

OUR GREATER SYDNEY 2056

# North District Plan

– connecting communities



## Acknowledgement of Country

The Greater Sydney Commission acknowledges the traditional owners of the lands that include North District and the living culture of the traditional custodians of these lands. The Commission recognises that the traditional owners have occupied and cared for this Country over countless generations, and celebrates their continuing contribution to the life of Greater Sydney.

### North District

City of Ryde  
Hornsby  
Hunters Hill  
Ku-ring-gai  
Lane Cove  
Mosman  
North Sydney  
Northern Beaches  
Willoughby



Chief Commissioner  
Lucy Hughes Turnbull AO



I am delighted to present the North District Plan, which sets out planning priorities and actions for improving the quality of life for residents as the District grows and changes.

The Plan recognises what the Greater Sydney Commission has heard – the North District has outstanding natural assets, including wonderful beaches and bushland, on the edges of a growing district, and that its residents have access to thriving centres, giving the District an enviable mix of lifestyles.

This Plan complements those natural and built assets, and it puts people first. It considers major infrastructure investments and the transport, infrastructure, services, affordable housing and open spaces that will be required as the population grows and the demographics change.

The Plan acknowledges great places bring people together. It respects and creates the conditions for the wellbeing of communities, and for the celebration of culture, heritage and creative pursuits.

It protects the environmental sustainability of the landscape with strategies that enhance waterways, bushland, biodiversity and green open spaces.

Collaboration is the key to transparent and informed decision-making on our city's future growth. The Greater Sydney Commission will continue to bring together all parties with an interest in the District's future and channel the collective energy into improved planning outcomes.

By taking a leadership role, we are bringing together public resources and expertise to create a more liveable, productive and sustainable city.

Finally, on behalf of the Greater Sydney Commission, I acknowledge the important work of councils whose submissions and feedback on the needs of their neighbourhoods and centres have been invaluable. Together with the community and other stakeholders, your expertise and interest have helped to produce an inspiring and practical plan.

North District Commissioner  
Dr Deborah Dearing



The North District is one of the loveliest areas of Greater Sydney and Australia. It offers world-class beaches and bushland, from the coastline suburbs between Manly and Palm Beach to leafy areas such as Lane Cove, Wahroonga and Beecroft. It is rich in natural and Aboriginal heritage, and along with urban heritage areas such as Crows Nest, Castlecrag and Hunters Hill we have insights into the District's past.

The Eastern Economic Corridor looms large as the most productive corridor in the region. Beginning in the north-west, it seamlessly connects the District to the wealth and jobs of the Harbour CBD. Many people want to enjoy this lifestyle while living within reach of a diversity of world-leading workplaces.

Like the rest of Greater Sydney, the District's population will grow and demographics will change over the next 20 years. By ensuring that new and enhanced infrastructure including transport,

hospitals and schools keeps pace with population changes, current and future residents will benefit. We need to ensure that new development delivers quality urban places for people.

We know that many people struggle with congestion, and while we will gain easier and quicker access to strategic centres from road and rail investments such as Sydney Metro and NorthConnex, I want to continue working together to provide good access, including walking and safe cycling, to schools, shops and workplaces as well as our District's bushland and waterways.

This Plan is part of a continuing conversation between all of us who live and work here, about how we can come together to create the District we aspire to. I'm eager for as many people as possible to get involved as we implement the Plan. It's an important step in helping to shape the decisions that will drive the District's future.

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# 6 Future of the North District

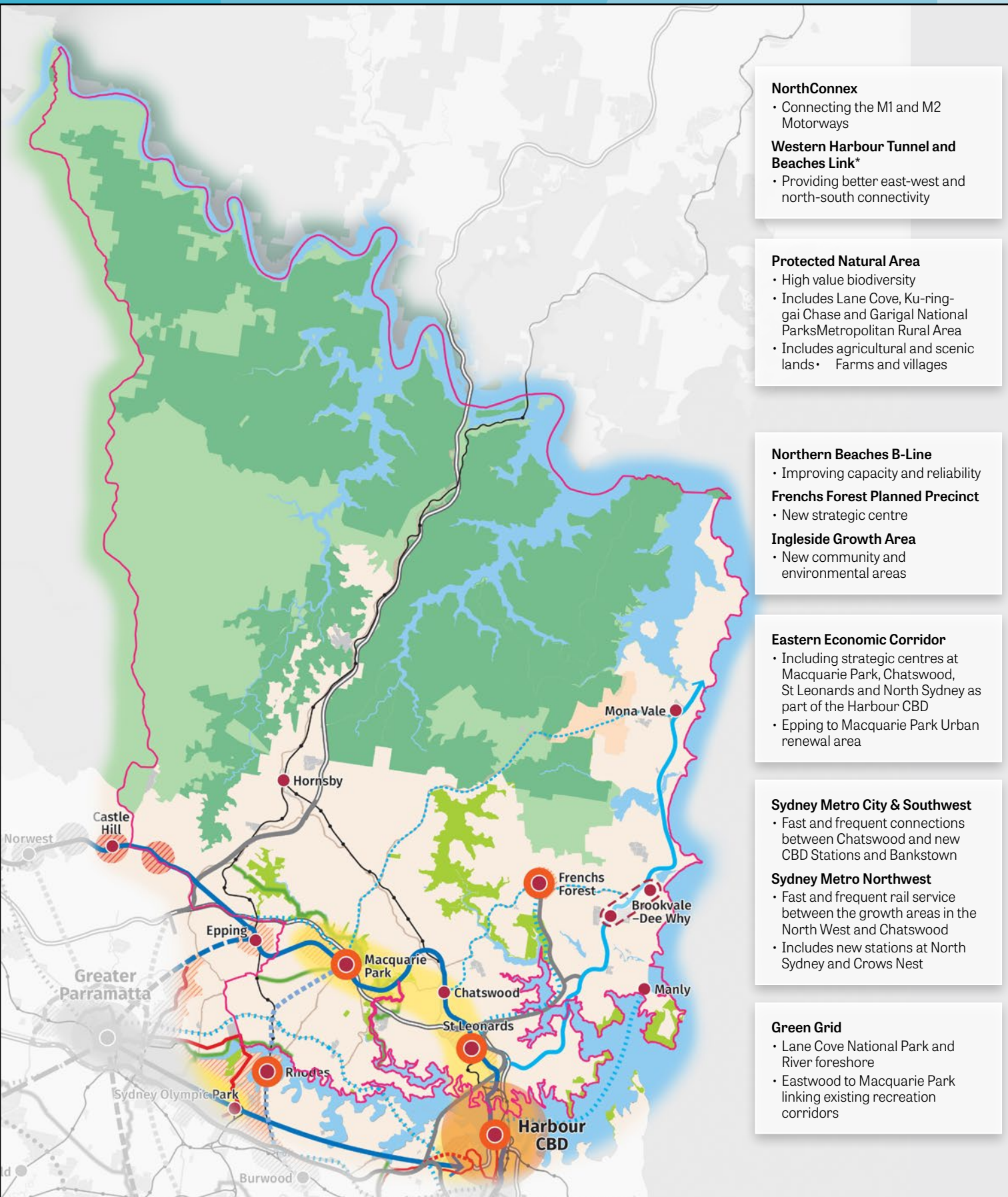


The vision for Greater Sydney as a metropolis of three cities – the Western Parkland City, the Central River City and the Eastern Harbour City and a 30 minute city – means residents in the North District will have quicker and easier access to a wider range of jobs, housing types and activities. The vision will improve the District's lifestyle and environmental assets.

This will be achieved by:

- Enhancing the role of the **Eastern Economic Corridor**, including North Sydney as part of the Harbour CBD
- Supporting jobs growth in **strategic centres**, including **health and education precincts** and facilitating innovation
- Sustaining **local centres** to provide jobs, services and amenity
- Providing **fast and efficient transport** connections to achieve a 30-minute city
- Retaining and managing **industrial and urban services land**
- Creating and renewing great places while protecting **heritage and local character** and improving **places for people**
- Improving **walking and safe cycling** ways
- Enhancing **foreshore access** to Sydney Harbour and the District's waterways
- Enhancing the quality and improving access to open space, and increasing **urban tree canopy**
- Retaining the environmental, social and economic values of the **Metropolitan Rural Areas**
- Protecting and enhancing the District's **unique natural assets** including **waterways, coastlines and bushland**





# 8 Metropolitan context of the North District



## Infrastructure and collaboration

Major transport and health investments are underway across the District with the improved Northern Beaches B-Line services, Sydney Metro Northwest, and Sydney Metro City & Southwest set to improve services to North Sydney and Macquarie Park.

Collaboration approaches are being undertaken in health and education precincts at St Leonards, Macquarie Park and Frenchs Forest.



## Liveability

The North District will continue to grow over the next 20 years with demand for an additional 92,000 dwellings. This will be provided through urban renewal, around new and existing infrastructure, land release and infill developments.

The focus of growth will be on well-connected walkable places that build on local strengths and focus on quality public places.



## Productivity

Investments leading to the intensification of health and education facilities, growth of the office market and in tourism will underpin the District's economy.

Industrial and urban services land will be retained, and a transition from traditional to advanced manufacturing and innovative industries will increase local jobs.



## Sustainability

An integrated approach to green infrastructure – the coast and waterways, bushland, urban tree canopy and green ground cover, parks and open spaces – will improve sustainability.

The Greater Sydney Green Grid will provide cool, green links to support walking, cycling and community access to open space.

*A Metropolis of Three Cities* the region plan for Greater Sydney is built on a vision of three cities where most residents live within 30 minutes of their jobs, education and health facilities, services and great places – Western Parkland City, Central River City and Eastern Harbour City. This vision seeks to rebalance the economic and social opportunities and deliver a more equal and equitable Greater Sydney.

Greater Sydney's three cities reach across five districts: Western City District, Central City District, Eastern City District, North District and South District.

The North District forms a large part of the Eastern Harbour City, and its economy leans to the Harbour CBD, which is the North District's metropolitan centre. The Harbour CBD includes North Sydney and contains half a million jobs, making it the largest office market in the region.

The District's strategic centres of Macquarie Park, Chatswood and St Leonards are part of the State's greatest economic asset – the Eastern Economic Corridor – which contributed two-thirds of NSW's economic growth in the 2015–16 financial year.

Frenchs Forest is an emerging strategic centre focused on growing jobs around the Northern Beaches Hospital.

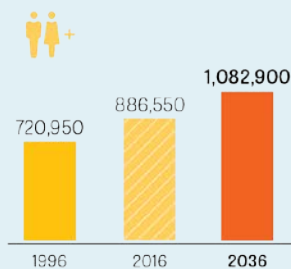
Road and rail investments such as the Sydney Metro Northwest, Sydney Metro City & Southwest and Western Harbour Tunnel and Beaches Link will provide faster access to the Harbour CBD to bolster business and jobs growth.



## Population growth (2016–36)

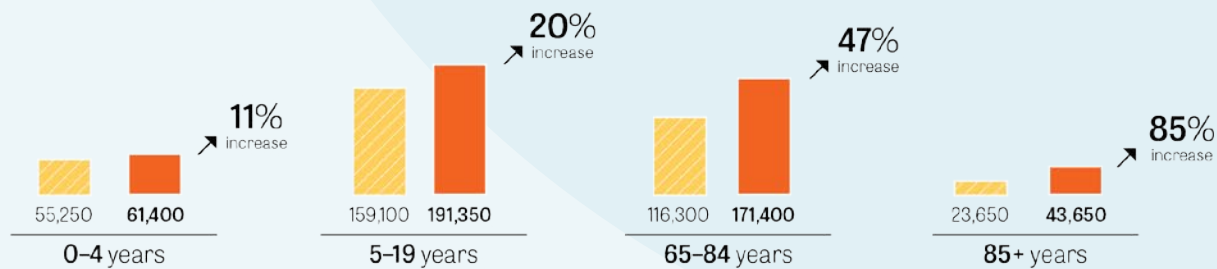


## North District

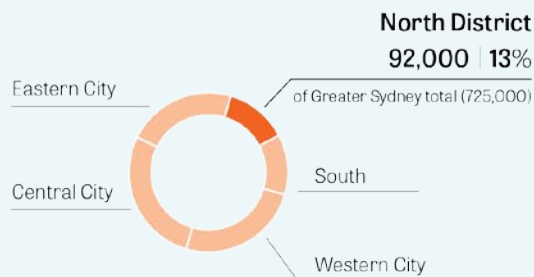


## Population growth by age (2016–36)

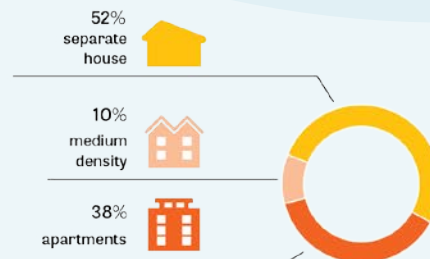
2016 2036



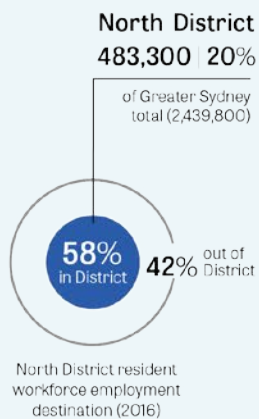
## Housing growth (2016–36)



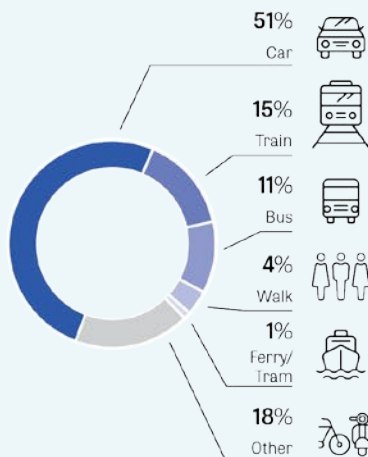
## Housing type (2016)



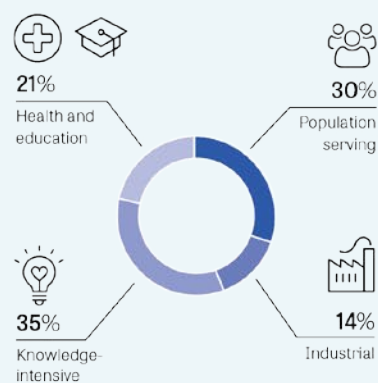
## Jobs (2016)



## Journey to work (2016)

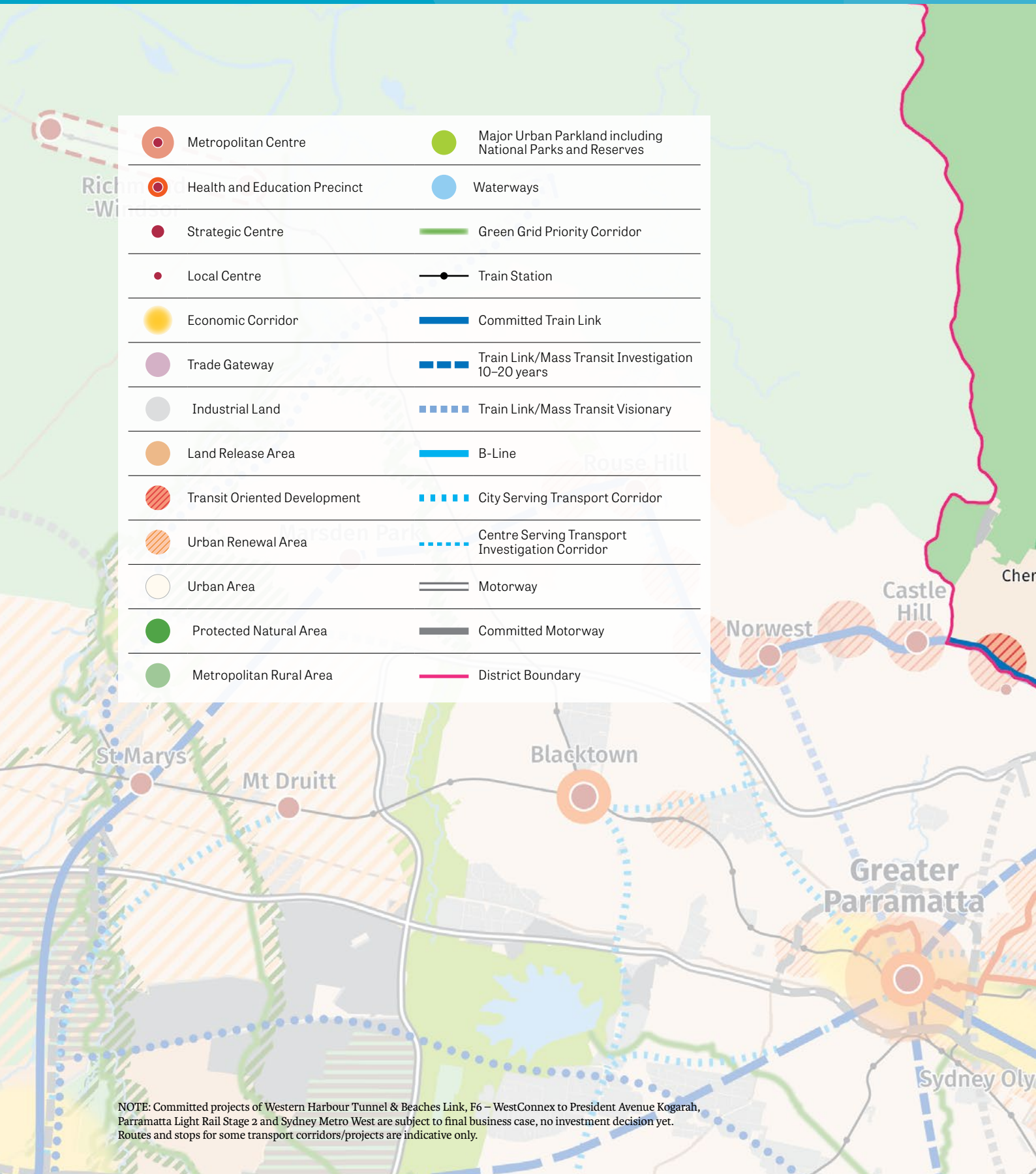


## Jobs by sector (2016)





# 10 Structure Plan for the North District

















# Ten Directions for a metropolis of three cities

## A liveability, productivity and sustainability framework

### Delivering and monitoring the Plan – planning priorities and indicators

	A city supported by infrastructure	A collaborative city	A city for people	Housing the city	A city of great places
Directions	<b>Infrastructure supporting new developments</b> 	<b>Working together to grow a Greater Sydney</b> 	<b>Celebrating diversity and putting people at the heart of planning</b> 	<b>Giving people housing choices</b> 	<b>Designing places for people</b> 
Potential indicator*	<b>Potential indicator:</b> Increased 30-minute access to a metropolitan centre/cluster	<b>Potential indicator:</b> Increased use of public resources such as open space and community facilities	<b>Potential indicator:</b> Increased walkable access to local centres	<b>Potential indicators:</b> Increased housing completions (by type)  Number of councils that implement Affordable Rental Housing Target Schemes	<b>Potential indicator:</b> Increased access to open space
North District Planning Priorities	<b>Planning Priority N1</b> Planning for a city supported by infrastructure	<b>Planning Priority N2</b> Working through collaboration	<b>Planning Priority N3</b> Providing services and social infrastructure to meet people's changing needs  <b>Planning Priority N4</b> Fostering healthy, creative, culturally rich and socially connected communities	<b>Planning Priority N5</b> Providing housing supply, choice and affordability with access to jobs, services and public transport	<b>Planning Priority N6</b> Creating and renewing great places and local centres, and respecting the District's heritage

\*Indicators will be developed in consultation with State and local Government to optimise regional, district and local monitoring programs.

A well connected city	Jobs and skills for the city	A city in its landscape	An efficient city	A resilient city
<p><b>Developing a more accessible and walkable city</b></p>  <p><b>Potential indicators:</b> Percentage of dwellings located within 30 minutes by public transport of a metropolitan centre/cluster</p> <p>Percentage of dwellings located within 30 minutes by public transport of a strategic centre</p> <p><b>Planning Priority N12</b> Delivering integrated land use and transport planning and a 30-minute city</p> <p><b>Planning Priority N14</b> Leveraging inter-regional transport connections</p>	<p><b>Creating the conditions for a stronger economy</b></p>  <p><b>Potential indicator:</b> Increased jobs in metropolitan and strategic centres</p> <p><b>Planning Priority N7</b> Growing a stronger and more competitive Harbour CBD</p> <p><b>Planning Priority N8</b> Eastern Economic Corridor is better connected and more competitive</p> <p><b>Planning Priority N9</b> Growing and investing in health and education precincts</p> <p><b>Planning Priority N10</b> Growing investment, business opportunities and jobs in strategic centres</p> <p><b>Planning Priority N11</b> Retaining and managing industrial and urban services land</p> <p><b>Planning Priority N13</b> Supporting growth of targeted industry sectors</p>	<p><b>Valuing green spaces and landscape</b></p>  <p><b>Potential indicators:</b> Increased urban tree canopy</p> <p>Expanded Greater Sydney Green Grid</p> <p><b>Planning Priority N15</b> Protecting and improving the health and enjoyment of Sydney Harbour and the District's waterways</p> <p><b>Planning Priority N16</b> Protecting and enhancing bushland and biodiversity</p> <p><b>Planning Priority N17</b> Protecting and enhancing scenic and cultural landscapes</p> <p><b>Planning Priority N18</b> Better managing rural areas</p> <p><b>Planning Priority N19</b> Increasing urban tree canopy cover and delivering Green Grid connections</p> <p><b>Planning Priority N20</b> Delivering high quality open space</p>	<p><b>Using resources wisely</b></p>  <p><b>Potential indicators:</b> Reduced transport-related greenhouse gas emissions</p> <p>Reduced energy use per capita</p> <p><b>Planning Priority N21</b> Reducing carbon emissions and managing energy, water and waste efficiently</p>	<p><b>Adapting to a changing world</b></p>  <p><b>Potential indicator:</b> Number of councils with standardised statewide natural hazard information</p> <p><b>Planning Priority N22</b> Adapting to the impacts of urban and natural hazards and climate change</p>
<p><b>Implementation</b></p> <p><b>Planning Priority N23</b> Preparing local strategic planning statements informed by local strategic planning</p> <p><b>Planning Priority N24</b> Monitoring and reporting on the delivery of the Plan</p>				

## 1

# About the Plan

The North District covers Hornsby, Hunter's Hill, Ku-ring-gai, Lane Cove, Mosman, North Sydney, Northern Beaches, Ryde and Willoughby local government areas (refer to Figure 1).

This *North District Plan* is a 20-year plan to manage growth in the context of economic, social and environmental matters to achieve the 40-year vision for Greater Sydney. It is a guide for implementing the Greater Sydney Region Plan, *A Metropolis of Three Cities*, at a district level and is a bridge between regional and local planning.

The District Plan informs local strategic planning statements and local environmental plans, the assessment of planning proposals as well as community strategic plans and policies. The District Plan also assists councils to plan for and support growth and change, and align their local planning strategies to place-based outcomes. It guides the decisions of State agencies and informs the private sector and the wider community of approaches to manage growth and change. Community engagement on the District Plan has contributed to a plan for growth that reflects local values and aspirations, in a way that balances regional and local considerations (refer to Figure 2).

*A Metropolis of Three Cities* has been prepared concurrently with the NSW Government's *Future Transport Strategy 2056* and Infrastructure NSW's *State Infrastructure Strategy 2018–2038* to integrate land use, transport and infrastructure across the region. In this context, all the transport initiatives outlined in this District Plan are sourced from *Future Transport 2056*.

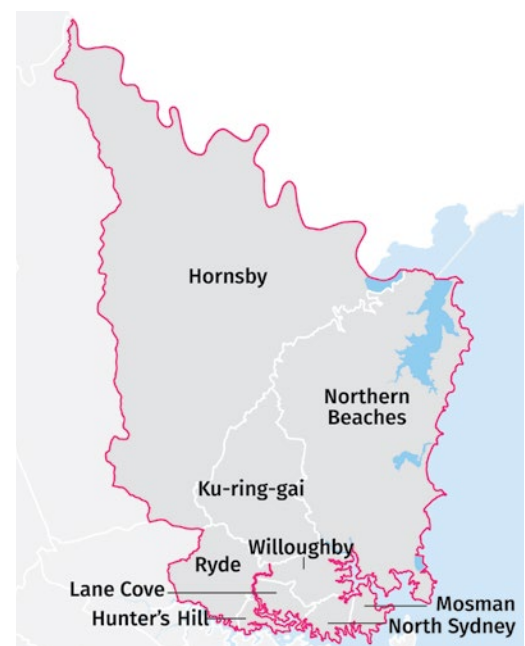
The concurrent preparation of the District Plans with *A Metropolis of Three Cities* has maximised the integration of these plans. All data in this District Plan is based on current Government published data sourced from State agencies.

In preparing this District Plan, the focus has been on identifying the Planning Priorities to achieve a liveable, productive and sustainable future for the District. Relevant Objectives, Strategies and Actions from *A Metropolis of Three Cities* are embedded in each of the Planning Priorities, to integrate the District's challenges and opportunities with the Greater Sydney vision of the metropolis of three cities.

In undertaking strategic planning processes, and/or preparing or considering planning proposals, planning authorities must give effect to the District Plan, specifically the Planning Priorities and Actions.

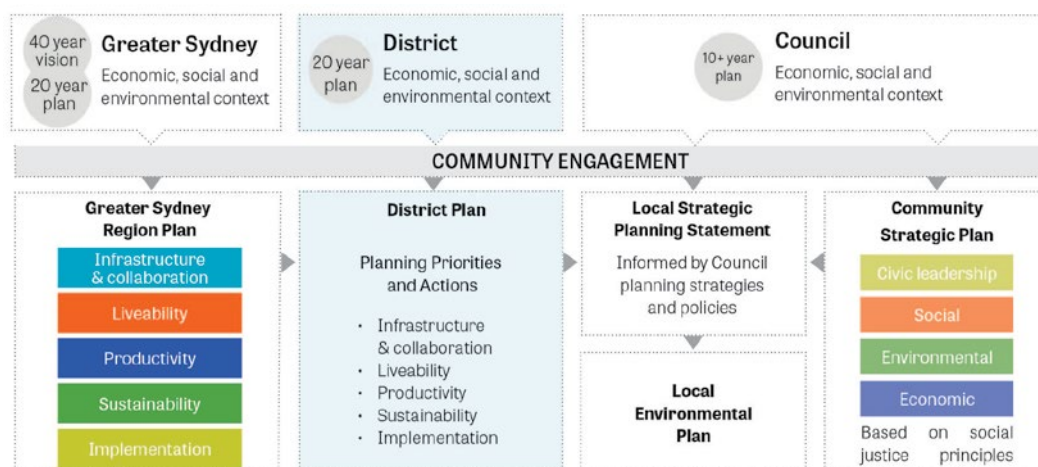
Refer *Environmental Planning and Assessment Act 1979*, section 3.8 Implementation of strategic plans (cf previous s 75A1) and the NSW Department of Planning and Environment's *A guide to preparing planning proposals*, Section B – Relationship to strategic planning framework.

**Figure 1:** North District





**Figure 2:** Relationship between regional, district and local plans



## Requirements of the Plan

This District Plan has been prepared to give effect to *A Metropolis of Three Cities*, the Region Plan that applies to the five districts that make up the Greater Sydney Region. It is the role of the Greater Sydney Commission to prepare and finalise the district plans.

This District Plan has been prepared in accordance with section 3.4 of the *Environmental Planning and Assessment Act 1979* which requires it to include or identify: the basis for strategic planning in the district, having regard to economic, social and environmental matters; Planning Priorities that are consistent with the relevant Objectives, Strategies and Actions in the Region Plan; Actions for achieving those Planning Priorities; and an outline of the basis on which the implementation of those Actions will be monitored and reported.

In finalising the Plan, the Greater Sydney Commission engaged with the community, businesses, councils, and State agencies throughout the process. This includes feedback from community and stakeholder engagement including submissions to the draft Greater Sydney Region Plan exhibited from 22 October 2017 to 15 December 2017 and the five revised draft District Plans exhibited from 26 October 2017 to 15 December 2017. Submission reports on the draft regional plan and district plans are available on the Commission's website at [www.greater.sydney](http://www.greater.sydney).

## Giving effect to the Plan

'Give effect to' is the legislative term for delivering the region and district plans through local plans. Opportunities to coordinate and realise greater efficiencies in the implementation of plans have been made possible by the introduction of local strategic planning statements, which together with region and district plans strengthen the line of sight in strategic planning at regional, district and local levels.

The common requirement for all plans to identify the basis for their strategic planning having regard to economic, social and environmental matters and for monitoring and reporting creates the opportunity to improve the integration of data and analysis that informs transparent decision-making and evaluation across all three spatial levels of planning.

A key component of this framework is the local strategic planning statement which leads the local response to changes and trends. As set out in the *Environmental Planning and Assessment Act 1979*, the local strategic planning statement must include or identify the Planning Priorities that are consistent with any strategic plan for the area and (subject to any such strategic plan) any applicable community strategic plan under section 402 of the *Local Government Act 1993*.

Local planning is supported by NSW Government funding for implementation and infrastructure. This includes funding that accelerates planning processes for a selection of councils and state infrastructure funding programs that align to growth (refer Planning Priority 5).

The relationship between the plans and their implementation is discussed further in Chapter 6.



## Directions for infrastructure and collaboration



### A city supported by infrastructure

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#### Planning Priority N1

Planning for a city supported by infrastructure



### A collaborative city

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#### Planning Priority N2

Working through collaboration.

## 2

# Infrastructure and collaboration

Greater Sydney is a successful and growing city, but to become more liveable, productive and sustainable, it needs additional infrastructure and services in the right places and at the right time.

Infrastructure planning requires collaboration – managing the competing needs of a city involves all levels of government, industry and the community. *A Metropolis of Three Cities* emphasises the alignment of local environmental plans, transport programs and other agency programs. This involves the interface of NSW Government investment, such as transport interchanges, and local infrastructure provided by councils, such as public domain improvements.

Planning for infrastructure includes consideration of how such investments contribute to the shape and connectivity of Greater Sydney as a metropolis of three cities.

This District Plan responds to major transport, health and education investments either committed or planned across the District, such as the Northern Beaches Hospital, Sydney Metro Northwest, Sydney Metro City & Southwest and NorthConnex, which aligns with *Future Transport 2056*.

The increasingly rapid change of technological innovations will influence the planning and delivery of infrastructure. Recognising and facilitating adaptability in infrastructure is critical.

Infrastructure – planned to support orderly growth, change and adaptability – must be delivered and used efficiently. Optimal use of infrastructure increases the capacity to better support communities.

For the North District, this means the following Planning Priorities:

- N1.** Planning for a city supported by infrastructure
- N2.** Working through collaboration.

## Planning Priority N1

### Planning for a city supported by infrastructure

In giving effect to *A Metropolis of Three Cities*, this Planning Priority delivers on the following objectives and the corresponding strategies:

#### Objective 1

Infrastructure supports the three cities.

#### Objective 2

Infrastructure aligns with forecast growth – growth infrastructure compact.

#### Objective 3

Infrastructure adapts to meet future needs.

#### Objective 4

Infrastructure use is optimised.

New infrastructure, at local, district or metropolitan levels, is to be planned and delivered to meet the needs of Greater Sydney as a metropolis of three cities. This includes transport infrastructure for connections within each of the cities and for making connections between the three cities. Importantly, transport corridors and locations for new centres need to be safeguarded for future infrastructure investments.

For the North District, this includes Sydney Metro Northwest and Sydney Metro City & Southwest which will better connect the Eastern Economic Corridor; the Northern Beaches Hospital which will provide a major health and employment focus; and NorthConnex which will improve regional travel times and benefit local communities by easing congestion.

Across Greater Sydney significant areas have already been committed to growth and change. At the same time the NSW Government is allocating unprecedented levels of investment in transport, education and health. This is alongside investment in arts and cultural facilities across the region.

However, there is room to better align growth with infrastructure by identifying place-based infrastructure priorities. This would take into account the capacity of existing infrastructure and existing infrastructure commitments and programs such as Special Infrastructure Contributions, affordable housing initiatives, social housing programs and augmentation of utilities.

Planning decisions need to support new infrastructure in each city – including cultural, education, health, community and water infrastructure – to fairly balance population growth with infrastructure investment. Decisions are required to equitably enhance local opportunities, inclusion and connection to services. In this way infrastructure provision can move from a focus on network-based services to a place-based service approach.

Aligning land use and infrastructure planning will maximise the use of existing infrastructure. A growth infrastructure compact could be used to align infrastructure with growth. This approach is being piloted in Greater Parramatta and the Olympic Peninsula (GPOP).

The compact would identify possible scenarios for land use and infrastructure to assess optimal land use, infrastructure investment and community outcomes. The outcomes of the pilot will potentially inform government on how the growth infrastructure compact could provide an important benchmark for understanding the relative costs and benefits of new development.

The growth infrastructure compact could also provide greater context for coordination with infrastructure delivered by local councils. In time, and as appropriate, this approach could be expanded to include local infrastructure requirements.

Planning for infrastructure considers infrastructure in terms of its function: city-shaping infrastructure such as major transport investments that generates greater demand and influences land uses; enabling infrastructure such as electricity and water, without which development cannot proceed; and supporting infrastructure such as local bus services that meet demand in growing communities.


In terms of transport planning, new public transport infrastructure, such as ride share, car sharing and other emerging modes that complement public transport, will help connect residents to their nearest strategic centre or metropolitan centre within 30 minutes.

In other areas, traditional facilities such as libraries are being reimaged as community hubs.





Macquarie University station

 Actions	Responsibility
1. Prioritise infrastructure investments to support the vision of <i>A Metropolis of Three Cities</i> .	Councils, other planning authorities, State agencies and State-owned corporations
2. Sequence growth across the three cities to promote north-south and east-west connections.	Councils, other planning authorities, State agencies and State-owned corporations
3. Align forecast growth with infrastructure.	Councils, other planning authorities, State agencies and State-owned corporations
4. Sequence infrastructure provision using a place-based approach.	Councils, other planning authorities, State agencies and State-owned corporations
5. Consider the adaptability of infrastructure and its potential shared use when preparing infrastructure strategies and plans.	Councils, other planning authorities, State agencies and State-owned corporations
6. 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.	Councils, other planning authorities, State agencies and State-owned corporations



## Planning Priority N2

### Working through collaboration

In giving effect to *A Metropolis of Three Cities*, this Planning Priority delivers on the following objective and the corresponding action:

#### Objective 5

Benefits of growth realised by collaboration of governments, community and business.

Collaboration in the planning and delivery of infrastructure, housing, jobs and great places is essential to realise the full benefits of growth.

The complexities of a growing region mean different approaches are required depending on the context. This ranges from nationally significant investment, corridors of renewal and land release, to a focus on a specific strategic centre or precinct.

The role of the collaboration also varies: it may be for the development of an integrated strategy where alignment of agencies is critical, for coordination of investment across different tiers of government to achieve land use outcomes, or for the delivery of specific projects.

Table 1 outlines the approaches supporting land use and infrastructure planning and delivery.

The suite of Collaboration Areas, Growth Areas and Planned Precincts are highlighted throughout this District Plan.

The Greater Sydney Commission's facilitation role in bringing together various parties with an interest in the District's future and channelling their collective energy into improved planning outcomes, is demonstrated by its Collaboration Areas and support for collaborative processes. This collaborative approach is underpinned by *Directions for a Greater Sydney* and is central to the way the Commission works.

The responsibility for creating great places does not rest with any one organisation. As a non-statutory initiative, Collaboration Areas offer a new way of working to deliver improved planning outcomes that support growth and change. Collaboration Areas are a place-based process led by the Greater Sydney Commission to address complex issues

that require cross-stakeholder solutions. This will be undertaken by identifying and aligning the activities and investments of government and stakeholders, based on evidence, to deliver significant regional and district liveability, productivity and sustainability outcomes.

Other collaboration roles of the Commission include providing expert advice on significant regional and district collaborations led by other State agencies such as the NSW Department of Planning and Environment's Planned Precincts.

Each Collaboration Area starts with a Collaboration Area Agreement. The Agreement is a governance tool that sets out the shared vision and purpose, outputs and membership of each Collaboration Area. The collaborative process is characterised by:

- **transparency:** share information openly
- **consistency:** speak with one voice about the Collaboration Area
- **respect:** recognise that everyone has a view to contribute
- **early involvement:** involve stakeholders throughout the process
- **exploration:** explore and understand all perspectives before finalising recommendations.

A tailored approach for each Collaboration Area is established through the following steps. Members of each Collaboration Area will:

- establish a shared vision for the area
- identify impediments and opportunities
- agree to priorities for the Collaboration Area
- identify projects and initiatives to deliver the vision.

These elements will be documented in a Place Strategy which will identify the roles of State agencies and local councils, government arrangement and strategies and actions required to deliver the desired outcomes for the area. It is also likely that these outcomes will be reflected in updates to the District Plan to provide enhanced clarity on the priorities for the area, and provide

certainty to the community and the private sector, and inform the NSW Government's investment and policies to creating great places (refer to Planning Priority N6).

In the North District, the following areas have been identified as places where the Greater Sydney Commission will chair the Collaboration processes to initiatives being led by the NSW Department of Planning and Environment:

- **St Leonards health and education precinct and Planned Precinct**, which will bring together North Sydney Council, Lane Cove Council, Willoughby City Council, NSW Roads and Maritime Services, Transport for NSW, and NSW Health and other State agencies to grow jobs, housing and infrastructure within the precinct.
- **Macquarie Park health and education precinct and Planned Precinct**, which will bring together City of Ryde Council, NSW Health, Transport for NSW and NSW Roads and Maritime Services and other State agencies to grow jobs and infrastructure within the precinct.
- **Frenchs Forest health and education precinct and Planned Precinct**, which will bring together Northern Beaches Council, UrbanGrowth NSW Development Corporation, NSW Health, NSW Department of Education, Transport for NSW and NSW Roads and Maritime Services and other State agencies to grow jobs, housing and infrastructure within the precinct.

These processes also include consultation with major businesses, health and education institutions.

Other collaborative processes in the District include:

- **Cherrybrook Planned Precinct**, led by the NSW Department of Planning and Environment, as part of the Sydney Metro Northwest Urban Renewal Corridor, which will bring together Hornsby Shire Council, The Hills Shire Council, Transport for NSW, NSW Roads and Maritime Services and other State agencies to maximise the land use benefits of Sydney Metro Northwest.
- **Ingleside Growth Area**, led by the NSW Department of Planning and Environment, which will bring together the Northern Beaches Council, UrbanGrowth NSW Development Corporation, Transport for NSW, NSW Roads and Maritime Services, and other State agencies to plan for new housing and infrastructure.

- **Ivanhoe Estate Communities Plus** program, led by Land and Housing Corporation, which will bring together State agencies to lead housing initiatives and provide an integrated community including social housing.

Planned precincts will be consistent with the objectives and strategies of *A Metropolis of Three Cities* and this District Plan. They will be delivered in collaboration with councils and informed by the asset plans of relevant agencies. Planned Precincts will be supported by a Special Infrastructure Contribution or similar satisfactory arrangement to help fund the delivery of essential community infrastructure such as health facilities, schools, open space and roads.


The Greater Sydney Commission is also collaborating with local councils to improve regional open space and deliver the Greater Sydney Green Grid through the administration and management of the Metropolitan Greenspace Program (refer to Planning Priority N19).



Balmoral

**Table 1:** Approaches to supporting land use and infrastructure planning and delivery

Collaboration	Agency	Focus
Western Sydney City Deal	Australian; NSW and local government	City Deal commitments: <ul style="list-style-type: none"> <li>• connectivity</li> <li>• jobs for the future</li> <li>• skills and education</li> <li>• liveability and environment</li> <li>• planning and housing</li> <li>• implementation and governance</li> </ul>
Collaboration Areas	Greater Sydney Commission	Place-based process including: <ul style="list-style-type: none"> <li>• identification and resolution of impediments to deliver</li> <li>• the region and district plans</li> <li>• strategy drivers: productivity, liveability and sustainability</li> <li>• coordinated investment and infrastructure alignment</li> <li>• whole-of-government considerations</li> <li>• issue-specific demonstration focus</li> </ul>
Growth Areas Urban Renewal Corridors	NSW Department of Planning and Environment	Transformative corridor delivery including: <ul style="list-style-type: none"> <li>• new land release areas</li> <li>• city-shaping transport investment and urban renewal</li> <li>• infrastructure schedules and funding options</li> </ul>
Planned Precincts	NSW Department of Planning and Environment	Transformative precinct delivery: <ul style="list-style-type: none"> <li>• targeted development focused on housing diversity around a centre and transit node/rail station</li> <li>• infrastructure schedules and funding options</li> </ul>
Urban Transformation	UrbanGrowth NSW Development Corporation and Landcom	Project delivery: <ul style="list-style-type: none"> <li>• unlocking development opportunities</li> </ul>

 Actions	Responsibility
7. Identify, prioritise and deliver Collaboration Areas.	Greater Sydney Commission
8. Undertake a collaboration role by providing expert advice on the significant district collaborations of St Leonards, Frenchs Forest and Macquarie Park.	Greater Sydney Commission





Woolwich



## Directions for liveability



### A city for people

#### Planning Priority N3

Providing services and social infrastructure to meet people's changing needs

#### Planning Priority N4

Fostering healthy, creative, culturally rich and socially connected communities



### Housing the city

#### Planning Priority N5

Providing housing supply, choice and affordability with access to jobs, services and public transport



### A city of great places

#### Planning Priority N6

Creating and renewing great places and local centres, and respecting the District's heritage



## 3

# Liveability

Liveability is about people's quality of life. Maintaining and improving liveability requires housing, infrastructure and services that meet people's needs, and the provision of a range of housing types in the right locations with measures to improve affordability. This enables people to stay in their neighbourhoods and communities as they transition through life.

Improving liveability is about creating and renewing great places, neighbourhoods and centres. This requires place-based planning and design excellence that builds on local strengths and focuses on public places and open spaces.

The North District offers residents and visitors unique places, centres, neighbourhoods and suburbs: from the leafy northern neighbourhoods of Wahroonga, Berowra and Belrose, to the world-class beachside suburbs of Whale Beach, Narrabeen and Freshwater and harbourside suburbs of Northbridge, Seaforth and Mosman.

The thriving commercial core of North Sydney and the vibrant Lane Cove, Ryde, Macquarie Park and Hornsby centres provide great places that meet the needs of a culturally rich and diverse resident population.

Street life and the night-time economy are also important elements of the District's character in dynamic places like Crows Nest, Neutral Bay and Manly, with centres such as Eastwood and Chatswood boasting distinctive cultural identities.

Proximity to bushland and beaches; the Lane Cove, Ku-ring-gai Chase and Garigal national parks; and Sydney Harbour and the Pacific Ocean give residents many outdoor, sporting and recreational opportunities.

As the District's 2016 population of around 887,000 people increases, it is also ageing. By 2036, the number of residents over 85 is expected to grow by 85 per cent and the number of single-person households is expected to rise by 39 per cent.

Couples with children will remain the dominant household type<sup>1</sup>. As a result, there will be comparatively fewer working age people (20–64 years) living in the District (refer to Planning Priority N6).

Together with overall population growth of around 196,000 (2016–2036), these demographic changes mean that an additional 92,000 homes will be required in the District by 2036.

Great places are walkable – this means they are designed, built and managed to encourage people of all ages and abilities to walk or cycle for leisure, transport or exercise. This requires fine grain urban form and land use mix at the heart of neighbourhoods. Places that demonstrate these characteristics promote healthy, active lifestyles and social interaction and can better support the arts, creativity, cultural expression and innovation.

The 30-minute city aspiration will guide decision-making on locations for new jobs and housing, and the prioritisation of transport, health, schools and social infrastructure investments. This will facilitate the co-location of infrastructure in metropolitan and strategic centres and more direct and convenient public transport links to these places, so that people can access services and jobs.

A place-based and collaborative approach is required to maintain and enhance the liveability of the North District. This can be achieved by the following Planning Priorities:

- N3.** Providing services and social infrastructure to meet people's changing needs
- N4.** Fostering healthy, creative, culturally rich and socially connected communities
- N5.** Providing housing supply, choice and affordability, with access to jobs, services and public transport
- N6.** Creating and renewing great places and local centres, and respecting the District's heritage.

## Planning Priority N3

### Providing services and social infrastructure to meet people's changing needs

In giving effect to *A Metropolis of Three Cities*, this Planning Priority delivers on the following objective and the corresponding strategies:

#### Objective 6

Services and infrastructure meet communities' changing needs.

As the District's population grows, major demographic changes are also occurring. Planning must recognise the changing composition of population groups in local places and provide services and social infrastructure that meet the changes in people's needs through different stages of life. This requires integrated planning and collaboration including consideration of the provision of services and the overall health and well-being outcomes for the community and intergenerational equity.

Population projections show distinct differences in projected growth in some age groups in the District's local government areas (refer to Figures 3 and 4). The greatest increase in population is expected in Ryde Local Government Area (51,700 additional people by 2036) due to the anticipated urban renewal in the area.

Growth increases demand on existing services and infrastructure, including sport and recreation facilities that are, in some cases, at or nearing capacity. Integrated and targeted delivery of services and infrastructure is needed to support growth and take account of existing levels of provision and use, while also responding to changing demands over time and in different places. Residents need the right mix of local services, programs and infrastructure to meet their needs.

Facilities can be the focus of neighbourhoods with the co-location of schools, youth and health services, aged care, libraries, community and cultural facilities, parks and recreation. These facilities need to be accessible with direct and safe walking and cycling connections that can be used by people of all ages and abilities. This encourages

people to be more physically and socially active, improves health outcomes and enhances the overall liveability of a neighbourhood or centre.

Improving safety, accessibility and inclusion by co-locating activities benefits all residents and visitors. When supported by a fine grain urban form and land use mix which provides a greater diversity of uses and users, liveability can be improved.

Creating opportunities for increased shared use and more flexible use of under-utilised facilities, such as schools, sports facilities, open space, halls and creative spaces, can support growth and respond to the different needs of local demographics groups. Multipurpose and intergenerational facilities are the key to better use of, and access to, infrastructure and services in urban renewal and land release areas.

Publicly owned land, including social housing in renewal precincts, may provide opportunities to optimise the co-location of social infrastructure and mixed-uses at the heart of neighbourhoods.

Integrated and targeted delivery of services and infrastructure is needed to support growth and respond to the different needs of population groups. Accessible local health services and regional health infrastructure such as hospitals are important for all people across the District. Northern Sydney Local Health District focuses on healthy communities through community health services, obesity prevention, and promotion of a healthy built environment (refer to Planning Priority N4).

Cemeteries and crematoria are key social infrastructure that also need to be accessible geographically and economically, and reflective of a diversity of cultures and backgrounds. A growing Greater Sydney requires additional land for burials and cremations with associated facilities such as reception space and car parking.

## Children and young people

Over the 20 years to 2036, projections show an expected increase of 6,150 children aged four years and under, with more than half of this growth in Ryde and Ku-ring-gai local government areas.

Planning for early education and child care facilities requires innovative approaches to the use of land and floor space, including co-location with compatible uses such as primary schools and office buildings, close to transport facilities.

The NSW Department of Education estimates an extra 21,900 students will need to be accommodated in both government and non-government schools in the North District by 2036, a 20 per cent increase. Growth is projected to be greatest in Ryde (8,160), Ku-ring-gai (5,733), Northern Beaches (3,454) and Hornsby (2,120) local government areas.

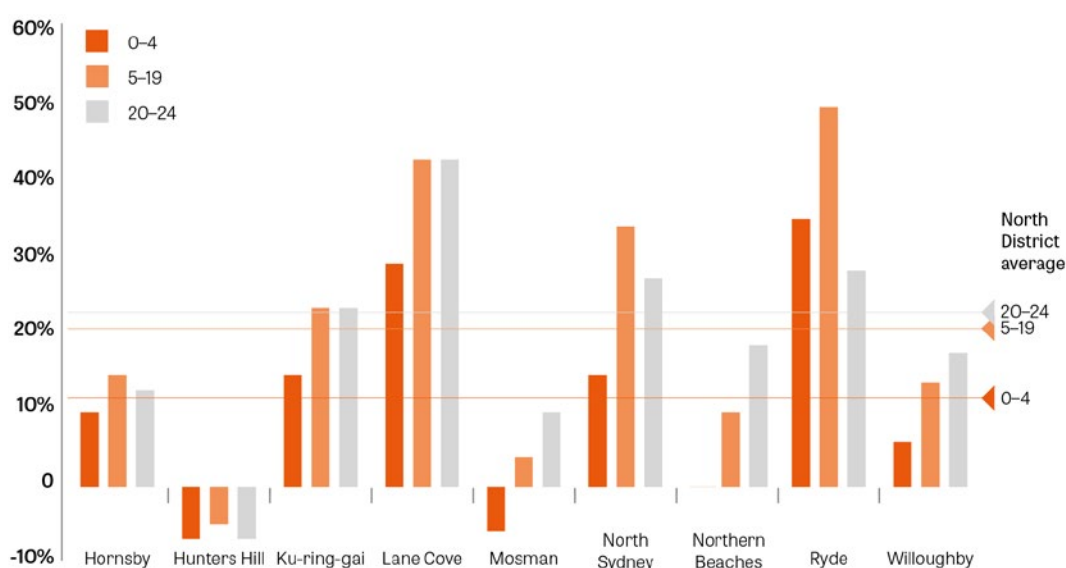
The NSW Department of Education's high-level *School Assets Strategic Plan Summary* (2017) coordinates planning for, and delivery of, both new and expanded schools. It encourages the joint and shared use of school facilities with local

government and the private sector to develop innovative ways to provide school infrastructure. School Infrastructure NSW, a new specialist unit within the Department, will undertake school community planning and deliver the education infrastructure program, working with other State agencies and community groups to develop schools as community hubs.

Schools help to create and support inclusive and vibrant neighbourhoods. Planning for new schools, and the use of existing schools, must respond to growth and changing demand in innovative ways such as more efficient use of land, contemporary design, greater sharing of spaces and facilities, and flexible learning spaces. Safe walking and cycling links to schools encourage young people to be more active, and better connect schools with local communities. They can reduce local congestion around schools, improving safety for children and families.

The design and management of open space, cultural spaces and the public realm need to consider the needs of children and young people (refer to Planning Priority N6).

**Figure 3:** North District projected population change 2016–2036 by local government area: 0–4, 5–19 and 20–24 years



Source: NSW Department of Planning and Environment, 2016 *New South Wales State and Local Government Area Household Projections and Implied Dwelling Requirements 2016 to 2036*, NSW Government, Sydney.



The Office of the NSW Advocate for Children and Young People's Strategic Plan for Children and Young People is the first legislated three-year whole-of-government plan focused on all children and young people aged 0–24 years. It aims to give children and young people opportunities to thrive, get the services they need and have their voice heard.

Lane Cove and Ryde local government areas are projected to see the largest growth in people aged 20–24 years across the District between 2016–2036 (44 per cent and 29 per cent respectively).

The North District provides important opportunities for tertiary and vocational education and training. These allow people to gain and refine skills for employment and connect with other people in the community. TAFEs and universities are also employment hubs for knowledge-intensive industries.

State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017 recognises the need for child care, schools, TAFEs and university level infrastructure with a focus on good design.

## Older people

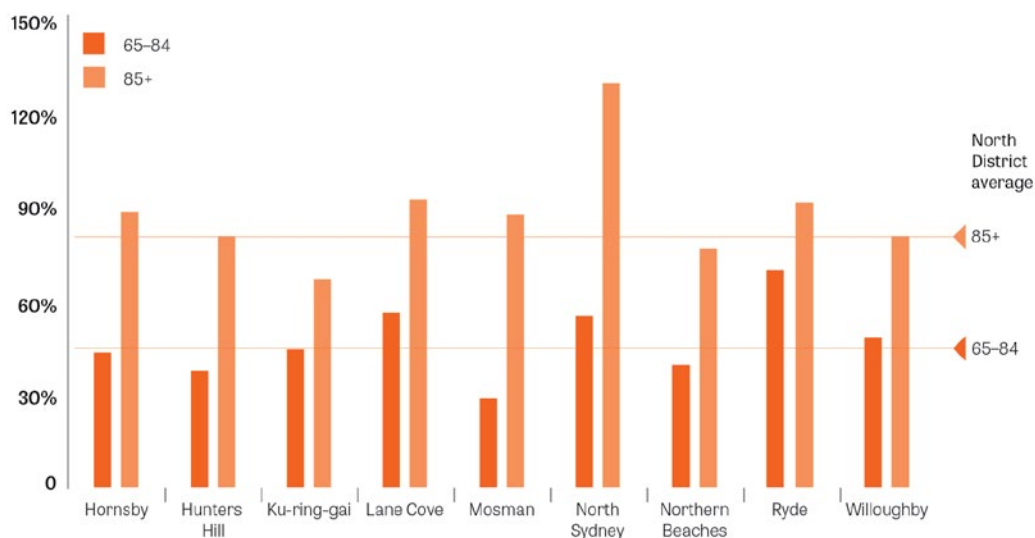
The District is expected to see an 85 per cent proportional increase in people aged 85 and over, and a 47 per cent increase in the 65–84 age group is expected by 2036. This means 20 per cent of the District's population will be aged 65 or over in 2036, up from 16 per cent in 2016.

The local government areas of Hornsby, Ryde, Ku-ring-gai and Northern Beaches will have the largest projected increase in the 65–84 age groups<sup>2</sup>.

More diverse housing types and medium density housing, as well as the design of walkable neighbourhoods, will create opportunities for older people to continue living in their community, where being close to family, friends and established health and support networks improves people's wellbeing<sup>3</sup>.

Coordinated and additional health, social and aged care services and collaborative responses across government and industry are needed to meet the expected increase in demand for local aged care facilities and respite services, including home care options (with associated visitor parking).

**Figure 4:** North District projected population change 2016–2036 by local government area: 65–84 and 85 years and over



Source: NSW Department of Planning and Environment, 2016 *New South Wales State and Local Government Area Household Projections and Implied Dwelling Requirements 2016 to 2036*, NSW Government, Sydney.

This approach will also need to address care for people with specific needs such as those with dementia and the frail aged.

The *NSW Ageing Strategy 2016–2020*, prepared by the NSW Department of Family and Community Services, responds to the opportunities and challenges of the ageing population. This strategy focuses on five priority areas including health and wellbeing, working and retiring, housing choices, getting around and inclusive communities.

## Accessibility

Public places including streets, parks, shopping precincts and community facilities must be designed so that people of all ages and abilities can participate in community life. In addition to the rapidly ageing population, the District includes over 27,500 people with disability<sup>3</sup>. Walkable places and homes of universal design are essential to provide opportunities for the participation of all people.

Universal design of places, homes and public transport is increasingly required as the population grows and demographics change. It is a key part of planning for 30-minute cities ensuring that children, young people, people with disability<sup>4</sup> and older people can easily access services.

Neighbourhoods, streets and transport also need to be safe and designed in accordance with the principles of Crime Prevention Through Environmental Design.

This focus on accessibility, inclusion and safety when designing and building neighbourhoods, public transport and transport interchanges, places and homes, will encourage a greater cross-section of people to lead physically active and socially connected lives. This is especially important to the health of people ageing in community and also benefits people with a disability and families.

## Joint and shared use

Infrastructure can be adapted and shared for different uses – school and open space facilities can be used for community, sports, arts, screen, cultural and recreational use when they are not otherwise required. Creating opportunities for increased shared use, and more flexible use, of under-utilised facilities can support growth, and respond to the

different needs of local demographic groups. In new developments, providing multipurpose and intergenerational facilities can support better access to and use of infrastructure.

There are a number of opportunities for developing a more collaborative city by enhancing shared use of spaces and greater connectivity between residents. These include the occasional use of streets for community events such as temporary markets, basketball and other sports, or school fetes.

Joint and shared use of facilities is encouraged to make school assets available to the community outside school hours and to give schools access to community facilities.

**Joint use** involves a school and a community partner, funding shared facilities, such as a building and operating a sports ground with a local council.

**Shared use** is where a school allows community use of school facilities during out-of-school hours.

Each neighbourhood has facilities such as libraries, community centres, adult education, sport and recreation facilities that enhance and promote social connections and networks within the community.

Schools are an important example of these social connectors. Where shared use of these facilities is achieved, its function as a community hub is significantly enhanced (refer to Planning Priority N4).

Joint and shared use agreements increase opportunities for the community to access facilities and resources and facilitate programs and activities where resources and funding are limited. This is particularly important in urban environments with high land values and growing demand for access to open space and community facilities.

Established partnerships between local councils and the NSW Government for shared use of school facilities in the North District include a joint-use agreement between Willoughby City Council and the NSW Department of Education that enables co-utilisation of a synthetic sports field at Chatswood High School.

#### Related government initiatives:

- NSW Government *Mapping the NSW Budget 2017-18*
- NSW Government *State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017*
- Livable Housing Australia 2017 *Livable Housing Design Guidelines*
- NSW Department of Education 2017, *School Assets Strategic Plan summary*
- Office of the Advocate for Children and Young People, *NSW Strategic Plan for Children and Young People, 2016-2019*
- NSW Family and Community Services, *The NSW Ageing Strategy 2016-2020*
- NSW Health Northern Sydney Local Health District *NSLHD Strategic Plan 2017-2022*

#### ⚙️ Actions

#### Responsibility

- |  |   |
|--|---|
| 9. Deliver social infrastructure that reflects the needs of the community now and in the future. | Councils, other planning authorities and State agencies                           |
| 10. Optimise the use of available public land for social infrastructure.                         | Councils, other planning authorities, State agencies and State-owned corporations |



Chatswood



## Planning Priority N4

### Fostering healthy, creative, culturally rich and socially connected communities

In giving effect to *A Metropolis of Three Cities*, this Planning Priority delivers on the following objectives and the corresponding strategies:

#### Objective 7

Communities are healthy, resilient and socially connected.

#### Objective 8

Greater Sydney's communities are culturally rich with diverse neighbourhoods.

#### Objective 9

Greater Sydney celebrates the arts and supports creative industries and innovation.

To foster healthy, creative, culturally rich and socially connected communities, this District Plan recognises diversity as one of Greater Sydney's key strengths. Strong social connections are key to these strengths and a foundation of resilience and healthy lifestyles among the District's residents. To support and deliver these outcomes a multi faceted and place-based approach is required to focus on the local inter relationships between healthy, creative, culturally rich and socially connected communities.

## Healthy and active lifestyles

Research identifies three key aspects of the built environment that support healthy lifestyles and improved health outcomes: strong social connections, physical activity and access to fresh food<sup>5</sup>. Consequently, the design and management of streets, places and neighbourhoods are essential to improved mental and physical health outcomes.

These aspects of a healthy built environment are important preventative responses to the incidence of chronic lifestyle diseases like obesity and type 2 diabetes. This is especially important as around 44 per cent of the adult population in the North District is overweight or obese<sup>6</sup>.

Walkable streets that provide direct, accessible and safe pedestrian and cycling connections from homes to schools, daily needs and recreation facilities can encourage greater physical activity

and social connection. Delivering fine grain urban form and local mixed-use places can provide better access to local retailers of fresh food, together with opportunities for people to participate in arts, recreation and cultural activities.

Connectivity of, and access to, diverse open spaces and opportunities for recreational physical activity are also essential to improved mental and physical health outcomes. Sport and active lifestyles provide many social, cultural and health benefits. The Office of Sport is working in collaboration with key partners, including councils, to develop a Sport and Recreation Participation Strategy and a Sport and Recreation Facility Plan for each district during 2018 and 2019. The plans will include local and regional sport facilities, that provide a strong foundation for participation in sport and active recreation.

## Diverse neighbourhoods

Greater Sydney, like many global cities, has a diversity of people from differing socioeconomic circumstances and a range of social, cultural, ethnic and linguistic backgrounds. This cultural richness brings to the region a wide array of skills, languages, cultures and experiences. It gives identity and distinctive character to Greater Sydney's neighbourhoods and centres. As the District grows and changes, supporting social connections, and cultural and creative expression will build resilience through understanding, trust and neighbourliness.

The District includes social housing in places such as Ivanhoe. Targeted local responses to address spatial variations in socioeconomic disadvantage across the District are required, particularly in neighbourhoods that experience greater disadvantage. This includes creating communities where social housing is part of the same urban fabric as private and affordable housing has good access to transport and employment, community facilities and open spaces which can therefore provide a better social housing experience.

The North District is home to people from many cultural and social backgrounds. Thirty-nine per cent of residents in the District are from 201 countries including China, England, India,

New Zealand and South Korea. As a result, 29 per cent of the District's population speak 175 non-English languages in their homes<sup>7</sup>.

The North District is home to refugees from many parts of the world. The majority of councils within the District have declared their areas Refugee Welcome Zones and have made a commitment in spirit to welcoming refugees into communities and celebrating their diversity of cultures.

The top four languages spoken at home other than English are Mandarin (23 per cent), Cantonese (13 per cent), Korean (seven per cent) and Italian (four per cent).

Fifty per cent of City of Ryde residents speak over 120 languages other than English. It is home to the most Cantonese and Mandarin speakers in the District. In the Northern Beaches Local Government Area, residents speak 99 languages other than English with the most speakers of Spanish and Italian in the District.

A diversity of housing types provided through urban renewal, local infill (such as "missing middle") and new communities in land release areas supports many of the household types and different community needs (refer to Planning Priority N5).

Place-based planning in the District's culturally diverse neighbourhoods utilises engagement that recognises the different ways people participate. Many councils have targeted approaches that consider specific linguistic or other needs to support greater participation (refer to Planning Priority N6). A better understanding of people's social and economic aspirations and specific needs achieved through engagement and participation, enhances inclusion and identifies culturally appropriate responses to local needs, to deliver improved health and wellbeing outcomes.

## Aboriginal people

The District's Aboriginal people, their histories and connections to Country and community make a valuable and continuing contribution to the District's heritage, culture and identity.

Supporting Aboriginal self-determination, economic participation and contemporary cultural expression through initiatives such as the development of culturally appropriate social infrastructure, will strengthen the District's identity and cultural richness.

The District contains landholdings acquired under the *Aboriginal Land Rights Act 1983* where Local Aboriginal Land Councils can work towards planning outcomes that will help support self-determination and economic participation.

As this District Plan is implemented, engagement with Aboriginal communities will be founded on self-determination and mutual respect to foster opportunities for economic participation, culturally appropriate social infrastructure and contemporary cultural expression.

## Supporting creative enterprise, cultural expression

Cultural expression and creative expression promotes understanding of people's experiences. Place-based planning will build on the District's artistic, heritage, cultural, volunteering and creative strengths.

Co-locating artistic and creative organisations will support creative enterprises and precincts. This requires planning for multi functional and shared spaces with opportunities for artists and makers to live, work, exhibit, sell and learn locally.

Cultural diversity is celebrated by the communities of the North District and includes cultural events and celebrations such as NAIDOC Week, National Reconciliation Week, Guringai Festival, Manly Jazz Festival, Northern Beaches Music Festival, Narrabeen Lakes Festival, Lane Cove Festival and Willoughby's Emerge Festival.

The District's artistic and cultural experiences are supported by:

- entertainment facilities such as the Hayden Orpheum Picture Palace Cremorne and Roseville Cinema

- arts and cultural facilities such as The Concourse Chatswood, Ensemble Theatre, Manly Art Gallery and Museum, Ku-ring-gai Art Centre, Glen Street Theatre, Wallarobba Arts and Cultural Centre, Mosman Art Gallery and Community Centre, Scotland Island Community Centre, Berowra Community Centre, Avalon Annex and Willandra Art Gallery in Ryde, as well as local libraries
- open space and sports facilities, including Brookvale Oval and North Sydney Oval.

Creative and cultural expression is also a hallmark of innovation, and innovation underpins the productivity of the 21st century city.

Creative industries – a core element of an innovative economy – have a growing role in the District's productivity, with creativity, entrepreneurship, technical ability and collaboration being essential skills for the future workforce.

Support for a range of creative enterprises and opportunities for cultural expression will expand arts and cultural institutions, and encourage audience and artist participation. Locations to consider for creative industries and cultural enterprise include underutilised mixed-use areas and ground-level commercial or declining high streets. In particular providing better and more opportunities for creative industries to collaborate with health and education can also facilitate local innovation.

The NSW Cultural Infrastructure Program Management Office is working with Infrastructure NSW to develop a cultural infrastructure strategy, which will include strategies and actions for Greater Sydney. Continued investment in the arts, screen and cultural sector attracts a skilled workforce and encourages innovation in other sectors.

Local cultural and arts networks such as those that centre on arts facilities recognise that place-based approaches can develop local artistic and creative culture.

The District's cultural vibrancy is reinforced by night-time economies, from popular eat streets, clubs, pubs and small bars to cinemas, arts and cultural activities. Stimulating and diversifying the night-time economy in appropriate locations across the District can support local economies and culture.

This can generally occur in mixed-use centres with adequate noise control, locally appropriate operating hours and safe late-night travel options.

Greater use of the public realm for interim and temporary uses, and vacant or under-utilised commercial space for arts, events and creative uses, can support activation of places and encourage participation. Investigation of options to reduce the regulatory burden for arts, creative and temporary uses as well as the night-time economy is needed for regulations to be commensurate with the activity. This may require measures such as simplifying development approval processes or increasing the application of exempt and complying development provisions to these uses.

The provision of arts and creative spaces in areas experiencing significant urban renewal will further support local identity and innovation.

## Supporting social connections

Many educational and community facilities, social enterprises, community initiatives, clubs and sporting organisations and facilities connect people with one another. These social connectors help foster healthy, culturally rich and networked communities that share values and trust, and can develop resilience to shocks and stress.

The multi-faceted nature of social networks and connections are illustrated in Figures 5–8. These maps illustrate concentrations of some key social connectors in and around local centres, which provide opportunities for people to connect with one another. They include:

- social infrastructure including community and neighbourhood hubs, sports fields, clubs and courts, men's sheds, pools and leisure centres
- education facilities like child care, schools, TAFEs and universities as well as libraries
- sharing spaces like community gardens, co-working spaces and car sharing
- street life and meeting places including live music venues, farmers' markets, and high streets and eat streets.

Stronger concentrations of social connectors are indicated by larger dots. The maps illustrate examples of centres where place-based planning can enhance existing community connections and strengthen



or add new social connectors. Focusing on building social connectors in tandem with universal design will help to improve individual and community health, inclusion and participation outcomes.

Lifelong learning facilities and libraries provide valuable opportunities to continue education and connect with others. Digital connectivity builds broad and diverse communities of interest that cross traditional spatial boundaries.

These social connectors are a major element of the characteristics on which the local identity and distinctive functions of centres are built. For example, street life is particularly evident in places like Manly, Chatswood and Crows Nest.

In the North District, places with high concentrations of social connectors are characterised by:

- access to trains or high-frequency bus routes
- cultural and economic diversity
- high levels of volunteering
- high provision of social infrastructure

- access to education and learning
- walkable town centres or eat streets
- diverse housing mix (density, tenure and affordability).

Place-based planning to enhance social connections should focus these activities at the heart of neighbourhoods and in local centres to enhance social and economic participation. This co-location of social infrastructure with daily needs and other services helps build connections.

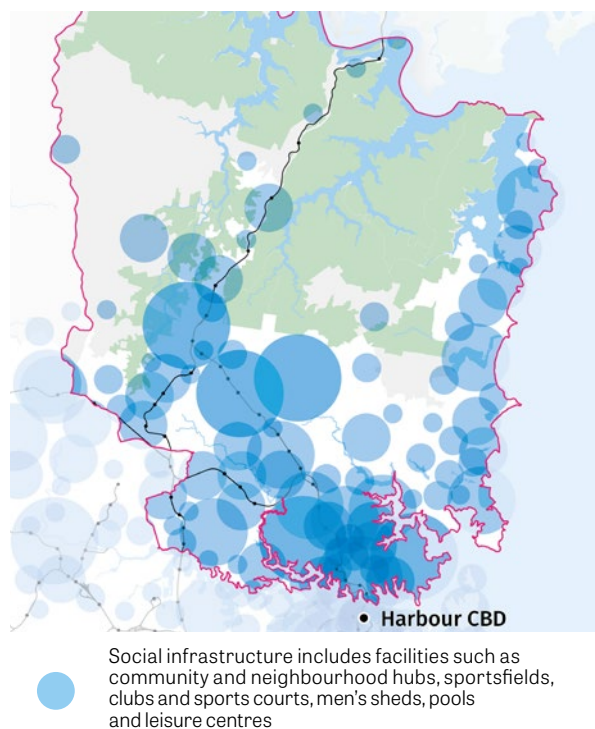
#### Related government initiatives:

- NSW Department of Planning and Environment 2017 *Aboriginal Community Lands and Infrastructure Program*
- NSW Government 2018 *Cultural Infrastructure in NSW*
- NSW Office of Sport *A New Way of Delivering Sport and Active Recreation in NSW*

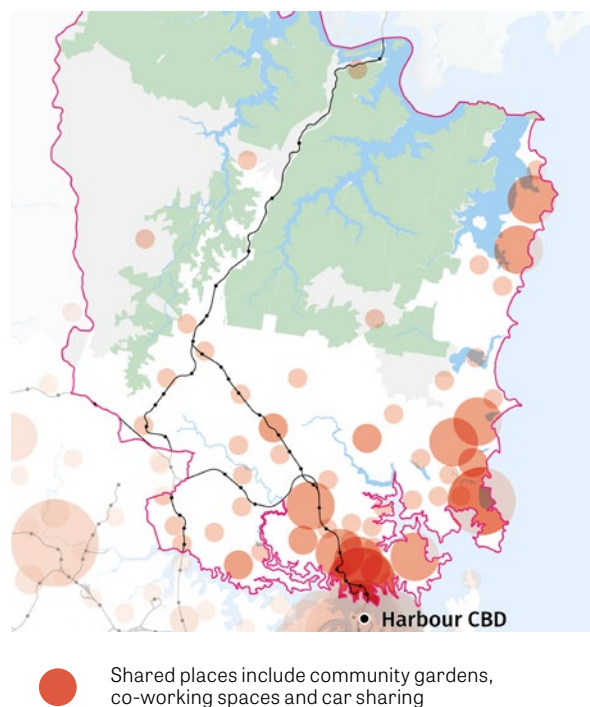
 Actions	Responsibility
11. Deliver healthy, safe and inclusive places for people of all ages and abilities that support active, resilient and socially connected communities by: <ol style="list-style-type: none"> <li>providing walkable places at a human scale with active street life</li> <li>prioritising opportunities for people to walk, cycle and use public transport</li> <li>co-locating schools, health, aged care, sporting and cultural facilities</li> <li>promoting local access to healthy fresh food and supporting local fresh food production</li> </ol>	Councils, other planning authorities, State agencies and State-owned corporations
12. Incorporate cultural and linguistic diversity in strategic planning and engagement.	Councils, other planning authorities, State agencies and State-owned corporations
13. Consider the local infrastructure implications of areas that accommodates large migrant and refugee populations.	Councils, other planning authorities, State agencies and State-owned corporations
14. Strengthen the economic self-determination of Aboriginal communities by engagement and consultation with Local Aboriginal Lands Councils to better understand and support their economic aspirations as they relate to land use planning.	Councils, other planning authorities, State agencies and State-owned corporations
15. Facilitate opportunities for creative and artistic expression and participation, wherever feasible, with a minimum regulatory burden, including: <ol style="list-style-type: none"> <li>arts enterprises and facilities, and creative industries</li> <li>interim and temporary uses</li> <li>appropriate development of the night-time economy.</li> </ol>	Councils, other planning authorities, State agencies and State-owned corporations
16. Strengthen social connections within and between communities through better understanding of the nature of social networks and supporting infrastructure in local places.	Councils, other planning authorities, State agencies and State-owned corporations

## North District social connectors

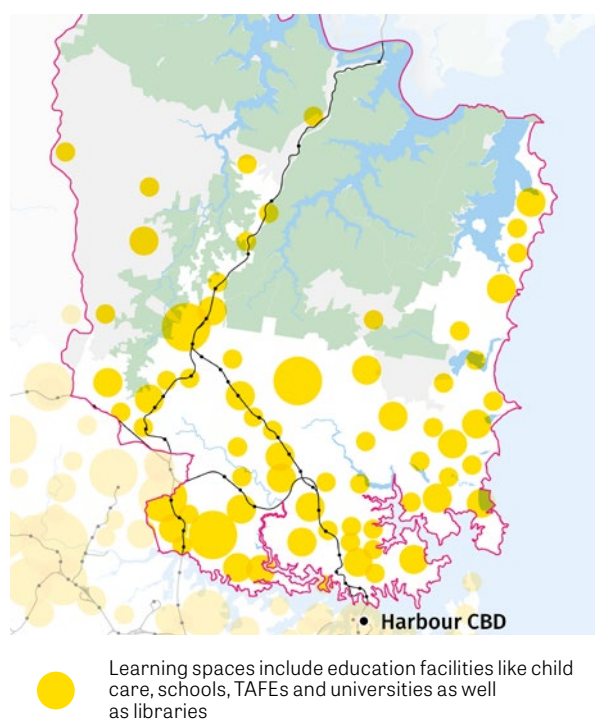
**Figure 5:** North District social infrastructure



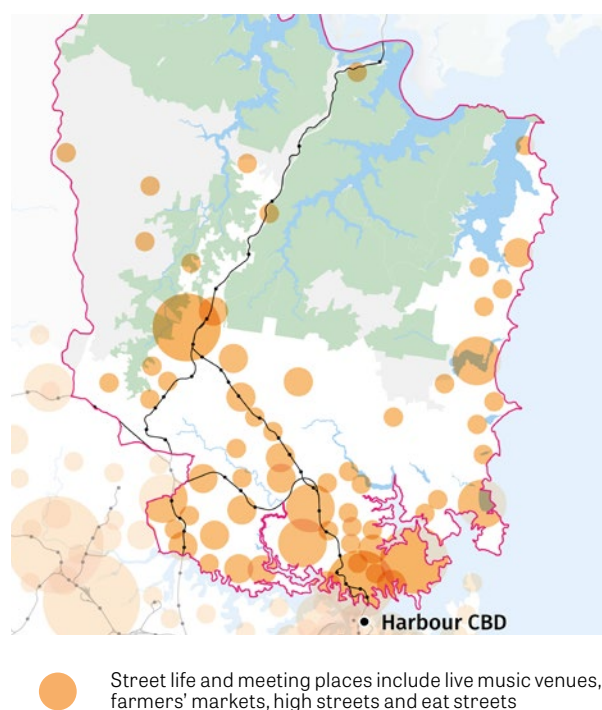
**Figure 6:** North District shared places



**Figure 7:** North District learning



**Figure 8:** North District street life



Source: Greater Sydney Commission, 2017 adapted from *Greater Sydney's Social Capital Study (2017)*, Cred Consulting.





Mona Vale



## Planning Priority N5

Providing housing supply, choice and affordability, with access to jobs, services and public transport

In giving effect to *A Metropolis of Three Cities*, this Planning Priority delivers on the following objectives and the corresponding strategies and actions:

### Objective 10

Greater housing supply.

### Objective 11

Housing is more diverse and affordable.

*A Metropolis of Three Cities* sets out objectives to deliver housing supply and affordability. The location, type and cost of housing requires choices that have far-reaching impacts on quality of life, including time spent commuting, which affects people's ability to spend time with family or in the community.

The housing continuum recognises all types of housing from crisis and social housing through to market housing. Housing is more than just dwellings and needs to be considered in a local context with a place-based approach.

The NSW Department of Planning and Environment's projections of population and household growth in the North District translate to

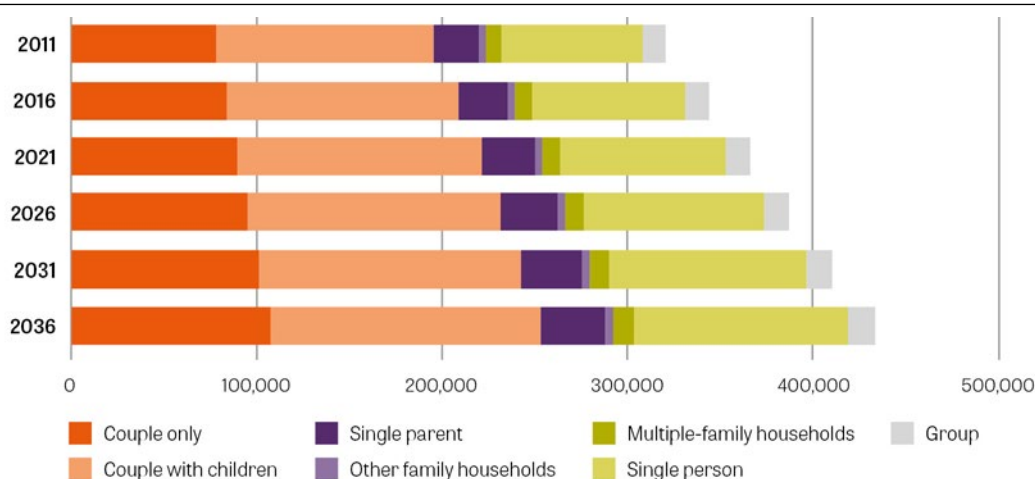
a need for an additional 92,000 homes in the period 2016 to 2036.

## Housing diversity and choice

New housing must be in the right places to meet demand for different housing types, tenure, price points, preferred locations and design. Housing supply must be coordinated with local infrastructure to create liveable, walkable neighbourhoods with direct, safe and universally designed pedestrian and cycling connections to shops, services and public transport. This means that some areas are not appropriate for additional housing due to natural or amenity constraints, or lack of access to services and public transport.

Planning for housing needs to consider the type of dwellings required to respond to expected changes in household and age structures (refer to Figure 9). The number of single-person households is expected to increase by 31,750 to 2036. The number of single-parent and couple-only households in particular, is also expected to increase by 2036. This requires more smaller homes, group homes, adaptable homes of universal design and aged care facilities.

**Figure 9:** North District projected household structure 2011–2036



Source: NSW Department of Planning and Environment, 2016 *New South Wales State and Local Government Area Household Projections and Implied Dwelling Requirements 2016 to 2036*, NSW Government, Sydney.

At the same time, households comprised of couples with children will remain the highest proportion of households. This requires housing that can meet the needs of families as well as flexible housing types that can accommodate multiple generations and family groups living together, as well as more accessible and adaptable housing of universal design.

Forty-eight per cent of the District's housing is provided as either apartment or medium density housing. Multi-unit dwellings can provide important housing for seniors and more affordable homes for young people. This needs to be balanced with medium density row, terrace and villa homes that provide increased housing options, especially for larger households. A diverse mix of housing can provide greater opportunities to cater for a range of changing needs.

## Housing preferences

Research into housing preferences in Greater Sydney has shown that people generally prefer to

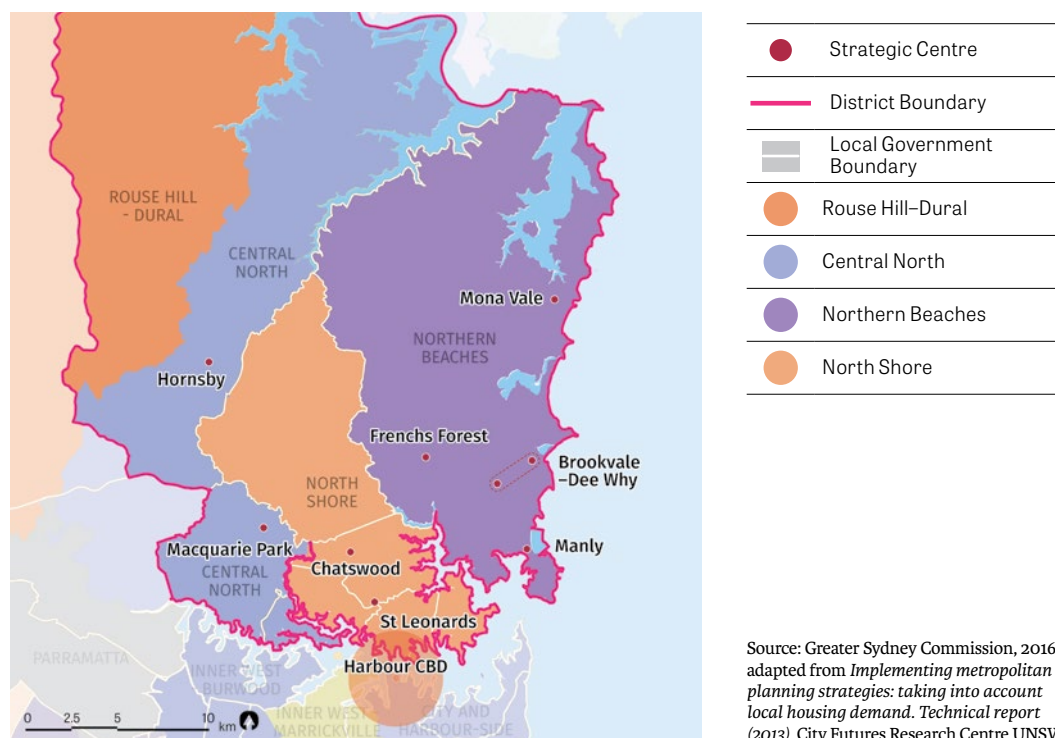
remain within their local area, with 82 per cent of residents moving into a new home within 15 kilometres of their former residence<sup>8</sup>.

In the North District, there are four housing market demand areas (refer to Figure 10):

- **Northern Beaches** – aligned with the Northern Beaches Local Government Area
- **North Shore** – from the northern shore of Sydney Harbour to the northern most point of the Ku-ring-gai Local Government Area and focused around the T1 North Shore train line
- **Central North** – from Parramatta River through Ryde and Hornsby in the north-south corridor around the T1 Northern train line
- **Rouse Hill-Dural** – of which a small part lies in Hornsby Local Government Area.

These housing markets mean that providing supply in one market demand area may not satisfy demand in another. Understanding need and capacity in individual housing markets will better satisfy residents' preferred housing locations.

**Figure 10:** North District housing market areas



## Historic housing supply

Dwelling completions are at their highest levels in 16 years for Greater Sydney, although the North District has experienced fluctuations in the amount of dwelling approvals over the past decade from a high in 1999–2000<sup>9</sup>.

In 2016–2017, completions for the North District totalled 4,408 dwellings. In the 10 years from 2007–08 to 2016–17, 29,554 dwellings were completed – 40 per cent of these were in the past three years. Over the past five years, almost 55 per cent of dwelling completions were in Ryde, Ku-ring-gai, and Hornsby local government areas.

More than 90 per cent of these recent completions are multi-unit dwellings, in contrast to the existing house stock which remains dominated by detached dwellings. Apartment completions have concentrated in Ryde, St Ives, Lane Cove, Chatswood and Dee Why and also along train lines.

Multi-unit dwellings provide compact housing for seniors, homes for single people and more affordable homes for young people and young families. The remaining housing completions are medium density, comprising three to five units, new single dwellings or dual occupancy dwellings. These are more prevalent in the west of the District.

Over the past 10 years, the North District has had an annual average dwelling completion rate of 2,950. Forecast supply of housing growth in the North District has identified the potential for dwelling completions above this annual average in the next five years.

## Current initiatives and opportunities

Additional capacity for housing supply is well progressed across much of the District. Current State-led initiatives include:

- Macquarie Park Urban Renewal Area including Macquarie University (Herring Road) Precinct, North Ryde Station Precinct and Macquarie Park investigation area
- St Leonards/Crows Nest Planned Precinct
- Cherrybrook Station Planned Precinct

- Frenchs Forest Planned Precinct
- Ingleside Growth Area
- Communities Plus Project at Ivanhoe Estate as part of the Macquarie Park Urban Renewal Area.

Planned Precincts will be consistent with the objectives and strategies of *A Metropolis of Three Cities* and this district plan to enhance liveability, sustainability and productivity. These projects will be well planned and designed, delivered in collaboration with councils and informed by State government agencies and their asset plans. This planning will be supported by a Special Infrastructure Contribution or similar satisfactory arrangement to help fund the delivery of essential community infrastructure such as health facilities, schools, open space and roads.

Local government strategies that identified opportunities to increase capacity for housing in the North District include:

- *Hornsby Shire Housing Strategy (2011)*
- *Manly Housing and Employment Targets Report (2011)*
- *Pittwater Local Planning Strategy (2011)*.

Further potential urban renewal opportunities to align growth with infrastructure investment include:

- leveraging the investment in NorthConnex on Pennant Hills Road
- optimising opportunities to connect to Sydney Metro Northwest, City & Southwest
- leveraging the investment in projects that are under investigation such as the committed Western Harbour Tunnel & Beaches Link, subject to final business case and funding.

## More housing in the right locations

Creating capacity for new housing in the right locations requires clear criteria for where capacity is to be located. Accommodating homes needs to be linked to local infrastructure – both to optimise existing infrastructure and to maximise investment in new infrastructure. Opportunities for capacity that aligns with infrastructure can be realised by urban renewal, local infill developments and land release areas (refer to Figure 11).

### Urban renewal

Opportunities for urban renewal need to be considered by location and by capacity of existing and proposed infrastructure. In older more established parts of Greater Sydney, urban renewal opportunities may exist around regional transport and strategic centres where links for walking and cycling promote a healthy lifestyle and contribute to liveability.

Where there is significant investment in mass transit corridors, both existing and proposed, urban renewal may best be investigated in key nodes along the corridor. Corridor investigations can provide a longer term strategic context while the development of precincts within the corridor is sequenced over time.

Locational criteria for urban renewal investigation opportunities include:

- alignment with investment in regional and district infrastructure which acknowledges the catalytic impacts of infrastructure such as Sydney Metro Northwest and Sydney Metro City & Southwest, NorthConnex, and the Northern Beaches Hospital
- other possible future investments such as the Western Harbour Tunnel and Beaches Link and opportunities created by enhancements to existing infrastructure such as upgrades to schools, open space including sporting facilities and transport
- accessibility to jobs, noting that over half of Greater Sydney's jobs are generated in metropolitan and strategic centres
- accessibility to regional transport, noting that high-frequency transport services can create efficient connections to local transport services and expand the catchment area of people who can access regional transport
- efficient interchanges with a comprehensive walking and cycling network
- catchment areas within walking distance (up to

10 minutes) of centres with rail, light rail or regional bus transport

- areas of high social housing concentration where there is good access to services, transport and jobs
- distance from special land uses such as ports and airports.

### Local infill development

Local infill development – the missing middle – refers to medium density housing such as villas and townhouses within existing areas, that provide greater housing variety.

Councils are in the best position to investigate and confirm which parts of their local government areas are suited to additional medium density opportunities. As part of their investigations councils should consider:

- transitional areas between urban renewal precincts and existing neighbourhoods
- residential land around local centres where links for walking and cycling help promote a healthy lifestyle
- areas with good proximity to regional transport where more intensive urban renewal is not suitable due to challenging topography or other characteristics
- lower density parts of suburban Greater Sydney undergoing replacement of older housing stock
- areas with existing social housing that could benefit from urban renewal and which provide good access to transport and jobs.

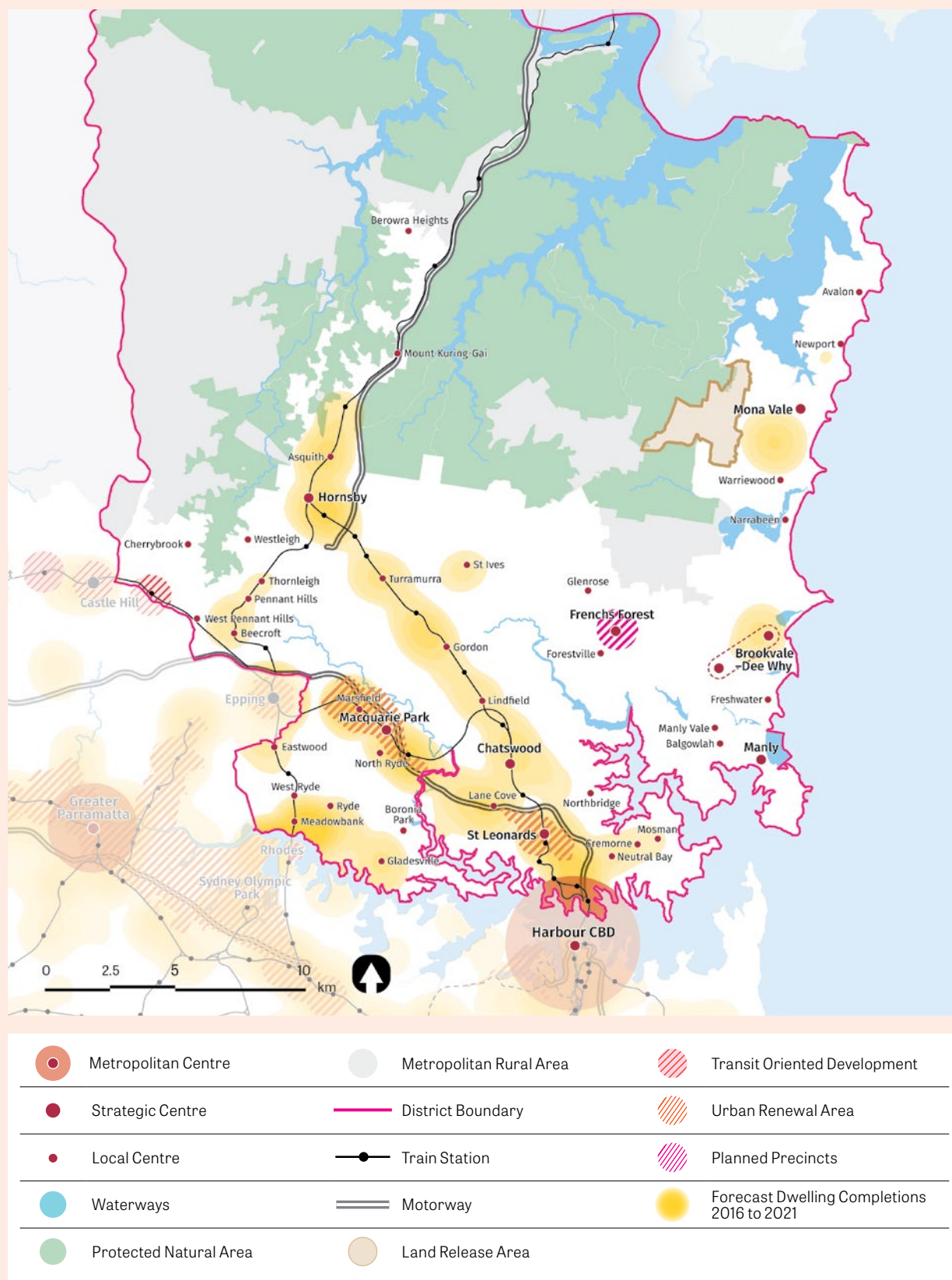
Design guidelines set out in the NSW Department of Planning and Environment's Draft Medium Density Design Guide show how this infill can promote good design outcomes.

### New communities in land release areas

The Growth Area programs of the NSW Department of Planning and Environment guide the development of new communities in land release areas and provide significant capacity into the medium and longer term. These include the Ingleside Growth Area with the potential for a new community of 3,400 dwellings.



**Figure 11:** North District future housing supply



Source: Greater Sydney Commission, NSW Department of Planning and Environment and NSW Government Housing Affordability Package.

## Housing strategies

Housing strategies are to be prepared by councils for a local government area or district and given effect through amendments to local environmental plans. To deliver coordinated outcomes the development of housing strategies are to be aligned with councils' community strategic planning and to inform local strategic planning statements and local environmental plans. To address housing supply, housing strategies are to be developed by councils to:

- make provision for the anticipated growth associated with the 0–5 and 6–10 year housing targets (when agreed)
- align projected growth with existing and proposed local infrastructure and open space improvements (refer to Planning Priorities N1, N3 and N2o)
- identify the right locations for growth, including areas that are unsuitable for significant change in the short to medium term
- identify capacity to contribute to the District's 20-year strategic housing target
- inform the Affordable Rental Housing Target Schemes for development precincts
- coordinate the planning and delivery of local and State infrastructure.

The NSW Department of Planning and Environment will prepare guidelines to support housing strategies as outlined in *A Metropolis of Three Cities* (Objective 10).

## Housing targets

Table 2 sets five-year housing targets for the North District. These are based on the Districts dwelling needs and existing opportunities to deliver supply. They include traditional detached and attached houses, apartments and granny flats.

The five-year targets are generally consistent with known housing approvals and construction activity. These are minimum targets and largely reflect delivery potential under current planning controls.

**Table 2:** North District housing targets by local government area

LGA	0–5 year housing supply target: 2016–2021
Hornsby	4,350
Hunter's Hill	150
Ku-ring-gai	4,000
Lane Cove	1,900
Mosman	300
North Sydney	3,000
Northern Beaches	3,400
Ryde	7,600
Willoughby	1,250
<b>North District Total</b>	<b>25,950</b>

Each council is to develop 6–10 year housing targets. The 6–10 year housing targets will be developed iteratively through the housing strategy. The strategy is to demonstrate capacity for steady housing supply into the medium term. Principles for housing are set out below in and will be expanded on in guidance by the NSW Department of Planning and Environment.

Meeting housing demand over 20 years requires a longer term outlook. *A Metropolis of Three Cities* sets a District 20-year strategic housing target of 92,000, equating to an average annual supply of 4,600 dwellings, or one in eight of all new homes in Greater Sydney over the next 20 years.

*Future Transport 2056* identifies city-shaping transport projects that will, in the long term, improve accessibility to jobs and services, and act as a stimulus for additional housing supply. To deliver the 20-year strategic housing target, councils should, in local housing strategies, investigate and recognise opportunities for long-term housing supply associated with city-shaping transport corridors; growing, emerging and new centres; and other areas with high accessibility.

## Principles for housing strategies

Housing strategies play an important role in planning for more liveable neighbourhoods and to meet housing demand by responding to the following principles:

- **Housing need:** the projected housing need and demographic characteristics of the existing and growing community, including different cultural, socio-economic and age groups and the availability of a range of housing types, tenures and price points.
- **Diversity:** including a mix of dwelling types, a mix of sizes, universal design, seniors and aged care housing, student accommodation, group homes, and boarding houses.
- **Market preferences:** market demand considerations that drive the take-up of housing, including local housing preferences.
- **Alignment of infrastructure:** opportunities to optimise transport infrastructure enabling access to jobs, health, education and recreation facilities, that align with State and local government infrastructure priorities (refer to 'More housing in the right locations').
- **Displacement:** managing potential impacts of growth on existing communities such as displacement by understanding the location and volume of affordable rental housing stock.
- **Amenity:** opportunities that improve amenity including recreation, the public realm, and increased walkable and cycle-friendly connections to centres.
- **Engagement:** engaging the community on a range of options and neighbourhood priorities that can be integrated with new housing and benefit existing and future communities.
- **Efficiency:** opportunities for innovations in waste management, water and energy provision by determining the nature of growth, location and demand for utilities.

Key technical aspects of preparing a housing strategy to improve housing affordability and choice will be further supported by a new planning circular and guidelines to be prepared by the NSW Department of Planning and Environment. Key aspects include:

- **Capacity:** land with potential for rezoning for residential development.

- **Viability:** the assessment of new areas and whether the capacity created is financially viable for a range of configurations (one, two, three or more bedrooms) and is consistent with market demand and planning controls.
- **Good design:** buildings that exhibit design excellence in neighbourhoods that are walkable, cycle friendly, connected to transport and services, and have a mix of land uses to support active healthy and socially-connected communities.
- **Environment:** green infrastructure including urban bushland and waterways, local features (such as topography, heritage and cultural elements, visual impacts, natural hazards such as flooding, special land uses and other environmental constraints) lot sizes, strata ownership and the transition between different built forms.
- **Mix:** a mix of housing types allows people to relocate within their local area and stay connected to community services, friends and family.
- **Supply:** land zoned for residential development, served by adequate infrastructure and ready for development projects.
- **Affordable rental housing:** through housing diversity for those on moderate incomes and affordable rental housing for low and very low-income households.
- **Local character:** recognising the distinctive and valued combination of characteristics that contribute to local identity.
- **Social housing:** more and better access to supported and/or subsidised housing.
- **Delivery:** the staging of enabling infrastructure, upgrades or expansions of local infrastructure such as schools, open space including sportsgrounds and community facilities.
- **Monitoring:** homes completed and ready for occupation.

A place-based planning approach to the development of housing strategies will help facilitate high quality urban outcomes including the creation of walkable neighbourhoods which support active and healthy lifestyles, as well as the creation and renewal of great places (refer to Planning Priority N6).

## Affordable Rental Housing Targets

Housing has a dual social and economic role across Greater Sydney. Communities require housing that meets changing demographic needs over time and that provides stability. At the same time housing has an economic productivity role by providing housing choice and affordability for a cross-section of workers.

Research and testing of needs through stakeholder and community consultation reaffirms the critical importance of providing a diversity of housing across the housing continuum in Greater Sydney.

Ensuring a steady supply of market housing in locations supported by existing or planned services and amenity with an emphasis on public transport access is outlined in Objective 10 of *A Metropolis of Three Cities*.

The Affordable Rental Housing State Environmental Planning Policy provides incentives for development projects to include a 10-year term for affordable rental housing dwellings for very low to moderate income households; however, the areas where this is being applied are limited.


*A Metropolis of Three Cities* includes Affordable Rental Housing Targets for very low to low-income households in Greater Sydney. Affordable Rental

Housing Targets that are generally in the range of 5–10 per cent of new residential floor space are subject to viability. *A Metropolis of Three Cities* identifies the need for further work by the Greater Sydney Commission to support the implementation of the Affordable Rental Housing Targets including consideration of allocation, ownership, management and delivery models.

The NSW Department of Planning and Environment and the Greater Sydney Commission will also jointly investigate ways to facilitate housing diversity through innovative purchase and rental models. This collaboration will also develop mechanisms to deliver the Affordable Rental Housing Targets.

Further opportunities for planning to support housing affordability and diversity measures include:

- more compact housing, either on smaller land lots or through a proportion of smaller apartments of innovative design to support moderate-income households and particularly key workers and skilled workers in targeted employment areas such as health and education precincts
- new owner-developer apartment models that support lower cost and more flexible delivery of apartments for like-minded owner groups.

 Actions	Responsibility
17. Prepare local or district housing strategies that address the following: <ol style="list-style-type: none"> <li>the delivery of five-year housing supply targets for each local government area</li> <li>the delivery of 6–10 year (when agreed) housing supply targets for each local government area</li> <li>capacity to contribute to the longer term 20-year strategic housing target for the District</li> <li>the housing strategy requirements outlined in Objective 10 of <i>A Metropolis of Three Cities</i> that include:               <ol style="list-style-type: none"> <li>creating capacity for more housing in the right locations</li> <li>supporting planning and delivery of growth areas and planned precincts as relevant to each local government area</li> <li>supporting investigation of opportunities for alignment with investment in regional and district infrastructure</li> <li>supporting the role of centres.</li> </ol> </li> </ol>	City of Ryde Council Hornsby Shire Council Hunter's Hill Council Ku-ring-gai Council Lane Cove Council Mosman Council North Sydney Council Northern Beaches Council Willoughby City Council
18. Prepare Affordable Rental Housing Target Schemes following development of implementation arrangements.	Councils and other planning authorities



## Planning Priority N6

### Creating and renewing great places and local centres, and respecting the District's heritage

In giving effect to *A Metropolis of Three Cities*, this Planning Priority delivers on the following objectives and the corresponding strategies:

#### Objective 12

Great places that bring people together.

#### Objective 13

Environmental heritage is identified, conserved and enhanced.

Greater Sydney's cities, centres and neighbourhoods each have a unique combination of local people, history, culture, arts, climate, built form and natural features creating places with distinctive identities and functions. Great places build on these characteristics to create a sense of place that reflects shared community values and culture. Through this, they attract residents, workers, visitors, enterprise and investment.

Great places include all parts of the public realm such as open space, streets, centres and neighbourhoods and the interface with the private realm which includes residential, commercial and industrial streetscapes. They exhibit design excellence and start with, and focus on, open space and a people-friendly public realm. They recognise and celebrate the local character of the place and its people.

To create great places, the mechanisms for delivering public benefits need to be agreed early in the planning process, so that places provide a combination of the following elements as set out in *A Metropolis of Three Cities*:

- **Well-designed built-environment:** great places are enjoyable and attractive, they are safe, clean and flexible with a mix of sizes and functions.
- **Social infrastructure and opportunity:** great places are inclusive of people of all ages and abilities, with a range of authentic local experiences and opportunities for social interaction and connection.
- **Fine grain urban form:** great places are walkable, of human scale with a mix of land uses including social infrastructure and local services at the heart of communities.

The District's great places include local and strategic centres such as Crows Nest, Lane Cove and North Sydney; beachside neighbourhoods like Avalon and Narrabeen; major shopping precincts, and distinctive dining and night-time precincts such as Chatswood and Manly. Spectacular views of Sydney Harbour, the CBD skyline, an expansive coastline, waterways and bushland provide the focal points for many great places across the North District.

The unique character and distinctive mix of land uses, activities, social connectors and functions in these places provide social and physical connectivity, local diversity and cultural richness, all of which contribute to the liveability of neighbourhoods and enhance people's quality of life.

Improving liveability in urban environments necessitates planning for a mix of high quality places that engage and connect people and communities. Co-locating activities and social infrastructure in mixed-use areas is a more efficient use of land and enhances the viability of, and access to, great places, centres and public transport.

To deliver high quality, community specific and place-based outcomes, planning for the District should integrate site specific planning proposals with precinct-wide place and public domain outcomes through place-based planning. This is a method by which great places can capitalise on the community's shared values and strengths and the place's locally distinctive attributes through collaboration and meaningful community participation.

As the population grows and demographics change, more high quality public places will be required in and around centres. Ground level places including streets, plazas, parks and recreation spaces provide places for community events, markets and festivals and for encouraging social interaction and active lifestyles. Growth and renewal will increase opportunities to expand and connect these places and to explore innovative public places, such as rooftops and podiums.

## Streets as places

Streets are the most common places in any city. They connect and unite communities. The way streets meet people's different needs is fundamental to the way the city is experienced. Streets are important for moving people and goods between places, but are also important places for people and street life, enhancing social and economic participation. *A Metropolis of Three Cities* and *Future Transport 2056* adopt a common approach to balancing the dual functions of streets (refer to Figure 12).

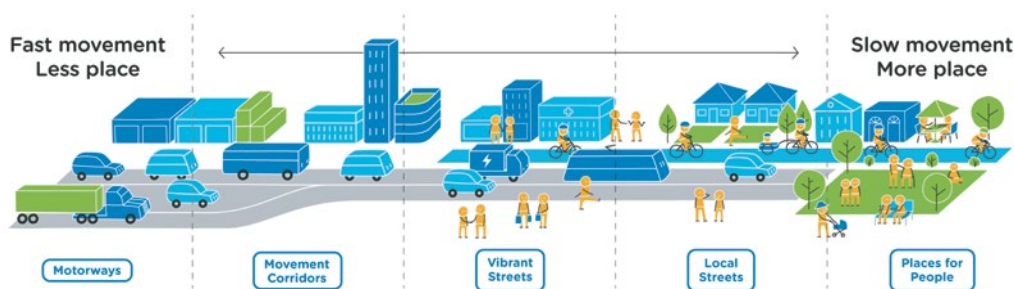
Creating and renewing streets as great places is therefore key to improving liveability. Walkable places, particularly streets, need to be designed, built and managed to encourage people of all ages and abilities to walk or cycle for leisure, transport or exercise. Walkable neighbourhoods support an active street life, which enhances community connections, safety and the success of local businesses, and improves social and economic participation. Improving walkability should guide decision-making on locations for new jobs and housing, and prioritisation of transport, health, schools and social infrastructure investments.

Although streets differ in their function and character, maximising opportunities for walking, safe cycling and social interaction is a priority. This requires allocation of road space between footpaths, cycleways, public transport and vehicles that considers people's safety needs, and balances movement and place functions in response to the type of street and local conditions.

This occurs through design and management of the street environment. The pattern and amount of road space allocated to pedestrians, cyclists, public transport and private vehicles and the speed of travel are important considerations. Where streets are destinations for shopping, dining, meeting friends, accessing transport or walking, the design of streets affects the attractiveness, vitality and viability of a place.

Leading a healthy and active life means substituting walking and cycling for short car journeys. More people can be encouraged to walk and cycle where there is a safe road environment and suitable pathways<sup>10</sup> (refer to *Greater Sydney Services and Infrastructure Plan* Customer Outcome 3).

Figure 12: Movement and place framework



Source: *Future Transport 2056* and Greater Sydney Commission

Places for people like Manly Corso, Mount St Plaza in North Sydney and Lane Cove Plaza perform intense place functions with highly significant local pedestrian movements.

Vibrant streets like Victoria Avenue, Chatswood are important places for street life and transport.

Local streets provide the principal opportunity for formal and informal connections with neighbours and the local community. They must also provide good local access.

Movement corridors such as Pittwater Road, Pittwater provide safe, and efficient movement between centres, and neighbourhoods, whilst balancing the needs of the places and the communities it passes through.

This requires better:

- **Accessibility:** footpaths need to be suitable for use by people of all ages and abilities.
- **Connectivity:** direct routes to local destinations and services are required along streets that allocate sufficient road space to safe walking and cycling. A permeable and well-connected urban form that has human scale and attractive streetscapes. In local streets with low traffic volumes, safe cycling can be encouraged through design of the street environment for low vehicle speeds.
- **Amenity:** safe, direct and comfortable pedestrian pathways for all people are essential. Where footpaths, pedestrian crossings and wayfinding are of universal design, have appropriate lighting, shading, pram ramps, rest points and natural surveillance to maintain comfortable and safe conditions for pedestrians with mobility constraints, all of the community benefits, and people are able to be more active and healthy.

In addition, provision of fine grain urban form and land use mix through the co-location of schools, retail services and transport infrastructure in local centres contributes to enhanced walkability as well as the viability of, and access to, great places, centres and public transport.

Transport for NSW is also establishing the Principal Bicycle Network which will connect centres with high quality cycling routes.

## Local centres

Local centres include many of the District's great places: from a cluster of local shops, like those at Killarney Heights, to Eastwood and West Ryde that provide culturally diverse eating and shopping experiences. Local Centres such as Gordon and Pennant Hills are accessible with bus and rail networks linking to strategic centres. Ryde has potential to expand to expand as a civic and commercial hub, with localised services offering social infrastructure services and cultural facilities.

Local centres such as Mosman and Avalon serve as community hubs with natural and scenic qualities that enhance their character. Turramurra, St Ives and Cherrybrook are emerging as destinations for eateries and cafes offering unique neighbourhood qualities and cultural facilities.

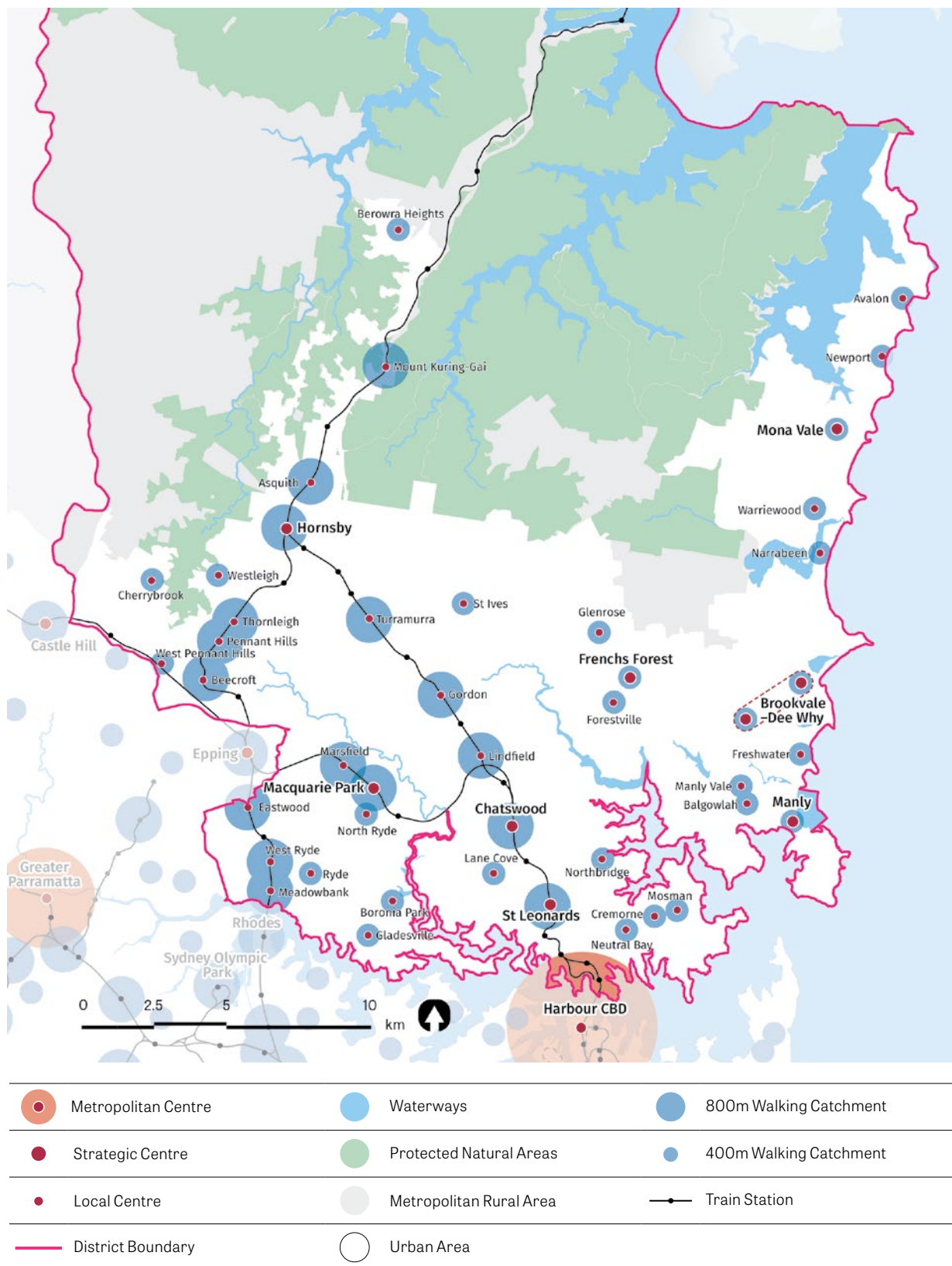
Local centres are a focal point of neighbourhoods and where they include public transport and transport interchanges, they are an important part of a 30-minute city. While local centres are diverse and vary in size, they provide essential access to day-to-day goods and services close to where people live.

*Future Transport 2056* identifies the importance of transport interchanges as places which will have a high level of accessibility which is enhanced as service frequencies and travel times are improved. There will be potential for interchanges to deliver mixed-use, walkable, cycle-friendly centres and neighbourhoods. As service frequencies and travel times are improved, there is a need for councils to consider local conditions through place-based planning that provides for centres around interchanges to grow and evolve over time.

Local centres also have an important role in providing local employment. Approximately 200 local centres include a supermarket with floorspace greater than 1,000 square metres. These centres account for close to 18 per cent of all Greater Sydney's jobs (refer to Figure 13).

The mapped local centres in Figure 13 are not exhaustive as there are many local centres without a supermarket that provide essential local functions such as access for goods and services, social or community infrastructure or transport interchanges. Rural towns and villages also provide essential goods and services and are an important focus for the local community.

Figure 13: North District – centres



The map illustrates the approximate five-minute walking catchment around local centres serviced by local transport and the approximate 10-minute walking catchment around a centre focused on a mass transit stop. Actual walking catchments of 5-10 minutes will depend on local connections and conditions and should be determined using a place-based approach within which housing, retail and commercial growth opportunities need to be balanced and planned for by councils.



## Principles for local centres

As part of the exhibition of the revised draft district plans, a number of councils recommended additions to the centres identified in Figure 13. As the management of local centres is predominantly led by councils, the resolution of which local centres are important to each council will need to be assessed as part of their preparation of local strategic planning statements and local environmental plans. Councils will need to consider which centres:

- will be appropriate to accommodate additional housing as part of their housing strategy
- will need to grow to provide for the required goods and services of the community
- may also need to grow to deliver other roles for the community, such as recreational, cultural and community hubs.

This hierarchy of local, strategic and metropolitan centres (including transport interchanges) should be informed by an evidence-based assessment of local and district-wide housing, employment, retail, commercial services and infrastructure demand.

An understanding of the identity, character, size, land use mix, function, catchment and potential of each local centre and the local centres' hierarchy will inform housing strategies. Additional residential development within a five-minute walk of a centre focused on local transport, or within a 10-minute walk of a centre with city-shaping or city-serving public transport, will help create walkable local centres. However, housing should not compromise a centre's primary role to provide goods and services, and the opportunity for the centre's employment function to grow and change over time.

Place-based planning for centres should address the following principles:

- provide public realm and open space focus
- deliver transit-oriented development and co-locate facilities and social infrastructure
- provide, increase or improve local infrastructure and open space
- improve walking, cycling and public transport connections including through the Greater Sydney Green Grid
- protect or expand retail and/or commercial floor space

- protect or expand employment opportunities.
- integrate and support arts and creative enterprise and expression
- support the night-time economy
- augment or provide community facilities, services, arts and cultural facilities
- conserve and interpret heritage values
- accommodate local festivals, celebrations, temporary and interim uses
- increase residential development in, or within a walkable distance of, the centre
- provide parking that is adaptable to future uses and takes account of access to public transport, walking and cycling connections.

A vibrant and safe night-time economy will enhance the social and recreational needs of communities across Greater Sydney. Planning for a night-time economy in centres includes supporting a range of small businesses such as retail, arts and cultural enterprises and events.

## Heritage

Heritage and history are important components of local identity and contribute to great places. The District's rich Aboriginal, cultural and natural heritage reinforces its sense of place and identity. A variety of local heritage items and heritage streetscapes also form part of the character of centres throughout the District.

The District's communities share heritage items and historic places such as the State heritage listed Sydney Harbour Bridge and Aboriginal place listings, rock art sites, middens and conservation areas. The District's natural and cultural heritage values are reflected in its landscape and rural areas, water catchment and ridgelines.

Identifying, conserving, interpreting and celebrating Greater Sydney's heritage values leads to a better understanding of history and respect for the experiences of diverse communities. Heritage identification, management and interpretation are required so that heritage places and stories can be experienced by current and future generations.

Sympathetic built-form controls and adaptive re-use of heritage are important ways to manage the conservation of heritage significance and new development. Respectfully combining history and heritage with modern design achieves an urban environment that demonstrates shared values and contributes to a sense of place and identity. It is particularly important for transitional areas, places experiencing significant urban renewal, and where it is necessary to take account of the cumulative impacts of development on heritage values.

Improved public access and connection to heritage through innovative interpretation is also required.

Understanding the significance and community values of heritage early in the planning process provides the greatest opportunity for conservation and management. Protection and management

of heritage is undertaken by a broad range of stakeholders including Aboriginal people, State and local governments, businesses and communities.

The Office of the NSW Government Architect has prepared guidelines in *Better Placed: An integrated design policy for the built environment of New South Wales*, which support the creation and renewal of great places, for use by all practitioners including State and local governments, businesses and the community.

#### Related government initiative:

- Government Architect NSW 2017  
*Better Placed: An integrated design policy for the built environment of New South Wales*

## Place-based planning

Place-based planning is a design-led and collaborative way of examining the complexity of the city by viewing it as a mosaic of different places, each with unique potential and characteristics. It is a means of better understanding a place, and building relationships and collaboration to deliver a vision and solutions that respond to a place's potential.

Focusing on how specific places work and collaborative processes that recognise the value and need for local expertise, knowledge, responsibility and investment allows development of a shared vision and values.

People involved in the process vary depending on the circumstances, nature and scale of the task and may include the community, local businesses, residents, State and local governments and other stakeholders.

A shared vision for a place that resolves different perspectives and interests can then be created.

The shared vision and a spatial framework for a place provide the basis for future development, governance and allocation of responsibilities. The outputs of place-based planning detail how the vision will be implemented and the place activated, monitored and managed. Place-based planning is also a way of managing change over time through staging, sequencing and re-visioning that allows for continual adjustments and improvements.

A place-based planning approach can be applied to streets, neighbourhoods, local centres and larger scale urban renewal. This approach also underpins the development of strategies in Collaboration Areas.

 Actions	Responsibility
19. Using a place-based and collaborative approach throughout planning, design, development and management, deliver great places by: <ol style="list-style-type: none"> <li>prioritising a people-friendly public realm and open spaces as a central organising design principle</li> <li>recognising and balancing the dual function of streets as places for people and movement</li> <li>providing fine grain urban form, diverse land use mix, high amenity and walkability, in and within a 10-minute walk of centres</li> <li>integrating social infrastructure to support social connections and provide a community hub</li> <li>recognising and celebrating the character of a place and its people</li> </ol>	Councils, other planning authorities, State agencies and State-owned corporations
20. In Collaboration Areas, Planned Precincts, Growth Areas and planning for centres: <ol style="list-style-type: none"> <li>investigate opportunities for precinct based provision of adaptable car parking and infrastructure in lieu of private provision of car parking</li> <li>ensure parking availability takes into account the level of access by public transport</li> <li>consider the capacity for places to change and evolve, and accommodate diverse activities over time</li> <li>incorporate facilities to encourage the use of car sharing, electric and hybrid vehicles including changing stations.</li> </ol>	Councils, other planning authorities, and State agencies
21. Identify, conserve and enhance environmental heritage by: <ol style="list-style-type: none"> <li>engaging with the community early in the planning process to understand heritage values and how they contribute to the significance of the place</li> <li>applying adaptive re-use and interpreting of heritage to foster distinctive local places</li> <li>managing and monitoring the cumulative impact of development on the heritage values and character of places.</li> </ol>	Councils, other planning authorities, State agencies and State-owned corporations
22. Use place-based planning to support the role of centres as a focus for connected neighbourhoods.	Councils, other planning authorities, and State agencies
23. Use flexible and innovative approaches to revitalise high streets in decline.	Councils, other planning authorities, and State agencies



## Directions for productivity



### A well-connected city

#### Planning Priority N12

Delivering integrated land use and transport planning and a 30-minute city

#### Planning Priority N14

Leveraging inter-regional transport connections



### Jobs and skills for the city

#### Planning Priority N7

Growing a stronger and more competitive Harbour CBD

#### Planning Priority N8

Eastern Economic Corridor is better connected and more competitive

#### Planning Priority N9

Growing and investing in health and education precincts

#### Planning Priority N10

Growing investment, business opportunities and jobs in strategic centres

#### Planning Priority N11

Retaining and managing industrial and urban services land

#### Planning Priority N13

Supporting growth of targeted industry sectors.



## 4

# Productivity

The vision for Greater Sydney as *A Metropolis of Three Cities* – the Western Parkland City, the Central River City and the Eastern Harbour City – seeks to deliver a more productive region. This will be achieved by driving opportunities for investment, business and jobs growth; supporting economic diversity; supporting internationally competitive industry sectors; and rebalancing the region's eastern economic focus so that all three cities benefit from growth.

The urban structure to support a metropolis of three cities needs to ensure people have access to a large number and range of jobs and services delivering a well-connected city – a 30-minute city.

A well-connected Greater Sydney will contribute to productivity by improving efficiency in supply chains and reducing business costs; increasing access to markets; enhancing access to large numbers of skilled workers; and enhancing business-to-business interactions.

Metropolitan and strategic centres provide 50 per cent of all Greater Sydney's jobs and therefore play a significant role in providing jobs close to home. When larger local centres are considered, this increases to 68 per cent. Facilitating the growth of new metropolitan strategic and local centres will be an important outcome in growing jobs.

The North District forms a large part of the Eastern Harbour City and its economy is focused on the Harbour CBD which includes North Sydney as well as the strategic centres within the Eastern Economic Corridor, including St Leonards, Chatswood and Macquarie Park. The District is supported by Hornsby and the population-driven economy of the Northern Beaches (refer to Figures 14 and 15).

Efficient transport connections, and safe and convenient walking and cycling routes create a 30-minute city. This is where most people can travel

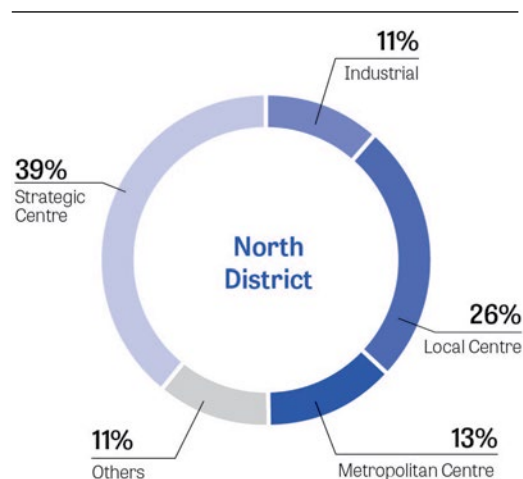
to their nearest metropolitan city centre by public transport within 30 minutes; and where everyone can travel to their nearest strategic centre by public transport seven days a week to access jobs, shops and services.

Sydney Metro will provide faster transport connections which will bolster the influx of businesses to the North District and boost employment growth.

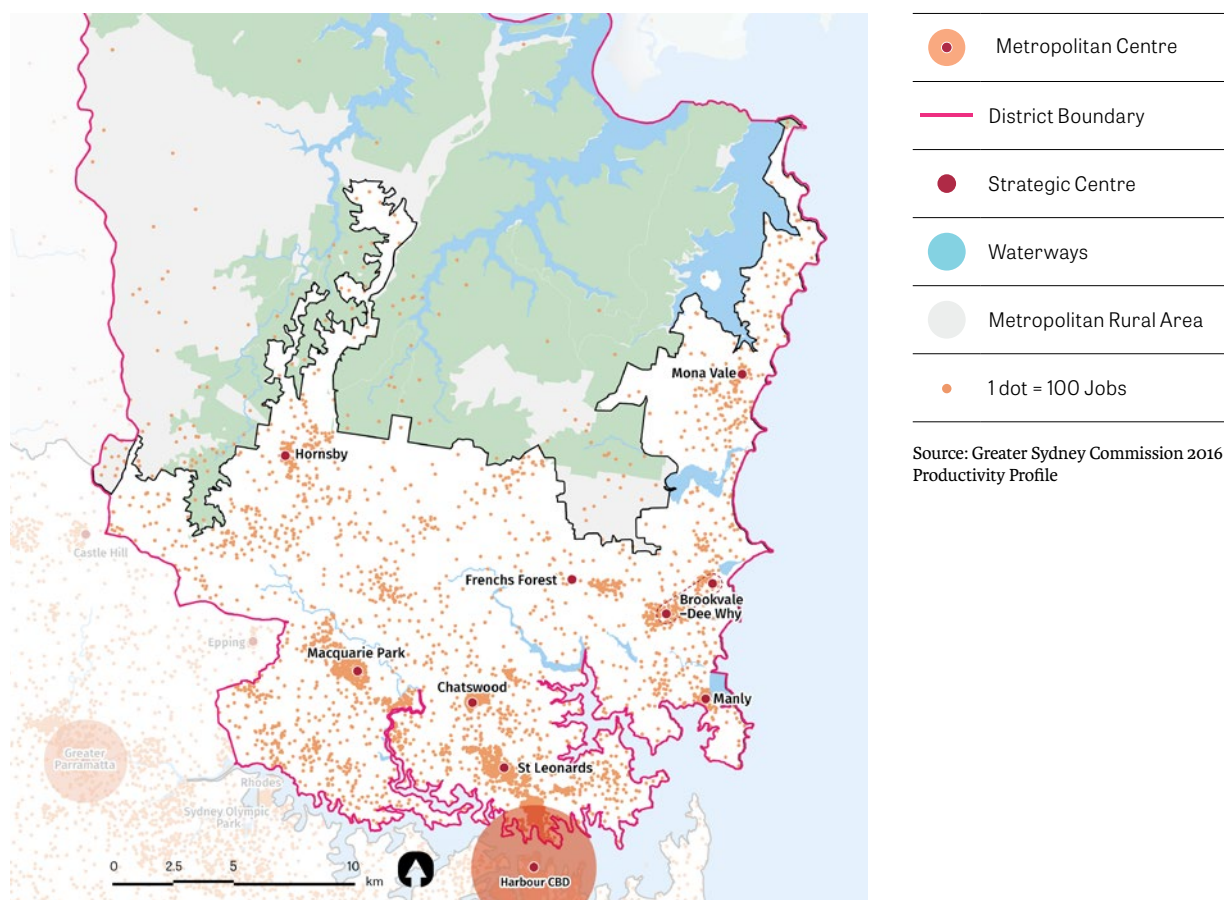
The North District has a high proportion of knowledge and professional services jobs, and health and education jobs, compared to the Greater Sydney average. These fast-growing employment sectors are the biggest contributors to economic growth in the District and foster innovation which drives global competitiveness.

Job targets for strategic centres will guide councils and State agencies to the potential scale of growth and inform land use and infrastructure planning.

**Figure 14:** North District job distribution by type of location



Source: Australia Bureau of Statistics Census 2011

**Figure 15:** North District job density

Intensification of health and education facilities and ancillary businesses will occur at Macquarie Park, Frenchs Forest (to support the Northern Beaches Hospital) and St Leonards, which have all been identified as health and education precincts. Macquarie Park is the largest non-CBD office market in Australia and is set to become Australia's fourth largest commercial precinct by 2030.

The transition from traditional industrial to advanced manufacturing and innovation industries will further boost productivity for the District and Greater Sydney. With the North District having the least amount of industrial and urban services land to accommodate these activities, it is critical to maintain this land and provide important services and jobs for the District.

Tourism is a major contributor to the local economy, with domestic and international tourists visiting its coast and Harbour beaches, national parks, sites such as West Head, Taronga Zoo and Luna Park, and retail centres such as Chatswood.

For the North District, improving productivity can be achieved by the following Planning Priorities:

- N7.** Growing a stronger and more competitive Harbour CBD.
- N8.** Eastern Economic Corridor is better connected and more competitive.
- N9.** Growing and investing in health and education precincts.
- N10.** Growing investment, business opportunities and jobs in strategic centres.
- N11.** Retaining and managing industrial and urban services land.
- N12.** Delivering integrated land use and transport planning and a 30-minute city
- N13.** Supporting growth of targeted industry sectors.
- N14.** Leveraging inter-regional transport connections.





North Sydney

## Planning Priority N7

### Growing a stronger and more competitive Harbour CBD

In giving effect to *A Metropolis of Three Cities*, this Planning Priority delivers on the following objective and the corresponding strategies:

#### Objective 18

Harbour CBD is stronger and more competitive.

## Harbour CBD

Growing the global competitiveness of Greater Sydney is fundamental to the vision of a metropolis of three cities.

The Harbour CBD contains 22 per cent of Greater Sydney's jobs and is Australia's financial business capital, containing a large proportion of the regional headquarters of multinational and national companies<sup>11</sup>. It has the largest commercial office market in Australia with the largest concentration of high-value knowledge-intensive jobs.

The Harbour CBD is a metropolitan city centre and includes the areas of Sydney CBD, **North Sydney CBD**, Barangaroo, Darling Harbour, Pyrmont, The Bays Precinct, Camperdown-Ultimo health and education precinct, Central to Eveleigh, part of Surry Hills and Sydney East, and is therefore discussed in detail in Planning Priority E7 of the Eastern City District Plan.

Delivering a well-connected city where transport investments improve residents' ability to access a larger and more diverse pool of jobs is central to the Harbour CBD.

Maintaining a long-term supply of office space will maintain Greater Sydney's global economic role, and should not be compromised by residential development. Future planning for the Harbour CBD will balance high levels of development with high levels of amenity.

## North Sydney CBD as part of the Harbour CBD

North Sydney CBD is a thriving office market and is an attractive complementary office market to Sydney CBD. For this reason, it is recognised as the northern component of the Harbour CBD.

North Sydney CBD is also an attractive alternative to the Macquarie Park commercial office market, offering:

- a distinct and high quality commercial core
- Sydney Harbour and Sydney CBD views
- high accessibility to Sydney CBD and a skilled labour force
- surrounding high-amenity residential and mixed-use precincts that, along with the commercial core, provide specialist services and experiences.

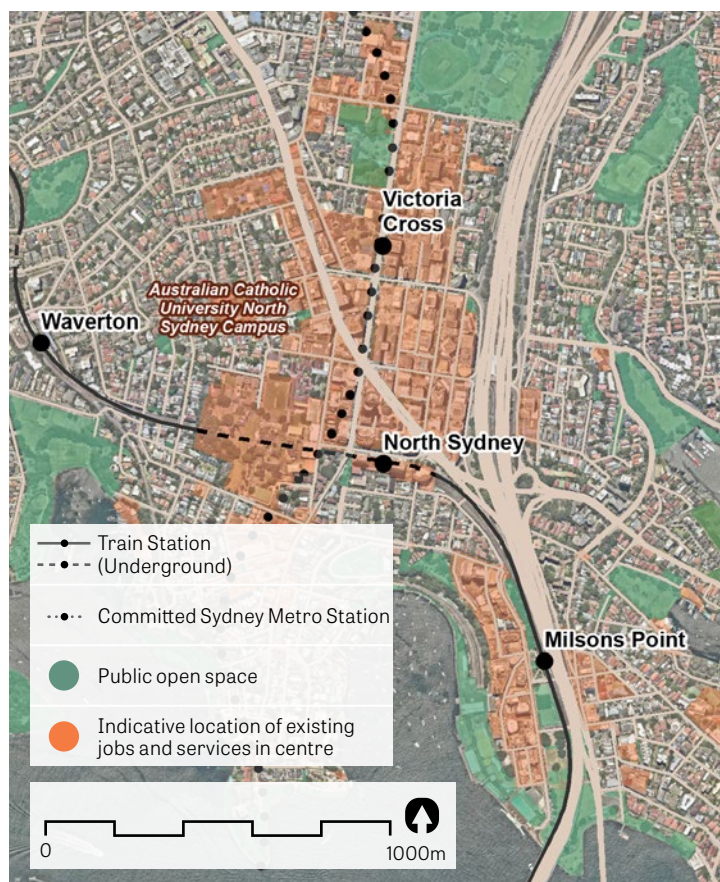
North Sydney CBD will continue to benefit from higher proportions of jobs in professional, scientific and technical services, financial and insurance services, and information, media and telecommunications<sup>12</sup>.

The North Sydney CBD is located on a rail line, and includes a bus interchange and access to major arterial roads. Sydney Metro City & Southwest will deliver a second North Sydney station – Victoria Cross station – to improve connectivity with the Harbour CBD and other centres in the Eastern Economic Corridor and expanded labour pool from the north west. North Sydney CBD's strong commercial core is thriving. Its ongoing protection and growth is key to its prominent role in the Greater Sydney office market. This commercial core is complemented by educational institutions, including the Australian Catholic University and many schools; Greenwood Plaza; and civic uses including the North Sydney Council chambers and Stanton Library.

North Sydney CBD has access to the Sydney CBD's existing tourism infrastructure. This access, combined with a waterside location, spectacular views and amenity, provide opportunities to increase visitation and further diversify the local economy.

With many office workers using the North Sydney CBD commercial core, a more diverse night-time economic offering should be explored. Continuing to improve walking and cycling links will attract business to the North Sydney CBD. For the same reason, public spaces should be protected from overshadowing and wind (potentially generated from buildings).





North Sydney	Jobs
2016 Estimate	60,400
2036 Baseline Target	76,000
2036 Higher Target	81,500

Data sources: Public open space - Sydney Open Space Audit (DPE 2016), Aerial Photo - Nearmap 2018

## Actions

## Responsibility

24. Grow economic development in the North Sydney CBD to:
  - a. maximise the land use opportunities provided by the new station
  - b. grow jobs in the centre and maintain a commercial core
  - c. strengthen North Sydney's reputation as an education centre, to grow jobs and add diversity
  - d. expand after hours' activities
  - e. encourage growth in business tourism as a conference location that takes advantage of North Sydney's identity as a business hub, its location, access and views
  - f. provide a variety of high quality civic and public spaces befitting a globally-oriented CBD, which can be utilised for a range of cultural and entertainment activities
  - g. improve amenity by reducing the impact of vehicle movements on pedestrians
  - h. create capacity to achieve job targets by reviewing the current planning controls.
25. Prioritise:
  - a. public transport projects to the Harbour CBD to improve business-to-business connections and support the 30-minute city
  - b. infrastructure investments particularly those focused on access to the transport network, which enhance walkability within 2 kilometres of metropolitan or strategic centres or 10 minutes walking distance of a local centre
  - c. 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.

North Sydney Council, other planning authorities, and State agencies

Councils, other planning authorities, and State agencies

## Planning Priority N8

### Eastern Economic Corridor is better connected and more competitive

In giving effect to *A Metropolis of Three Cities*, this Planning Priority delivers on the following objective and the corresponding strategies:

#### Objective 15

The Eastern, GPOP and Western economic corridor are better connected and more competitive.

Enhancing transport connectivity to and within the Eastern Economic Corridor and removing the barriers to investment and business in the strategic centres along the Corridor will strengthen Greater Sydney's global competitiveness.

The Eastern Economic Corridor, from Macquarie Park to Sydney Airport, contains close to one-third of Greater Sydney's jobs<sup>13</sup>.

In the North District, the Corridor includes North Sydney as part of the Harbour CBD and the strategic centres of Macquarie Park, Chatswood and St Leonards (see Planning Priorities N7 and N10). Macquarie Park and St Leonards are also important health and education precincts (see Planning Priority N9).

The major assets of the Eastern Economic Corridor that have significance for the North District include:

- Four of the top ten office precincts in Greater Sydney: Chatswood, St Leonards, Macquarie Park and North Sydney as part of the Harbour CBD (refer to Table 3)
- Macquarie University and the principal referral hospital of Royal North Shore Hospital
- Artarmon's industrial areas, which provide for essential trades and services that support specialised economic activities.

Growing the economic activity of these major assets is discussed in more detail in the following Planning Priorities:

- N9 – Growing and investing in health and education precincts
- N10 – Growing investment, business opportunities and jobs in strategic centres

**Table 3:** Greater Sydney office precincts 2017

Precinct	Office floor space (sqm)
Sydney CBD*	5,079,899
Macquarie Park	878,950
Sydney CBD fringe*	864,640
North Sydney*	822,496
Parramatta CBD	707,099
St Leonards	315,542
Chatswood	278,919
Norwest	272,474
Green Square/Mascot	200,000
Rhodes	161,668
Sydney Olympic Park	158,907
<b>TOTAL</b>	<b>9,740,594</b>

Source: Colliers International 2017, *NSW Office Market Research Report 2017* (unpublished)

\*Component of Harbour CBD

A number of committed and potential transport infrastructure projects will improve accessibility between the well-established economic agglomerations along and near the corridor and significantly increase the size of the labour market which can access the corridor by public transport, boosting productivity. These transport infrastructure projects include the following:


- The committed Sydney Metro Northwest and Sydney Metro City & Southwest will extend the reach and capacity of the existing rail network beyond Rouse Hill and significantly enhance the accessibility to, and between, approximately 1 million jobs which will exist between Rouse Hill and Sydney Airport by 2036.

- The committed NorthConnex will, among other wider benefits to Greater Sydney, improve accessibility to Hornsby and the Central Coast.
- The potential Northern Beaches to Chatswood bus improvements will better connect the major new Northern Beaches Hospital at Frenchs Forest and the Northern Beaches with the corridor. The roles of Frenchs Forest and Chatswood as interchange locations connecting parts of the Northern Beaches to other strategic centres will increase, and planning for improvement to the interchange facilities will need to be considered.
- A potential mass transit link from Parramatta to Epping would significantly improve the connection between Greater Sydney's (and in fact Australia's) two largest suburban centres of Macquarie Park and Greater Parramatta.

The NSW Government is also directly facilitating economic activity in the Eastern Economic Corridor through the work of the NSW Department of Planning and Environment, and UrbanGrowth NSW Development Corporation and Landcom in the following initiatives:

- Macquarie Park Urban Renewal Area, where the NSW Department of Planning and Environment will assess opportunities for new community facilities, vibrant spaces and homes close to transport links and jobs
- St Leonards and Crows Nest, where the NSW Department of Planning and Environment is working with Lane Cove, North Sydney and Willoughby City councils to undertake a strategic planning investigation of the St Leonards and Crows Nest Station Precinct.

The Greater Sydney Commission's District Commissioner chairs both of these collaborative processes.

 Actions	Responsibility
26. Prioritise public transport investment to deliver the 30-minute city objective for strategic centres along the economic corridor.	Councils, other planning authorities State agencies, and State-owned corporations
27. Prioritise transport investments that enhance access to the economic corridors and between centres within the corridors.	Councils, other planning authorities, State agencies, and State-owned corporations
28. Co-locate health, education, social and community facilities in strategic centres along the economic corridor.	Councils, other planning authorities, State agencies, and State-owned corporations

# Planning Priority N9

## Growing and investing in health and education precincts

In giving effect to *A Metropolis of Three Cities*, this Planning Priority delivers on the following objective and the corresponding strategy:

**Objective 21**  
Internationally competitive health, education, research and innovation precincts.

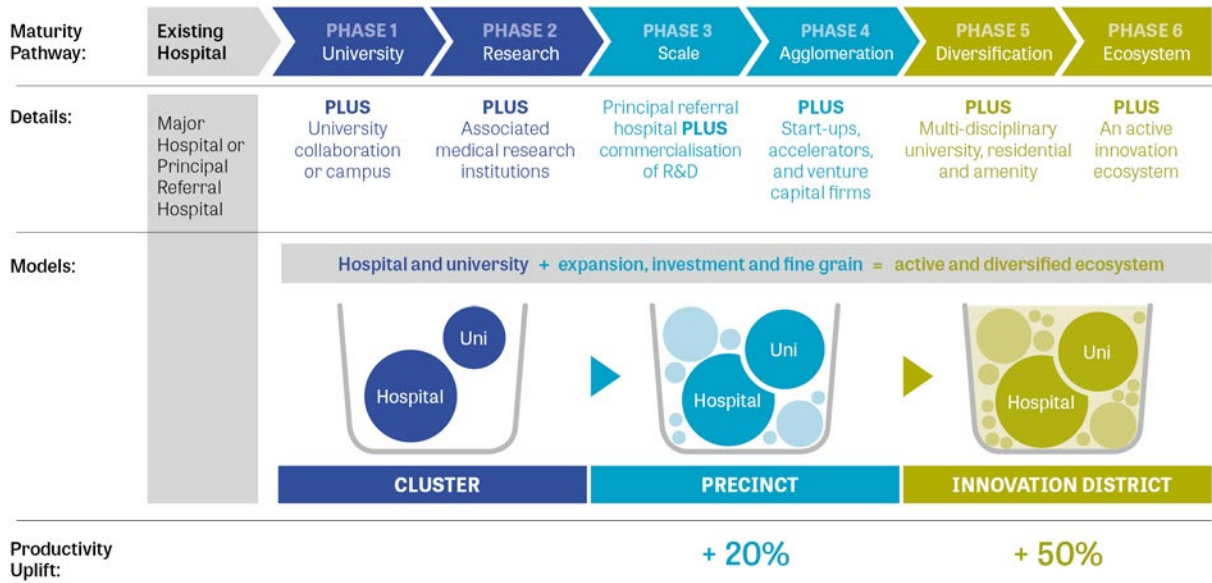
Greater Sydney’s health and education precincts are drivers of export services. Education is the largest export service industry in NSW, with international enrolments growing at a faster rate than domestic enrolments.

- Government investment in, and the growth of, health and education precincts will:
- diversify job opportunities across Greater Sydney
  - facilitate jobs closer to home
  - strengthen the international competitiveness of the economy, particularly in the area of innovation.

- The North District has three health and education precincts:
- St Leonards, which contains Royal North Shore Hospital
  - Frenchs Forest, through the \$600 million Northern Beaches Hospital, due to open in 2018
  - Macquarie Park, including Macquarie University, a hospital and a high-tech industrial employment hub.

These three health and education precincts are also classified as strategic centres. Planning Priority N10 outlines the generic actions for growing investment, business and jobs opportunities in strategic centres. This Planning Priority outlines the centre-specific actions for the District’s health and education precincts, together with generic health and education actions.

Figure 16: Maturity Pathway for health and education precincts






As outlined in *A Metropolis of Three Cities*, the evolution of health and education precincts follow a Maturity Pathway<sup>14</sup>. As precincts evolve, the economic productivity of the precinct increases substantially. This corresponds to three general models, which become progressively more complex: Clusters, Precincts and Innovation Districts (refer to Figure 16).

The Frenchs Forest health and education precinct currently corresponds to the Cluster model. The St Leonards health and education precinct is further

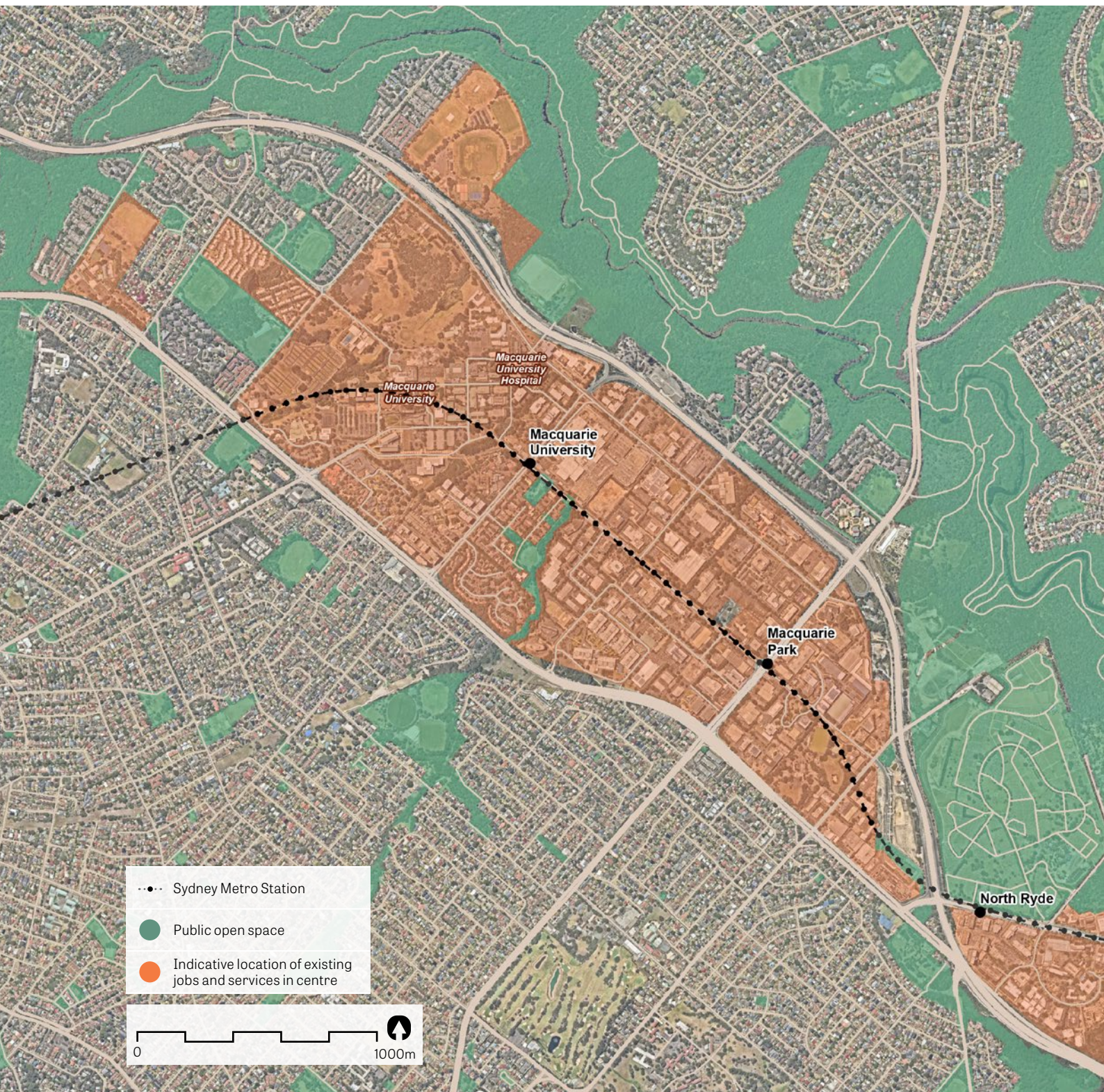
along the Maturity Pathway at the Precinct stage. There will need to be tailored responses along the Maturity Pathway based on what is already in place and what is required in the short, medium and long term. To be truly internationally competitive and achieve sufficient critical mass, it is not expected that all precincts should, or will be able to, develop into an Innovation District.

Housing location and choice for key workers and students are important considerations, and in this regard are considered economic infrastructure.

 Actions	Responsibility
29. Facilitate health and education precincts that: <ul style="list-style-type: none"> <li>a. create the conditions for the continued co-location of health and education facilities, and services to support the precinct and growth of the precincts</li> <li>b. have high levels of accessibility</li> <li>c. attract associated businesses, industries and commercialisation of research</li> <li>d. include housing opportunities for students and workers within 30 minutes of the precinct.</li> </ul>	Councils other planning authorities, and State agencies
30. Deliver and implement a Place Strategy and Infrastructure Plan for the Frenchs Forest health and education precinct.	NSW Department of Planning and Environment, State agencies, Greater Sydney Commission, NSW Health and Northern Beaches Council
31. Deliver and implement a Place Strategy and Infrastructure Plan for the St Leonards health and education precinct.	NSW Department of Planning and Environment, State agencies, Greater Sydney Commission, NSW Health, Lane Cove Council, North Sydney Council and Willoughby City Council
32. Deliver and implement a Place Strategy and Infrastructure Plan for the Macquarie Park health and education precinct.	NSW Department of Planning and Environment, State agencies, Greater Sydney Commission, NSW Health and City of Ryde Council



## Macquarie Park



Data sources: Public open space - Sydney Open Space Audit (DPE 2016), Aerial Photo - Nearmap 2018





The strategic centre of Macquarie Park is a health and education precinct. The centre contains Macquarie University and Macquarie University Hospital. Macquarie Hospital and CSIRO Lindfield are nearby.

Macquarie Park is the largest non-CBD office market in Australia with 854,254 square metres of office floor space (January 2014) and continues to develop. It has grown as a major centre for knowledge-intensive employment and now accounts for one-third of jobs in the centre<sup>15</sup>.

In 2016, the centre was estimated to include approximately 58,500 jobs. Wholesale trade, professional, scientific and technical services and information, media and telecommunications are significant employment sectors in the centre. Maintaining a high quality commercial core will allow continued growth of the precinct as a major employment hub<sup>16</sup>.

The centre includes Macquarie Centre shopping precinct and is serviced by three train stations

with links to Chatswood and Epping and local and regional bus services. The potential for improved future connections with Parramatta and the District's other strategic centres including Frenchs Forest would present further opportunities in the area.

Transport for NSW has plans to upgrade transport services within the area. These include:

- faster and more efficient interchanges between buses, trains and taxis
- provision of continuous kerbside bus lanes along Herring Road (between Ivanhoe Place and Waterloo Road), Waterloo Road (between Cottonwood Crescent and Lane Cove Road), and southbound on Lane Cove Road (between Waterloo Road and Epping Road); and
- intersection upgrades.

Stage 1 of these works started late in 2017 and will be completed before the rail conversion shutdown in late 2018. Stage 2 improvement works will

commence after Metro Rail commences operation in 2019.

Macquarie Park is identified as a place where the Greater Sydney Commission will chair the collaboration process, given its important health and education uses.

It is an Urban Renewal Area including Macquarie University (Herring Road) Precinct, North Ryde Station Precinct and Macquarie Park Investigation Area.

The NSW Department of Planning and Environment is leading planning in this area, in collaboration with the Commission, City of Ryde Council, NSW Health, Macquarie University, Macquarie Centre, Transport for NSW, NSW Roads and Maritime Services, and Department of Industry.

Macquarie Park	Jobs
2016 Estimate	58,500
2036 Baseline Target	73,000
2036 Higher Target	79,000



## Actions

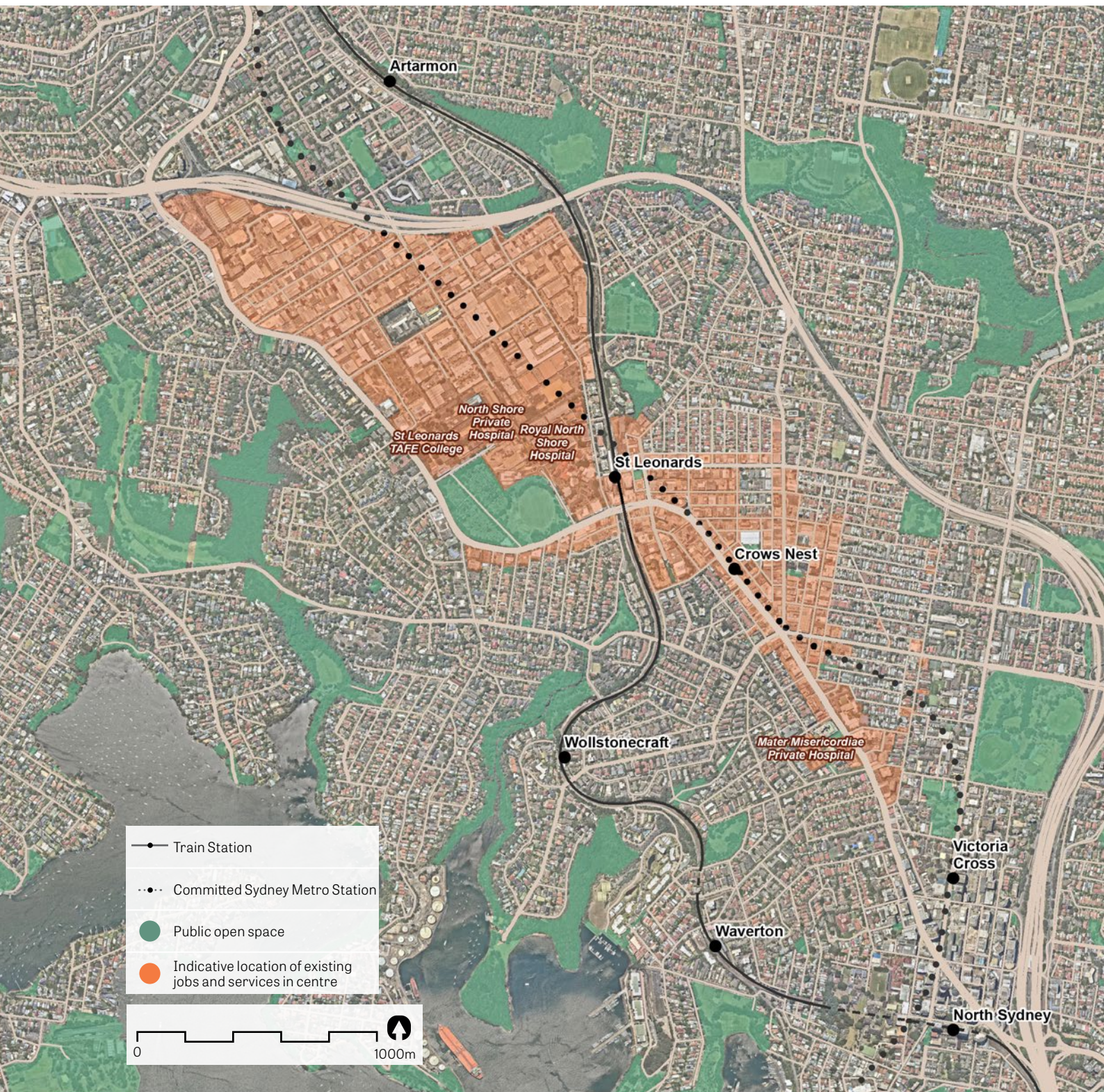
33. Strengthen Macquarie Park through approaches that:
  - a. enable additional capacity for commercial floor space and maintain a commercial core
  - b. improve urban amenity as the centre transitions from business park to a vibrant commercial centre, including reducing the impact of vehicle movements on pedestrian and cyclist accessibility
  - c. deliver a finer grain road network to enhance pedestrian connections and provide new access points
  - d. promote design excellence in urban design by upgrading public areas
  - e. deliver an innovation ecosystem in Macquarie Park, capitalising on the relationship with Macquarie University and nearby high-tech and medical corporations
  - f. improve public transport connections to Parramatta and the District's other strategic centres, including the Northern Beaches Hospital.

## Responsibility

NSW Department of Planning and Environment, State agencies, Greater Sydney Commission, NSW Health and City of Ryde Council



## St Leonards



Data sources: Public open space - Sydney Open Space Audit (DPE 2016), Aerial Photo - Nearmap 2018





The strategic centre of St Leonards is a health and education precinct. St Leonards has a range of significant metropolitan health and education assets, including the Royal North Shore Hospital, North Shore Private Hospital and TAFE NSW St Leonards campus.

There is potential to leverage the Royal North Shore public and private hospitals and the Mater Hospital to grow jobs in complementary health services and existing education facilities.

St Leonards is a mixed-use centre with high-rise offices, and high density residential development. The Artarmon employment area is a highly productive industrial area with a very low vacancy rate<sup>17</sup>.

A vibrant restaurant and retail strip is located along Willoughby Road, Crows Nest which provides a vibrant night-time economy.

The area is well served by public transport with St Leonards Station and nearby Artarmon Station. The importance of the precinct as a key employment centre in Greater Sydney combined with the new Sydney Metro station proposed at Crows Nest, presents an opportunity for renewal and activation.

St Leonards is identified as a place where the Greater Sydney Commission will chair the collaboration process given its important health and education uses.

St Leonards-Crows Nest is a Planned Precinct with the NSW Department of Planning and Environment leading planning in this area, in collaboration with the Commission, North Sydney, Willoughby and Lane Cove councils, NSW Health, Transport for NSW, NSW Roads and Maritime Services, Department of Industry and TAFE NSW.

St Leonards	Jobs
2016 Estimate	47,100
2036 Baseline Target	54,000
2036 Higher Target	63,500



## Actions

34. Strengthen St Leonards through approaches that:
  - a. leverage the new Sydney Metro Station at Crows Nest to deliver additional employment capacity
  - b. grow jobs in the centre
  - c. reduce the impact of vehicle movements on pedestrian and cyclist accessibility
  - d. protect and enhance Willoughby Road's village character and retail/restaurant strip
  - e. deliver new high quality open space, upgrade public areas, and establish collaborative place-making initiatives
  - f. promote synergies between the Royal North Shore Hospital and other health and education-related activities, in partnership with NSW Health
  - g. retain and manage the adjoining industrial zoned land for a range of urban services.

## Responsibility

NSW Department of Planning and Environment, State agencies, Greater Sydney Commission, NSW Health, Lane Cove Council, North Sydney Council and Willoughby City Council

## Frenchs Forest



Data sources: Public open space - Sydney Open Space Audit (DPE 2016), Aerial Photo - Nearmap 2018

The strategic centre of Frenchs Forest is a health and education precinct. The Northern Beaches Hospital development will anchor a new health and education precinct for the North District and Greater Sydney. The hospital is due to be completed in 2018 and will provide knowledge-intensive jobs, innovation and service delivery. The NSW Government is upgrading roads around the new Northern Beaches Hospital.

The new hospital and improved transport links will be a catalyst for revitalisation of the area and the

creation of a vibrant town centre with new homes and jobs.

Frenchs Forest is identified as a place where the Greater Sydney Commission will chair the collaboration process, given the important health uses that are proposed.

Frenchs Forest is a Planned Precinct with the NSW Department of Planning leading planning of the area in collaboration with the Commission, NSW Health, NSW Department of Education, Transport for NSW and NSW Roads and Maritime Services.

Frenchs Forest	Jobs
2016 Estimate	9,300
2036 Baseline Target	12,000
2036 Higher Target	13,000

Actions	Responsibility
<div>35. Strengthen Frenchs Forest through approaches that:<ul style="list-style-type: none"><li>a. leverage the investment in the Northern Beaches Hospital to provide a vibrant and well-connected strategic centre</li><li>b. deliver an urban core with a mix of commercial and residential uses, open space and community facilities</li><li>c. provide new housing, including affordable housing</li><li>d. encourage walkability and cycling within the precinct</li><li>e. enhance the natural setting of the area by embellishing existing open space</li><li>f. attract new, innovative health and medical related commercial premises to support the hospital</li><li>g. reinforce the centre as an employment hub for the Northern Beaches, building on the existing business park east of the Wakehurst Parkway</li><li>h. continue to investigate a high frequency public transport link, in partnership with State agencies.</li></ul></div>	NSW Department of Planning and Environment, State agencies, Greater Sydney Commission, NSW Health and Northern Beaches Council

## Planning Priority N10

### Growing investment, business opportunities and jobs in strategic centres

In giving effect to *A Metropolis of Three Cities*, this Planning Priority delivers on the following objective and the corresponding strategies:

#### Objective 22

Investment and business activity in centres.

Greater Sydney continues to benefit from the historic policy of locating major trip-generating activities (such as retail, hospitality, offices, health and education, community and administrative services) in centres at train stations.

The growth, innovation and evolution of centres will underpin the economy of the North District. Centres continue to be a key organising element of the urban structure of Greater Sydney and provide access to jobs, goods and services. Their vitality and viability are important to local economies and their character defines local areas. Well-planned centres help to stimulate economic activity and innovation through the co-location of activities, provide jobs closer to where people live and use infrastructure more efficiently.

This Plan builds on the existing strengths of each centre within a common framework to deliver on the wider productivity and liveability objectives to grow jobs across Greater Sydney and improve community access to good and services. To manage the growth and change of the North District's centres, a centres hierarchy has been established as outlined below:

- Metropolitan centre: North Sydney CBD as part of the Harbour CBD (refer to Planning Priority N7)
- Strategic centres: Brookvale-Dee Why, Chatswood, Hornsby, Manly, Mona Vale, St Leonards, Frenchs Forest and Macquarie Park (for the latter three, refer to Planning Priority N9)
- Local centres (refer to Planning Priority N6).

All strategic centres will be the focus of public transport investments that seek to deliver the 30-minute city objective (refer to Planning Priority N12).

Some strategic centres in the North District have major office precincts or health and education activities. They differ in size and scale of economic activity. However, as strategic centres they all have similar expectations, including:

- high levels of private sector investment
- flexibility, so that the private sector can choose where and when to invest
- co-location of a wide mix of activities, including residential
- high levels of amenity, walkability and being cycle-friendly
- areas identified for commercial uses and, where appropriate, commercial cores.

Creating the conditions for growth and making centres great places is a focus of Planning Priority N6.

Employment growth is the principal underlying economic goal for metropolitan and strategic centres. Therefore the designation of a commercial core within a strategic centre, economic and employment uses, may be necessary to manage the impact of residential developments in crowding out commercial activity.

A balance must be struck in providing adequate mixed-use or residential zoned land around the commercial core zone to ensure new residential developments can benefit from access and services in centres.

Centres are not just for economic exchange. They are places where communities gather, and where recreational, cultural and educational pursuits are found. They are important to how people participate in community life.

Delivering housing within a walkable distance of strategic centres encourages non-vehicle trips, which foster healthier communities. Housing within centres contributes to a sense of vibrancy; however, the delivery of housing should not constrain the ongoing operation and expansion of commercial and retail activities.


Research has shown that the North District will need to accommodate more than 800,000 square metres of additional retail floor space over the next 20 years<sup>18</sup>. In addition, there will be significant demand for additional office floor space. Creating the opportunities to attract retail and office development locally brings jobs closer to homes. This requires growth in either existing or new centres. The principles for developing new centres are outlined in this Planning Priority. The NSW Department of Planning and Environment will prepare a state wide retail planning policy.

Rapid changes in technology and in retail trends, emerging night-time economies and population growth require councils to be agile and responsive in their planning for centres growth. Adaptive and flexible spaces may be required, particularly in

centres close to the CBD, because of an increasing demand for workspaces from start-up and creative industries.

Smart work hubs offer the conveniences of a modern office – high-speed internet, meeting rooms, video conferencing facilities, informal lounges and quiet booths – in local areas. They operate as shared workspaces with small businesses, government and corporate organisations. The creation of smart work hubs in strategic centres should be encouraged.

With economic growth a core goal for centres planning, job targets, expressed as a range, have been identified for each strategic centre, as well as for North Sydney CBD as part of the Harbour CBD. These targets seek to inform planning authorities and infrastructure agencies of anticipated growth. They should not be seen as maximum targets.

 Actions	Responsibility
<p>36. Provide access to jobs, goods and services by:</p> <ul style="list-style-type: none"> <li>a. attracting significant investment and business activity in strategic centres providing jobs growth</li> <li>b. diversifying the range of activities in all centres</li> <li>c. creating vibrant, safe places and quality public realm</li> <li>d. focusing on a human-scale public realm and locally accessible open space</li> <li>e. balancing the efficient movement of people and goods with supporting the liveability of places on the road network</li> <li>f. improving the walkability within and to the centre</li> <li>g. completing and improving a safe and connected cycling network to and within the centre.</li> <li>h. improving public transport services to all strategic centres</li> <li>i. conserving and interpreting heritage significance</li> <li>j. designing parking that can be adapted to future uses</li> <li>k. providing for a diverse and vibrant night-time economy in a way that responds to potential negative impacts</li> <li>l. creating the conditions for residential development within strategic centres and within walking distance (up to 10 mins), but not as the expense of the attraction and growth of jobs, retailing and services; where appropriate, strategic centres should define commercial cores informed by an assessment of their need.</li> </ul>	Councils, other planning authorities, and State agencies
37. Create new centres in accordance with the Principles for Greater Sydney's centres.	Councils and other planning authorities and State agencies
38. Prioritise strategic land use and infrastructure plans for growing centres, particularly those with capacity for additional retail floor space.	Councils and other planning authorities
39. Encourage opportunities for new smart work hubs.	Councils and other planning authorities
40. Review the current planning controls and create capacity to achieve the job targets for each of the District's strategic centres	Councils and other planning authorities





Crows Nest

The lower end of the range of these job targets reflects the baseline of projected jobs growth anticipated in the centre, while the upper end is an aspirational higher growth scenario to reflect outcomes in the case of future investment and land use planning in centres.

## Principles for Greater Sydney's centres

As Greater Sydney's population grows over the next 20 years, there will be a need to grow existing centres, particularly strategic centres and supermarket-based local centres, create new centres including business parks, and attract health and education activities into centres. The principles for developing new centres are:

- **Existing centres:** Expansion options will need to consider building heights and outward growth. In some cases, directly adjacent industrial land may be appropriate for centre expansions to accommodate businesses. Quality design and adequate infrastructure provision is critical to enable expansions. This approach needs to be informed by local government industrial strategies.
- **New centres:** These will be required across the whole of Greater Sydney.
- In land release areas, planning is to identify a range of centre types, including large and small local centres which could grow and evolve into new strategic centres and planning should maximise the number and capacity of centres on existing or planned mass transit corridors. To deliver this latter outcome centres need to be identified early to allow their incorporation into transport infrastructure plans.
- In established areas, innovative approaches to creating new centres are likely to be part of urban renewal and mixed-use developments.
- All new centres are to have good public transport commensurate with the scale of the centre.
- **Business parks:** Not all centres will start as retail centres. Creating jobs and providing services to local communities can be initiated within business parks. However, the built form of these business parks is critical – that is, they need to be developed, from the outset, as urban places which can transition into higher amenity and vibrant places while maintaining their main role as an employment precinct. Councils' retail and employment strategies should provide guidance on the transition of business parks into mixed employment precincts including, where appropriate, ancillary residential developments to support the business park.

- **New health and tertiary education facilities**, such as hospitals and community health centres. These should be located within or directly adjacent to centres, and ideally co-located with supporting transport infrastructure. In some cases, health and education facilities may be the anchor of a new centre. Built form is critical to facilitate the transition of centres with health and education uses into more mature innovation precincts. A mix of retail and other services including hotel type accommodation adjacent to the precinct should be supported.
- **Clusters of large format retail** should be treated as part of the retail network, and planning for new clusters of large format retail should be done in the same way other new centres are planned. This includes ensuring centres are places that can grow and evolve over time, and have adequate access to transport services and quality public domains.

Increases in online ordering and home delivery means some retail is essentially a distribution centre. These 'dark retail' stores are most suited to industrial areas as they involve significant logistics support and do not require community access.

Where there is a prevalence of retail activities in an industrial area, there may be exceptional circumstances which warrant the development of a new centre. This should be informed by a net community benefit test supported by a strategic review of centres (which identifies the need for the centre) and an industrial land review (which identifies that the loss of industrial activity can be managed) for the local government area. These reviews are to be prepared by councils, and endorsed by the Greater Sydney Commission.

In the North District where there is the lowest provision of industrial and urban services lands, 'retain and manage' is the primary direction for managing industrial and urban services land and any consideration of new centres must only be determined by Councils as part of their review of their local environmental plan.

In such cases, the centre should be:

- located where public transport services are commensurate with the scale of the centre
- directly opposite a residential catchment accessible by a controlled pedestrian crossing
- more than a standalone supermarket
- of quality urban design with amenity, informed by a master plan
- supported by planned and funded infrastructure commensurate with the needs of the centre.

For new centres in industrial areas, the economic impact of the centre should be assessed for its impact on the operation of existing businesses in the locality and the viability of surrounding centres.

Planning for new and existing centres is to:

- be informed by council growth strategies, which should consider the network of centres, retail, commercial and industrial supply and demand and local housing strategies
- be potentially informed by district-based studies, facilitated by collaborations between councils
- consider the temporal nature of growth and change across Greater Sydney, both historic and future, and its influence on development opportunities at the local level
- recognise improvements to walkability as a core outcome for change in centres
- result in the development and implementation of land use and infrastructure plans to inform infrastructure investment and land use policy decisions
- respond to the detailed planning considerations of Strategy 12.1 and Strategy 22.1 set out in *A Metropolis of Three Cities*.

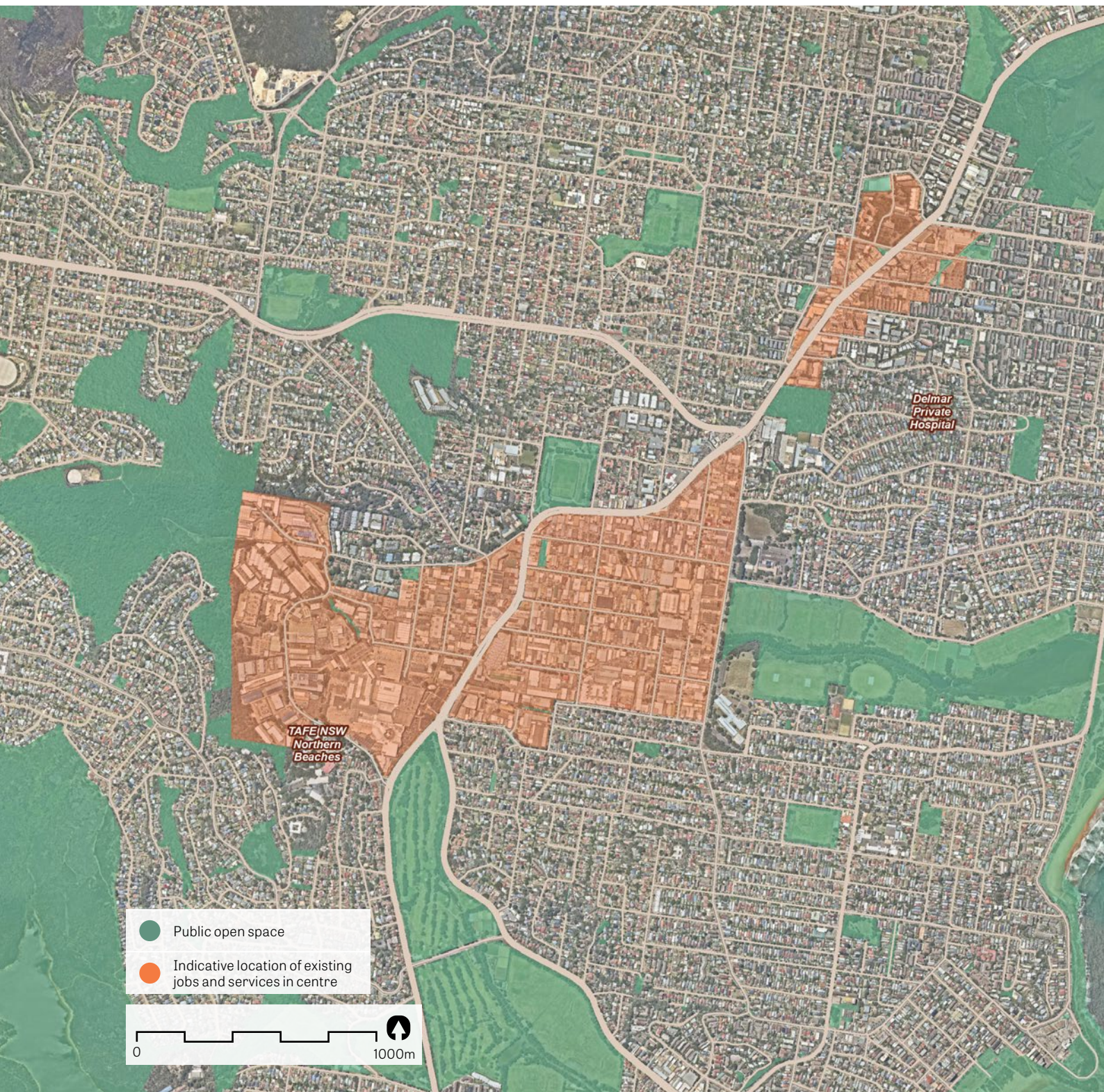




Chatswood



## Brookvale-Dee Why



Data sources: Public open space - Sydney Open Space Audit (DPE 2016), Aerial Photo - Nearmap 2018





The strategic centre that combines Brookvale and Dee Why provides the greatest number of jobs in the Northern Beaches. Brookvale industrial area supports niche manufacturing and wholesale industries. Warringah Mall at Brookvale is one of the largest retail areas in Greater Sydney. TAFE NSW Northern Beaches provides tertiary education for Northern Beaches residents.

Dee Why is a mixed-use area and offers a vibrant local night-time economy.

Growth of the combined centre including greater connectivity, will attract employment, retail and local services, strengthening the existing centre.

Brookvale – Dee Why	Jobs
2016 Estimate	20,000
2036 Baseline Target	23,000
2036 Higher Target	26,000



## Actions

41. Strengthen Brookvale-Dee Why through approaches that:
  - a. maintain the mix of uses so that Brookvale-Dee Why continues to perform strongly as a well-balanced, self-sustaining combined centre
  - b. encourage and support improvements to Warringah Mall and better integrate it within the fabric and life of Brookvale-Dee Why
  - c. recognise and enhance the economic and employment opportunities along Pittwater Road and encourage revitalisation along the commercial strip
  - d. promote walking, cycling and public transport to Warringah Mall, the Brookvale industrial area and Dee Why
  - e. encourage the establishment of new, innovative and creative industries in the Brookvale industrial area
  - f. encourage new lifestyle and entertainment uses to activate local streets in Brookvale-Dee Why
  - g. improve connections between Brookvale-Dee Why and the Northern Beaches Hospital at Frenchs Forest.

## Responsibility

Northern Beaches Council, relevant planning authorities and State agencies

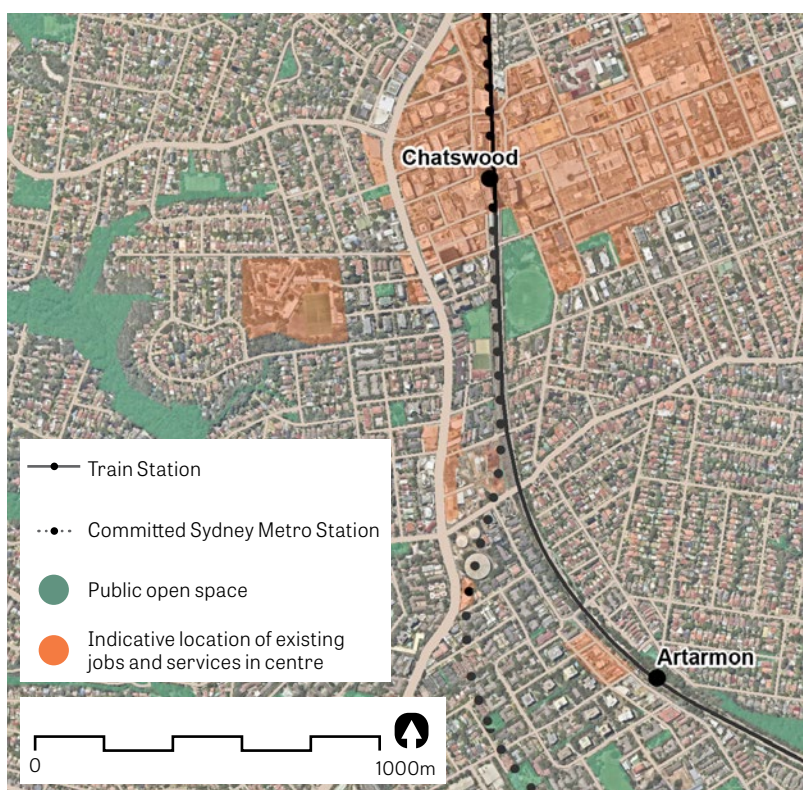
## Chatswood

Chatswood strategic centre comprises a mix of uses including retail, office, residential as well as community and health. The centre has a highly successful retail focus. The regional shopping centres of Westfield, Chatswood Chase and Mandarin Centre combine with other centres to provide one of the largest shopping precincts in Greater Sydney. Entertainment facilities such as The Concourse and Zenith Theatre and a vibrant night-time economy contribute to amenity.

Maintaining and growing a high quality commercial core will facilitate the continued growth of the centre as a major employment hub.

The proposed Sydney Metro station will improve connectivity. Further investigation regarding bus operations and accessibility on the western side of the railway would improve the amenity of the commercial core.

Transport infrastructure such as the potential Northern Beaches to Chatswood bus improvement will mean that the role of Chatswood as an interchange location connecting parts of the Northern Beaches to other Strategic Centres will increase. Planning for improvement to the interchange facilities will need to be considered.



Data sources: Public open space - Sydney Open Space Audit (DPE 2016), Aerial Photo – Nearmap 2018

Chatswood	Jobs
2016 Estimate	24,700
2036 Baseline Target	31,000
2036 Higher Target	33,000

### Actions

42. Strengthen Chatswood through approaches that:
- protect and grow the commercial core
  - maximise the land use opportunities provided by Sydney Metro
  - promote the role of the centre as a location for high quality, commercial office buildings and a diverse retail offering
  - enhance the role of the centre as a destination for cultural and leisure activities
  - promote and encourage connectivity, and upgrade and increase public open spaces
  - investigate interchange operations on both sides of the railway line to increase capacity and efficiency of modal changes
  - improve pedestrian connectivity between the eastern and western side of the rail line

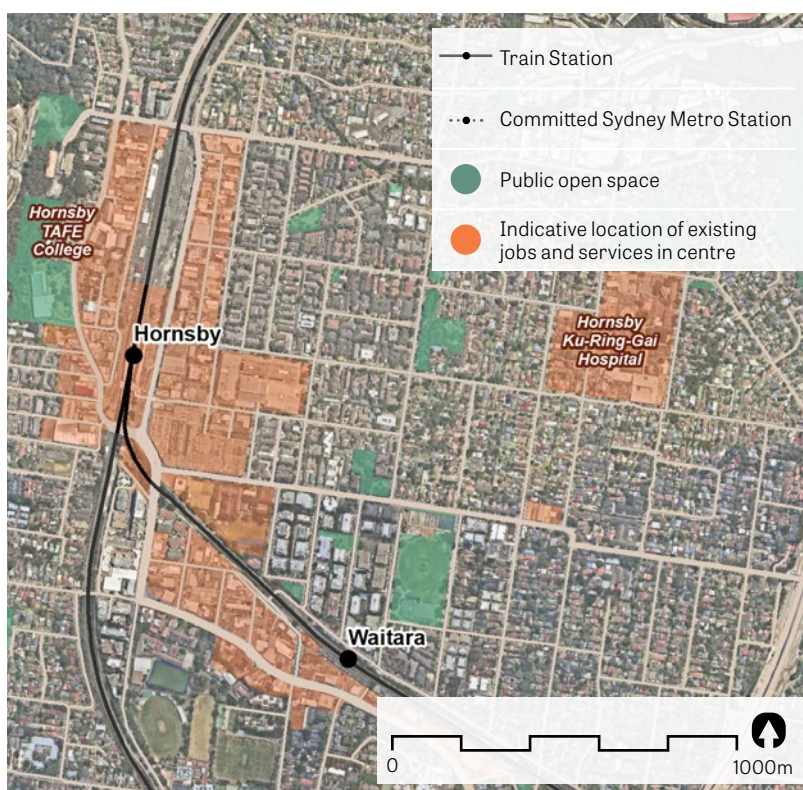
### Responsibility

Willoughby City Council, other planning authorities and State agencies

## Hornsby

Hornsby strategic centre includes Westfield Hornsby, Hornsby TAFE and Hornsby Ku-ring-gai Hospital. Hornsby Shire Council's planned reconfiguration of the bus terminal and centre renewal will better connect the centre and provide an opportunity for revitalisation.

The proposed rehabilitation of Hornsby Quarry and expansion of Hornsby Park will provide new open space for recreation within walking distance of the centre.



Data sources: Public open space - Sydney Open Space Audit (DPE 2016), Aerial Photo - Nearmap 2018

Hornsby	Jobs
2016 Estimate	14,300
2036 Baseline Target	18,000
2036 Higher Target	22,000

### Actions

43. Strengthen Hornsby through approaches that:
- encourage revitalisation of the commercial core
  - better integrate Westfield Hornsby into the centre and make the area more attractive
  - attract mixed-use development west of the railway line, encourage a stronger integration with the centre, and encourage the development of a lively eat street and restaurant precinct
  - unlock development potential of strata-constrained areas east of the centre
  - support health-related land uses and infrastructure around Hornsby-Ku-ring-gai Hospital
  - improve walking and cycling connections between Hornsby Station and the Hospital
  - reduce the impact of traffic movements on pedestrians
  - promote walking, cycling and public transport to and within the centre
  - prioritise public domain upgrades, place-making initiatives and a new civic space.

### Responsibility

Hornsby Shire Council, other relevant planning authorities and State agencies



## Manly

Manly strategic centre includes cultural, tourist, retail and entertainment activities for residents as well as local and international visitors. The variety of restaurants and small bars contribute to a vibrant night-time economy.

Recreational opportunities from the coastal location and stunning beaches provide economic opportunities such as eco-tourism around North Head and Cabbage Tree Bay Aquatic Reserve.

Manly is well served by public transport including a ferry and bus service from the Sydney CBD.



Data sources: Public open space - Sydney Open Space Audit (DPE 2016), Aerial Photo – Nearmap 2018

Manly	Jobs
2016 Estimate	5,000
2036 Baseline Target	6,000
2036 Higher Target	6,500

### Actions

44. Strengthen Manly through approaches that:
- further develop Manly as a cultural, tourist, retail and entertainment precinct
  - improve public transport connections to Manly Wharf from other lower Northern Beaches suburbs
  - provide improved public transport to Chatswood, Frenchs Forest, St Leonards, Macquarie Park and Macquarie University
  - encourage diversified commercial activity to improve economic resilience
  - encourage eco-tourism around North Head and the Cabbage Tree Bay Aquatic Reserve.

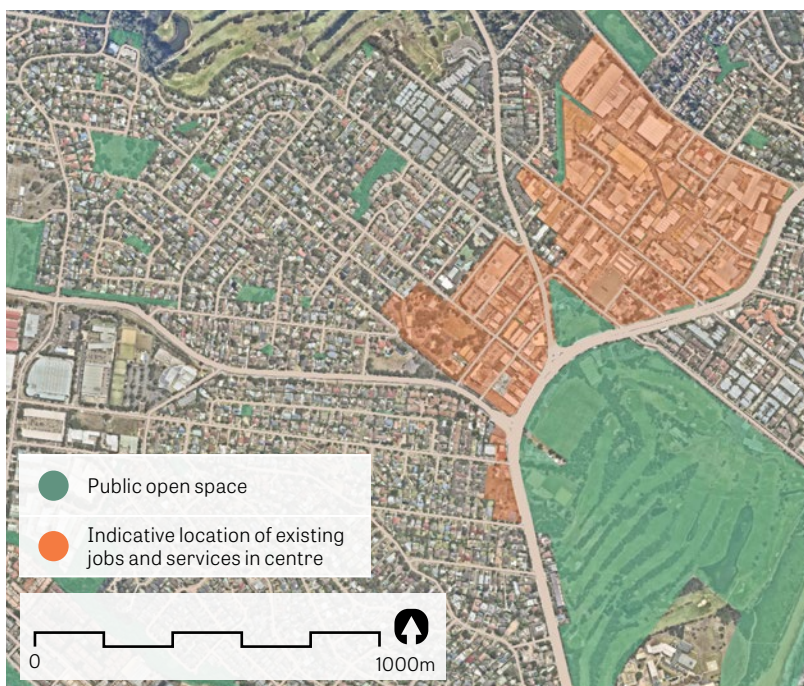
### Responsibility

Northern Beaches Council, other relevant planning authorities and State agencies

## Mona Vale

Mona Vale strategic centre is a mixed-use area including retail, commercial, community, light industrial and residential uses. It is a thriving centre during business hours, providing amenity, convenience and a sense of community for residents.

Mona Vale's connectivity to Brookvale-Dee Why and the Harbour CBD has improved with the commencement of the B-Line bus service which operates more frequent buses both during the day and into the evening. Further improvements to travel times, especially for those within the northern part of the peninsula, will be made when operations are extended to Newport.



Data sources: Public open space - Sydney Open Space Audit (DPE 2016), Aerial Photo – Nearmap 2018

Mona Vale	Jobs
2016 Estimate	4,300
2036 Baseline Target	5,000
2036 Higher Target	6,000

### Actions

45. Strengthen Mona Vale through approaches that:
  - a. protect and enhance the commercial and retail function of the centre to provide employment growth and maintain high job containment
  - b. ensure sufficient retail and commercial floor space is provided to meet future demand
  - c. leverage Mona Vale's role as a north-south and east-west bus interchange to facilitate a greater diversity of employment and mixed-uses in the centre
  - d. improve access and linkages to local destinations, such as Mona Vale Hospital, through priority pedestrian networks
  - e. promote walking and cycling to and within the centre
  - f. retain and manage the industrial precinct to the north of the centre to serve the growing population
  - g. prioritise place-making and urban activation, including enlivening the centre.

### Responsibility

Northern Beaches Council, other relevant planning authorities and State agencies

## Planning Priority N11

### Retaining and managing industrial and urban services land

In giving effect to *A Metropolis of Three Cities*, this Planning Priority delivers on the following objective and the corresponding strategies:

#### Objective 23

Industrial and urban services land is planned, retained and managed.

Greater Sydney's existing industrial, manufacturing, warehousing and distribution facilities contribute to its role as Australia's manufacturing capital. These activities occur on industrial land that also accommodates urban services, freight and logistics services and advanced manufacturing. In some areas industrial and urban services activities are accommodated in business zones.

Urban services include activities such as motor vehicle services, printing, waste management, courier services and concrete batching plants. These activities serve local communities and businesses, and require adequate access to industrial land across the District. Demand for this land will increase commensurate with population growth. Good local access to these services reduces the need to travel to other areas, minimising congestion on the transport system.

In the North District, given the limited supply of industrial and urban services land and the inability to increase the supply, industrial and urban services land needs to be safe-guarded and efficiently managed.

### Industrial land supply

The North District has the lowest amount of industrial land in Greater Sydney and the highest proportion of the land used for urban services.

The North District has 572 hectares of industrial and urban services land, spread over 43 precincts<sup>19</sup> (refer to Figure 17). This represents four per cent of Greater Sydney's total stock of industrial and urban services land. Only approximately seven per cent (39 hectares) is undeveloped, indicating strong demand for this scarce resource.

This land contributed approximately \$ 7,905 million or three per cent to NSW Gross Domestic Product in 2015<sup>20</sup>. It also accommodated for approximately 68,000 jobs (four per cent of jobs) in the District.

**Table 4:** North District largest industrial and urban services precincts

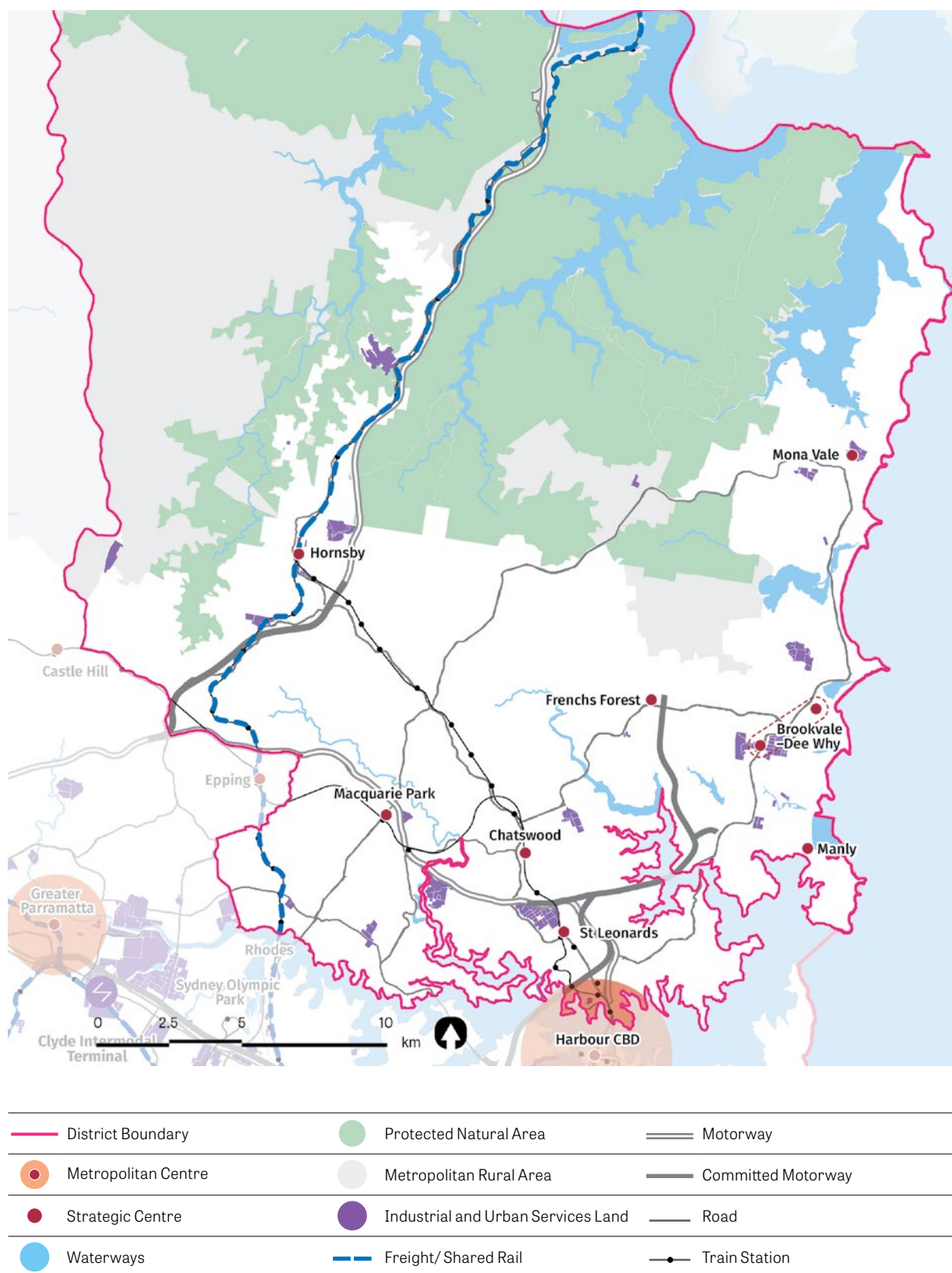
LGA	Precinct	Undeveloped Land (ha)	Developed Land (ha)	Total (ha)
Hornsby	Asquith	5	39	44
	Mount Ku-ring-gai	9	57	66
Lane Cove	Lane Cove West	6	45	51
Northern Beaches	Brookvale	0	86	86
	Cromer	0	44	44
Willoughby	Artarmon	4	61	65

Source: Department of Planning and Environment, 2017, *Employment Lands Development Program, 2017 Report*, NSW Government, Sydney.

Note: Figures are rounded to the nearest whole number



**Figure 17:** North District industrial and urban services land and freight assets



The six largest industrial and urban services lands in the North District are listed in Table 4. A total of 2,212 businesses operated within the precinct. Excluding the category of 'other', the top three business categories were:

- construction (254 businesses, 11 per cent)
- professional, scientific and technology services (248 businesses, 11 per cent)
- financial and insurance services (230 businesses, 10 per cent).

## Managing industrial and urban services land

Industrial activity and urban services are important to Greater Sydney's economy, and the nature of this economic sector is continuing to change, with emerging technologies and new industries with different requirements. Industrial land is evolving from traditional industrial and manufacturing lands, and freight and logistics hubs, into complex employment lands. This trend is consistent with other parts of Greater Sydney, particularly east of Parramatta.

Since 2011, nine hectares of industrial and urban services land in the North District have been rezoned for other uses<sup>21</sup>. While some land use changes meet longer term growth and productivity requirements, the provision of services and jobs close to business and where people live is critical to the District's productivity.

Pressure for residential and retail uses dominate in areas that are more accessible and valuable, such as locations close to hospital upgrades and transport improvements (for example, St Leonards, Frenchs Forest Hospital, Macquarie Park and Hornsby-Ku-ring-gai).

Consistent with development throughout the Eastern Harbour City, many smaller industrial precincts have a higher than average proportion of urban services activities.

While these precincts may appear to be only a small part of the industrial land supply, they provide important urban services and, in some cases, creative industries.

Industrial and urban services land provides space for emerging future industries. Playing a pivotal role

in the future of industry, they could support more creative industries as well as services such as waste management and recycling facilities.

Future employment growth across all industries and urban services will require additional floor space, additional land or both. Urban services are often less able to increase their floor space efficiency or locate in multi-storey buildings.

Research has identified a benchmark of three square metres of urban services land per person. The research found that in the North District, the per person amount is below the benchmark in 2016, and the per capita amount was anticipated to reduce between 2016 and 2036<sup>22</sup>.

## Principles for managing industrial and urban services land

The retention, growth and enhancement of industrial and urban services land should reflect the needs of each of Greater Sydney's three cities and their local context. It should provide land for a wide range of businesses that support the city's productivity and integrated economy.

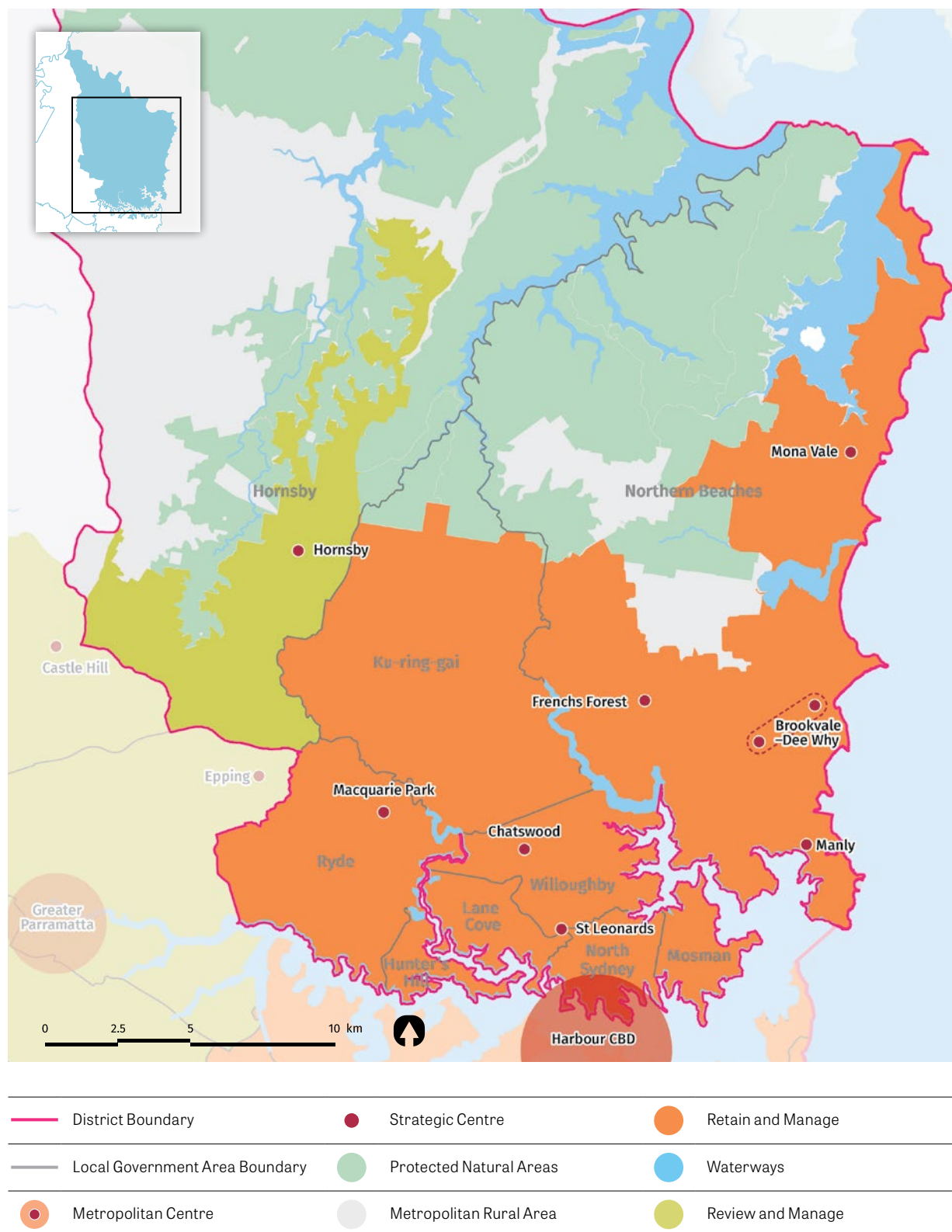
Industrial land approaches shall be consistent with Figure 18 and for the North District shall be as follows:

**Retain and manage:** All existing industrial and urban services land should be safe-guarded from competing pressures, especially residential and mixed-use zones. This approach retains this land for economic activities required for Greater Sydney's operation, such as urban services.

Specifically, these industrial lands are required for economic and employment purposes. Therefore, the number of jobs should not be the primary objective – rather a mix of economic outcomes that support the city and population. The management of these lands should accommodate evolving business practices and changes in needs for urban services from the surrounding community and businesses.

Where a retain and manage approach is being undertaken, councils are to conduct a strategic review of industrial land as part of updating local environmental plans.

**Figure 18:** North District industrial and urban services and approaches





There will also be a need, from time to time, to review the list of appropriate activities within any precinct in consideration of evolving business practice, and how they can be supported through permitted uses in local environmental plans. Any review should take into consideration findings of industrial, commercial and centre strategies for the local government area and/or the district.


**Review and manage:** The Greater Sydney Commission will review all industrial urban services land under this approach to either confirm its retention (as described in the approach above), or manage uses to allow sites to transition to higher-order employment activities (such as business parks) and seek appropriate controls to maximise business and employment outcomes. The review will consider the current level of industrial and urban services

land supply, the changing nature of industries and the transformation in the sector due to the impact of changing demands for land. In limited cases, conversion to other uses may be appropriate.

Equally in some locations, the safeguarding of industrial activities will be a starting objective. The Greater Sydney Commission will collaborate with other State agencies and councils and seek input from stakeholders as part of the review. The review and manage approach applies to Hornsby within the North District.

#### Related government initiative:

- NSW Department of Planning and Environment 2015 *Employment Lands Development Program*

 Actions	Responsibility
46. Retain and manage industrial and urban services land, in line with the principles for managing industrial and urban services land, in the identified local government areas (refer to Figure 18) by safe-guarding all industrial zoned land from conversion to residential development, including conversion to mixed-use zonings. In updating local environmental plans, councils are to conduct a strategic review of industrial lands.	Hunter's Hill Council, Ku-ring-gai Council, Lane Cove Council, Northern Beaches Council, Mosman Council, North Sydney Council, City of Ryde Council, Willoughby City Council and other planning authorities
47. Review and manage industrial and urban services land, in line with the principles for managing industrial and urban services land, in the identified local government areas (refer to Figure 18) by undertaking a review of all industrial land to confirm their retention or transition to higher order uses (such as business parks) and prepare appropriate controls to maximise business and employment outcomes, considering the changing nature of industries in the area.	Greater Sydney Commission, Hornsby Shire Council and other planning authorities
48. Manage the interfaces of industrial areas by: <b>Land use activities</b> <ol style="list-style-type: none"> <li>providing buffer areas to nearby activities, such as residential uses, that are sensitive to emissions from 24-hour freight functions</li> <li>retaining industrial lands for intermodal and logistics uses from the encroachment of commercial, residential and other non-compatible uses which would adversely affect industry viability to facilitate ongoing operation and long-term growth.</li> <li>identifying and preserving land for future intermodal and rail infrastructure.</li> <li>accommodating advanced manufacturing where appropriate by zoning that reflects emerging development models.</li> </ol> <b>Transport operations</b> <ol style="list-style-type: none"> <li>providing the required commercial and passenger vehicle, and freight and passenger rail access.</li> </ol>	Councils, other planning authorities, State agencies and State-owned corporations
49. Facilitate the contemporary adaptation of industrial and warehouse buildings through increased floor to ceiling heights.	Councils and planning authorities

## Planning Priority N12

### Delivering integrated land use and transport planning and a 30-minute city

In giving effect to *A Metropolis of Three Cities*, this Planning Priority delivers on the following objective and the corresponding strategies:

#### Objective 14

*A Metropolis of Three Cities* – integrated land use and transport creates walkable and 30-minute cities.

Delivering *A Metropolis of Three Cities* will require the integration of land use and transport planning to create walkable and 30-minute cities. To achieve this, *Future Transport 2056* and *A Metropolis of Three Cities* propose the concept of a 30-minute city.

The 30-minute city is a long-term aspiration that will guide decision-making on locations for new transport, housing, jobs, tertiary education, hospitals and other amenities. It means that more housing, jobs, health and education facilities will be planned in metropolitan and strategic centres and more people will have public transport access to their closest metropolitan or strategic centre within 30 minutes. This will enable more efficient access to workplaces, services and community facilities.

As Sydney transitions to a metropolis of three cities, convenient and reliable access for customers by public transport to their nearest metropolitan or strategic centre is increasingly important for:

- liveability, reducing the need for long commutes and spreading transport demand
- productivity, reducing the time people spend travelling and increasing people's access to jobs and services
- sustainability, increasing the proportion of trips by public transport and walking or cycling and reducing emissions.

As the North District grows, planning and investment will integrate land use, transport and infrastructure, recognising and harnessing the city-shaping role of transport infrastructure. Initiatives to support integration in line with population and economic growth include:

- city-shaping transport providing higher speed and volume linkages to better connect people to centres and services including committed and proposed links to both the Harbour CBD and the Central River City
- capacity and reliability improvements on existing transport corridors serving the Harbour CBD and strategic centres
- improved city-serving and centre-serving transport links between strategic centres, and as feeders into city-shaping corridors including transport improvements along Victoria Road and improved east-west bus services across the district; for example from the Northern Beaches to Chatswood
- improvements to the strategic road network, which may include both new roads and roadspace reallocation to prioritise the efficient movement of people and goods on transport corridors and key intersections to improve movement through the District and access to strategic centres
- strategic freight network improvements including the Northern Sydney Freight Corridor
- The Western Harbour Tunnel and Beaches Link will deliver a new crossing of Sydney Harbour to ease congestion across northern Sydney and the Harbour CBD, and take through traffic out of the Harbour CBD and off the Harbour Bridge. This project will also provide better east-west and north-south connectivity for our motorway network, and include better public transport links between the Northern Beaches and North Sydney.
- travel behaviour change to help manage demand on the transport network.

*A Metropolis of Three Cities* and *Future Transport 2056* outline the city-shaping public transport network and strategic road network initiatives which are integrated with the land use objectives for Greater Sydney.

The relevant transport initiatives for this District, and their role in supporting land use outcomes are outlined in the following Planning Priorities:

- **N7.** Growing a stronger and more competitive Harbour CBD
- **N8.** Eastern Economic Corridor is better connected and more competitive
- **N9.** Growing and investing in health and education precincts.

This District Plan identifies planning priorities and actions to leverage existing economic assets including Sydney Metro to enable further investment and growth (see Planning Priorities N7, N8 and N9).

## Improving access to local jobs and services

The District's strategic and local centres provide a range of local jobs and services that support the growing population. Encouraging the growth of strategic and local centres will reduce the need for people to travel long distances to access jobs and local services.

Access to strategic centres and interchanges will be supported by city-serving and centre-serving transport and an improved road network.

Northern Beaches B-Line is a city-shaping initiative – a multi faceted program to improve the capacity and reliability of the bus system relied on by the Northern Beaches community for access to the Sydney CBD and major local health, education, commercial and retail destinations at Mona Vale, Brookvale-Dee Why and Neutral Bay. Service on the B-line started late 2017 and it is providing extra services both during the day and into the evening.

Macquarie Park Interchange and Precinct upgrade is a recently announced joint Commonwealth and State program to deliver a major new bus interchange and support faster, efficient and more reliable travel times through Macquarie Park.

Key elements of the city-serving and centre-serving transport network to be considered in the next 20 years include:

- additional ferries for Parramatta River
- improved bus services between the Northern Beaches and Chatswood

- east-west public transport between Mona Vale and Macquarie Park
- Victoria Road transport improvements to support frequent, reliable and efficient transport to the Harbour CBD and Greater Parramatta
- on-demand bus services on selected local bus routes on the Northern Beaches to provide more convenience and choice for customers while improving the efficiency of the transport network and providing more choices for first and last mile access to the train network
- investment in Smart Roads, which will support the financial sustainability of the transport system by better using existing road infrastructure, and enable future forms of mobility such as connected and automated vehicles.

## Safeguarding the next phase of growth

Where possible, the proactive and early reservation of corridors to protect longer term linear infrastructure opportunities should be undertaken to provide greater clarity and certainty for landowners, communities and businesses.

In assessing potential infrastructure corridors, economic, social and environmental outcomes need to be considered. The early preservation of corridors also reduces the potential for conflict in the future.

The NSW Government is planning for the long-term transport needs of Greater Sydney by identifying and protecting corridors of land that can be used to deliver transport and infrastructure in the future when it is needed. Acting early, engaging community, and having an open and transparent process allows certainty for the community and all levels of government when making land use decisions or purchasing land.

## Improving walking and cycling

Walking is a fundamental part of the transport system and most journeys start and end with walking. Pleasant and safe environments for walking and cycling contribute to great places where people and businesses choose to locate and invest. Direct, safe and accessible routes to local destinations and services should be prioritised within a 10-minute walk of centres.



## City-serving network

Source: Transport for NSW



Note: Timing, staging and station/stop locations for new corridors are indicative and subject to further assessment.

The city-serving network will provide high-frequency services within approximately 10 kilometres of the metropolitan centres and metropolitan cluster. This will support public transport access within some of the highest density residential areas in Greater Sydney where demand for travel is most concentrated. As these inner urban areas in the three cities develop further, the NSW Government will investigate increasing the reliability and frequency of these public transport services.

The city-serving network enables and supports higher density residential areas by offering convenient and reliable connectivity to key destinations.

The current city-serving network is characterised by scheduled ferry, bus, light rail and train services as well as walking and cycling networks. The network provides access across the Eastern Harbour City and the Central River City and in some centres with the Western Parkland City.

Over the next 10 years the NSW Government has committed to increasing the capacity of the city-serving network. This includes increasing the role of public transport through greater prioritisation of bus services along city-serving corridors and within centres to improve 30-minute access, and investing in priority walking and cycling networks around the centres.

The NSW Government will also investigate improvements to the frequency of public transport services, including more on-demand-services, across all city-serving modes of public transport to improve 30-minute access and support growth.

By 2036, the areas surrounding the Western Sydney Airport and Badgerys Creek Aerotropolis will be more urbanised than today. Residents within these areas will require reliable, fast and frequent public transport to access jobs and services.

The NSW Government is committed to meeting the transport needs of residents and will investigate how emerging technology and on-demand services will help meet the needs of Western Parkland City residents.



Milsons Point

Mixed-use neighbourhoods with homes and schools close to centres and public transport improve the opportunity for people to walk and cycle to local shops and services. Enhancing the safety, convenience and accessibility of walking and cycling trips has many benefits including healthier people, more successful businesses and centres, and reduced traffic congestion.

Transport for NSW is establishing a bicycle network hierarchy in collaboration with councils. The Principal Bicycle Network will establish high quality, high-priority routes to facilitate safe and direct connections to centres. This Principal Bicycle Network will form the transport layer of the Greater Sydney Green Grid.

Regional and local routes identified in local government bike plans, including the inner Sydney Regional Bike Network, will connect to the Principal Bicycle Network to facilitate a seamless and

connected network within urban areas. Local streets will connect to these routes to provide door-to-door access for cycling.

A joint NSW Government and Northern Beaches Council initiative is planned to provide a 36-kilometre continuous coastal work linking Palm Beach to Manly, together with linking cycleways and shared paths.

Secure bicycle parking and end-of-trip facilities should be provided in centres to support cycling throughout the District.

## Designing adaptable infrastructure

Innovation and the digital economy are dramatically changing the way people and goods move around Greater Sydney, providing more efficient service delivery.

Technological advances have created new mobility options including automated vehicles, assisted mobility devices such as e-bikes, automated trains and buses, and enhanced aerial mobility. Strategic planning must harness innovation and accommodate new technologies to create new opportunities for improved productivity and accessibility to jobs, goods and services.

Throughout Greater Sydney, there are many examples where councils and State agencies are embracing new technologies to promote adaptable infrastructure. For example, Blacktown City Council is investing in smart poles where electric vehicle drivers can charge their cars for free. In Sydney Olympic Park, Transport for NSW is trialling a driverless passenger bus to observe how automated vehicles can improve the mobility of customers and interact with other people. In planning for adaptable infrastructure, planning must consider opportunities for more flexible design of streets and public spaces; for example, through car parking strategies.

The NSW Government is introducing intelligent technology, known as a managed motorway system, to Sydney's motorways. Work has commenced on

the M4 Smart Motorway project, which will use real-time information, communication and traffic management tools to maximise the performance of the motorway and provide a safer, smoother and more reliable journey.

## Optimising infrastructure assets

To make the most of existing infrastructure assets, planning must constantly explore opportunities to support behaviour change, unlock infrastructure capacity and manage demand, and use land more efficiently by co-locating similar or mixed services or utilities. New technologies provide opportunities for better management of traffic and contribute to more efficient use of existing infrastructure.

### Related government initiatives:

- Transport for NSW Roads and Maritime Services *M4 Smart Motorway project*
- Transport for NSW *Northern Beaches B-Line*
- Transport for NSW *Sydney Metro*

 Actions	Responsibility
50. Integrate land use and transport plans to deliver the 30-minute city.	Councils, other planning authorities and State agencies
51. Investigate, plan and protect future transport and infrastructure corridors.	Councils, other planning authorities and State agencies
52. Support innovative approaches to the operation of business, educational and institutional establishments to improve the performance of the transport network.	Councils, other planning authorities and State agencies
53. Plan for urban development, new centres, better places and employment uses that are integrated with, and optimise opportunities of, the public values and use of Sydney Metro City & Southwest, as well as other city-shaping projects.	Councils, other planning authorities and State agencies



## Planning Priority N13

### Supporting growth of targeted industry sectors

In giving effect to *A Metropolis of Three Cities*, this Planning Priority delivers on the following objective and the corresponding strategies:

#### Objective 24

Economic sectors are targeted for success.

*A Metropolis of Three Cities* highlights the importance and role of the NSW Government in leading the development and coordination of sector-specific industry development strategies to grow and globally position key sectors of the economy.

These sectors are important in fostering innovation in the development of highly skilled jobs which drive productivity and global competitiveness.

The strategies build on and leverage existing industry and government activities and plans, and focus on delivering high-impact practical initiatives to drive sector growth through industry, academia and government collaboration.

*A Metropolis of Three Cities* outlines the strategies to support industry sectors. They cover the areas of:

- industry skills and capacity building
- investment attraction
- export growth and facilitation
- industry showcasing and promotion
- opportunities through government procurement
- government and industry partnerships.

To support these strategies, Objective 24 of *A Metropolis of Three Cities* emphasises the need to work with internationally competitive trade sectors to identify the barriers to growth, including regulatory barriers.

The North District also includes part of the Metropolitan Rural Area, where agricultural processing and export is a key economic sector.

This Planning Priority reinforces the need to:

- support the growth of internationally competitive industry sectors
- respond to changing technologies
- plan for tourism and visitation activities
- protect and support rural industries.

## Tourism

The tourism and visitor economy contributes significantly to the District's economy supporting jobs and businesses. Approximately 1.8 million visitors stayed overnight in the North District in 2015–16, 82 per cent of whom were domestic visitors. Visitors spend \$2.56 billion each year on accommodation, hospitality, entertainment and leisure.

The North District has a high rate of overnight visitors and expenditure, second only to the Eastern City District. The tourism and the visitor economy provides a significant contribution to productivity in the District, supporting jobs and businesses<sup>23</sup>.

Attractions include:

- world-class locations on the north shore of Sydney Harbour including Luna Park, and Taronga Zoo, and views to the Sydney Opera House and Harbour Bridge
- stunning beaches and national parks such as Palm Beach, Lane Cove National Park, Ku-ring-gai Chase National Park, Marramarra National Park, Berowra Valley National Park, Garigal National Park, the Great North Walk and the Hawkesbury River
- parkland destinations such as Bradfield Park, Clifton Gardens and Fagan Park
- retail centres such as Chatswood and Macquarie Centre
- significant historic sites such as the Quarantine Station at Manly and Barrenjoey Head.



Manly

Weekend and night markets, events and festivals (such as food and wine shows, Vivid in Chatswood, Manly Jazz Festival, Northern Beaches Music Festival, Narrabeen Lakes Festival and Granny Smith Festival) attract visitors, promote the District's lively centres, and contribute to the local economy. Centres such as Manly, Chatswood Kirribilli, Crows Nest and Dee Why also provide popular night-time destinations.

Manly also benefits from its ferry connections to the Sydney CBD. The walk and cycleway from Palm Beach to Manly will provide further tourism opportunities.

Improving public transport will give tourists and visitors access to significant natural, cultural and commercial tourist assets. Walking and cycling trails could expand tourism to destinations such as Manly, Palm Beach, Ku-ring-gai Chase National Park, Lane Cove River and National Park, Middle Harbour and Pittwater.

Encouraging tourism in natural areas should not be at the expense of the environment. Tourism must be culturally appropriate and respect the District's Aboriginal and European heritage.

A comprehensive tourism strategy for the District could identify local, national and international tourism markets, and the infrastructure needed to support economic growth, including improved public transport services, and walking and cycling routes, to facilitate accessibility in key tourist corridors and to significant destinations.

## Rural industries

Rural industries in the North District include a multi-use horticulture cluster, growing vegetables and fruit around Middle Dural, Galston and Arcadia. This cluster extends into The Hills Shire in the Central City District. Other rural uses such as nurseries and the equine industry feature in the corridor between Duffys Forest and Ingleside.

Nurseries – both outdoor and undercover – are the most economically productive form of agriculture in the North District, while cut-flower and stone fruit production are the other main agricultural activities. These industries are to be supported and protected throughout the District.



Warriewood

## Adapting to changing technologies

Rapid technological changes and digital advancements are disrupting established business models and the workplace worldwide. These are dramatically changing the way people and goods move around, providing more efficient transport services. While technological changes can reduce demand for certain types of jobs, they also help to deliver innovation, new knowledge-intensive jobs and business opportunities. Business and governments must continually engage with industry, assess regulatory barriers and manage data to update governance and policies to capitalise on changes.

The NSW Government has invested \$18 million in the Boosting Business Innovation Program, giving small businesses access to research organisations to build strong local business communities and stimulate economic growth in metropolitan and regional NSW.

The Program is boosting:

- a networked innovation ecosystem across NSW
- additional external funding
- small-to-medium enterprises (SMEs) which want to scale up and innovate
- the regional start-up sector and creating innovation clusters across the state
- access to high-tech equipment and technical expertise research for SMEs and start-ups through TechVouchers.



In the North District, delivery partners include the Australian Catholic University, Macquarie University and CSIRO Lindfield. The Program will allow SMEs to connect with skills and research expertise to create a better, more collaborative, innovative future for the NSW economy:

- Australian Catholic University – ACU  
Collaborate Plus is establishing multidisciplinary collaborative spaces in North Sydney to facilitate sustainable partnerships with organisations.
- Macquarie University – the University is establishing co-working space providing access to expertise and technical equipment and undertaking other initiatives.

- Commonwealth Scientific and Industrial Research Organisation (CSIRO) at Lindfield – CSIRO is offering collaborative work spaces at CSIRO's high-tech lab, providing access to digital and analogue electronics, prototyping, general laboratory equipment and workshop tools, and various other initiatives.

Embracing opportunities to expand start-up and digital innovation can allow more people to work closer to home. Small businesses can be supported by providing infrastructure including smart work hubs and meeting spaces across the District. There are already smart hub business providers located in North Sydney.

 Actions	Responsibility
54. Consider the barriers to the growth of internationally competitive trade sectors including engaging with industry and assessing regulatory barriers.	Councils and other planning authorities
55. When preparing plans for tourism and visitation, consider: <ul style="list-style-type: none"> <li>a. encouraging the development of a range of well-designed and located facilities.</li> <li>b. enhancing the amenity, vibrancy and safety of centres and township precincts</li> <li>c. supporting the development of places for artistic and cultural activities.</li> <li>d. improving public facilities and access</li> <li>e. protecting heritage and biodiversity to enhance cultural and eco-tourism</li> <li>f. supporting appropriate growth of the night-time economy</li> <li>g. developing industry skills critical to growing the visitor economy.</li> <li>h. incorporating transport planning to serve the transport access needs of tourists.</li> </ul>	Councils and other planning authorities
56. Protect and support agricultural production and mineral resources (in particular, construction materials) by preventing inappropriately dispersed urban activities in rural areas.	Councils and other planning authorities
57. Provide a regulatory environment that enables economic opportunities created by changing technologies.	Councils and other planning authorities and State agencies
58. Consider opportunities to implement place-based initiatives to attract more visitors, improve visitor experiences and ensure connections to transport at key tourist attractions.	Councils and other planning authorities and State agencies
59. Consider opportunities to enhance the tourist and visitor economy in the District, including a coordinated approach to tourism activities, events and accommodation.	Councils and other planning authorities and State agencies

## Planning Priority N14

### Leveraging inter-regional transport connections

In giving effect to *A Metropolis of Three Cities*, this Planning Priority delivers on the following objectives and the corresponding strategies:

#### Objective 16

Freight and logistics network is competitive and efficient.

#### Objective 17

Regional connectivity is enhanced.

Greater Sydney's traditional manufacturing, transport, distribution, warehousing and intermodal functions support the creation and success of global value chains, which in turn support trade growth through Port Botany and Sydney Airport.

Retaining internationally competitive operations at these locations is vital for a productive NSW economy. Planning for the freight network must allow movements that feed communities, deliver consumer goods and provide the materials to build the city. An efficient and effective road and rail freight network will integrate with ports and airports.

Changes are also continuing to occur in the freight and logistics sector, in part driven by technology changes and related changes to some retail business models. Whilst significant long-term growth in the freight and logistics sector is in the Western Parkland City, the nature of different supplies such as local produce, will require opportunities in the Central River City and Eastern Harbour City to be retained. In addition, planning decisions should support the growing demand for parcel deliveries and on-demand freight.

The North District is the main road and rail infrastructure which is part of the national significant freight routes from the north (to Brisbane and beyond) to the south of NSW, through Greater Sydney. By 2056, the combined population of Greater Sydney, Newcastle and Wollongong will be approximately 10 million. Improving the north-south transport connections between Greater Sydney, Newcastle and Wollongong will enable greater economic efficiencies and opportunities.

Regional transport connections will connect Port Botany, Port Kembla and the Port of Newcastle which are internationally important trade gateways, facilitating the import and export of significant volumes of container and bulk freight such as coal, motor vehicles and agricultural products. It should be noted that although the District does not generate large amounts of freight, it provides nationally significant freight routes to the Central Coast, Newcastle, and interstate to Queensland.

Improving north-south connections between the five cities will allow greater access to a wider range of job opportunities and enhance business-to-business links collectively enhancing their productivity. Equally, improved connections will provide greater choices for where people can live and in the long term, provide increased growth management choices.

Hornsby provides an important interchange for the catchment of workers ranging from Greater Sydney to the Central Coast, as well as regional connections to the North Coast. Planning for Hornsby needs to consider how to leverage its growth in line with its gateway role.

As the North District grows, the need for freight movements, particularly delivery vehicles, will rise. Freight movements, including both local and through freight, can have negative impacts on the amenity of neighbourhoods, such as noise and additional congestion on roads, particularly during the morning peak. Freight movements outside of the peak can help reduce congestion, greenhouse gas emissions and freight costs. The planning and design of communities should take a balanced approach to minimising the negative impacts of freight movements, and supporting more efficient freight movements. This could include considering how development addresses busy roads, the siting of loading docks and how more freight movements can happen out of peak hours.


NorthConnex is a nine-kilometre underground motorway tunnel linking the M1 Pacific Motorway at Wahroonga to the Hills M2 Motorway at West Pennant Hills that will be completed by 2019. It is estimated this will remove up to 5,000 trucks per day from Pennant Hills Road. NorthConnex will provide a connection between Newcastle and Melbourne with no traffic lights.

Other initiatives for investigation outlined in *Future Transport 2056* include:

- train improvements between Greater Sydney, Central Coast and Newcastle, including a new fleet and track straightening
- Northern Sydney Freight Corridor Stage 2
- Outer Sydney Orbital (motorway and freight rail) to the Central Coast.

The Gore Bay terminal which has been operating as a fuel import and storage facility since 1901, is located on the western shores of Gore Cove. The terminal continues to be a critical part of the fuel supply chain in NSW. It supplies 40 per cent of the State's fuel requirements a year that is approximately 4.4 billion litres.

Diesel, marine fuel oil, jet fuel and gasoline fuels are imported by ship through the Gore Bay terminal to fuel the vehicles, machinery, ships, aircraft and ferries used by major industries such as logistics, construction and agriculture as well as by households. The fuel is piped from Gore Bay to the Clyde storage facilities for distribution by road tankers across NSW.

 Actions	Responsibility
<p>60. Optimise the efficiency and effectiveness of the freight handling and logistics network by:</p> <ul style="list-style-type: none"> <li>a. protecting current and future freight corridors and shared freight corridors</li> <li>b. balancing the need to minimise negative impacts of freight movements on urban amenity with the need to support efficient freight movements and deliveries.</li> <li>c. identifying and protecting key freight routes</li> <li>d. limiting incompatible uses in areas expected to have intense freight activity.</li> </ul>	Councils, other planning authorities, State agencies and State-owned corporations
61. Investigate and plan for the land use implications of potential long-term transport connections.	Councils, other planning authorities, State agencies and State-owned corporations





## Directions for sustainability



### A city in its landscape

#### Planning Priority N15

Protecting and improving the health and enjoyment of Sydney Harbour and the District's waterways

#### Planning Priority N16

Protecting and enhancing bushland and biodiversity

#### Planning Priority N17

Protecting and enhancing scenic and cultural landscapes

#### Planning Priority N18

Better managing rural areas

#### Planning Priority N19

Increasing urban tree canopy cover and delivering Green Grid connections

#### Planning Priority N20

Delivering high quality open space



### An efficient city

#### Planning Priority N21

Reducing carbon emissions and managing energy, water and waste efficiently



### A resilient city

#### Planning Priority N22

Adapting to the impacts of urban and natural hazards and climate change.

## 5

# Sustainability

Improving sustainability will involve incorporating natural landscape features into the urban environment; protecting and managing natural systems; cooling the urban environment; innovative and efficient use and re-use of energy, water and waste resources; and building the resilience of communities to natural and urban hazards, shocks and stresses.

All aspects of sustainability rely on maintaining and managing green infrastructure. Green infrastructure is the network of green spaces, natural systems and semi-natural systems that support sustainable communities. Its connected elements are waterways; urban bushland; urban tree canopy and green ground cover; parks and open spaces.

Parks and gardens, remnant bushland and tree-lined streets also attract and sustain talent required for Greater Sydney to thrive as a global city. Optimising and protecting existing assets will be essential in ensuring the on going health and sustainability of the District.

The North District's natural environment is defined by extensive native bushland, beaches and lagoons, the foreshore of Sydney Harbour and major waterways. The District's coasts and waterways – including the iconic Sydney Harbour – frame the District on three sides and help define its identity.

Maintaining and improving the health of Sydney Harbour and the Parramatta, Pittwater and Hawkesbury rivers as natural, cultural and recreational assets also contributes to cooling the environment and provide habitat for aquatic ecosystems.

The Greater Sydney Green Grid – the regional network of high quality green spaces and tree-lined streets that support walking, cycling and community access to open spaces – will provide cool green links throughout the District.

The District's extensive rural areas include farmland which supplies fresh local produce

and mineral resources providing construction materials. Its bushland provides habitat for wildlife and offset sites for biodiversity.

As the North District grows, improvements in the way buildings and precincts are planned and designed, and the way water and energy infrastructure is delivered, can support the more efficient use of resources and lower carbon emissions. The management of waste will present both an environmental challenge and an economic opportunity. New approaches to how waste materials and resources are re-used within a circular economy will help reduce impacts on the environment.

Its climate and natural landscape can create natural hazards such as bushfire, heatwaves, flooding, storms, coastal erosion and inundation. Natural and urban hazards will be exacerbated by climate change. Supporting actions that mitigate climate change, and actions that assist communities to adapt to the impacts of climate change, will be important.

For the North District an integrated approach to improving sustainability can be achieved by the following Planning Priorities:

- N15.** Protecting and improving the health and enjoyment of Sydney Harbour and the District's waterways
- N16.** Protecting and enhancing bushland and biodiversity
- N17.** Protecting and enhancing scenic and cultural landscapes
- N18.** Better managing rural areas
- N19.** Increasing urban tree canopy cover and delivering Green Grid connections
- N20.** Delivering high quality open space
- N21.** Reducing carbon emissions and managing energy, water and waste efficiently
- N22.** Adapting to the impacts of urban and natural hazards and climate change.

## Green infrastructure and greener places

Green infrastructure is fundamental to creating a high quality of life and is important in creating a region that is climate-resilient and adaptable to future needs. The NSW Government's draft green infrastructure policy *Greener Places: Establishing an urban green infrastructure policy for New South Wales* was produced by the Government Architect NSW to guide the planning, design and delivery of green infrastructure. The draft policy also highlights the role of green roofs and walls, private and semi-private residential gardens and agricultural land that complement green infrastructure and help support more sustainable places.

The draft policy is based on a green infrastructure framework which has key components:

- Bushland and Waterways – delivering green infrastructure for habitat and ecological health
- The Urban Tree Canopy – delivering green infrastructure for climate change adaptation and resilience
- Parks and Open Space – delivering green infrastructure for people.



Chowder Bay



## Planning Priority N15

### Protecting and improving the health and enjoyment of Sydney Harbour and the District's waterways

In giving effect to *A Metropolis of Three Cities*, this Planning Priority delivers on the following objective and the corresponding strategies:

#### Objective 25

The coast and waterways are protected and healthier.

The North District's coast and waterways shape its landscape and character. They are natural assets, cultural resources and recreational destinations. As the District grows, greater housing density around waterways, and more people looking to use waterways for recreation, will mean that these assets will need to be carefully managed so they continue to support a wide range of activities.

The waterways and rivers of the North District are part of an overall natural system and contribute to the green infrastructure that cools and greens the District. The District's waterways support coastal, marine and groundwater-dependent ecosystems, which benefit from continuing protection and management. They support threatened ecological communities and accommodate the disposal of stormwater and wastewater. The District's catchments and waterways are shown on Figure 19.

Waterways within the North District include Sydney Harbour and the Parramatta River, the Lane Cover River, Middle Harbour, Narrabeen Lagoon, Pittwater and the Hawkesbury rivers.

The North District's waterways support significant biodiversity. Five aquatic reserves – Barrenjoey Head, Narrabeen Head, Long Reef, Cabbage Tree Bay and North Harbour at Manly – have been created to protect fish, aquatic animals and marine vegetation.

The North District's protected waterways play an integral role in creating a sense of place, providing recreational opportunities, and supporting economic and cultural activities. Sydney Harbour is an internationally celebrated tourism destination and continues to be a working harbour.

The District's famous beaches, including Manly Beach and Palm Beach, also attract visitors and support an active lifestyle for residents.

Pittwater's foreshore is a spectacular natural resource with visitors and residents using the foreshore for leisure and recreation. Many recreational activities including water skiing, fishing and canoeing are located on the Hawkesbury River.

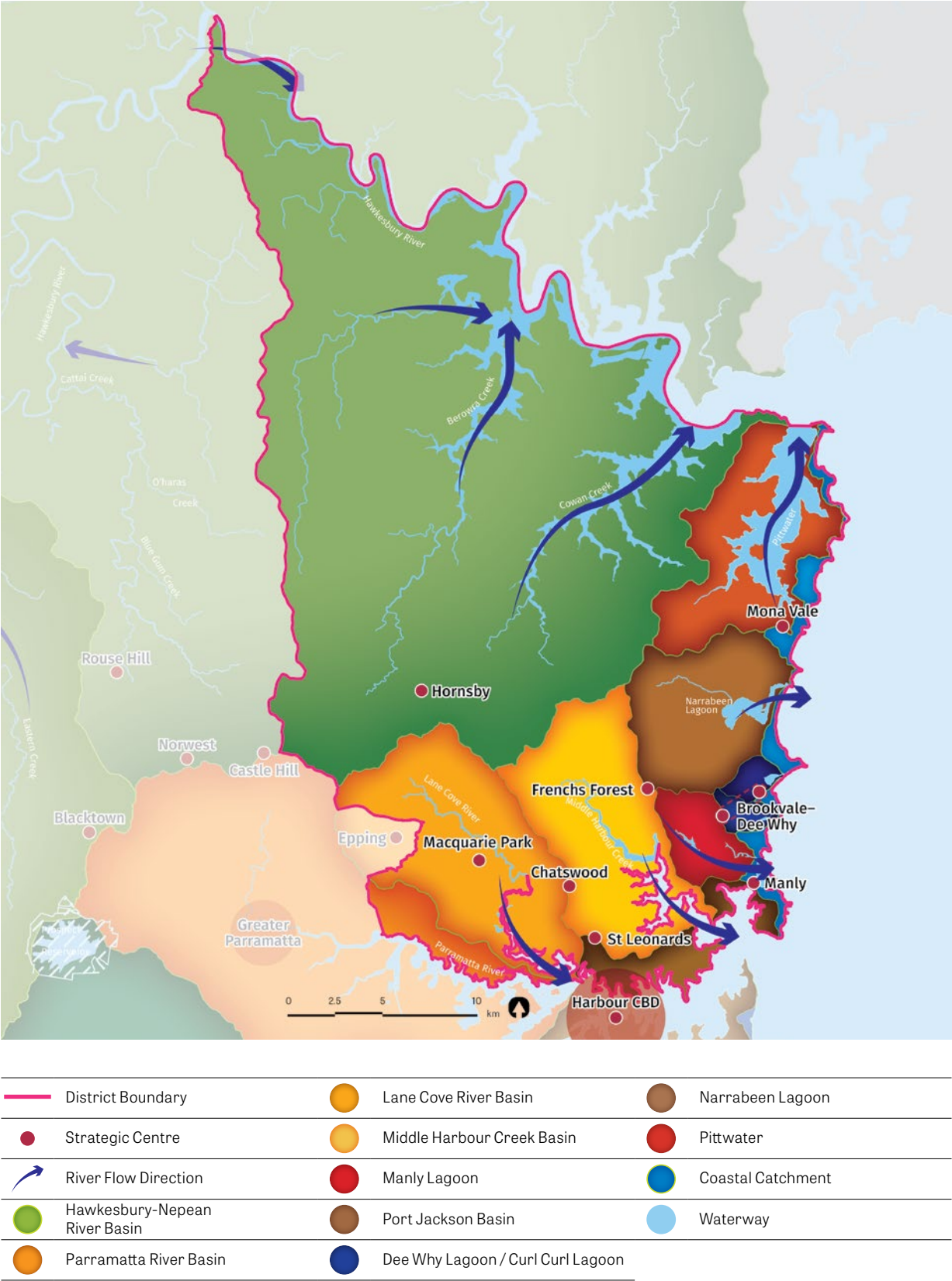
A legacy of historical land uses, contaminated land and groundwater, aged infrastructure and the pattern of urban development have impacted some of the District's waterways. Other waterways, such as Middle Harbour at Balmoral Beach, are in better health, provide habitat, are accessible and are popular for swimming.

Urban development, the clearing of vegetation, and the increase in impermeable surfaces have resulted in large quantities of stormwater run-off, reduced water quality and loss of habitat. Urban stormwater carries litter and contaminants into the District's waterways. The District's waterways often flow through more than one local government area and are managed by a number of State agencies and stakeholders, so water quality and waterway health is best managed at a catchment and sub-catchment level.

New development and investment in infrastructure provides an opportunity to improve the necessary health and quality of the District's waterways, foreshores and riparian corridors, through improving public access to and along the foreshores; providing connected green space around the foreshores; conserving cultural heritage; protecting and enhancing flora, fauna and urban bushland; reducing erosion and sedimentation; improving bank stabilisation; promoting pervious surfaces; providing vegetation buffers, and recovering and reinstating more natural conditions in highly modified waterways.

Enhancing community access to the coast and waterways within the District and, in particular, the foreshores of Sydney Harbour, should be prioritised. This includes access for pedestrians as well as boats and other watercraft. The delivery of the Greater Sydney Green Grid (refer to Planning Priority N19) will enhance connections to Sydney Harbour, the Parramatta River and the coastline from Palm Beach to Manly.

Figure 19: North District catchments and waterways



Legislation, policies and plans, are in place to improve the health of waterways and to manage water resources. For example, the *Coastal Management Act 2016* integrates coastal management and land use planning, the *Fisheries Management Act 1994* protects aquatic biodiversity, and the *Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005* coordinates development decisions for Sydney Harbour and its tributaries. The NSW Water Quality and River Flow Objectives identify the high-level goals for several catchments in the District. State agencies and councils also manage the health of waterways through planning and development decisions, environmental programs and through the management of public land.

The *2017 Metropolitan Water Plan* is the NSW Government's plan to ensure there is sufficient water to meet the needs of the people and environment of Greater Sydney, now and for the future. The NSW Government's WaterSmart Cities Program will explore new ways to supply drinking water, and manage stormwater and wastewater in a more integrated, cost-effective and sustainable way.

The Marine Estate Management Authority has prepared the draft *Marine Estate Management Strategy 2018-28* which when finalised, will support a clean, healthy and productive marine environment.

This District Plan aims to protect and improve the environmental health of waterways. Many councils have identified and mapped environmentally sensitive areas of waterways that are important to the local community, and use additional local provisions and natural waterways and environment zones to protect these areas.

For local waterways, where governance and ownership of the waterway can be highly fragmented, a green infrastructure approach, which values waterways as infrastructure, can lead to more innovative management of waterways with outcomes that better reflect community expectations.

An integrated approach to the protection and management of waterways will also rely on more comprehensive approaches to the monitoring and reporting of water quality and waterway health. Councils monitor water quality and waterway health, implement sustainable urban water management and encourage water-sensitive urban design.

The District Plan aims to integrate the objectives for waterways that are set out in legislation, policies and plans, by prioritising the management of waterways as green infrastructure. This involves:

- reconceptualising waterways as an infrastructure asset that provide environmental, social and economic benefits to communities
- integrating approaches to protecting environmentally sensitive waterways within a network of green infrastructure
- addressing the cumulative impacts of development and land management decisions across catchments to improve water quality and waterway health.

Collaboration and coordination across all levels of government and with the community are needed to deliver the green space, urban cooling and integrated water management outcomes needed to support the North District.

Future work will apply the lessons from previous management of the District's rivers, notably the Parramatta River Catchment Group which coordinates the management of the Parramatta River.

Catchment-scale management and coordination can:

- solve multiple problems – for example, catchment condition and water scarcity, or water quality impacts on aquifers, estuaries and the marine estate
- set objectives for the District's waterways and enable them to be achieved in innovative and cost-effective ways
- achieve both public and private benefits for example, stormwater from private land could support the management of public green space and urban waterways
- promote integrated water cycle management and investment in sustainable water, wastewater and stormwater infrastructure.

Strategic planning needs to manage the cumulative impacts of activities and associated infrastructure (such as moorings, marinas and boat launching facilities) while ensuring public access and opportunities for swimming, and small boat and kayak launching from publicly owned land. Access to waterways should not compromise the integrity of environmentally sensitive aquatic and riparian habitats.



The planning and design of neighbourhoods can also enhance community access to the coast and waterways of the District, prioritising the foreshores of Sydney Harbour, Parramatta River and Pittwater.

## Sydney Harbour

Sydney Harbour is one of Greater Sydney's most recognised and valuable assets – it is part of what makes Sydney one of the most attractive and recognisable cities in the world.

It is a significant natural scenic feature with its many tributaries, estuaries, beaches and bays providing abundant biodiversity. There is a rich Aboriginal and colonial heritage associated with the Harbour. The Harbour and its tributaries are major transport corridors, flora and fauna habitat and recreation areas.

Public access to Sydney Harbour and its foreshore is important for water-based activities, especially where these are adjacent to public open space. Access to Sydney Harbour foreshore should be maintained and increased wherever possible.

Sydney Harbour is a major economic asset which makes a significant contribution to tourism and provides a place for major cultural events, including New Year's Eve and Australia Day celebrations. It is a working waterway, with defence and military operations, cruise ships, commercial shipping, recreational watercraft industries, ferries and water taxis. Collaboration is required to resolve conflicts between recreational, residential and industry users.

Currently, Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005 provides a framework to maintain, protect and enhance the catchment, foreshores, waterways and islands of Sydney Harbour. There may be opportunities to take a more comprehensive view as to how major waterways and their foreshores across Greater Sydney are managed and protected.

## Hawkesbury River

The Hawkesbury-Nepean River has a 21,400 square kilometre catchment – one of the State's largest catchments east of the Great Dividing Range. The river system, including the Nepean River, extends beyond the boundaries of Greater Sydney, stretching from south of Goulburn, and west of Lithgow, to the Brooklyn Bridge in the north. The river and its tributaries flow through remote bushland and mountainous terrain, fertile agricultural land and urbanised areas, and it joins the ocean at a spectacular estuary.

In the North District, the Hawkesbury River flows past semi-rural land, waterfront villages and bushland before meeting Pittwater and the Pacific Ocean at Broken Bay. Most of the District's regional open space is located along the Hawkesbury River and its tributaries in large national parks and reserves such as the Ku-ring-gai Chase National Park and Berowra Valley National Park.

The Hawkesbury River provides opportunities for fishing and recreational boating, including house boats, as well as a fishing and oyster farming industry. Maintaining the health of the river is essential for the future of these industries and to support recreation.

Pittwater is a significant body of water within the Hawkesbury-Nepean catchment which is an important natural heritage area, comprising wetlands, lagoons and lagoons with adjacent bushland. It is a popular water recreation location.

The land adjacent to waterways to the north of Sydney Harbour was settled for thousands of years by the Guringai people, and Aboriginal people continue to have a strong association with these important waterways.

The most significant change to the Hawkesbury-Nepean catchment will occur around South Creek in the Western City and Central City districts, where rapid and sustained urban growth will transform the landscape over the next few decades. Maintaining water quality and waterway health will be a significant challenge that will be carefully managed as South Creek catchment becomes more urbanised.

## Parramatta River

Parramatta River is central to Greater Sydney's Aboriginal and colonial history and the development of modern Sydney. Its foreshore has an enhanced network of open spaces, walkways and cycleways.


In the past, Parramatta River and its tributaries have suffered from degradation and contamination. There have been gradual improvements to water quality in recent decades, although recent modelling has predicted water quality in the river will worsen unless additional management interventions are implemented.

The NSW Government is working with councils and the community to develop the Parramatta River Masterplan, a blueprint for making selected sites along the Parramatta River swimmable. Four sites are already open for swimming, and a number of other sites have been identified for further investigation including Meadowbank, Kissing Point Park and Putney. The masterplan adopts the Office of Environment and Heritage and the Environment Protection Authority's risk-based decision framework. Proactive management and improvements to wastewater and stormwater systems, including state-of-the-art water quality analysis and modelling, will provide the foundation of a healthy river<sup>24</sup>.

Making more sites along the Parramatta River swimmable requires improvements to the water quality and waterway health in the upstream catchment. This will take time to implement. Measures which slow the flow of stormwater into waterways and create bio-retention systems along streets, where water can be filtered and soak into the soil, will help make the river swimmable.

### Related government initiatives:

- NSW Department of Industry 2017 *Draft Marine Estate Management Strategy 2018–2028*
- The Parramatta River Catchment Group *Strategic Plan 2016–2018*
- Parramatta River Catchment Group *Let's make Parramatta River swimmable again by 2025*
- NSW Office of Environment and Heritage and the Environment Protection Authority 2017 *Risk-based Framework for Considering Waterway health Outcomes in Strategic Land-use Planning Decisions*

 Actions	Responsibility
62. Protect environmentally sensitive areas of waterways and the coastal environment areas.	Councils, other planning authorities, State agencies and State-owned corporations
63. Enhance sustainability and liveability by improving and managing access to waterways, foreshores and the coast for recreation, tourism, cultural events and water-based transport.	Councils, other planning authorities, State agencies and State-owned corporations
64. Improve the health of catchments and waterways through a risk-based approach to managing the cumulative impacts of development including coordinated monitoring of outcomes.	Councils, other planning authorities, State agencies and State-owned corporations
65. Work towards reinstating more natural conditions in highly modified urban waterways	Councils, other planning authorities, State agencies and State-owned corporations

## Planning Priority N16

### Protecting and enhancing bushland and biodiversity

In giving effect to *A Metropolis of Three Cities*, this Planning Priority delivers on the following objective and the corresponding strategy:

#### Objective 27

Biodiversity is protected, urban bushland and remnant vegetation is enhanced

Objective 27 in *A Metropolis of Three Cities* outlines how the NSW Government seeks to protect and manage biodiversity values across Greater Sydney, from national and State biodiversity conservation legislation to information such as biodiversity mapping. This Planning Priority reinforces the importance of Objective 27 and provides a context to District issues.

Bushland areas protected in national parks and reserves support the District's significant biodiversity, while bushland and remnant vegetation throughout the District's urban and rural areas also provide habitat, help cool the environment and support cleaner waterways and air.

Bushland covers around 48 per cent of the North District<sup>25</sup>. Most of this bushland is located within the Protected Natural Area, the major landscape area at the northern periphery of the District, including Ku-ring-gai Chase National Park. National parks and reserves in the District protect a number of important ecological communities including the Blue Gum High Forest and the Sydney Turpentine-Ironbark Forest, and protect vulnerable and endangered species. Figure 20 shows the extent of the District's Protected Natural Area.

Many areas of urban bushland are on public land managed as green infrastructure by councils, while some are on privately owned land.

Urban bushland, close to some of the District's most densely populated areas, supports opportunities for nature-based recreation and enhances liveability. Areas of bushland at the edges of urban neighbourhoods will need to be managed and enhanced to reduce edge-effect impacts, such as pollution and nutrients from stormwater runoff, weeds, domestic pets, litter and unmanaged or informal recreation trails.

For the North District, conservation planning will focus on opportunities to protect and enhance areas of endangered and critically endangered ecological communities outside the Protected Natural Area, including areas of native vegetation close to existing national parks.

A strategic approach to protecting the biodiversity in the North District involves investing in connected bushland corridors and protecting larger pockets of remnant vegetation, as large and connected areas of bushland give the District's wildlife the greatest chance of survival. Councils are also working together to map opportunities to restore and reconnect areas of habitat in established urban areas. This complements the delivery of the Greater Sydney Green Grid. Selected species of trees and understorey plants for parks and street planting in targeted areas supports the movement of wildlife and helps strengthen connections between areas of habitat.

Strengthening the protection of bushland in urban areas will help to conserve the District's biodiversity, preserve its scenic landscape, and enhance its tourist and recreational values. Remnant vegetation should be recognised as an asset that can be incorporated into the planning and design of neighbourhoods; for example, in parks, school grounds and as street trees.

Bushland in the District's rural areas will be protected and managed through place-based planning and incentivised as potential biodiversity offsets.

The *Biodiversity Conservation Act 2016* provides a framework and tools to avoid, minimise and offset impacts on biodiversity through the planning and development assessment process. There are a range of tools available to protect biodiversity on private land, including biodiversity stewardship agreements, conservation agreements and wildlife refuge agreements.

#### Related government initiative:

- NSW Office of Environment and Heritage  
*Cumberland subregion Biodiversity  
Investment Opportunities Map (BIO Map)*





West Head



### Actions

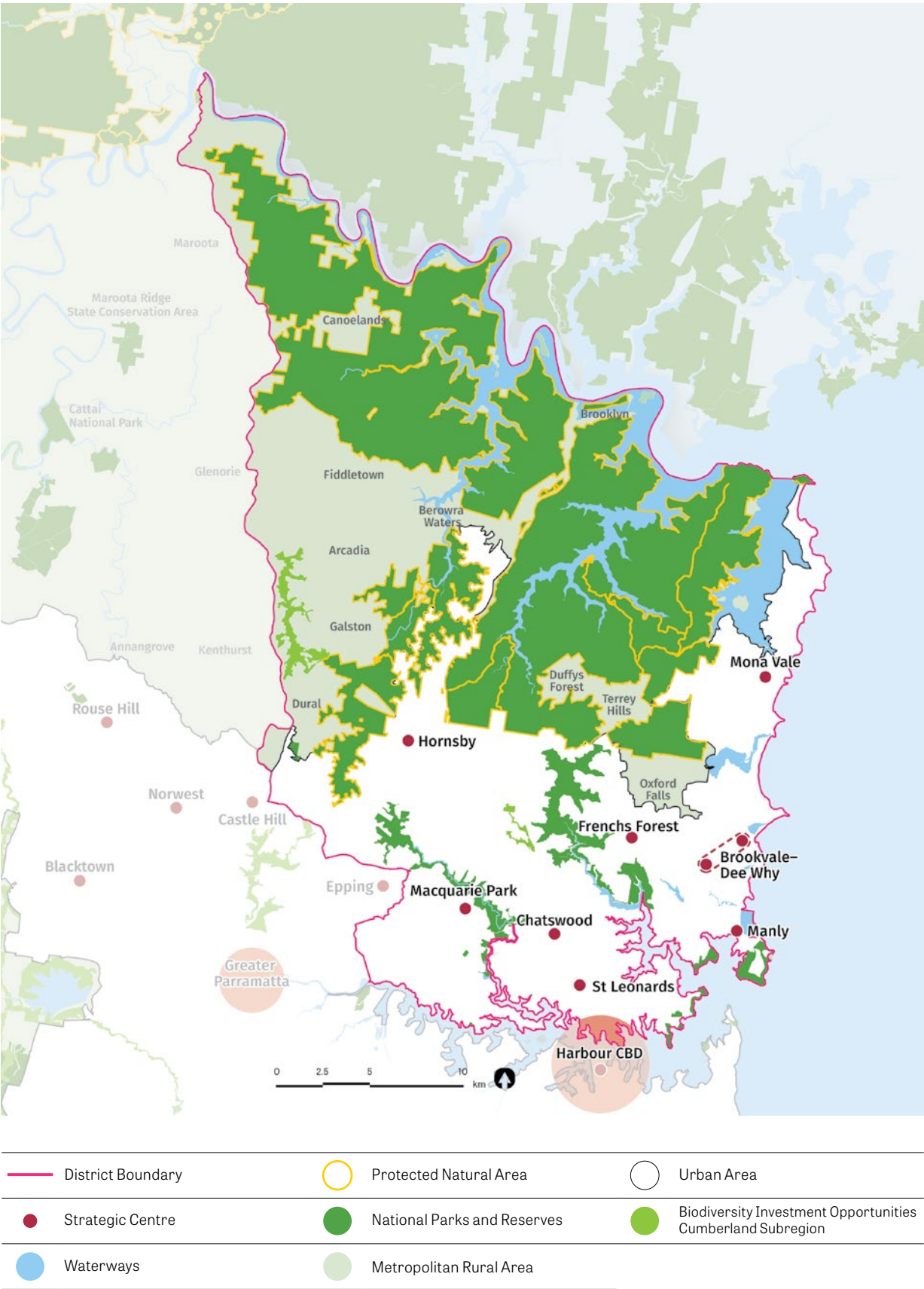
66. Protect and enhance biodiversity by:
- supporting landscape-scale biodiversity conservation and the restoration of bushland corridors
  - managing urban bushland and remnant vegetation as green infrastructure
  - managing urban development and urban bushland to reduce edge-effect impacts.

### Responsibility

Councils, other planning authorities and State agencies



Figure 20: North District Protected Natural Area and Metropolitan Rural Area



# Planning Priority N17

## Protecting and enhancing scenic and cultural landscapes

In giving effect to *A Metropolis of Three Cities*, this Planning Priority delivers on the following objective and the corresponding strategies:

**Objective 28**  
 Scenic and cultural landscapes are protected.

The scenic and cultural landscapes of the North District contribute to the identity and international profile of Greater Sydney. Scenic and cultural landscapes encourage an appreciation of the natural environment, protect heritage and culture, and create economic opportunities, particularly for recreation and tourism. Aboriginal culture is deeply entwined in the landscapes of Greater Sydney.

Scenic and cultural landscapes can complement green infrastructure, particularly where scenic landscapes include waterways and urban bushland. Scenic and cultural landscapes can often be prone to natural hazards; for example, escarpments can be prone to land slip and erosion.

One of the District’s key assets is its stunning Harbour and coastline. The Harbour and coastal views contribute to, and shape, the character of the District and the way people live. Tree-lined ridges and escarpments provide natural backdrops enjoyed from the Harbour. Beaches, bays and rock outcrops also contribute to these scenic views. Views from the Harbour, and views to the Harbour and foreshores, are both important. Escarpments such as West Head provide viewing locations which should be retained and enhanced in the planning and design process.

Other valued scenic landscapes in the District include the Hawkesbury River and its tributaries, such as Berowra and Cowan creeks, which are framed by Protected Natural Areas. Views to and from the Hawkesbury River include natural coves, tree-lined ridges and beaches, providing a scenic setting for boats and foreshore picnics.

Protected Natural Areas provide scenic views from beaches and the coastline, including locations such as Palm Beach and Whale Beach. Bushland areas, shaped by ridgelines and valleys, are also important landscapes in the District, such as Ku-ring-gai National Park.

The Metropolitan Rural Area provides another valued scenic and cultural landscape in the District, with pastoral and historic locations including Glenorie and Arcadia (refer to Planning Priority N18).

A protected cultural landscape within the North District is North Head, including Sydney Harbour National Park and the Quarantine Station at Manly. The site provides a prominent gateway into Sydney, with a landscape spread with heritage-listed buildings from new arrivals to Australia in the colonial era. This cultural landscape is already protected for its scenic and cultural values.

Continued protection of the North District’s scenic and cultural landscapes is important for the sustainability, liveability and productivity of the District. It can complement the protection of biodiversity and habitat, help manage natural hazards and support tourism. Protecting scenic and cultural landscapes can also help preserve links to Aboriginal cultural heritage.

 Actions	Responsibility
67. Identify and protect scenic and cultural landscapes.	Councils, other planning authorities and State agencies
68. Enhance and protect views of scenic and cultural landscapes from the public realm.	Councils, other planning authorities and State agencies



## Planning Priority N18

### Better managing rural areas

In giving effect to *A Metropolis of Three Cities*, this Planning Priority delivers on the following objective and the corresponding strategies:

#### Objective 29

Environmental, social and economic values in rural areas are protected and enhanced.

The North District's rural areas contribute to habitat and biodiversity, support productive agriculture, provide mineral and energy resources, and sustain local rural towns and villages. They are part of the larger Metropolitan Rural Area.

The District's rural areas are located around Terrey Hills and Oxford Falls, and around the rural villages of Galston, Glenorie, Fiddletown, Maroota, Canoelands, Berowra Waters and Brooklyn. Figure 20 shows the extent of the District's rural areas.

Nurseries, cut-flower and stone-fruit production are the main forms of agriculture in the District. There are clusters of agricultural activity around Middle Dural, Galston and Arcadia, which extend into the Central City District. A significant proportion of the Metropolitan Rural Area is under-utilised and has the potential to be used for productive rural uses.

The District has mineral and extractive resources around Maroota, Canoelands and Belrose. These operations extract construction sand for use in concrete and mortar used in housing developments, infrastructure and building redevelopment throughout the Sydney Region. Sourcing construction materials locally minimises transport requirements, and reduces the cost, environmental footprint and social impact of construction, supporting growth in the Greater Sydney.

The District's rural areas provide opportunities for people to live in a pastoral or bushland setting. Urban development is not consistent with the values of the Metropolitan Rural Area. *A Metropolis of Three Cities* takes a strategic approach to delivering Greater Sydney's future housing needs within the current boundary of the Urban Area, including existing growth areas.

Urban development in the Metropolitan Rural Area will be considered only in the urban investigation areas identified in *A Metropolis of Three Cities*.

Urban investigation areas have been identified as part of a structured approach to managing the long-term growth of Greater Sydney in a deliberate and carefully planned way, where land use is integrated with major transport corridors. There are no urban investigation areas in the North District.

Increased demand for biodiversity offset sites and limiting urban development in the Metropolitan Rural Area will help make it more attractive for landowners to protect biodiversity on private land through stewardship agreements.

The distinctive towns and villages of the Metropolitan Rural Area within the North District offer opportunities for people to live and work in an attractive and unique setting, close to a major city. Examples of these villages include Glenorie, and Wisemans Ferry.

Maintaining and enhancing the distinctive character of each rural and bushland town and village is a high priority. Ongoing planning and management of rural towns and villages will need to respond to local demand for growth, the character of the town or village and the surrounding landscape and rural activities. Rural and bushland towns and villages will not play a role in meeting regional or district scale demand for residential growth.


The North District's rural areas contain large areas that serve as locations for people to live in a rural or bushland setting amongst bushland, farms and other rural industries. Within the North District, these areas are primarily zoned RU2 Rural Landscape or RU6 Transition.

Rural residential development is not an economic value of the District's rural areas and further rural residential development is generally not supported. Limited growth of rural residential development could be considered where there are no adverse impacts on the amenity of the local area and the development provides incentives to maintain and enhance the environmental, social and economic

values of the Metropolitan Rural Area. This could include the creation of protected biodiversity corridors, buffers to support investment in rural industries and protection of scenic landscapes.

Parts of the urban-rural fringe are owned by the Local Aboriginal Land Council. Future planning of these areas may require flexibility in order to balance rural values with the objectives of greater economic participation and community and cultural use of these areas by Aboriginal people.

Design-led place-based planning will help manage environmental, social and economic values, maximise the productive use of rural areas, and incentivise biodiversity protection for remnant vegetation. Design-led planning at the landscape unit scale will provide councils with a process to engage more effectively with stakeholders, examine complex issues more clearly, identify important rural values at a local scale and set priorities for maintaining and enhancing these values through local land use planning.

 <b>Actions</b>	<b>Responsibility</b>
69. Maintain or enhance the values of the Metropolitan Rural Area using place-based planning to deliver targeted environmental, social and economic outcomes.	Councils and other planning authorities
70. Limit urban development to within the Urban Area.	Councils and other planning authorities, State agencies and State-owned Corporations



Dural

## Planning Priority N19

### Increasing urban tree canopy cover and delivering Green Grid connections

In giving effect to *A Metropolis of Three Cities*, this Planning Priority delivers on the following objectives and the corresponding strategies:

#### Objective 30

Urban tree canopy cover is increased.

#### Objective 32

The Green Grid links parks, open spaces, bushland and walking and cycling paths.

The Greater Sydney Green Grid is a long-term vision for a network of high quality green spaces that connects communities to the natural landscape. It links tree-lined streets, waterways, bushland corridors, parks and open spaces to town centres, public transport and public spaces. The Greater Sydney Green Grid builds on the District's established open space, the Regional Tracks and Trails Framework and the Principal Bicycle Network.

Tree-lined streets, urban bushland and tree cover on private land form a component of the urban tree canopy. The urban tree canopy is a form of green infrastructure that mitigates the urban heat island effect, with a 10 per cent increase in tree canopy cover reducing the land surface temperature by 1.13 degrees Celsius<sup>26</sup>. The urban tree canopy also supports cleaner air and water, and provides local habitat. Trees remove fine particles from the air and help insulate against urban noise pollution, particularly important along busy roads. The urban tree canopy can also help make communities more resilient by reducing the impact of heat waves and extreme heat.

### The urban tree canopy

The urban areas of the North District have 47 per cent tree canopy cover, with some areas in Hornsby, Ku-ring-gai and the Northern Beaches providing more than 50 per cent tree canopy cover<sup>27</sup>. Sustaining boulevards of trees along the District's busiest roads (such as Epping Road, Pacific Highway, Victoria Avenue, Albert Avenue, Archer Street, Pittwater Road and Warringah Road) is an important

step towards improving amenity and air quality, and cooling the North District. The NSW Government has set a target to increase tree canopy cover across Greater Sydney to 40 per cent. Figure 25 shows tree canopy cover in the Urban Area in 2011.

Along many busy roads, where there is limited space to plant new trees, there may be opportunities to plant other forms of green groundcover, such as garden beds and hedges that can help improve the air quality.

Trees are valued by residents and contribute to the streetscape, character and amenity of the District. As the District continues to grow and change, the urban tree canopy will come under pressure. This means that expanding the urban tree canopy in public places will become even more important for sustainable and liveable neighbourhoods.

The tree canopy may be formed by a mix of native and exotic, deciduous or evergreen trees, which provide shade in summer while allowing sunlight into homes and onto roofs for solar power, particularly in winter.

Therefore, urban renewal and transformation projects will be critical to increasing urban tree canopy cover. This can be complemented by other green cover, including rain gardens, green roofs and green walls. Green cover can help slow and store stormwater and improve water quality, filtering pollution before it reaches the District's waterways.

Challenges to extending the urban tree canopy in public and private areas include the lack of sufficient space within existing street corridors and the competition with other forms of infrastructure both above and below the ground. Opportunities to relocate power lines underground or bundle them may be explored at a local or precinct scale, particularly in areas experiencing urban renewal, to provide space for the urban tree canopy and enhance the public domain. Extending the urban tree canopy should be balanced with the need to allow sunlight into homes and onto roofs for solar power.



The District's councils generally provide guidance on enhancing tree canopy and tree cover in the urban environment, and information on street trees. Some encourage permeable surfaces to allow rainwater to soak into the ground and reduce stormwater run-off, which supports the growth of canopy trees and vegetation, and reduces pollution, flooding and urban heat.

Where trees are lost as a result of development, some councils have developed programs to plant replacement trees in the public realm.

The NSW Department of Planning and Environment's *Apartment Design Guide* and the new *Greenfield Housing Code* guide the requirements for landscape areas that can support the urban tree canopy. The NSW Department of Planning and Environment is preparing an urban tree canopy manual, as part of a green infrastructure policy framework, to support the expansion of the urban tree canopy.

## Connecting the Greater Sydney Green Grid

Enhancing the amenity and activity within, and accessibility to, the Greater Sydney Green Grid will promote a healthier urban environment, improve community access to places for recreation and exercise, encourage social interaction, support walking and cycling connections and improve resilience.

The long-term vision for the Greater Sydney Green Grid in the North District is shown on Figure 21.

This vision will be delivered incrementally over decades, as opportunities arise and detailed plans for connections are refined. Green Grid Priority Projects have been selected to provide district-scale connections

that link open space, waterways and bushland. Table 5 lists Green Grid Projects for the District.

Councils will lead the delivery of the Greater Sydney Green Grid through land use planning and infrastructure investment mechanisms such as development and land use controls, agreements for dual use of open space and recreational facilities, direct investment in open space, and other funding mechanisms such as local development contributions and voluntary planning agreements.

State, regional and district parklands and reserves form a principal element of the Greater Sydney Green Grid for both biodiversity and recreational purposes.

The NSW Government supports the delivery of regional open space and Green Grid connection through the Metropolitan Greenspace Program.

The NSW Government also supports delivery of regional open space using special infrastructure contributions.

Transport for NSW is establishing a Principal Bicycle Network in collaboration with councils. Opportunities to integrate the Principal Bicycle Network with the Greater Sydney Green Grid will be an important part of linking centres.

In some areas, rail lines and other linear infrastructure prevent Green Grid connections. Where feasible, planning and investment must consider opportunities for connections across rail lines, roads and other linear infrastructure.

### Related government initiative:

- NSW Office of Environment and Heritage  
2015 *Urban Green Cover in NSW Technical Guidelines*


 Actions	Responsibility
71. Expand urban tree canopy in the public realm.	Councils, other planning authorities and State agencies
72. Progressively refine the detailed design and delivery of: <ul style="list-style-type: none"> <li>a. Greater Sydney Green Grid priority corridors</li> <li>b. opportunities for connections that form the long-term vision of the network</li> <li>c. walking and cycling links for transport as well as leisure and recreational trips.</li> </ul>	Councils, other planning authorities and State agencies

Table 5: North District Green Grid projects

### Priority Corridors

#### 1 Lane Cove National Park and Lane Cove River

enhanced open spaces along the Lane Cove River foreshores to create unique recreational experiences, linking the Lane Cove National Park to Macquarie Park, Macquarie University, Chatswood and Epping. Funding has been granted towards flood mitigation of a heavily used crossing point of the Lane Cove River, linking Ku-ring-gai and Ryde local government areas, and connecting to the Great North Walk. The project will create design options to improve track accessibility under wet conditions along the Browns Waterhole Track, North Epping and South Turramurra.

#### 2 Eastwood to Macquarie Park Open Space Corridors

will be extended and enhanced, including Shrimptons Creek, Terrys Creek and the Booth Road-North Road-Welby Street Green Link. A \$450,000 grant to the City of Ryde will upgrade ELS Hall Park, a popular park to link two major recreational corridors (Shrimptons Creek and County Road shared pathways). This will involve new tree planting, wayfinding signage, picnic shelters and enhancements to the dog off-leash area.

### Projects important to the District

#### 3 Northern Beaches Coastal Lagoons

combining three related projects at Curl Curl Lagoon and Greendale Creek, Dee Why Lagoon and Wheeler Creek, and Warriewood Wetlands and Narrabeen Creek that support the recreational needs of the surrounding communities and wider District, and protect Narrabeen, Curl Curl and Dee Why lagoons as a recreation asset and wildlife sanctuary.

#### 4 Coastal Walk and Cycleway from Barrenjoey Head to Manly

continuing to support the completion of the Coastal Walk, reviewing current foreshore access, developing staging strategies for the completion of any missing links or sections of lower quality, and improving pedestrian and cycle access from surrounding suburbs, and sustainable transport connections from areas further west.

#### 5 Great North Walk

upgrading Berowra Valley sections of the 250-kilometre Great North Walk from Newcastle to Lane Cove (National Parks and Wildlife Service) and potentially including links from train stations and centres to the Great North Walk, particularly the link from Hornsby to Berowra Valley through Hornsby Quarry.

#### 6 Parramatta River and Sydney Harbour Foreshore

improving foreshore access by completing missing links along the northern Parramatta River foreshore, and continuing to support the delivery of Sydney Harbour Federation Trust projects, including the proposal to transform the *HMAS Platypus* site in Neutral Bay into a public park with buildings adapted for a range of new uses.

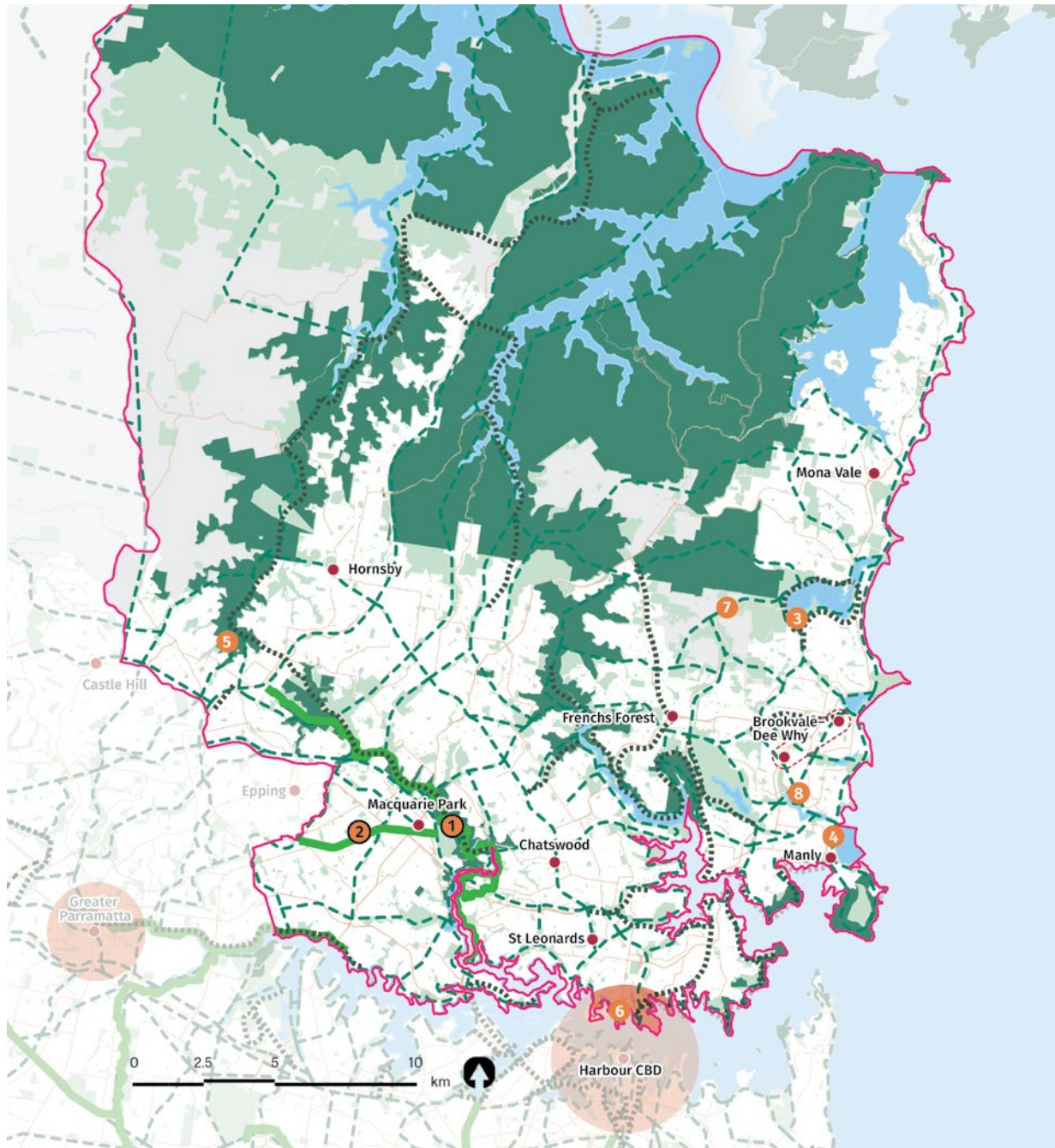
#### 7 Garigal National Park – Oxford Falls and Deep Creek

improving links to the new Northern Beaches Hospital precinct, improving walking and cycling links to Narrabeen Lagoon and protecting the Garigal National Park from the impacts of nearby development.

#### 8 Pittwater Road Corridor

establishing street trees along the corridor, exploring options for new development setbacks to incrementally widen the corridor to improve the environment for walking and cycling, linking the corridor to surrounding bushland patches in Ingleside and initially focusing on the areas between Queenscliff to Brookvale, Dee Why to Collaroy and North Narrabeen to Mona Vale.

**Figure 21:** North District Green Grid opportunities



	District Boundary		Green Grid Priority Corridor		Road
	Metropolitan Centre		Projects important to the District		National Parks and Reserves
	Strategic Centre		Other Green Grid Opportunities		Open Space and Reserves
	Metropolitan Rural Area		Existing Tracks and Trails		Waterways

Source: Greater Sydney Commission, 2017, adapted from *Sydney Green Grid*, report prepared by Tyrrell Studio and Office of the Government Architect for the Greater Sydney Commission



## Planning Priority N20

### Delivering high quality open space

In giving effect to *A Metropolis of Three Cities*, this Planning Priority delivers on the following objective and the corresponding strategy:

#### Objective 31

Public open space is accessible, protected and enhanced.

Public open space is a form of green infrastructure that enhances the character of the North District's neighbourhoods, supports healthy and active lifestyles, and brings communities together. As the District grows, providing for and developing innovative ways to optimise open space areas for recreation, sport and social activity, as well as establishing physical links that support social networks and create a sense of community, will become increasingly important. Delivering connected walking, cycling and horse riding trails will maximise their use.

The key considerations for planning open space are quality, quantity and distribution. The Greater Sydney Green Grid will help improve access and distribution. There will be relatively few opportunities to increase the quantity of public open space, and therefore greater emphasis will be needed on improving the quality and distribution of open space, including sporting facilities.

Councils already identify innovative solutions for the shortfall in active open space, including making better use of existing sportsgrounds, converting existing open space into sports fields, and partnering with schools to share spaces outside school hours.

Urban renewal also creates opportunities for increasing the quantity of open space. Planning for urban renewal needs to consider opportunities to deliver new, improved and accessible open spaces, including space for active sport and recreation, that meet the needs of the growing community. High density development (over 60 dwellings per hectare) should be located within 200 metres of open space and all dwellings should be within 400 metres of open space.

People in urban neighbourhoods should be able to walk to local open space. In high density neighbourhoods, public open space is used like a shared backyard, providing a green communal living space. Open space in high density neighbourhoods needs to be durable, multipurpose and accessible to a wide variety of users. High density neighbourhoods also need to have high quality open space within close proximity.

In local and strategic centres, Planned Precincts and Growth Areas, local open space is important to provide places for workers to relax and for people to meet and socialise. It also provides for tree and vegetation planting in the centre. Place-based planning can identify opportunities to improve the quality, management and use of existing open space, and to provide new open space.

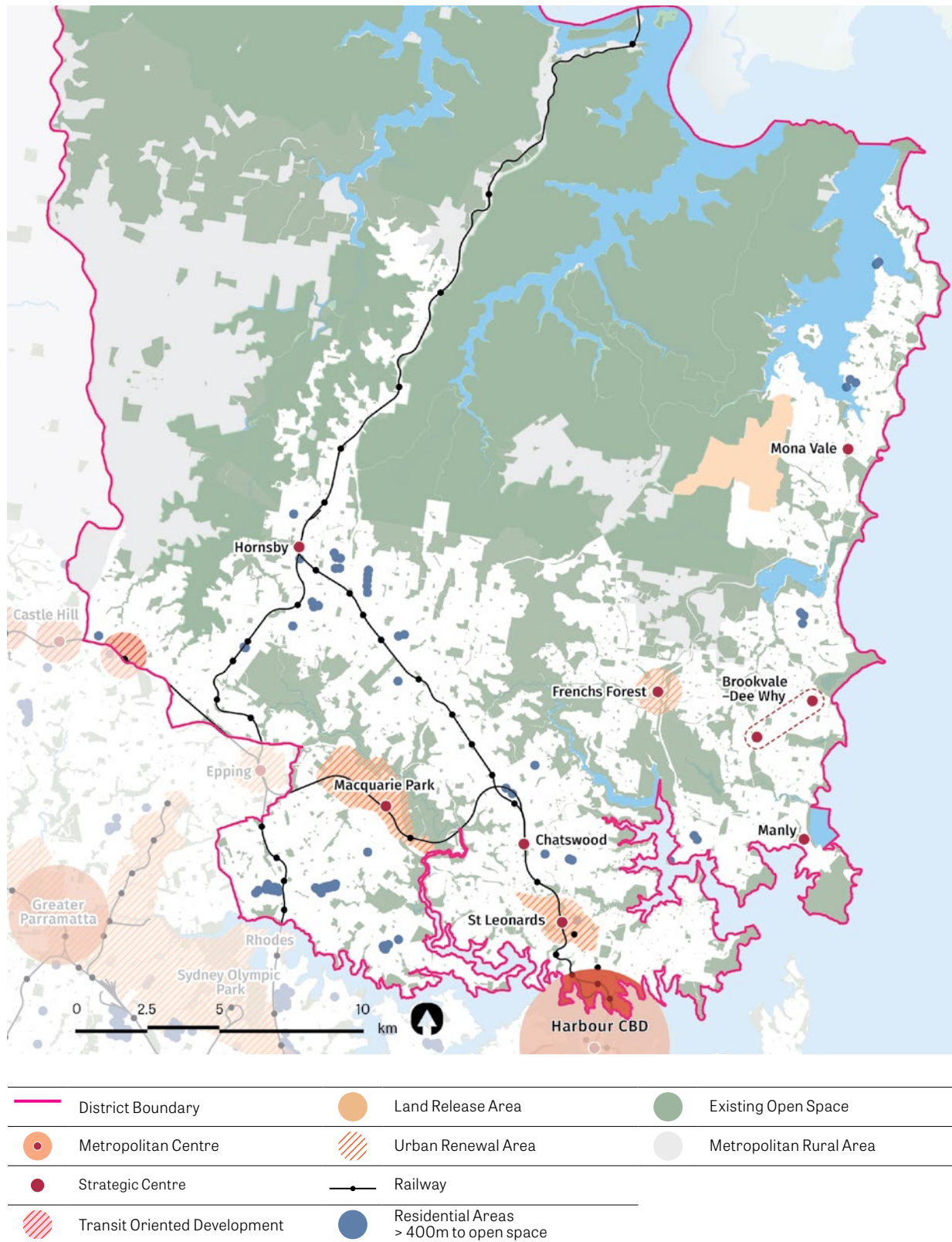
While 52 per cent of the District is open space, most of this is protected national parks and reserves along the Hawkesbury River and its tributaries, such as the Ku-ring-gai National Park and the Berowra Valley National Park<sup>28</sup>. Nature-based recreation can help connect communities to the natural landscape. Demand for nature-based recreation will need to be managed to minimise impacts on biodiversity.

Existing open space within the District is shown on Figure 22.

Access to open space for the majority of residents in the District is within 400 metres. For residents of high density development, improving access to local open space together with its quality will be essential.

When the future of any larger spaces used for activities such as golf courses is uncertain, due to declining membership and attendance figures any land or facilities in public ownership should be retained as open space and transitioned to shared open space and facilities, including for organised sports. For land in private ownership, there may be opportunities for part of the land to be repurposed or set aside for open or shared spaces.

**Figure 22:** North District access to open space



Source: Greater Sydney Commission, 2016, Greater Sydney Public Open Space Audit, December 2016


Active open space is in high demand across the District, with limited opportunity to provide additional capacity in response to population growth. Utilisation rates are high, with some sporting clubs unable to access fields as needed, and providers such as local councils finding it difficult to fund upkeep and maintenance. A trend towards greater participation in sport by women and people aged over 35 is beginning to appear, as well as a trend towards indoor sports, and sports requiring less space such as futsal, changing patterns of demand for sports fields and facilities.

The Northern Sydney Regional Organisation of Councils' (NSROC) *Regional Sportsground*

*Management Strategy* (2011) aims to improve coordination of sportsground management across the region and is in the process of being reviewed. Future open space planning relies on collaboration and innovative re-use of shared spaces in response to the rising demand for active open space.

Open space within school grounds is a potential asset that could be shared by the wider community outside of school hours.

The Government Architect NSW is developing an open space toolkit, a resource for councils to use for open space planning.

 Actions	Responsibility
<p>73. Maximise the use of existing open space and protect, enhance and expand public open space by:</p> <ul style="list-style-type: none"> <li>a. providing opportunities to expand a network of diverse, accessible, high quality open spaces that respond to the needs and values of communities as populations grow</li> <li>b. investigating opportunities to provide new open space so that all residential areas are within 400 metres of open space and all high density residential areas (over 60 dwellings per hectare) are within 200 metres of open space</li> <li>c. 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</li> <li>d. planning new neighbourhoods with a sufficient quantity and quality of new open space</li> <li>e. delivering shared and co-located sports and recreational facilities including shared school grounds and repurposed golf courses</li> <li>f. delivering, or complementing the Greater Sydney Green Grid</li> <li>g. providing walking and cycling links for transport as well as leisure and recreational trips.</li> </ul>	<p>Councils, other planning authorities, State agencies and State-owned corporations</p>



## Planning Priority N21

### Reducing carbon emissions and managing energy, water and waste efficiently

In giving effect to *A Metropolis of Three Cities*, this Planning Priority delivers on the following objectives and the corresponding strategies:

**Objective 33**  
A low-carbon city contributes to net-zero emissions by 2050 and mitigates climate change.

**Objective 34**  
Energy and water flows are captured, used and re-used.

**Objective 35**  
More waste is re-used and recycled to support the development of a circular economy.

The significant growth and development planned for the North District will mean that demand for energy and water and the generation of waste will increase. Without new approaches to the use of energy and water and management of waste, greenhouse gas emissions are likely to increase.

The District has an opportunity to include precinct-wide energy, water and waste efficiency systems, for land release at Ingleside, urban renewal, industrial and urban services land and centres. Adopting a place-based approach is necessary to achieve the best sustainability outcomes, including renewing and replacing inefficient infrastructure and organising utilities, waste management, car parking, amenities, open space, urban green cover and public spaces.

Better design of precinct-wide energy, water and waste systems will encourage a circular economy that improves efficiency. A circular economy means designing waste out of the system. For example, a food manufacturing plant could send waste to an adjacent anaerobic digester to power the plant.

### A low-carbon District

More efficient use of energy and water in the District will reduce impacts on the environment and the District’s greenhouse gas emissions. The Greater Sydney Commission has been seeking to better understand greenhouse gas emissions for each

District across Greater Sydney and will continue to explore opportunities for planning initiatives to support the NSW Government’s goal of achieving a pathway towards net-zero emissions by 2050.

Potential pathways towards net-zero emissions in the District include:

- new public transport infrastructure, electric vehicles, and autonomous vehicles to connect residents to their nearest strategic centre or metropolitan centre within 30 minutes
- a range of transport demand management initiatives, including working from home, improved walking and cycling, improved access to car sharing, carpooling and on-demand transport
- new building standards and retrofits so that energy, water and waste systems operate as efficiently as possible (for residential and non-residential buildings)
- building and precinct-scale renewable energy generation
- waste diversion from landfill.

The way Greater Sydney’s urban structure and built form develop in the future can support NSW’s transition towards net-zero emissions. Better integrating land use with transport planning will help slow emissions growth by locating new homes near public transport and high quality walkways and cycle paths.

Building on existing public transport connections with electric vehicle transport hubs, shared autonomous vehicles and other innovative transport technologies can further reduce greenhouse emissions, and reduce levels of noise and air pollution. Prioritising parking spaces for car sharing and car pooling can support more efficient use of road space and help reduce emissions. Emerging transport technologies will reduce the need for parking spaces and help reduce congestion.

Designing high-efficiency buildings and incorporating renewable energy generation will reduce emissions and reduce costs over time.

This means improving the energy and water efficiency of buildings, and reducing waste in urban renewal projects and infrastructure projects.

Recycling local water and harvesting storm-water creates opportunities for greening public open spaces including parks, ovals and school playgrounds.

Recycling water diversifies the sources of water to meet demands for drinking, irrigating open spaces, keeping waterways clean and contributing to Greater Sydney's water quality objectives.

## Recycling and reducing waste

There is diminishing capacity in existing landfill sites in Greater Sydney, with more waste being sent to landfill outside the region. This increases costs to the community. Additional sites for waste management in Greater Sydney would improve efficiencies in managing waste.

Waste is managed through a number of facilities in the North District. The District is one of the few in NSW with a facility capable of managing its own waste for the foreseeable future.

The Kimbriki Resource Recovery Facility, on the border of Ingleside and Terrey Hills, operates a dry landfill, a transfer station for household recyclables (as well as a composting facility for garden vegetation) and the processing of construction and demolition waste and other recovery and recycling activities. A number of transfer stations operate in the area, separating and transferring waste from the region to other landfills.

The planning and design of new developments should support the sustainable and effective collection and management of waste.




The NSW Environment Protection Authority has a range of guidelines and other information to assist in the sustainable management of waste.

Treating separated organic waste and then processing it through an energy-from-waste facility, will reduce waste sent to landfill and can help reduce greenhouse gas emissions.

In higher density neighbourhoods innovative precinct-based waste collection, re-use and recycling would improve efficiency, reduce truck movements and boost the recycling economy. Where possible, additional land should be identified for waste management, reprocessing, re-use and recycling.

#### Related government initiatives:

- NSW Environment Protection Authority *NSW Waste Avoidance and Resource Recovery Strategy 2014–2021*
- NSW Environment Protection Authority *Resources for local council waste and recycling operations*
- NSW Environment Protection Authority *Waste Less, Recycle More*

 Actions	Responsibility
74. Support initiatives that contribute to the aspirational objective of achieving net-zero emissions by 2050, especially through the establishment of low-carbon precincts in Planned Precincts, State Significant Precincts, Urban Transformation projects, Growth Areas and Collaboration Areas.	Councils, other planning authorities, State agencies and State-owned corporations
75. Support precinct-based initiatives to increase renewable energy generation, and energy and water efficiency, especially in Planned Precincts, Growth Areas, Collaboration Areas and State Significant Precincts, and Urban Transformation projects.	Councils, other planning authorities, State agencies and State-owned corporations
76. Protect existing, and identify new, locations for waste recycling and management.	Councils, other planning authorities and State agencies
77. Support innovative solutions to reduce the volume of waste and reduce waste transport requirements.	Councils, other planning authorities and State agencies
78. Encourage the preparation of low-carbon, high efficiency strategies to reduce emissions, optimise the use of water, reduce waste and optimise car parking provision where an increase in total floor area greater than 100,000 square metres is proposed in any contiguous area of 10 or more hectares.	Councils and other planning authorities, State agencies and State-owned corporations
79. Investigate potential regulatory mechanisms such as a Protection of the Environment Policy (PEP) that sets low-carbon, high efficiency targets to be met through increased energy efficiency, water recycling and waste avoidance, reduction or re-use. This could include a framework for the monitoring and verification of performance for precincts in Growth Areas, Planned Precincts, Collaboration Areas, urban renewal precincts and housing growth areas that are planned to have an increase in total floor area greater than 100,000 square metres.	Environmental Protection Authority



## Planning Priority N22

### Adapting to the impacts of urban and natural hazards and climate change

In giving effect to *A Metropolis of Three Cities*, this Planning Priority delivers on the following objectives and the corresponding strategies:

#### Objective 36

People and places adapt to climate change and future shocks and stresses.

#### Objective 37

Exposure to natural and urban hazards is reduced.

#### Objective 38

Heatwaves and extreme heat are managed.

The District's climate and natural landscape can create natural hazards such as heatwaves, bushfire, flooding, storms, coastal inundation and erosion. Climate change will exacerbate these natural hazards. While planning for resilience has traditionally focused on responses to natural hazards and climate change, it is increasingly being used to consider a wider range of social and economic shocks and stresses.

Effective planning can reduce the exposure to natural and urban hazards, and build resilience to shocks and stresses. Growth and change needs to consider exposure at a local level, and when making decisions about growth and considering cumulative impacts, at district and regional levels.

State agencies and councils use a range of policies and tools to reduce risks from natural and urban hazards. Centralised and coordinated collection of data on hazards, particularly on how infrastructure is exposed to hazards, will help embed resilience in land use planning and infrastructure planning.

## Natural and urban hazards

The climate, vegetation, topography and pattern of development in the District mean that bushfire and flooding will continue to be hazards. Placing development in hazardous areas or increasing the density of development in areas with limited evacuation options increases risk to people and property.

All local government areas in the North District are exposed to some flood threat, whether from major rivers or local overland flow. The *Floodplain Development Manual 2005* provides councils with policy directions and tools for managing exposure to flooding. Some coastal areas of the District are at risk of coastal erosion and inundation, and sea-level rise such as Collaroy. Potential sea-level rise associated with climate change could also lead to saltwater intrusion into freshwater ecosystems and damage coastal open space and infrastructure.

Past and present urban development and activities can also create urban hazards such as noise, air pollution and soil contamination. Compared to many cities around the world, Greater Sydney enjoys excellent air quality, which enhances its reputation as a sustainable and liveable city. However, the combined effect of air circulation patterns in the Sydney Basin, local topography, and proximity to different sources of air pollution such as wood-fire smoke, can lead to localised air quality issues.

Transport movements along major roads and rail corridors generate noise and are a source of air pollution. The degree of noise or air pollution can be related to the volume of traffic and the level of truck and bus movements. The design of new buildings and public open space can help reduce exposure to noise and air pollution along busy road and rail corridors. Public transport, walking and cycling, as well as hybrid and electric cars, provide opportunities to reduce air pollution. The NSW Government has recently strengthened regulation of ventilation outlets in motorway tunnels, which will also help reduce air pollution.

Soil and groundwater contamination is another urban hazard which will require careful management as the District grows, and land uses change. This is particularly important when planning for more sensitive land uses such as schools, open space and low-density residential neighbourhoods, in areas with the potential for pre-existing contamination. State Environmental Planning Policy No. 55 – Remediation of Land and

its associated guidelines manage the rezoning and development of contaminated land.

Greater Sydney, particularly its rural land, is at risk from biosecurity hazards such as pests and diseases that could threaten agriculture, the environment and community safety. Biodiversity hazards are being managed by the NSW Government through the *Greater Sydney Peri Urban Biosecurity Program*.

In planning for future growth, consideration of natural hazards and their cumulative impacts includes avoiding growth and development in areas exposed to natural hazards, and limiting growth in existing communities that are exposed and vulnerable to natural hazards. In exceptional circumstances, there may be a need to reduce the number of people and amount of property that are vulnerable to natural hazards, through managed retreat of development.

The impact of extreme heat on communities and infrastructure networks can also be significant. More highly developed parts of the District can be exposed to extreme heat as a result of the urban heat island effect. Increasing tree canopy cover is important to help reduce those impacts. The *State Heatwave Sub Plan*, which is within the *NSW State Emergency Management Plan*, details the control and coordination arrangements across State and local governments for the preparation for, response to, and immediate recovery from a heatwave.

Current guidelines and planning controls also focus on minimising hazards and pollution by:

- using buffers to limit exposure to hazardous and offensive industries, noise and odour
- designing neighbourhoods and buildings that minimise exposure to noise and air pollution in the vicinity of busy rail lines and roads, including freight networks
- cooling the landscape by retaining water and protecting, enhancing and extending the urban tree canopy to mitigate the urban heat island effect.

Minimising interfaces with hazardous areas can reduce risks. Clearing vegetation around developments on bushfire-prone land can help reduce risks from bushfire, but must be balanced with protecting bushland, and its ecological processes and systems. Planning on bushfire prone land should consider risks and include hazard protection measures within the developable area. The Rural Fire Service requires new developments to comply with the provisions of *Planning for Bush Fire Protection 2006*.

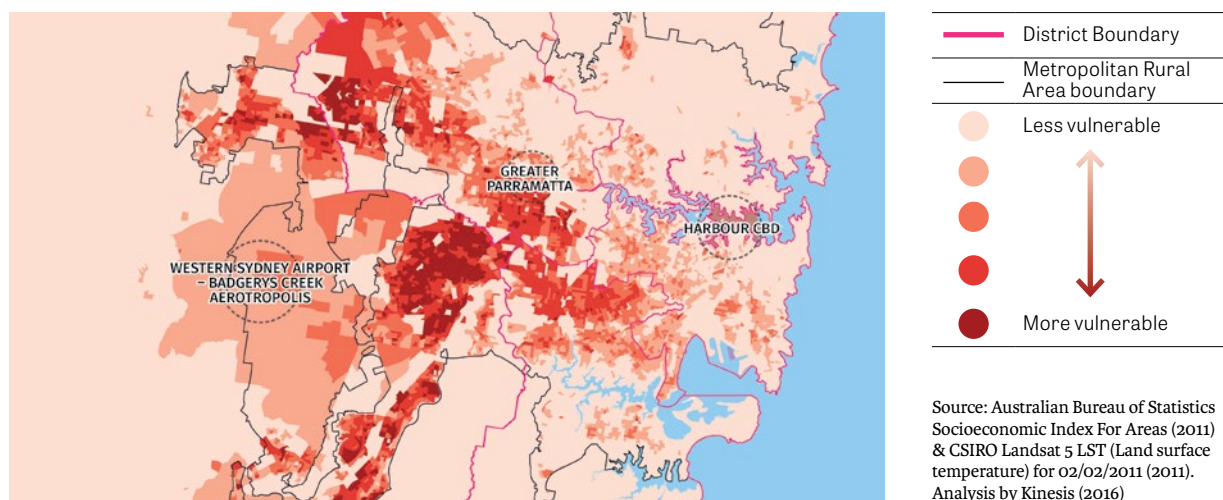
## Adapting to climate change

The most significant natural hazards and acute shocks that affect the North District include bushfire, severe storms and coastal erosion and inundation, which can also impact coastal lagoons and streams. These natural phenomena will be exacerbated by climate change.

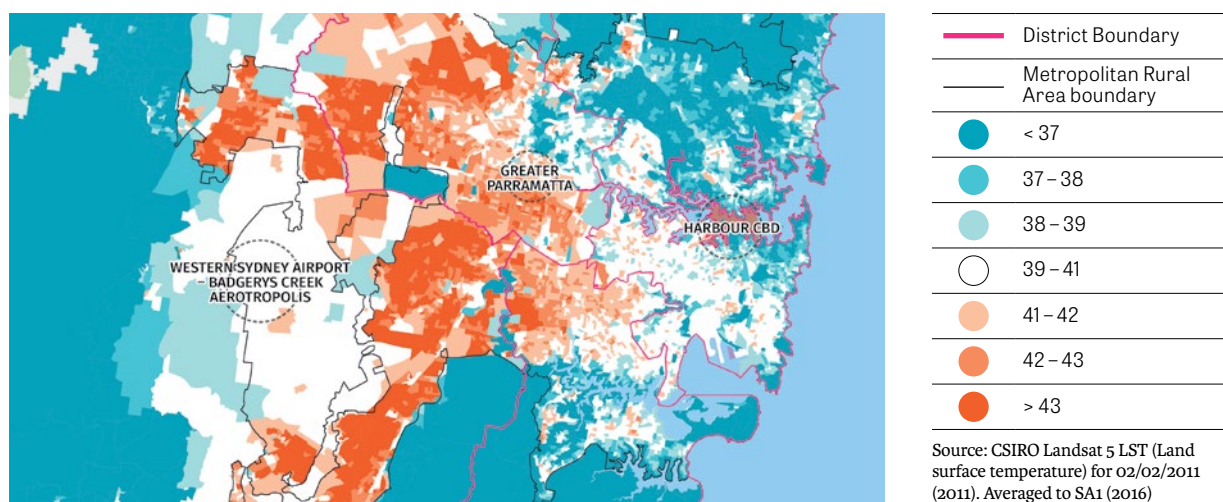


Lane Cove

**Figure 23:** Vulnerability to heatwaves



**Figure 24:** Land surface temperature during a heatwave



**Figure 25:** Tree canopy cover at 2011





The *draft Coastal Management Manual* sets out approaches to address sea level rise and the resilience of coastal assets, while CoastAdapt collates tools to support adaptation to coastal climate change and sea-level rise.

Air temperatures in Greater Sydney are expected to increase due to climate change and increasing urbanisation. With projected increases in heatwaves and the number of extreme temperature days, taking action to cool the city, in conjunction with supporting the community to adapt to a changing climate, is increasingly important. Increasing tree canopy cover will help reduce those impacts.

Figure 23 shows different levels of vulnerability to heatwaves. Areas are ranked by their combined level socioeconomic disadvantage and exposure to heat during a heatwave, and Figure 24 shows land surface temperatures during heatwave conditions. Figure 25 shows tree canopy cover as at 2011.

The way neighbourhoods and buildings are planned and designed can help communities adapt and be more resilient to extreme heat. Increased tree canopy and green groundcover, will help minimise these effects.

Retaining more water in the landscape and integrating waterways in the design of new communities will help create a greener and cool city. Water-play features and connections with water will become essential elements of urban areas while green walls, green roofs and initiatives such as rain gardens will help cool urban environments.

Building design and building materials can also mitigate the urban heat island effect. Cooler building materials, including lighter-coloured roofs, lighter-coloured paving and more permeable paving can be highly effective.

## Shocks and stresses

Councils across the North District are participating in the 100 Resilient Cities initiative and considering ways to respond to shocks and stresses that could strengthen community resilience.


The Australian Government has released *Australia's Strategy for Protecting Crowded Places from Terrorism*, which provides a framework for making public places safer and more resilient. This strategy is accompanied by tools which councils and building owners and managers can use to implement protective measure that will strengthen community resilience.

### Related government initiatives:

- NSW Office of Environment and Heritage *Floodplain Development Manual 2005*
- NSW Rural Fire Service *Planning for bush fire protection 2006*
- NSW Justice Office of Emergency Management *2011 State Heatwave Sub Plan*
- NSW Office of Environment and Heritage *AdaptNSW*
- Australian Government *Australia's Strategy for Protecting Crowded Places from Terrorism*

### Useful link:

[100 Resilient Cities](#)

 Actions	Responsibility
80. Support initiatives that respond to the impacts of climate change.	Councils, other planning authorities and State agencies
81. Avoid locating new urban development in areas exposed to natural and urban hazards and consider options to limit the intensification of development in existing urban areas most exposed to hazards.	Councils, other planning authorities and State agencies
82. Mitigate the urban heat island effect and reduce vulnerability to extreme heat.	Councils, other planning authorities and State agencies

## 6

# Implementation

Successful implementation of the district plans requires:

- councils to prepare and implement local strategic planning statements as part of their strategic planning framework
- councils to update local environmental plans through the development of their local strategic planning statements and other relevant plans and policies
- collaboration across government and with local government and the private sector where each have clear roles and responsibilities (refer to Figure 26)
- private sector investment in line with the expectations and targets for housing, and jobs including commercial, retail and industrial developments
- infrastructure delivery which is responsive to the District Plan's priorities and growth patterns across each District
- ongoing engagement to inform implementation
- annual monitoring of the performance of the District Plan and the status of delivering actions.

## Role of district and local plans

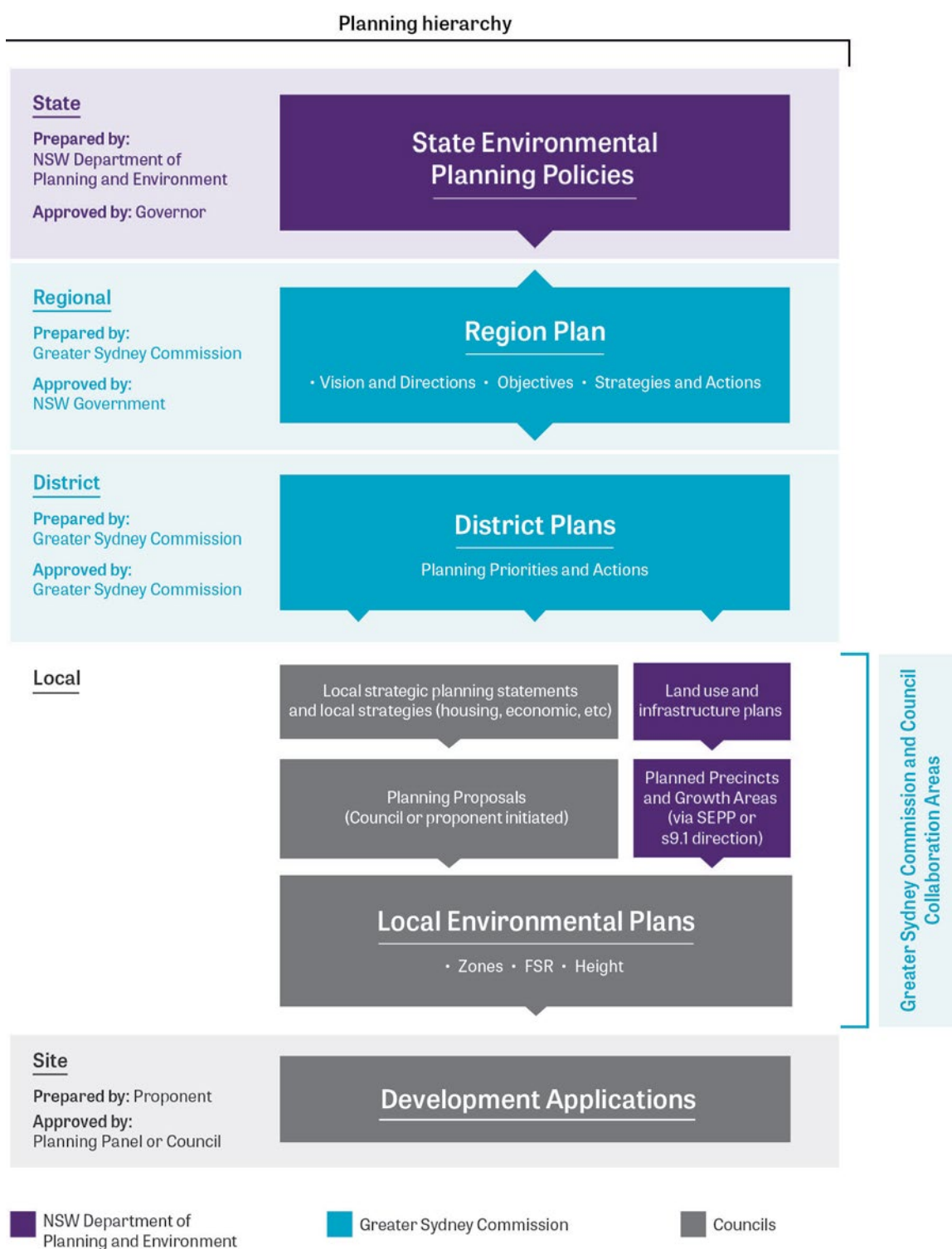
Region and district plans inform the preparation and endorsement of local strategic planning statements and the preparation and assessment of planning proposals. Councils are to complete the update of their local environmental plan within three years of the district plans being finalised.

This involves councils:

- reviewing their strategic planning framework, including a review of the existing local environmental plans against the relevant District Plan
- undertaking necessary studies and strategies and preparing a local strategic planning statement which will guide the update of the local environmental plans.

To accelerate the local planning process, the Housing Affordability Package announced by the NSW Government in June 2017 requires the Greater Sydney Commission, as part of a suite of policy measures, to nominate 10 Priority Councils in Greater Sydney, which will each receive up to \$2.5 million to assist with updating their local environmental plans to give effect to the district plans, within two years of the Commission releasing final district plans.

**Figure 26:** Roles of planning authorities in Greater Sydney





The role of the local strategic planning statement is to provide an alignment between regional and district strategic plans and local strategic planning and delivery. To assist the alignment of regional – district and local planning protocols are required that formalise cooperation between State and local governments in that many of the opportunities and challenges in local planning are inter-related with government programs, particularly infrastructure investment.

Therefore a level of consistency in strategic planning approaches is needed to provide:

- alignment in interpretation of the region and district plans that supports the development of local strategic planning statements
- coordinated inputs by State agencies, particularly where State agency programs cross council and district boundaries – such as investment in major rail corridors, or the need for a new high school
- the ongoing review of the region and district plans that is informed by local inputs.

The first step towards this is developing, in consultation with councils a level of consistency in the approach to the council review of their local environmental plans.

Local planning is also informed by councils' community strategic plans. These community focused plans provide the strategic framework for the planning and delivery of services over a 10-year period for each local government area and are part of the broader Integrated Planning and Reporting Framework under the *Local Government Act 1993*. These plans can provide an important source of economic, social and environmental context for local strategic planning as well as a greater context to councils' delivery programs and operational plans. The community engagement strategy that supports the preparation of a community strategic plan may also inform a council's community participation plan.

As such a council, in the review of their local environmental plan can provide local economic, social and environmental context that will help identify the priorities for investigation needed to inform the local strategic planning statement.

In undertaking strategic planning processes, and/or preparing or considering planning proposals, planning authorities must give effect to the District Plan, specifically the planning priorities and actions. This also includes, as set out in the NSW Department of Planning and Environment's *A guide to preparing planning proposals*, consistency with other plans and policies that form part of the strategic planning framework for Greater Sydney, such as:

- State environmental planning policies – the NSW Department of Planning and Environment is currently reviewing state environmental planning policies as part of initiatives to simplify the NSW planning system and reduce complexity. This review process will modernise, simplify and improve the effectiveness and usability of the policies.
- Ministerial Directions under Section 9.1 of the *Environmental Planning and Assessment Act 1979*, which require consideration for local plan making that cover issues such as employment, environment and heritage, housing, infrastructure and urban development.

Information Note 6 outlines the status of the district plans in regard to planning matters.

## Planning Priority N23

### Preparing local strategic planning statements informed by local strategic planning

In giving effect to *A Metropolis of Three Cities*, this Planning Priority delivers on the following objective and the corresponding actions:

#### Objective 39

A collaborative approach to city planning.

A role of strategic planning is to provide a basis for planning decisions. Critically, strategic planning provides the community with transparency to the planning process. The Community Participation Plan and mandatory exhibition of draft local strategic planning statements reinforce the importance of community participation in shaping the plans that will guide future decision-making in their local area.

The local strategic planning required to inform the preparation of local strategic planning statements will support State-local government partnerships where State agencies have a critical role in supporting councils in managing growth and change. Councils' identification of the scope

and priorities for local strategic planning will be a streamlined process supported by the Greater Sydney Commission and the NSW Department of Planning and Environment and follows a similar approach to the Greater Sydney Commission's review of *A Plan for Growing Sydney*. This approach highlights the importance of understanding the context at the same time as an assessment of the planning framework to deliver the plan.

As the first step in the implementation of the district plans it is therefore important to set up a strong foundation for local strategic planning in partnership with the community and State agencies. This will commence with a review of existing local environmental plans which is to include:

- an assessment of local environmental plans against the relevant district plan which can establish an understanding of the areas that would need to be addressed to give effect to the district plan's Planning Priorities and Actions




Jerusalem Bay

- local context including:
  - the basis for strategic planning in the area, having regard to economic, social and environmental matters,
  - the planning priorities for the area from any applicable community strategic plan under section 402 of the Local Government Act 1993 subject to any such strategic plan
  - relevant areas of State, regional and district significance, including growth areas and planned precincts identified in the district plan
  - impediments to giving effect to district plan
- conclusions including
  - findings of the review
  - recommendations for local strategic planning priorities to inform local strategic planning statements and local environmental plan updates.

It is intended that the output of this review will clearly identify each council's priorities in giving effect to the district plans and where the strategic planning includes key inputs for state agencies.

The Commission and the NSW Department of Planning and Environment will support councils in the preparation of these reviews through a series of technical workshops which will incorporate the input of councils on the implementation of local strategic planning statements and other plans and policies. This will also include guidance on the housing demand that will inform the development of 6–10 year housing targets.

 Actions	Responsibility
83. The Greater Sydney Commission will require a local environmental plan review to include: <ul style="list-style-type: none"><li>a. an assessment of the local environment plan against the district plan Planning Priorities and Actions</li><li>b. local context analysis</li><li>c. an overview and program for the local strategic planning required to inform the preparation of a local strategic planning statement that will inform updates to the local environmental plan</li></ul>	Councils



## Planning Priority N24

### Monitoring and reporting on the delivery of the Plan

In giving effect to *A Metropolis of Three Cities*, this Planning Priority delivers on the following objective and the corresponding actions::

**Objective 40**  
Plans are refined by monitoring and reporting.

Monitoring and reporting will provide transparency to the community and other stakeholders. Action 13 in *A Metropolis of Three Cities* proposes that performance indicators be developed in consultation with State agencies and councils based around the 10 Directions that provide an integrated framework for both region and district plans. Performance indicators will also be used to monitor the performance of each district plan. This means the line of sight between the region and district plans will be underpinned by coordinated monitoring and it presents the opportunity for coordination with local planning.

It is intended that this common set of indicators enables a regional, district, local understanding of the performance of the plans. In this way evidence-based data can assist in the coordination of State and local planning decisions, a major issue raised in submissions to the draft region and district plans.

Developing indicators in consultation with agencies and councils would provide an opportunity to identify indicators that can also assist councils in their monitoring and reporting requirements of local strategic planning statements. Councils may also tailor monitoring and reporting appropriate to their local planning context.

As part of reporting on the implementation of the district plans, the Commission will also provide an annual report to the NSW Government on the status of the Actions in each district plan.




 Actions	Responsibility
84. Develop performance indicators in consultation with state agencies and councils that ensure the 10 Directions to inform inter-agency, State and local government decision-making.	Greater Sydney Commission, State agencies and councils

Table 6: Basis for monitoring the performance of the Plan

10 Directions	Basis for monitoring performance
<b>Infrastructure and collaboration</b>	
 1. A city supported by infrastructure	<p>As Greater Sydney grows and becomes more complex there is a need to design better ways of supporting growth and delivering appropriate infrastructure in the right places.</p> <p>A city supported by infrastructure will be measured against the outcomes achieved by city-shaping infrastructure that facilitates the three cities and city-serving infrastructure that is sequenced and aligned with forecast growth.</p> <p><b>Potential indicator:</b> Increased 30-minute access to a metropolitan centre/cluster.</p>
 2. A collaborative city	<p>Collaboration between government, industry and local communities will result in the best use of resources such as public spaces, school ovals and community facilities.</p> <p>A collaborative city will be measured against the outcomes achieved by all levels of government, industry and the community working together.</p> <p><b>Potential indicator:</b> Increased use of public resources such as open space and community facilities.</p>
<b>Liveability</b>	
 3. A city for people	<p>Improved quality of life can be achieved by co-locating schools, recreation, transport, community and health facilities, social infrastructure and local services in walkable mixed-use places.</p> <p>A city for people will be measured against the outcomes achieved by improved access to local health, education, transport, recreation, social facilities and services.</p> <p><b>Potential indicator:</b> Increased walkable access to local centres.</p>
 4. Housing the city	<p>Providing ongoing housing supply and a range of housing types in the right locations will create more liveable neighbourhoods and support Greater Sydney's growing population. Housing affordability is also a challenge that can affect job and lifestyle choices.</p> <p>Housing the city will be measured against the outcomes achieved by increasing housing supply and choice, and housing affordability.</p> <p><b>Potential indicators:</b> Increased housing completions (by type); Number of councils that implement Affordable Rental Housing Target Schemes.</p>
 5. A city of great places	<p>The creation and renewal of great places for people, together with better local accessibility through walking and cycling, will achieve local liveability that attracts and retains residents and workers. Great places exhibit design excellence and start with a focus on open spaces and a people-friendly realm.</p> <p>A city of great places will be measured against the outcomes achieved by improved local accessibility and connections, and design excellence.</p> <p><b>Potential indicator:</b> Increased access to open space.</p>

## 10 Directions

## Basis for monitoring performance

## Productivity



## 6. A well-connected city

*A Metropolis of Three Cities* requires a well-connected Greater Sydney with new jobs, shops and services in well-located centres with efficient transport connections and safe and convenient walking and cycling routes. This creates a 30-minute city.

A well-connected city will be measured against the outcomes achieved by improved access to metropolitan, strategic and local centres.

**Potential indicators:** Percentage of dwellings located within 30 minutes by public transport of a metropolitan centre/cluster; Percentage of dwellings located within 30 minutes by public transport of a strategic centre.



## 7. Jobs and skills for the city

Greater Sydney's population growth needs to be supported by economic growth that enhances its productivity, export sectors and global competitiveness.

Jobs and skills for the city will be measured against the outcomes achieved by increased business growth and investment, improved transport connections, economic agglomerations and target sectors.

**Potential indicator:** Increased jobs in metropolitan and strategic centres.

## Sustainability



## 8. A city in its landscape

A healthy natural environment will be important to improve liveability, create healthy places, and mitigate the effects of climate change.

A city in its landscape will be measured against the outcomes achieved by protected, restored and enhanced landscapes, waterways, coastline, natural areas, tree canopy and open spaces.

**Potential indicators:** Increased urban tree canopy; Expanded Greater Sydney Green Grid.



## 9. An efficient city

In Greater Sydney, the sectors that contribute most to greenhouse gas emissions are energy (electricity and gas) used in buildings, transport and waste.

An efficient city will be measured against the outcomes achieved by innovative management of water, energy, resources and waste in planning new development and infrastructure.

**Potential indicators:** Reduced transport-related greenhouse gas emissions; Reduced energy use per capita.



## 10. A resilient city

Adapting to climate change is critical to Greater Sydney's future resilience, together with responding to its natural and urban hazards. To be resilient, communities need social cohesion and access to economic resources.

A resilient city will be measured against the outcomes achieved by managing the impacts of natural hazards on communities, and adapting communities to cope with more very hot days.

**Potential indicator:** Number of councils with standardised statewide natural hazard information.



## 7

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Note: The source of population, dwellings and household data in this Plan is from the NSW Department of Planning and Environment, 2016 NSW State and Local Government Area Population and Household Projections and Implied Dwelling Requirements 2016 to 2036. Population projections provide an indication of the size and age-sex structure of the future

population if specified assumptions about future fertility, mortality and migration are realised. The projections are based on final 30 June 2011 Estimated Resident Populations (ERPs) supplied by the Australian Bureau of Statistics (ABS). Finalised ERPs incorporating the 2016 Census of Population and Housing are not expected from the ABS until mid-2018.

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