets for 2030, 10 strategic directions and a series of objectives under each direction to make the city more sustainable and achieve the vision. Targets relevant to infrastructure planning and delivery in the Pyrmont Peninsula study area include:

- 70 per cent reduction in greenhouse gas emissions based on 2006 levels by 2030 and by 2050, achieve a net zero emissions city.
- 50 percent of electricity demand met by renewable sources; zero increase in potable water use from 2006 baseline, achieved through water efficiency and recycled water; total canopy cover increased by 50 per cent from 2008 baseline.
- 7.5 per cent of all city housing will be social housing, and 7.5 per cent will be affordable housing, delivered by not-for-profit or other providers.
- Trips to work using public transport will increase to 80 per cent, for both residents of the city and those travelling to the city from elsewhere.
- At least 10 per cent of total trips made in the city are by bicycle and 50 per cent by pedestrian movement.
- Every resident will be within reasonable walking distance to most local services, including fresh food, childcare, health services and leisure, social, learning and cultural infrastructure.
- Every resident will be within a 3-minute walk (250 m) of continuous green links that connect to the harbour foreshore, harbour parklands, Moore or Centennial or Sydney parks.
- The level of community cohesion and social interaction will have increased based on at least 65 per cent of people believing most people can be trusted.

Strategic directions and associated objectives relevant to infrastructure planning and delivery in Pyrmont Peninsula are summarised below.

2. A leading environmental performer

- 2.3 Across the city, potable water use is reduced through efficiency and recycling and gross pollutant loads to waterways are reduced
- 2.4 City residents, businesses, building owners, workers and visitors improve their environmental performance
- 2.5 The City's operations and activities demonstrate leadership in environmental performance
- 2.6 The extent and quality of urban canopy cover, landscaping and city greening is maximised
- 2.7 The city's buildings, infrastructure, emergency services and social systems are resilient to the likely impacts of climate change

3. Integrated transport for a connected city

- 3.1 Investment in public transport and walking and cycling infrastructure encourages more people to use these forms of transport to travel to, from and within the city
- 3.2 Transport infrastructure is aligned with city growth
- 3.3 The amenity of the city centre and villages is enhanced through the careful management and integration of transport
- 3.4 Public transport, walking and cycling are the first choice transport modes within the city
- 3.5 Transport services and infrastructure are accessible

4. A city for walking and cycling

- 4.1 The city and neighbouring areas have a network of accessible, safe, connected pedestrian and cycling paths integrated with green spaces
- 4.2 The city centre is managed to facilitate the movement of people walking and cycling
- 4.3 The number of people who choose to walk and cycle continues to increase
- 4.4 Businesses in the city encourage their staff to walk and cycle more often

6. Vibrant local communities and economies

- 6.4 There is equitable access to community facilities and places, parks and recreational facilities to support wellbeing in daily life

7. A cultural and creative city

- 7.1 Creativity is a consistent and visible feature of the public domain and there are distinctive cultural precincts in the city and its villages
- 7.3 Sydney's cultural sector and creative industries are supported and enhanced leading to greater sector sustainability, productivity gains, and innovation

9. Sustainable development, renewal and design

9.1 The City of Sydney leads by example to facilitate great places

9.2 The city is beautiful, sustainable and functions well

9.3 There are great public buildings, streets, squares and parks for everyone to use and enjoy

9.5 The urban environment promotes health and wellbeing

The City is currently developing Sydney 2050.

A.6: Draft Local Strategic Planning Statement, City Plan 2036

The City of Sydney's draft Local Strategic Planning Statement (LSPS), City Plan 2036, provides a 20-year land use vision and framework for the City of Sydney LGA. The draft LSPS builds upon the key objectives, strategies and actions of the Greater Sydney Region Plan and Eastern Harbour City District Plan and form a direct link between strategic State Government planning objectives and local planning instruments (i.e. Sydney Local Environmental Plan 2012).

The draft planning statement sets 13 priorities and a series of actions to achieve the vision and guide future changes to the City's planning controls. Of these, it includes three infrastructure related priorities and a series of related actions. Relevant actions under each priority are summarised below.

Priority 1 – Movement for walkable neighbourhoods and a connected city

I1.1 Continue to encourage walking and cycling in the city by implementing the City's walking, cycling and Liveable Green Network strategies, including working with:

- Land owners, universities, institutions, neighbouring local governments and government to deliver new, improved and safe connections, such as new streets, in particular across rail corridors, infrastructure sites and other barriers
- The NSW Government is requested to:
 - investigate opportunities to improve pedestrian and cycle priority and reduce travel time for people walking and cycling
 - respond to lower speed environments across the city that make streets safer and more liveable, by reducing speed limits with a target of 30km/h
 - ensure better access to major transport hubs
- Building owners and businesses to encourage walking and cycling through active workplace strategies and provision of end-of-trip facilities
- Reviewing development controls to identify new walking and cycling links.

I1.2 Work with the NSW Government to plan for the transition of streets to 'people first' places so streets are quieter, cleaner and greener with increased footpath capacity throughout the city, particularly:

- On streets with lower vehicle demand as a result of NSW Government transport investments and by applying the NSW Government Movement and Place framework

- On local streets, identifying opportunities for reducing through traffic, to make streets more suitable for walking, cycling and play
 - On multi-modal corridors with the priority to investigate Parramatta Road/Broadway and their respective side streets
 - On high streets and activity streets to support night and day economic, social, cultural and recreational activity and safety.
- I1.3** Continue to support the global gateways (Sydney Airport, Sydney Harbour, and Port Botany), economic growth within the Eastern Economic Corridor and general servicing of the city, by working with the NSW Government to accommodate essential service, freight and delivery vehicles, yet limit their impacts on other city users by investigating innovative opportunities such as the use of open-access loading docks, shared servicing facilities and dedicated small delivery consolidation points for 'last mile' parcel delivery by other means such as foot, cargo cycle courier or electric vehicle.
- I1.4** Advocate for the delivery of new metro stations on the proposed Sydney Metro West line, by 2028, including at Pyrmont, to serve existing and forecast populations. Green Square (Zetland), Central and Pyrmont (and in the future Randwick) will serve the Innovation Corridor, link the Western and Eastern Economic Corridors and connect high-growth employment sectors and their workers.
- I1.5** Where a Sydney Metro West station is committed in Pyrmont, work with NSW Government agencies and others to develop a land use framework that:
- Promotes employment growth, visitor accommodation, affordable enterprise space, high technology industry, retail, community and cultural uses
 - Facilitates improved environments for people walking and cycling
 - Maximises public and active transport interchange.
- I1.7** Continue to advocate for a light rail from The Bays Precinct (Glebe Island) to Central Sydney to support the Innovation Corridor; and advocate for a mass transit solution from Green Square to Central Sydney and along Parramatta Road to support local trips.
- I1.8** Work with the NSW and Australian Governments to promote the economic and employment growth benefits and test the feasibility of increasing transport connections across the city and district, including an east-west transport connection between Kensington, Green Square, Camperdown and The Bays, and the potential for City Deal planning, investment and delivery partnerships.
- I1.9** Continue to implement, review and update the car parking policies and controls to support the transition to a net-zero carbon and energy-efficient transport system by 2030, continue promoting more efficient modes of transport including walking, cycling and public transport and manage congestion, including:
- Sydney on-street, neighbourhood and car sharing policies
 - Planning controls for car parking and servicing, including accessibility mapping, parking rates and market mechanisms to manage parking supply
 - Low to zero parking approaches on and in the immediate vicinity of new transport infrastructure

- Adaptive basement design to allow for repurposing as demand for parking decreases

I1.10 Work with landowners, institutions and government to increase public walking, cycling and transport connections across the city and district, including infrastructure, busy roads, railway lands, institutional lands and golf courses and the like.

Priority 2 – Align development and growth with supporting infrastructure

I2.1 Assess infrastructure needs in consultation with NSW Government agencies, neighbouring councils and other infrastructure providers.

I2.2 Ensure infrastructure including state infrastructure such as transit, health and education, is delivered in a timely manner, including through working with NSW Government using the Growth Infrastructure Compact model to identify the funding, staging and delivery responsibilities.

I2.3 Work with stakeholders to deliver infrastructure identified in Council-endorsed strategies, action plans, public domain plans and the City's community strategic plan.

I2.4 Work with NSW Government agencies, utility and other infrastructure providers to update and align their Asset Management Plans (or equivalent) to this Planning Statement and other City infrastructure plans and strategies.

I2.5 When planning for land use change or growth, collaborate with utility providers to ensure appropriate energy, water, telecommunication and digital infrastructure are planned for, committed to and delivered in line with growth.

I2.6 Develop and implement funding and finance mechanisms for planning proposals to ensure the City can manage the supply of community infrastructure for its residents, workers and visitors. This includes:

- the continued use of community infrastructure contributions in Green Square
- meeting the intent of the proposed mechanisms in Central Sydney
- new mechanisms in precincts identified for investigation in this Planning Statement
- new mechanisms on any other sites subject to a planning proposal which proposes growth beyond this Planning Statement.

I2.7 Review existing development contributions plans regularly so that they adequately reflect infrastructure needs, and investigate if the City can increase the funds it can collect if funds do not meet the costs of providing infrastructure.

I2.8 Investigate opportunities for partnerships to contribute to infrastructure delivery and operation, including public-private and not-for-profit partnerships.

I2.9 When planning for growth beyond the capacity of this Planning Statement, or for major renewal projects, assess infrastructure needs, having regard to relevant City plans, policies and strategies and seek to have the demand met by the resulting development.

Priority 3 – Supporting community wellbeing with social infrastructure

I3.1 Improve the accessibility, capacity and function of existing community infrastructure by:

- Investigating existing infrastructure capacity and community demand for infrastructure
- Applying the strategic framework, actions and works program in the Open Space, Sport and Recreation Needs Study 2016, to open space planning
- Creating a network of open space, and recreation facilities by creating and improving streets, and other walking and cycling connections through the city, including the delivery of the liveable green network
- Co-locating facilities to provide a range and distribution of recreational, sporting and cultural opportunities

I3.2 Plan for and provide open space to meet the following criteria and outcomes:

- All residents and workers are to be within 400 metres of quality, functional open space
- Plan to increase public open space provision to meet or exceed 15 per cent of the City's total land area
- Minor urban renewal areas and individual sites are to provide between 9 and 15 per cent of the land as public open space in a consolidated and accessible location, with high-density projects delivering 15 per cent, as described in the Open Space, Sports and Recreation Needs Study 2016
- At least 15 per cent of the site area of NSW Government urban renewal projects and major urban renewal projects are to be delivered as public open space in a consolidated and accessible location
- Sunlight to existing parks and public squares is protected and new parks and squares receive adequate sunlight
- Integrate the recreational opportunities and benefits of waterways and the 'blue grid' into open space and recreational planning.

I3.3 Partner with other councils, NSW Government and other stakeholders to:

- Accommodate demand for active recreation and sporting facilities across the District and deliver Sydney Green Grid linkages (district councils)
- Share open space and recreation facilities, and community and cultural facilities (schools, universities and NSW Government)
- Improve collaboration and coordination of infrastructure planning, funding and delivery by the NSW Government and utility providers, to ensure existing and planned infrastructure supports development and changing demands in a timely and cost-efficient way, and where possible, results in community benefits such as public space gains or upgrades.

A.7: City of Sydney Baseline Infrastructure Study 2019

The Baseline Infrastructure Assessment (Mecone and Cred Consulting, 2019), provided a desktop analysis for the existing provision and forecast demand to 2036 resulting from growth for a range of social infrastructure categories including libraries, community facilities, early childhood education and care, arts and culture, indoor recreation, aquatic facilities, open space and recreation, education, health and emergency services.

Based on the City's existing provision, and forecast population growth for the Harris Street Village, the Baseline Infrastructure Study identified the following social infrastructure needs to 2036:

- Increased open space, to ensure that the existing provision rate per person is maintained through growth
- 5 new sports fields, 20 new tennis courts, and 9 new multiuse outdoor courts
- 1.9 new indoor sports courts
- No demand for new aquatic centre or indoor recreation centres
- 815 m² of library floor space
- 2.4 local community facilities
- 3.4 neighbourhood service centres
- 2.4 local arts and cultural facilities, for participation in arts and cultural activities
- 472 new early childhood education and care places
- Sufficient provision of TAFE and Universities across the whole LGA
- No benchmarking for schools was completed
- 1.5 new primary care clinics
- 1.2 ambulance stations across the entire LGA

A.8: City of Sydney Development Contributions Plan 2015

The City of Sydney Development Contributions Plan 2015 identifies infrastructure needed to support future development from 2015 until 2030, contributions required from development to help pay for this infrastructure, and the infrastructure that the City of Sydney will provide using the contributions.

In the Pyrmont Peninsula, contributions required from residential development range up to \$20,000 per dwelling.

The works program includes various open space works items in Pyrmont Peninsula. Works include a new civic space at Mary Ann Street next to the Goods Line, Bank Street foreshore works, Quarry Green Park upgrade, a new fitness station in Pirrama Park, playing field upgrades and new shading at various playgrounds.

APPENDIX B: INFRASTRUCTURE OPPORTUNITIES SCHEDULE

Table B1: Infrastructure opportunities schedule

Item	Description	Sub-precinct(s)	Responsibility	Priority (indicative) ⁴
Transport				
T1	Reallocate road space on Wattle Street south of Fig Street	Ultimo, Wentworth Park	State	Medium
T2	Contra-flow bus lane northbound on Harris Street and Regent Street (Thomas Street to Lee Street)	Ultimo	State	Medium
T3	Investigate removal of the Pyrmont Street ramp to Western Distributor	Tumbalong Park	State	Short
T4	Investigate converting local streets around UTS and TAFE Ultimo to shared zones between Wattle and Harris Street and Broadway and Mary Ann Street	Ultimo	Local	Short
T5	Investigate closure of Jones Street between Thomas Street and Broadway to create open space	Ultimo	Local	Short
T6	New signalised pedestrian crossing on Harris Street between Thomas Street and Broadway	Ultimo	Local/State	Short
T7	A new bus route to the Parramatta Road corridor through Glebe and Forest Lodge along Bridge Road and Pyrmont Bridge Road	Blackwattle Bay, Pyrmont Village, Daring Island	State	Short
T8	A new intermediate transit corridor connecting The Bays precinct to Redfern and Australian Technology Park through Pyrmont via Harris Street	Pirrama, Pyrmont Village, Ultimo	State	Medium
T9	Rationalisation and relocation of bus stops along Harris Street to improve bus travel time reliability	Pirrama, Pyrmont Village, Ultimo	State	Short

⁴ Short = years 1-5 (2021-2025); Medium = years 6-10 (2026-2030); Long = years 11-20 (2031-2040)

Item	Description	Sub-precinct(s)	Responsibility	Priority (indicative) ⁴
T10	Increase light rail frequency along Inner West light rail during peak period to increase peak capacity during weekdays and frequencies during weekends and public holidays	Wentworth Park, Blackwattle Bay, Pirrama, Darling Island, Tumbalong Park	State	Short – Medium
T11	Investigate new ferry wharf at Cadi Bay Wharf to provide all-weather shelter for ferry passengers	Pirrama	State	Short
T12	Extend Goods line south through existing tunnel to Central station and investigate further extension to Redfern station	Ultimo	State	Medium
T13	Extend Goods line north to Pyrmont Street and Murray Street to connect with existing Union Street cycleway; this would require integration into key sites including Powerhouse and Novotel sites	Tumbalong Park, Pyrmont Village	State	Medium
T14	Extend Jones Street cycleway north to Pyrmont Bridge Road	Blackwattle Bay	Local/State	Medium
T15	Investigate active transport crossing of Pyrmont Bridge Road to provide connection to Jones Street	Blackwattle Bay	Local/State	Short
T16	Extend Union Street cycleway along Miller Street, Bank Street and connecting with Glebe Island Bridge as a separated off-road path	Pyrmont Village, Blackwattle Bay	Local/State	Short
T17	Commuter cycleway through Blackwattle Bay development connecting Bridge Road (around Wattle Street) to Miller Street	Blackwattle Bay, Wentworth park	Local/State	Medium
T18	Extend foreshore active transport link through Blackwattle Bay and Sydney Fish Market redevelopment to complete recreational foreshore link to Wentworth Park	Blackwattle Bay, Wentworth park	Local/State	Medium
T19	Investigate underground active transport link to Sydney Fish Market from existing Fish Market light rail stop	Blackwattle Bay	State	Short
T20	Investigate Glebe Island Bridge link to provide active transport and public transport connection from Pyrmont to The Bays precinct.	Pirrama	State	Short

Item	Description	Sub-precinct(s)	Responsibility	Priority (indicative) ⁴
T21	Localised widening of footpaths along key streets in the Pyrmont Peninsula including Harris Street, Wattle Street and Pyrmont Street	Pyrmont Village, Wentworth Park, Ultimo	Local/State	Medium
T22	Pursue shared parking across different land uses with a view to re-purposing this space over time as parking demand decreases	All sub-precincts	Local/State	Medium
T23	Investigate parking pricing with efficient prices that include lower rates during off-peak periods and higher rates during peak times and locations. This includes the potential for variable pricing during congested times	All sub-precincts	Local/State	Short
T24	Encourage transportation management associations for new developments to establish member-controlled organisations that provide transport and parking management services	All sub-precincts	Local/State/ developer	Medium
T25	Investigate alternative freight arrangements within Pyrmont peninsula for consolidating "last mile" delivery into delivery centres such as a logistics hub	All sub-precincts	Local/State	Short
T26	Encourage more car-sharing and ride-sharing; shifting existing on-street parking over to car-sharing services can reduce the need for residents to own their own car to make trips that are not practical to make via active or public transport, supporting lower parking rates	All sub-precincts	Local	Medium
T27	Prepare for autonomous vehicles through flexible planning controls that can accommodate reduced or modified parking better suited to serving private vehicle travel demand through mobility as a service instead of personal ownership; this may include investing in dedicated facilities for charging and maintenance of autonomous vehicles as they become the dominant mode of road travel	All sub-precincts	Local/State	Long
T28	A potential new Sydney Metro West station at Pyrmont, located in the northern part of the Peninsula	Pyrmont Village, Darling Island, Blackwattle Bay	State	Long
Open space				
O1	New district park at Bank St Blackwattle bay of at least 2ha including 4 multi-purpose courts, regional inclusive play space (including water play), public boating facilities (launch points and storage (e.g. kayaks/canoes sharing), and formalisation of dragon boat storage	Blackwattle Bay	State	Medium

Item	Description	Sub-precinct(s)	Responsibility	Priority (indicative) ⁴
O2	Active recreation loop that wraps around the Peninsula, inclusive of a connected foreshore walk	All	State/Local	Medium - Long
O3	2-4 multi-purpose courts at new Bank St Park	Blackwattle Bay	State	Medium
O4	Harbour pool at Blackwattle Bay (can be temporary during summer use)	Blackwattle Bay	State/Local	Medium – Long
O5	Mary Ann St park upgrade to support students and residents; upgrade to include seating, tables and wi-fi to facilitate group outdoor study and play equipment suitable for both adults and children	Ultimo	Local	Medium
O6	Integration of youth spaces along Ultimo portion of active transport loop; this includes skate-friendly public domain treatments, mirrors for dance and access to power, seating with power, wi-fi and tables for individual/group study	Ultimo/Tumbalong Park	Local/State	Medium
O7	Transform area under Western Distributor between Pyrmont Bridge Road and Allen Street for community uses including potential skate area	Blackwattle Bay/Ultimo/Pyrmont Village	State/Local	Medium - Long
O8	New urban park/plaza connecting Allen street/convention centre light rail/access to waterfront past convention centre and ICC hotel, both increasing quantity of open space in the area and enhancing links between Ultimo and Darling Harbour	Tumbalong Park	Developer	Long
O9	Expand Carmichael park by disconnecting quarry master drive, potential additional expansion through renewal of adjoining apartment buildings and dedication of open space	Pirrama	Developer	Long
O10	New synthetic field at Wentworth Park to support increased capacity and use for both informal and formal sport	Wentworth Park	City of Sydney	Medium - Long
O11	Investigate returning Wentworth Park greyhound track land as newly activated, publicly accessible open space as part of a larger and enhanced parkland, once its terms expires	Wentworth Park	State/Local	Medium - Long

Item	Description	Sub-precinct(s)	Responsibility	Priority (indicative) ⁴
O12	Address significant need for increased play opportunities through the incorporation of Playful elements (e.g. climbing elements, sensory gardens, playful public art, pavement treatment to encourage jumping etc.) along the active transport loop of Jones, Banks, Bowman, Pirrama, Murray, Pyrmont Streets and the Goods Line	All	Developer/State/Local	Medium
O13	Incorporate at least 1 new outdoor fitness station along active transport loop to support workers	Darling Island/Blackwattle Bay	Developer/State/Local	Medium
O14	At least 2 new public new indoor courts provided as part of future development to support workers	Darling Island	Developer	Medium
O15	At least 4 new public outdoor courts to support students and young people living in Ultimo	Ultimo	Developer/UTS?	Medium
Community and cultural facilities				
C1	Refurbish and enhance public access to existing auditoriums/lecture theatres within the Powerhouse Museum to allow for local performances and theatre rehearsals.	Ultimo	State	Medium
C2	400m ² community venue hire at Blackwattle Bay	Blackwattle Bay	Developer	Medium
C3	Communal rooms for community activities as part of future residential development	Various	Developer	Ongoing
C4	Up to 3,000m ² of new library floor space through either new library facility or wi-fi ready lounge/foyer space in commercial buildings	Blackwattle Bay, Pyrmont Village	State/Local	Long
C5	Encourage work-based childcare as part of any future large commercial redevelopment	Blackwattle Bay, Ultimo	Private sector	Ongoing
C6	Affordable and quality medical centre	Blackwattle Bay	State	Medium
C7	Ground level cultural spaces for participation/exhibition as part of new private development	All	State/Local/ private	Short – Medium
C8	Creative live/work spaces within new residential development	All	Developer	Ongoing

Item	Description	Sub-precinct(s)	Responsibility	Priority (indicative) ⁴
C9	New production and rehearsal space to support local production of creative and performing arts	Blackwattle Bay, Ultimo	State/private	Short - Medium
Green infrastructure				
G1	Green perimeter utility hubs	To be determined	State/local/ developer	Ongoing
G2	Green streets, including tree planting	All	State/local	Ongoing
G3	Green buildings (energy and water)	All	State/local/ developer	Ongoing
G4	Recycled water scheme	All	State/local/ developer	Short - Medium
Affordable housing				
A1	New affordable housing – government-owned sites and new development	All	State/local/ developer	Ongoing
A2	Alternative housing trial	To be determined	Local/developer	Short

APPENDIX C: SUB-PRECINCT INFRASTRUCTURE OPPORTUNITIES

Table C1: Infrastructure opportunities in each sub-precinct

Item	Description	Blackwattle Bay	Darling Island	Pirrama	Pymont Village	Tumbalong Park	Ultimo	Wentworth Park
	Transport							
T1	Wattle St roadspace reallocation						●	●
T2	Harris St and Regent St contraflow bus lane						●	
T3	Traffic - remove Pymont Street ramp					●		
T4	Walking - new shared zones - near UTS and TAFE						●	
T5	Walking - close Jones St between Broadway and Thomas St for new open space						●	
T6	Walking - Harris St - new pedestrian crossing						●	
T7	Buses - new bus route along Bridge Rd and Pymont Bridge Rd	●	●		●			
T8	Public transport - intermediate transport corridor - Harris St			●	●		●	
T9	Buses - rationalise and relocate bus stops - Harris St			●	●		●	
T10	Light rail - increased frequency	●	●	●		●		●
T11	Ferries - upgrade Cadi Bay Wharf			●				
T12	Active transport - Goods Line - southern extension to Central						●	
T13	Cycling - Goods Line - northern extension				●	●		
T14	Cycling - extend Jones Street cycleway north	●						
T15	Walking - Pymont Bridge Road crossing	●						
T16	Cycling - Miller St and Bank St	●			●			
T17	Cycling - Blackwattle Bay	●						●
T18	Active transport - Blackwattle Bay foreshore	●						●

Item	Description	Blackwattle Bay	Darling Island	Pirrama	Pymont Village	Tumbalong Park	Ultimo	Wentworth Park
T19	Walking - pedestrian tunnel - Fish Market / light rail	●						
T20	Active and public transport - Glebe Island Bridge link			●				
T21	Walking - Harris St, Wattle St, Pymont St etc - localised footpath widening				●		●	●
T22	Traffic - shared parking	●	●	●	●	●	●	●
T23	Traffic - parking pricing	●	●	●	●	●	●	●
T24	Traffic - transportation management associations	●	●	●	●	●	●	●
T25	Traffic - alternative freight arrangements	●	●	●	●	●	●	●
T26	Traffic - car sharing	●	●	●	●	●	●	●
T27	Traffic - autonomous vehicles	●	●	●	●	●	●	●
T28	Metro – potential new Sydney Metro West station, located in the northern part of the Peninsula	●	●		●			
	Open space and recreation							
O1	New district park - Blackwattle Bay	●						
O2	Active recreation loop	●	●	●	●	●	●	●
O3	2-4 multi-purpose courts at new Bank St Park	●						
O4	Harbour pool	●						
O5	Mary Ann St park upgrade						●	
O6	Youth spaces - Ultimo - active transport loop					●	●	
O7	Area beneath overpasses - skate etc	●			●		●	
O8	New urban park/plaza at Allen St					●		
O9	Expand Carmichael Park			●				
O10	Wentworth Park - new synthetic field							●

Item	Description	Blackwattle Bay	Darling Island	Pirrama	Pyrmont Village	Tumbalong Park	Ultimo	Wentworth Park
O11	Investigate returning Wentworth Park greyhound track land as new open space ⁵							●
O12	Active transport loop - playful elements	●	●	●	●	●	●	●
O13	Active transport loop - at least 1 new outdoor fitness station	●	●					
O14	New public indoor courts		●					
O15	New public outdoor courts						●	
	Community and cultural facilities							
C1	Powerhouse Museum - refurbish existing auditoriums and lecture theatres - for theatre and performance						●	
C2	400 m ² community venue hire	●						
C3	Communal rooms - residential development	●	●	●	●	●	●	●
C4	New library floor space - new facility or in commercial building	●			●			
C5	Childcare - in commercial development	●					●	
C6	Medical centre	●						
C7	Cultural spaces - in private development	●	●	●	●	●	●	●
C8	Creative live/work spaces - in residential development	●	●	●	●	●	●	●
C9	New production and rehearsal space	●					●	
	Green infrastructure							
G1	Green perimeter utility hubs	●	●		●	●	●	●
G2	Green streets, including tree planting	●	●	●	●	●	●	●
G3	Green buildings (energy and water)	●	●	●	●	●	●	●

⁵ investigate returning Wentworth Park greyhound track land as newly activated, publicly accessible open space as part of a larger and enhanced parkland, once its terms expires

Item	Description	Blackwattle Bay	Darling Island	Pirrama	Pymont Village	Tumbalong Park	Ultimo	Wentworth Park
G4	Recycled water scheme	●	●	●	●	●	●	●
	Affordable housing							
A1	New affordable housing – government-owned sites and new development	●	●	●	●	●	●	●
A2	Alternative housing trial	●	●	●	●	●	●	●

APPENDIX D: FUNDING OPPORTUNITIES MATRIX

Table 10: Funding opportunities matrix, selected infrastructure opportunity items

Description	Responsibility ⁶	s7.11 contributions	s7.12 contributions	s7.4 Planning Agreement	Density bonus scheme	s7.32 affordable housing levies	SIC	Planning controls	Govt-owned land PDA	State Budget allocation	Grants	Council General fund	Special rate variation	Non-govt providers
Transport														
Metro – potential new Sydney Metro West station	S						•		•	•				
Walking – new pedestrian tunnel to Metro station	S			•			•		•	•				
Glebe Island Bridge – active transport link	S						•			•	•			
Traffic – Harris St and Wattle St changes	L	•	•				•			•	•			
Buses – Harris St intermediate transport corridor	S									•				
Cycling – Goods Line – north and south extension	S, L	•	•	•			•	•			•	•		
Cycling – Miller St and Bank St	L	•	•	•			•				•	•		
Ferry – new ferry wharf at Cadi Bay Wharf	S						•	•	•	•				
Open space and recreation														
Bank St – youth precinct	L, S	•	•	•	•						•	•	•	•
Bank St – foreshore improvement works	S	•	•	•	•		•	•	•	•	•			

⁶ CoS=City of Sydney; SG=State Government; P=private sector.

Description	Responsibility ⁶	s7.11 contributions	s7.12 contributions	s7.4 Planning Agreement	Density bonus scheme	s7.32 affordable housing levies	SIC	Planning controls	Govt-owned land PDA	State Budget allocation	Grants	Council General fund	Special rate variation	Non-govt providers
Bank St – passive boating and swimming facilities	S, P	●	●	●	●						●			●
Wentworth Park – increased public use of infield	L, S									●	●	●		●
Sports courts – new indoor and outdoor courts	L, S, P	●	●	●	●			●	●	●	●	●	●	●
Community facilities														
Libraries – new library floor space	L, S	●	●	●	●						●	●	●	
Local community centre – new centre	L, S	●	●	●	●						●	●	●	
Childcare – new early education centre	L, S, P	●	●	●	●			●			●	●		●
Theatre / performance – new space	L, S, P	●	●	●	●						●	●	●	●
Studios/art spaces – new studios and creative art spaces	L, S, P	●	●	●	●						●	●	●	●
Creative live-work spaces	L, S, P			●				●	●					●
Affordable housing														
Refer to discussion in section 4.3.5	L, S, N													

Description	Responsibility ⁶	s7.11 contributions	s7.12 contributions	s7.4 Planning Agreement	Density bonus scheme	s7.32 affordable housing levies	SIC	Planning controls	Govt-owned land PDA	State Budget allocation	Grants	Council General fund	Special rate variation	Non-govt providers
Green infrastructure														
Green hubs – precinct perimeter hubs e.g. for car parking	L, P	●	●	●	●			●					●	
Green streets – footpath widening etc	L	●	●	●	●							●	●	
Green buildings – energy and water	L, S, P			●	●			●	●					
Recycled water – precinct recycled water scheme	L, P			●	●			●	●			●		