

OUR GREATER SYDNEY 2056

Revised **Draft** **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

Hornsby
Hunter's Hill
Ku-ring-gai
Lane Cove
Northern Beaches
Mosman
North Sydney
Ryde
Willoughby



How to be involved

This revised draft *North District Plan* replaces the draft *North District Plan*, released in November 2016.

You can read the entire draft District Plan at www.greater.sydney

This draft District Plan is on formal public exhibition until 15 December 2017.

You can make a submission:

by visiting:

www.greater.sydney/submissions

by emailing:

submissions@gsc.nsw.gov.au

by post to:

Greater Sydney Commission
Draft North District Plan
PO Box 257
Parramatta NSW 2124

Before making a submission, please read the Privacy Statement at www.greater.sydney/privacy. If you provide a submission in relation to this document using any of the above addresses, you will be taken to have accepted the Privacy Statement.

Please note that all submissions and comments will be treated as public and will be published in a variety of mediums. If you would like to make a submission without it being made public or if you have any questions about the application of the Commission's privacy policy, please contact the Commission directly on 1800 617 681 or submissions@gsc.nsw.gov.au

Chief Commissioner
Lucy Hughes Turnbull AO



This draft District Plan sets out planning priorities and actions for the growth and development of the North District.

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

Now we want to know how to build on these natural and built assets and current major infrastructure investments as the population grows. We know that over the next 20 years, changes in our social make up – such as the expected increase in people aged over 65 – will require specific planning for housing and social infrastructure.

Collaboration will be the key for clarity and guidance on our city's growth. The Greater Sydney Commission is bringing together all parties with an interest in the District's future and is channelling 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.

I encourage all stakeholders with an interest in the North District to review this draft District Plan. Your suggestions and comments are important in making this draft District Plan a living and working document to guide the North District's future for all residents.

North District Commissioner
Dr Deborah Dearing



The North District is one of the loveliest areas of Greater Sydney and Australia. It offers outstanding 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 are given 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 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 us to work 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 draft District Plan is part of a 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 finalise the Plan. It's an important step in helping to shape the decisions that will drive the District's future.

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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 – means residents in the North District will have quicker and easier access to a wider range of jobs, housing types and activities.

The North District is part of the Eastern Harbour City. Its expansive national parks, waterways and beaches provide a natural setting for its vibrant, productive centres and strong community connections.

The District comprises geographically diverse, economically strong and environmentally aware communities who value and embrace progress, the local landscape and a great quality of life.

The draft *North District Plan* guides the growth of the District within the context of the metropolis of three cities to improve the District's social, economic and environmental assets.

The draft Plan guides this growth by protecting the District's many lifestyle assets – from the bush, to its world-class beaches and Sydney Harbour, its vibrant local centres and heritage.

The District will attract even more local, domestic and international visitors as this thriving modern economy grows and coexists within beautiful, natural landscapes.

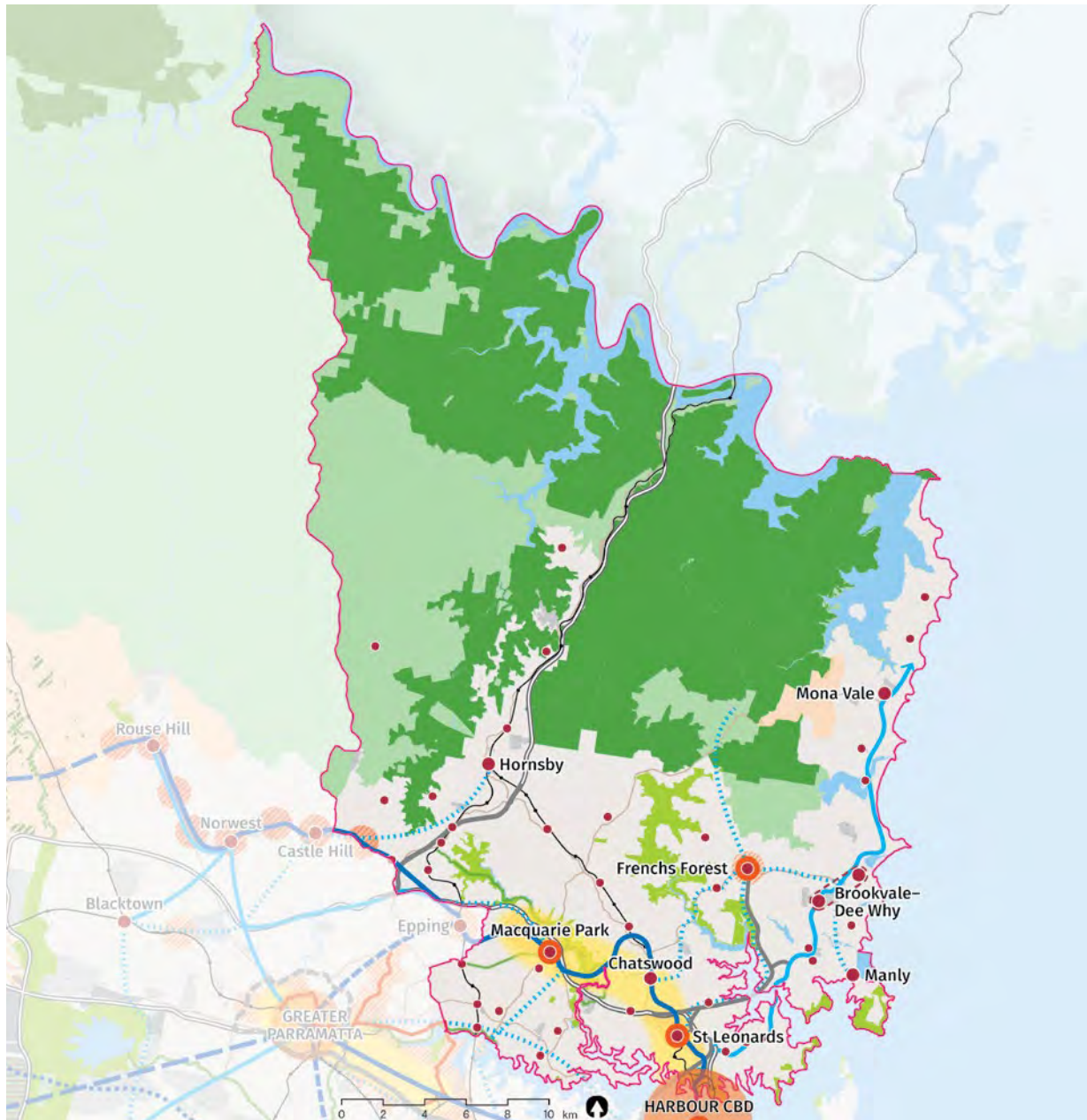
Housing and jobs will be targeted in the right places, aligned to new and enhanced infrastructure. Sydney Metro will create fast and efficient rail connections to both the Harbour CBD in the south and the growing communities in the northwest, while re-energising centres along its corridor.

Economic growth and a greater diversity of jobs will be targeted in the strategic centres of St Leonards, Chatswood, Macquarie Park, Brookvale-Dee Why, Hornsby and in Manly and Mona Vale as required. The Northern Beaches Hospital at Frenchs Forest will significantly boost the District's businesses and jobs in the health sector.

North Sydney's commercial core will be enhanced to strengthen the District's economic links to the Harbour CBD and its role in the Eastern Economic Corridor. North Sydney's neighbourhoods and lifestyle assets will continue to provide housing close to jobs, services and infrastructure, and give the area a unique character.

The North District will have new networks for walking and cycling both within and between strategic centres, along main roads, and along the coast from Manly through to Palm Beach. It will also have networks of open space and urban tree canopy as the Greater Sydney Green Grid is developed.

Figure 1: North District Structure Plan 2036



	Metropolitan City Centre		Land Release Area		Major Urban Parkland and Reserve		On Street Rapid Transit
	Health and Education Precinct		Transit Oriented Development		Waterways		Rapid Bus
	Strategic Centre		Urban Renewal Area		Train Station		Motorway
	Local Centre		Urban Area		Committed Train Link		Committed Motorway
	Economic Corridor		Protected Natural Area		Freight Rail Investigation		Green Grid Priority Project
	Industrial Land		Metropolitan Rural Area		Light Rail		

Source: Committed projects of: Western Harbour Tunnel & Beaches Link Tunnel, F6 Extension and Sydney Metro West are subject to final business case, no investment decision yet. Routes and stops for some transport corridors/projects are indicative only.

North District Structure Plan – urban area



Housing


























Existing and projected dwellings	2016	2036
North District	372,500	464,500

Jobs



Centre job target ranges	2016	2036
Brookvale-Dee Why	20,000	23,000-26,000
Chatswood	24,700	31,000-33,000
Frenchs Forest	9,300	12,000-13,000
Hornsby	14,300	18,000-22,000
Macquarie Park	58,500	73,000-79,000
Manly	5,000	6,000-6,500
Mona Vale	4,300	5,000-6,000
North Sydney	60,400	76,000-81,500
St Leonards	47,100	54,000-63,500

 Metropolitan City Centre	 Major Urban Parkland and Reserve
 Health and Education Precinct	 Waterways
 Strategic Centre	 Train Station
 Local Centre	 Committed Train Link
 Economic Corridor	 Freight Rail Investigation
 Industrial Land	 Light Rail
 Land Release Area	 On Street Rapid Transit
 Transit Oriented Development	 Rapid Bus
 Urban Renewal Area	 Motorway
 Urban Area	 Committed Motorway
 Protected Natural Area	 Green Grid Priority Project
 Metropolitan Rural Area	

Note: Committed projects of: Western Harbour Tunnel & Beaches Link Tunnel, F6 Extension and Sydney Metro West are subject to final business case, no investment decision yet. Routes and stops for some transport corridors/projects are indicative only.

Greater Sydney context



Figure 2: Metropolis of three cities

Planning for the five districts of Greater Sydney will support the vision for a metropolis of three cities (refer to Figure 2).

- The emerging **Western Parkland City** with the Western Sydney Airport and Badgerys Creek Aerotropolis will grow a strong trade, logistics, advanced manufacturing, health, education and science economy within a Western Economic Corridor and will be the most connected place in Australia.
- The developing **Central River City** will capitalise on its location in the centre of Greater Sydney and with radial transport links will continue developing its world-class health, education and research institutions, its finance, business services and administration sectors, and its logistics and urban services to drive the economy and support a growing population.
- The established **Eastern Harbour City**, Australia's global gateway, will build on its economic credentials and leverage its strong financial, professional, health and education sectors and push its capabilities with an innovation precinct that boosts productivity and global connections.

This vision will transform land use and transport patterns and rebalance Greater Sydney so the benefits of the growth are shared more equally and equitably to all residents as Greater Sydney's population increases from 4.7 million to 8 million over the next 40 years.

Each of the three cities is at a different stage of development so implementation requires a targeted approach to growth.

Economic growth is to be commensurate with population growth across Greater Sydney. Increasing productivity, global competitiveness and the region's export sectors are expected to increase economic activity to \$655 billion with 817,000 new jobs by 2036.

Greater Sydney's Eastern Economic Corridor has high concentrations of jobs with good road and public transport connectivity and high levels of interaction between business and people. This corridor contributed two-thirds of the State's economic growth over the

2015–16 financial year. Planning and investment will strengthen the established Eastern Economic Corridor and will complement it by growing the Greater Parramatta to the Olympic Peninsula (GPOP) and Western Economic Corridors.

People want to live close to jobs and services, so each of the three cities will have more housing in the right places which will assist with housing affordability. Housing and jobs will be aligned with new or improved infrastructure from transport to schools, health facilities and public places under the new growth infrastructure compacts.

Improved transport within and between each of the three cities will produce a 30-minute city where most commuters 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.

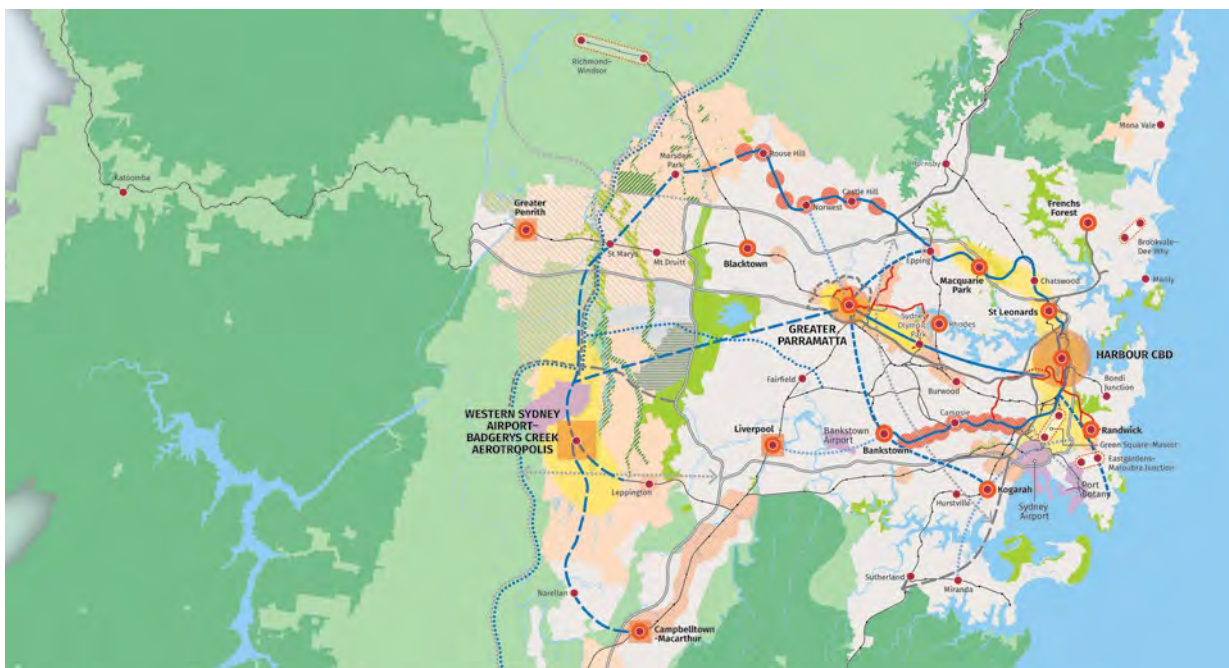
Better transport means people will be closer to knowledge-intensive jobs, city-scale infrastructure and services, and lifestyle features like entertainment, sporting and cultural facilities.

Walking and cycling will become increasingly important as part of daily travel with well-designed paths in popular thoroughfares improving the sustainability of the region and the wellbeing of residents. Growth within each of the three cities will be accompanied by higher quality public places and green spaces leading to opportunities for healthy lifestyles and community cohesion. Creativity, culture and the arts will be supported and acknowledged as part of the innovation economy.

The Greater Sydney Green Grid will connect green areas including parks, bushland and playgrounds to town centres, public transport and public places encouraging healthy lifestyles, enhancing biodiversity and supporting ecological resilience.

A metropolis of three cities brings liveability, productivity and sustainability benefits to all parts of Greater Sydney. It is consistent with the 10 Directions in *Directions for a Greater Sydney* which establishes the aspirations for the region over the next 40 years. The 10 Directions have been key to integrating land use, transport and infrastructure planning – they are foundational building blocks for the draft *Greater Sydney Region Plan*.

Figure 3: Greater Sydney Structure Plan 2056 – the three cities



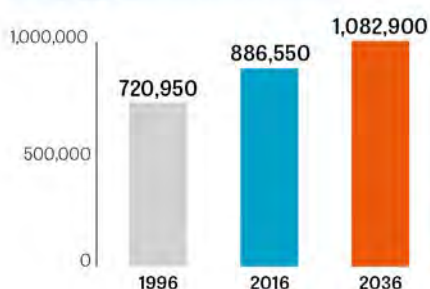
Note: Committed projects of: Western Harbour Tunnel & Beaches Link Tunnel, F6 Extension and Sydney Metro West are subject to final business case, no investment decision yet. Routes and stops for some transport corridors/projects are indicative only.

North District snapshot

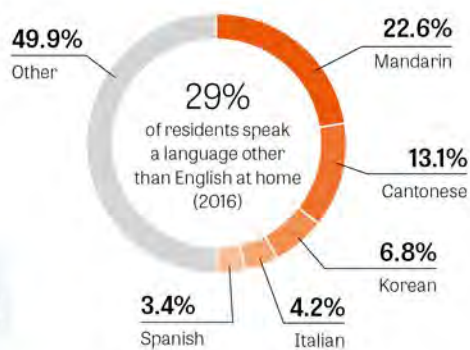


People – Population, age and languages spoken

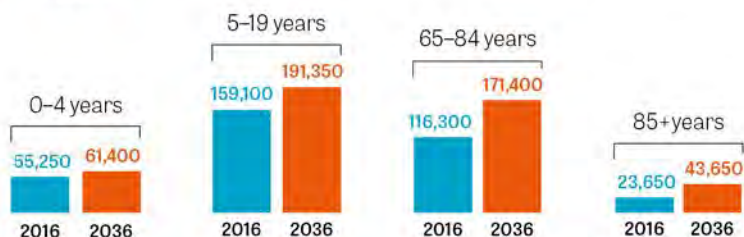
+196,350 more people by 2036



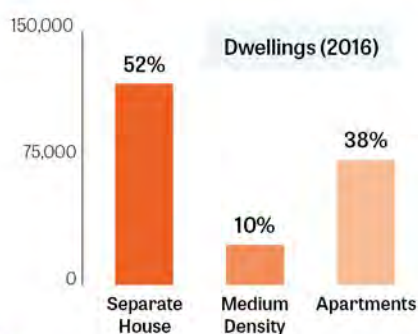
11% of Greater Sydney total growth of 1,740,400 to 2036



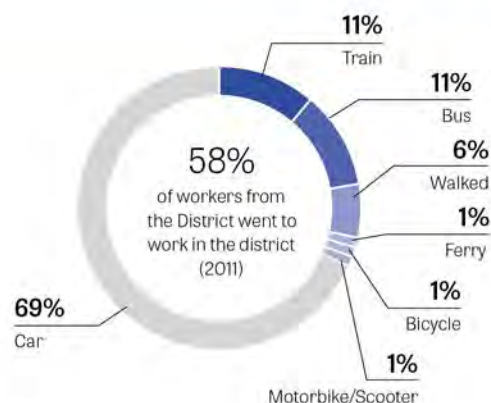
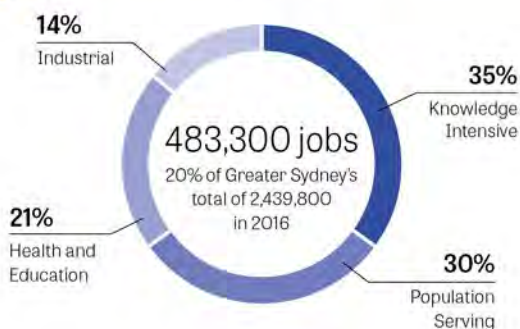
There will be a **54%** increase in the number of people aged 65 years and older in the next 20 years.



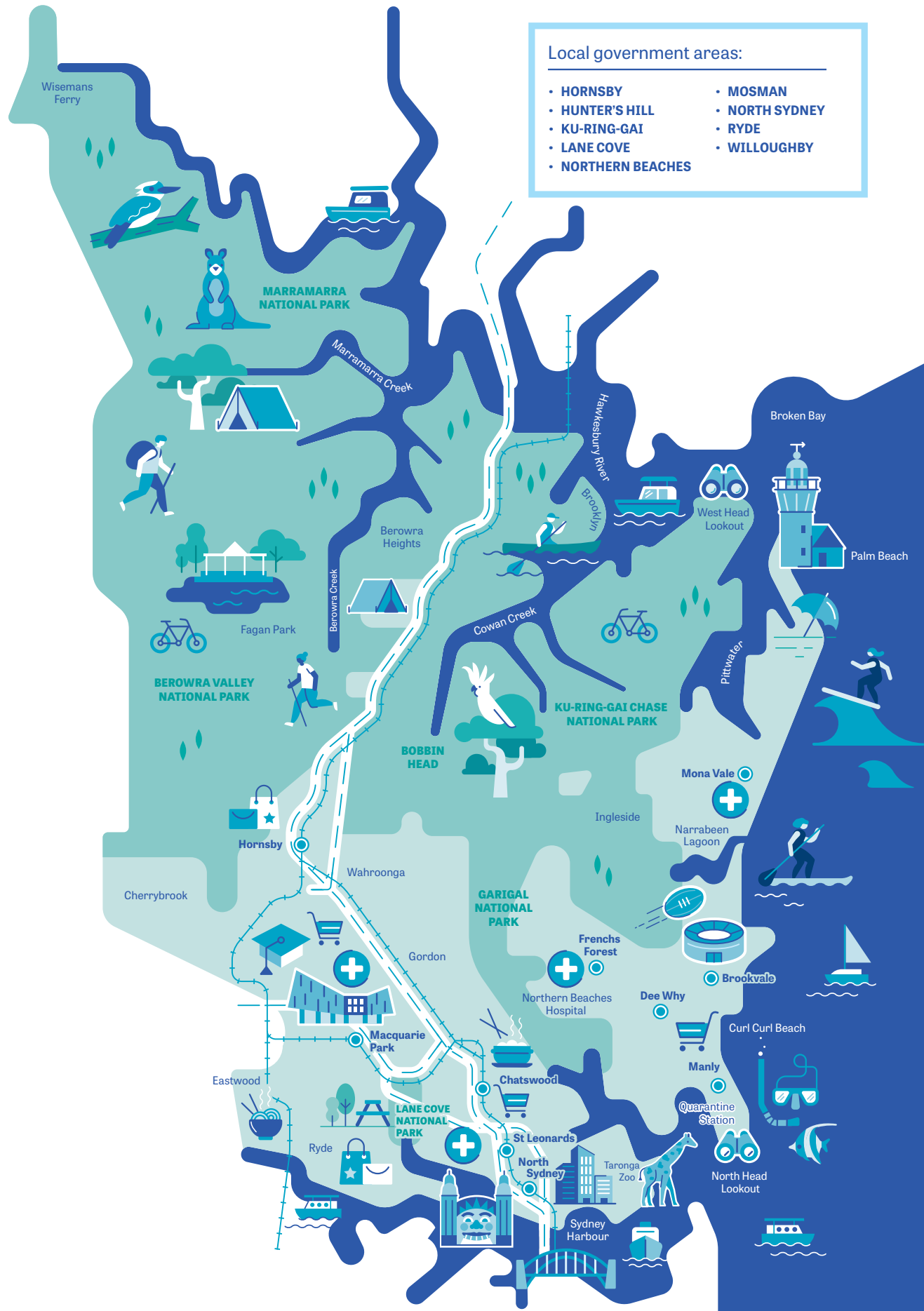
Dwelling demand and dwelling types








Jobs and journey to work








District context



Ten Directions and Planning Priorities

Directions	A city supported by infrastructure	A collaborative city	A city for people	Housing the city	A city of great places
	Infrastructure supporting new developments 	Working together to grow a Greater Sydney 	Celebrating diversity and putting people at the heart of planning 	Giving people housing choices 	Designing places for people 
Metrics	Number of land use plans supported by infrastructure plans (NSW Department of Planning and Environment, Greater Sydney Commission, Councils)	Proportion of agreed outcomes achieved in Collaboration Areas	Annual survey of community sentiment	<ul style="list-style-type: none"> Number of councils on track to deliver housing targets Number of councils with schemes that implement Affordable Rental Housing Targets 	<ul style="list-style-type: none"> Percentage of dwellings within walking distance of a local or strategic centre Percentage of dwellings within walking distance of open space
North District Planning Priorities	Planning Priority N1 Planning for a city supported by infrastructure	Planning Priority N2 Working through collaboration	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	Planning Priority N5 Providing housing supply, choice and affordability with access to jobs and services	Planning Priority N6 Creating and renewing great places and local centres, and respecting the District's heritage

A well connected city	Jobs and skills for the city	A city in its landscape	An efficient city	A resilient city
Developing a more accessible and walkable city  <ul style="list-style-type: none"> Percentage of dwellings located within 30 minutes by public transport of a metropolitan city centre/cluster Percentage of dwellings located within 30 minutes by public transport of a strategic centre 	Creating the conditions for a stronger economy  <ul style="list-style-type: none"> Growth in jobs in targeted metropolitan and strategic centres. Change in number of people employed locally (five yearly) 	Valuing green spaces and landscape  <p>Proportional increase in Greater Sydney covered by urban tree canopy</p>	Using resources wisely  <p>Number of precincts with low carbon initiatives</p>	Adapting to a changing world  <p>Number of local government areas undertaking resilience planning</p>
Planning Priority N12 Delivering integrated land use and transport planning and a 30-minute city Planning Priority N14 Leveraging inter-regional transport connections	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 Protecting and managing industrial and urban services land Planning Priority N13 Supporting growth of targeted industry sectors	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	Planning Priority N21 Reducing carbon emissions and managing energy, water and waste efficiently	Planning Priority N22 Adapting to the impacts of urban and natural hazards and climate change

1

About the draft 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 4).

This draft *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 draft *Greater Sydney Region Plan* at a District level and is a bridge between regional and local planning.

The draft District Plan informs local environmental plans and the assessment of planning proposals as well as community strategic plans and policies. The draft District Plan also assists councils to plan and deliver for growth and change, and align their local planning strategies to place-based outcomes. It informs infrastructure agencies, the private sector and the wider community of expectations for growth and change. Community engagement on the draft Plan will contribute to a plan for growth that reflects local values and aspirations, in a way that balances regional and local considerations (refer to Figure 5).

The draft *Greater Sydney Region Plan* has been prepared by the Commission concurrently with the Government's *Future Transport 2056* and Infrastructure NSW's *State Infrastructure Strategy* to integrate land use, transport and infrastructure across the region for the first time in a generation. In this context, all the transport initiatives outlined in this draft District Plan are sourced from *Future Transport 2056*.

This draft District Plan has been prepared to give effect to the draft *Greater Sydney Region Plan*. The final District Plan will need to reflect the final content of the region plan. This draft District Plan identifies, where relevant, areas of state regional and district significance, including priority growth areas.

In preparing this draft District Plan, the focus has been on identifying the Planning Priorities that are important to achieving a liveable, productive and sustainable future for the District. Relevant

Objectives, Strategies and Actions from the draft *Greater Sydney Region Plan* are embedded in each of the Planning Priorities, to integrate the District's challenges and opportunities with the Greater Sydney vision of a metropolis of three cities.

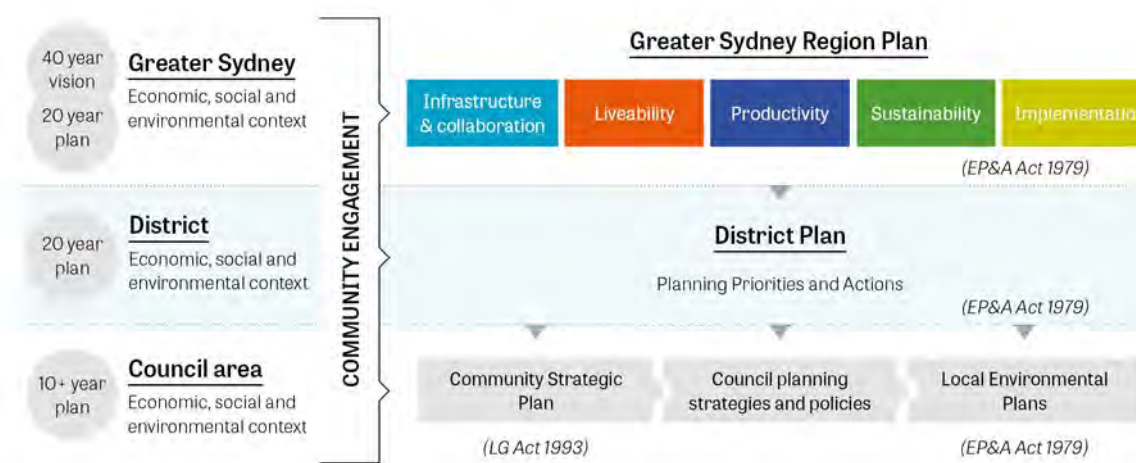
The concurrent preparation of the draft District Plan with the draft *Greater Sydney Region Plan* has maximised the opportunity to integrate these two plans. All data in this draft District Plan is based on current Government approved and published data sourced from the relevant State agency.

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

Figure 4: North District



Figure 5: Relationship of regional, district and local plans



Changes from the 2016 draft District Plan

This revised draft *North District Plan* replaces the version released in November 2016.

This draft District Plan reflects feedback from the initial exhibition period and from consultation throughout the development of the draft *Greater Sydney Region Plan*.

In preparing the draft District Plan, the Commission recognised there were Planning Priorities and Actions that were common to all districts – these have been incorporated into the draft *Greater Sydney Region Plan*.

The draft *Greater Sydney Region Plan* applies to the five districts that make up the region. The NSW Government declared six districts for the Greater Sydney Region on 27 January 2016. These were realigned to five districts on 22 September 2017.

Feedback

This draft District Plan incorporates feedback from the exhibition of draft District Plans from November 2016 to March 2017. This draft District Plan is the Commission's formal response to the key issues raised in submissions. The top five issues raised in relation to the draft *North District Plan* are outlined below.

Metropolitan Rural Area

- Support for the protection of the Metropolitan Rural Area, particularly in South Dural.

Vision and priorities for the District

- Vision and priorities need to be realised, including improvements in transport and infrastructure to support housing.
- Support improved transport connections, particularly to the Northern Beaches.
- Support enhanced walking and cycling connections.
- Support for medium density over high density.
- Support for the protection of neighbourhood character.
- Support for sustainable development outcomes.

Open space

- Support for the protection and expansion of open space areas.
- Support for the Greater Sydney Green Grid.
- Support for the protection and extension of the urban tree canopy.

Natural landscape

- Support for the protection of the District's natural landscape including foreshore areas, bushland, open space and areas of high environmental value.

Biodiversity

- Support for measures to protect and enhance biodiversity.

View the *Interim Submissions & Engagement Report* and *Submissions Responses Report* at www.greater.sydney/what-weve-heard to see a summary of the responses to the key issues.

2

Infrastructure and collaboration

Greater Sydney is a successful and growing city, but, to become more liveable, sustainable and productive, 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. The draft *Greater Sydney Region Plan* 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 programmed 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 draft District Plan responds to major transport, health and education investments underway across the District, such as the Northern Beaches Hospital, Sydney Metro Northwest and NorthConnex and aligns with *Future Transport 2056*.

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

Infrastructure – planned to support orderly growth, change and adaptability – must be efficient; optimal use of infrastructure increases infrastructure capacity to better support communities.

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

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

Planning Priority N1

Planning for a city supported by infrastructure

In giving effect to the draft *Greater Sydney Region Plan*, this Planning Priority delivers on: **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; and Objective 4: Infrastructure use is optimised** and the corresponding strategies.

Future infrastructure investment is to be considered in the context of how it will contribute to the shape of Greater Sydney as a metropolis of three cities. This considers the influence of metropolitan, district and local level infrastructure planning, and emphasises connections between each of the three cities.


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.

To align infrastructure with growth, a growth infrastructure compact approach could be used. 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 Commission will use this pilot to consider a broader application, particularly for areas set to experience high growth.

Planning for infrastructure considers infrastructure in terms of its function: catalytic 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, for example, new public transport infrastructure, electric vehicles and autonomous vehicles will help connect residents to their nearest strategic centre or metropolitan city centre within 30 minutes. In other areas, traditional facilities such as libraries are already being reimaged as community hubs.

 Actions	Responsibility
1. Prioritise infrastructure investments to support the vision of a metropolis of three cities.	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.	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 the draft *Greater Sydney Region Plan*, this Planning Priority delivers on **Objective 5: Benefits of growth realised by collaboration of governments, community and business** and the corresponding action.

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, Priority Growth Areas and Priority Precincts are highlighted throughout this draft District Plan.

The 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. 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 collective responses that support growth and change. This will be undertaken by identifying and aligning the activities and investments of government and stakeholders, based on evidence, to respond to unprecedented growth and investment.

The outputs of the collaborations are a Place Strategy and an Infrastructure Plan that provide certainty to the community and the private sector, and direct the NSW Government's investment and policies to achieving great places.

In the North District, the following areas have been identified as Collaboration Areas:

- **St Leonards health and education precinct and Priority Precinct**, led by the NSW Department of Planning and Environment, which will bring together the Commission, North Sydney Council, Lane Cove Council, Willoughby City Council, Transport for NSW and NSW Health, to grow jobs, housing and infrastructure within the precinct.
- **Macquarie Park health and education precinct and Priority Precinct**, led by the NSW Department of Planning and Environment, which will bring together the Commission, City of Ryde Council, NSW Health and Transport for NSW to grow jobs and infrastructure within the precinct.
- **Frenchs Forest health and education precinct and Priority Precinct**, led by the NSW Department of Planning and Environment, which will bring together the Commission, Northern Beaches Council, UrbanGrowth NSW Development Corporation, NSW Health and Transport for NSW to grow jobs, housing and infrastructure within the precinct.

Other collaborative processes include:

- **Cherrybrook Priority Precinct**, led by the NSW Department of Planning and Environment, as part of the Sydney Metro Northwest Priority Urban Renewal Corridor, which will bring together Hornsby Shire Council, The Hills Shire Council, Transport for NSW and other State agencies to maximise the land use benefits of Sydney Metro Northwest.

- **Ingleside Priority Growth Area**, led by the NSW Department of Planning and Environment which will bring together the Northern Beaches Council, UrbanGrowth NSW Development Corporation and other State agencies to plan for new housing and infrastructure.
- **Ivanhoe Estate Communities Plus** program, led by Land and Housing Corporation will bring together State agencies to lead housing initiatives and provide an integrated community including social housing.


The Priority Precincts will be consistent with the objectives and strategies of the *Greater Sydney Region Plan* and the relevant District Plans to

enhance liveability, sustainability and productivity. These projects will be well planned and designed and will be delivered in collaboration with councils and informed by key 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, schools, open space and roads.

The 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 Metropolitan Greenspace Program (see Planning Priority N19).

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

Collaboration	Agency	Focus
City Deal	Australian: State and local government	Domains for action: <ul style="list-style-type: none"> — governance, city planning and regulation — infrastructure and investment — housing — jobs and skills — innovation and digital opportunities — liveability and sustainability
Collaboration Areas	Greater Sydney Commission	Strategy development including: <ul style="list-style-type: none"> — integrated place management (strategic centres and health and education precincts) — strategy drivers: economic productivity, liveability, sustainability — infrastructure alignment
Priority Growth Areas Urban Renewal Corridors	NSW Department of Planning and Environment	Transformative corridor delivery including: <ul style="list-style-type: none"> — new land release areas — city shaping transport investment and urban renewal — infrastructure schedules and funding options
Priority Precincts	NSW Department of Planning and Environment	Transformative precinct delivery: <ul style="list-style-type: none"> — targeted development focused on housing diversity around a centre and transit node/rail station — infrastructure schedules and funding options
Urban Transformation	UrbanGrowth NSW Development Corporation and Landcom	Project delivery: <ul style="list-style-type: none"> — Focus on optimisation of government-owned land and urban renewal

 Actions	Responsibility
7. Identify, prioritise and deliver Collaboration Areas.	Greater Sydney Commission

3

Liveability

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, beaches, the Lane Cove, Ku-ring-gai Chase and Garigal national parks, Sydney Harbour and the Pacific Ocean means that many residents take advantage of the District's many outdoor, sporting and recreational opportunities.

As the overall population of around 887,000 people grows, it is also ageing. 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. As a result, there will be comparatively fewer working age people (20–64 years) residing in the District.

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.

Liveability is about people's quality of life.

Maintaining and improving liveability means 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.

Creating and renewing great places, neighbourhoods and centres requires place-based planning and design excellence that builds on local strengths and focuses on public places and open spaces.

Great places are walkable – 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. Walkable, great places that demonstrate these characteristics promote healthy, active lifestyles and social interaction and can better support the arts, creativity, cultural expression and innovation.

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

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



Planning Priority N3

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

In giving effect to the draft *Greater Sydney Region Plan*, this Planning Priority delivers on **Objective 6: Services and infrastructure meet communities' changing needs** and the corresponding strategies.

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. This includes considering both the provision of services and the overall outcomes for the community and intergenerational equity.

Population projections and age profiles show distinct differences where specific demographic groups will live in the North District (refer to Figures 6 and 7). The greatest increase in population is expected in Ryde Local Government Area (51,700 over the 20 years to 2036) due to the anticipated urban renewal in the area and the strong growth in all age groups. In comparison, slower growth is projected in Mosman and Hunter's Hill local government areas (a six per cent and nine per cent per cent increase respectively) which will see a decline in children 0–4 years of six per cent and seven per cent respectively (over the 20 years to 2036).

Growth increases demand on existing services and infrastructure, particularly sport and recreation facilities that are, in some cases, at or nearing capacity. Residents need the right local mix of services, programs and social infrastructure at the heart of walkable neighbourhoods to support them to live socially connected, active and healthy lives.

This includes co-located schools, health services, aged care, community and cultural facilities, parks and recreation facilities, and accessible walking and cycling connections.

Improving safety, accessibility and inclusion by co-locating activities benefits all residents and visitors. It supports a fine grain urban form and land use mix which provides greater diversity of uses and users and thereby improves liveability.

Creating opportunities for increased shared use and more flexible use of underutilised facilities such as schools, sports facilities, church halls and creative spaces can support growth and respond to the different needs of local demographic groups. Multipurpose and intergenerational facilities are the key to better use of, and access to, infrastructure in new developments and is essential in land release areas.

Integrated and targeted delivery of services and infrastructure is needed to support growth.

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 delivering healthy communities through local health services including community health services, obesity prevention and promotion of the benefits of a healthy built environment (refer to Planning Priority N4).

Children and young people

Over the 20 years to 2036 projections show an expected increase of 6,150 children aged four years or younger, 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.

Schools play an important role in creating and supporting inclusive and vibrant neighbourhoods. Planning for new schools, and use of existing schools, must respond to 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 maximises opportunities for young people to lead more active lifestyles.

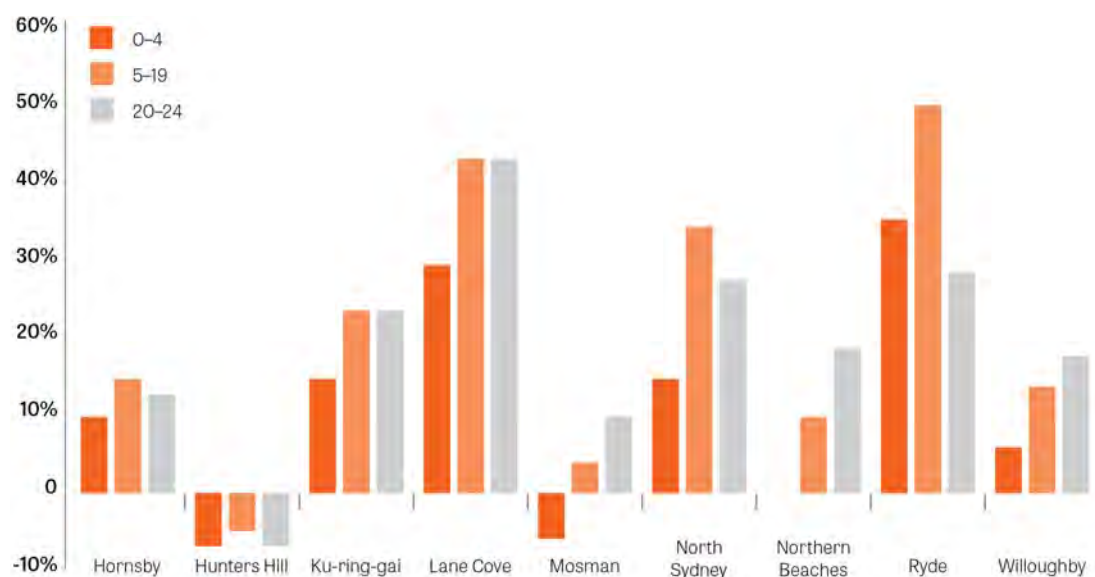
Education and Child Care SEPP

State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017 makes it easier for child care providers, schools, TAFEs and universities to build new facilities and improve existing facilities. It streamlines approval processes recognising the need for additional educational infrastructure with a focus on good design.

The accompanying *Child Care Planning Guideline* assists in matters such as site selection, location and building design to meet national requirements for child care.

The NSW Department of Education's *School Assets Strategic Plan* sets the direction and framework for the future of 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 groups to develop schools as community hubs.

Figure 1: North District projected population change 2016 to 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 needs of children and young people go beyond schools. They also require careful consideration of the way that open spaces, cultural spaces and the public realm are designed and managed to include children and young people (refer to Planning Priority N6).

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

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

Older people

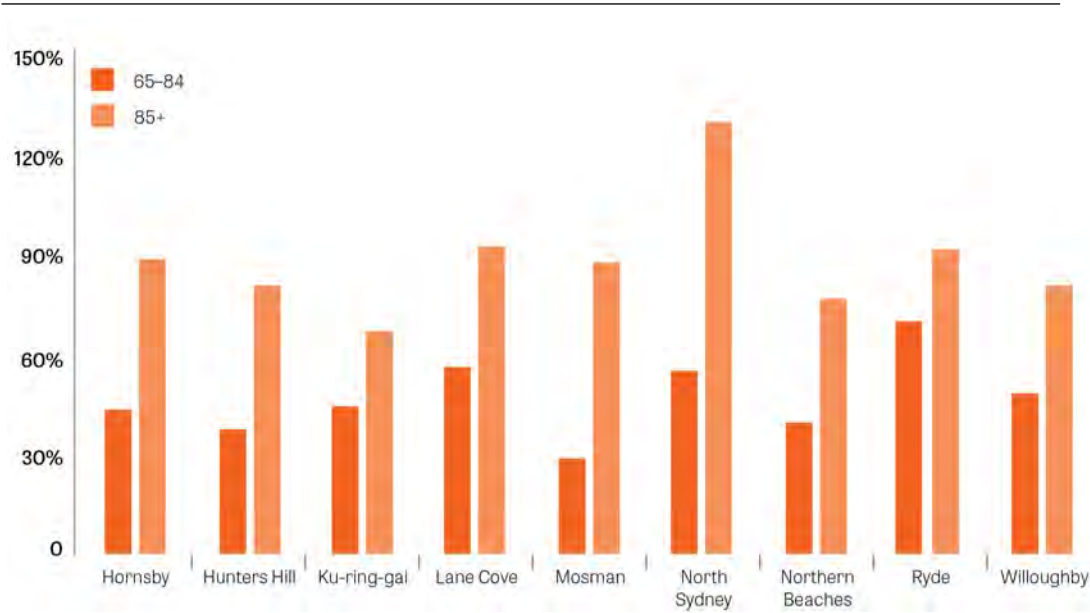
An 85 per cent proportional increase in people aged 85 and over, and a 47 per cent increase in the 65–84 age group is expected by 2036. This means 20 per cent of the District’s population will be aged 65 or over in 2036, up from 16 per cent in 2016.

The Hornsby, Ryde, Ku-ring-gai and Northern Beaches local government areas have the largest projected growth in the 65 to 84 age groups.

More compact 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.

Walkable places that encourage older people to lead physically and socially active lives for as long as possible are required to facilitate ageing in community. Universal design – the design of homes and places that can be accessed, understood and used by all people, regardless of their age or ability – also improves accessibility for older people.

Figure 2: North District projected population change 2016 to 2036 by local government area: 65–84 and over 85 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.

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). 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.

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.¹ Walkable places and homes of universal design are essential to provide opportunities and participation for all people.

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 and cultural or recreational use when the not otherwise required.

The Commission has identified 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.

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.

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.

Related government initiatives:

- NSW Department of Education *School Assets Strategic Plan Summary 2017*
- NSW Government, *NSW Ageing Strategy, 2016–2020*
- Office of the Advocate for Children and Young People, *NSW Strategic Plan for Children and Young People, 2016–2019*
- Northern Sydney Local Health District *Strategic Plan 2017–2022*

Useful links:

- Mapping the NSW Budget 2017–18
- State Environmental Planning Policy (Educational Establishments and Childcare Facilities) 2017
- Livable Housing Design Guidelines

 Actions	Responsibility
8. Deliver social infrastructure to reflect the needs of the community now and in the future.	Councils, other planning authorities, and State agencies
9. Optimise the use of available public land for social infrastructure.	Councils, other planning authorities, State agencies and State-owned corporations

Planning Priority N4

Fostering healthy, creative, culturally rich and socially connected communities

In giving effect to the draft *Greater Sydney Region Plan*, this Planning Priority delivers on **Objective 7: Communities are healthy, resilient and socially connected**; and **Objective 8: Greater Sydney's communities are culturally rich with diverse neighbourhoods** and **Objective 9: Greater Sydney celebrates the arts and supports creative industries and innovation** and the corresponding strategies.

To foster healthy, creative, culturally rich and socially connected communities this draft District Plan recognises cultural richness and diversity as some 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.² Consequently, the design and management of streets, places and neighbourhoods are essential to achieving improved mental and physical health outcomes. These characteristics of the built environment are important preventative responses to the incidence of chronic lifestyle diseases like obesity and type 2 diabetes. This is important given that around 44 per cent of the adult population in the North District are overweight or obese.³

Walkable streets that provide accessible and safe connections to schools, daily needs and recreation facilities can encourage greater physical activity and social connection. Fine grain urban form and local mixed use places can provide better access to fresh food, together with opportunities for people to participate in arts, recreation and cultural activities. Connectivity of, and access to, diverse open space and opportunities for recreational physical activity are also essential.

Diverse neighbourhoods

Greater Sydney, like many global cities, has a diversity of people from differing socio-economic circumstances and a range of social, cultural, ethnic and linguistic backgrounds. As the District grows and changes, supporting social connections, and cultural and creative expression will build resilience through understanding, trust and neighbourliness.

Targeted local responses to address spatial variations in socio-economic disadvantage across the North District are required, particularly in neighbourhoods that experience greater disadvantage. A diversity of housing types such as urban renewal, local infill – missing middle – and new communities in land release areas supports diversity of household types and community needs.

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.

The North District is home to refugees from many parts of the world. Councils including Hornsby, Ryde, Willoughby and North Sydney are declared 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 the 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 such as urban renewal, local infill – missing middle – and new communities in land release areas supports diversity of households types and community needs.

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.

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 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 may be working towards planning outcomes that will help support self-determination and economic participation.

As this draft 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 and social connection

Cultural and creative expression is a hallmark of innovation and promotes understanding of people's differences. 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.

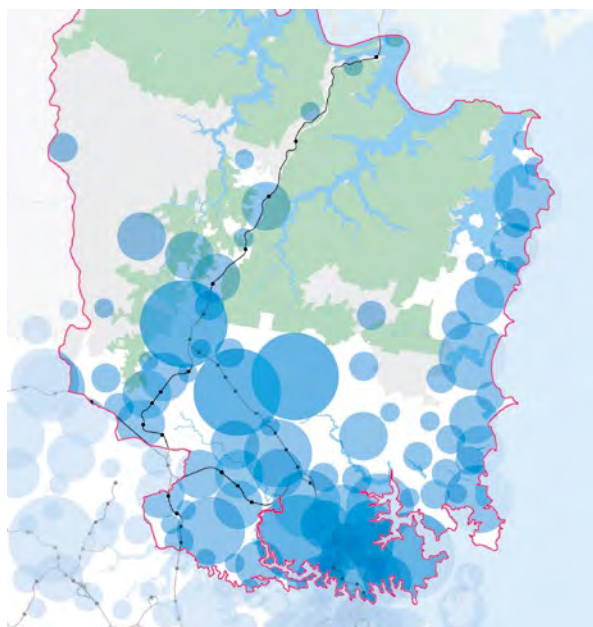
Cultural diversity is celebrated through a multitude of opportunities for cultural expression that develop and are nurtured by the communities of the North District. The District's artistic and cultural experiences include:

- cultural events and celebrations such as NAIDOC Week, National Reconciliation Week, Manly Jazz Festival, Northern Beaches Music Festival, Narrabeen Lake Festival and Willoughby Emerge Festival
- entertainment facilities such as the Cremorne Orpheum and Roseville Cinema



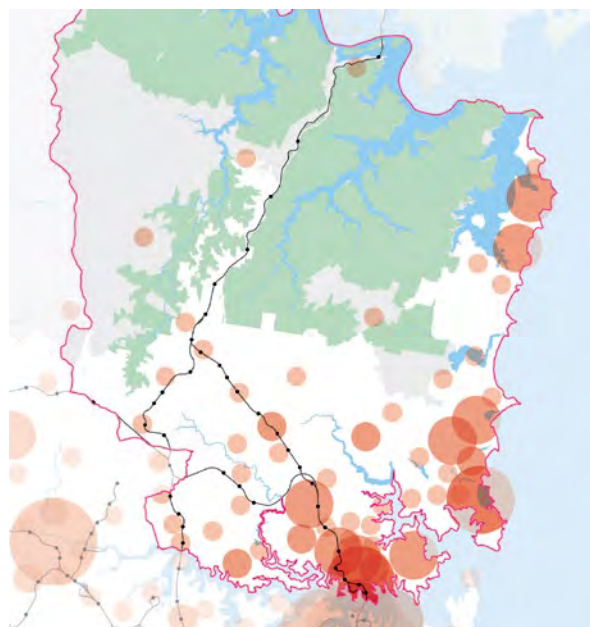
North District social connectors

Figure 8: North District social infrastructure



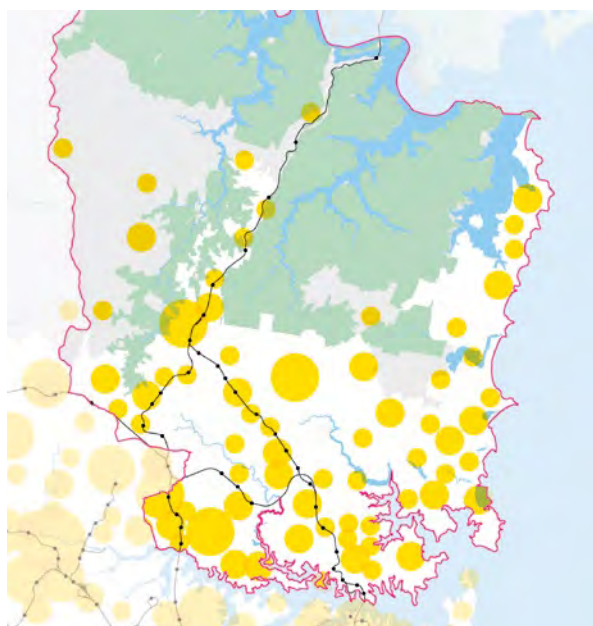
● Social infrastructure includes facilities such as community and neighbourhood hubs, sportsfields, clubs and courts, men's sheds, pools and leisure centres

Figure 9: North District shared places



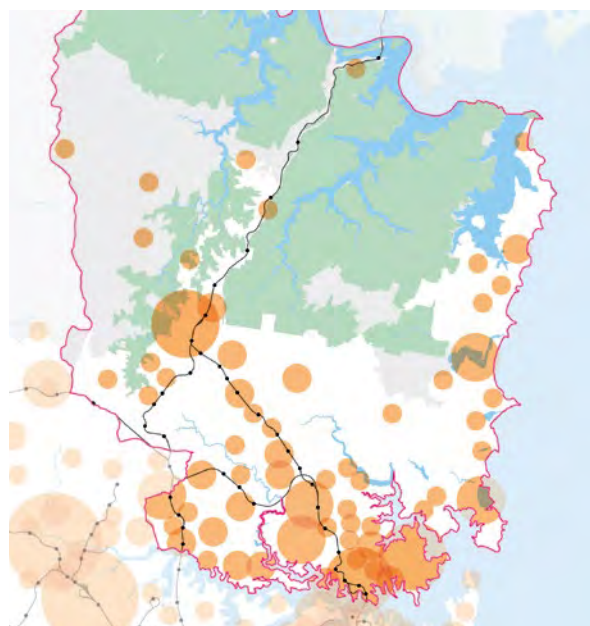
● Sharing spaces include community gardens, co-working spaces and car sharing

Figure 10: North District learning



● Learning spaces include education facilities like child care, schools, TAFEs and universities as well as libraries

Figure 11: North District street life



● Street life and meeting places include live music venues, farmers' markets, high streets and eat streets

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

- arts and cultural facilities such as The Concourse Chatswood, Ensemble Theatre, Manly Art Gallery and Museum, Ku-ring-gai Art Centre, 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 across the District including Brookvale Oval and North Sydney Oval.

Support for a wide range of creative enterprises and opportunities for cultural expression will expand arts and cultural institutions, and support audience and artist participation. Locations to consider for creative industries and cultural enterprises may include underutilised mixed use areas and ground level retail or declining high streets. Greater use of public areas for interim and temporary uses through flexible regulatory settings can support activation of places and encourage participation. Continued investment in the arts, screen and cultural sector attracts a skilled workforce and encourages innovation in other sectors.

Consistent with the *2014 State Infrastructure Strategy Update*, the Cultural Infrastructure Program Management Office is working with Infrastructure NSW to develop a cultural infrastructure strategy, which will include clear strategies and actions for Greater Sydney.

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

Key social strengths and their multi-faceted nature are illustrated in Figure 8–11. These preliminary maps illustrate places with concentrations of social connectors 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, farmer's 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 recognise and enhance existing community connections and provide a focus for strengthening and adding new social connectors. Focusing and augmenting social connectors in accessible places will help to improve individual and community health, inclusion and participation outcomes.

Healthy, culturally rich and networked communities share values and trust.

Social connectors are some of the characteristics on which the local identity, specialities and distinctive functions of these centres are built. For example street life is particularly evident in places like Manly, Chatswood and Crows Nest.

The District's cultural vibrancy is reinforced by night-time activities that extend from popular eat streets, clubs and small bars to lifestyle activities like cinemas. 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.

Lifelong learning facilities and libraries provide valuable opportunities to continue education and connect with others in the community. Digital connectivity is also emerging as key to building broad and diverse communities of interest that can cross traditional spatial boundaries.

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 centre/eat street (fine grain urban form and land use mix)
- diverse housing mix (density, tenure and affordability).

Place-based planning to enhance social connections within and across communities 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 – as is evidenced at multipurpose intergenerational facilities such as the Crows Nest Community Centre and Berowra Community Centre.

In recognition of the importance of sporting participation as a key activity and social strength, the NSW Office of Sport will bring councils together across the District to develop a Sport and Recreation Participation Strategy and a Sport and Recreation Facility Plan for the District.

Related government initiatives:

- NSW Department of Planning and Environment *Aboriginal Community Land and Infrastructure Programs*
- NSW Department of Planning and Environment *Cultural Infrastructure Program*
- NSW Office of Sport *A New Way of Delivering Sport and Active Recreation in NSW*

 Actions	Responsibility
10. Deliver inclusive places for people of all ages and abilities that support healthy, resilient and socially connected communities by: <ol style="list-style-type: none"> providing walkable places with active street life and a human scale co-locating schools, social, health, sporting, cultural and shared facilities. 	Councils, other planning authorities, State agencies and State-owned corporations
11. Consider cultural diversity in strategic planning and engagement.	Councils, other planning authorities, State agencies and State-owned corporations
12. Strengthen the economic self-determination of Aboriginal communities by engagement and consultation with Local Aboriginal Land 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
13. Facilitate opportunities for creative and artistic expression and participation, wherever feasible with a minimum regulatory burden, including: <ol style="list-style-type: none"> creative arts and cultural enterprises and facilities creative interim and temporary uses appropriate development of the night-time economy. 	Councils, other planning authorities, State agencies and State-owned corporations
14. 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

Planning Priority N5

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

In giving effect to the draft *Greater Sydney Region Plan*, this Planning Priority delivers on **Objective 10: Greater housing supply**; and **Objective 11: Housing is more diverse and affordable** and the corresponding strategies and actions.

The draft *Greater Sydney Region Plan* 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 their community.

Housing is more than just dwellings and needs to be considered across the housing continuum and with a place-based approach that is designed to support communities and create great places (refer to Objective 11 of the draft *Greater Sydney Region Plan*).

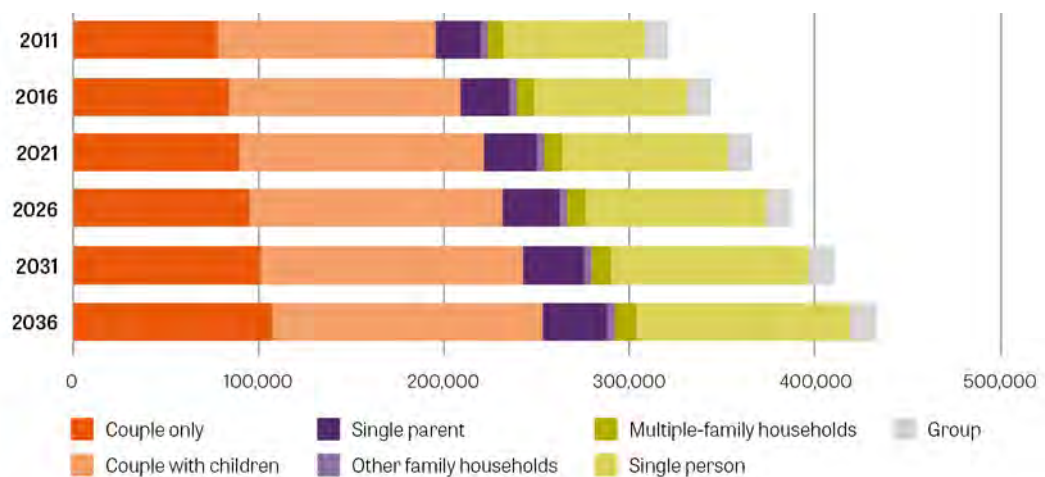
The NSW Department of Planning and Environment's projections of population and household growth in the North District translates to a need for an additional 92,000 homes in the period 2016 to 2036. North District targets have been updated from November 2016 Draft District Plans due to changes to council boundaries.

Housing diversity and choice

New housing must be in the right places to meet locational demand, and also respond to demand for different housing types, tenure, price points, preferred locations and design. Housing supply must be coordinated with local infrastructure to create liveable, walkable and cycle friendly neighbourhoods with 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 12). The number of single-person households are also expected to increase by 31,750 to 2036.

Figure 12: 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.

The numbers of single-parent and couple-only households in particular, is also expected to increase by 2036. This requires additional smaller homes, group homes, adaptable homes of universal design and aged care facilities. 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.

Housing preferences

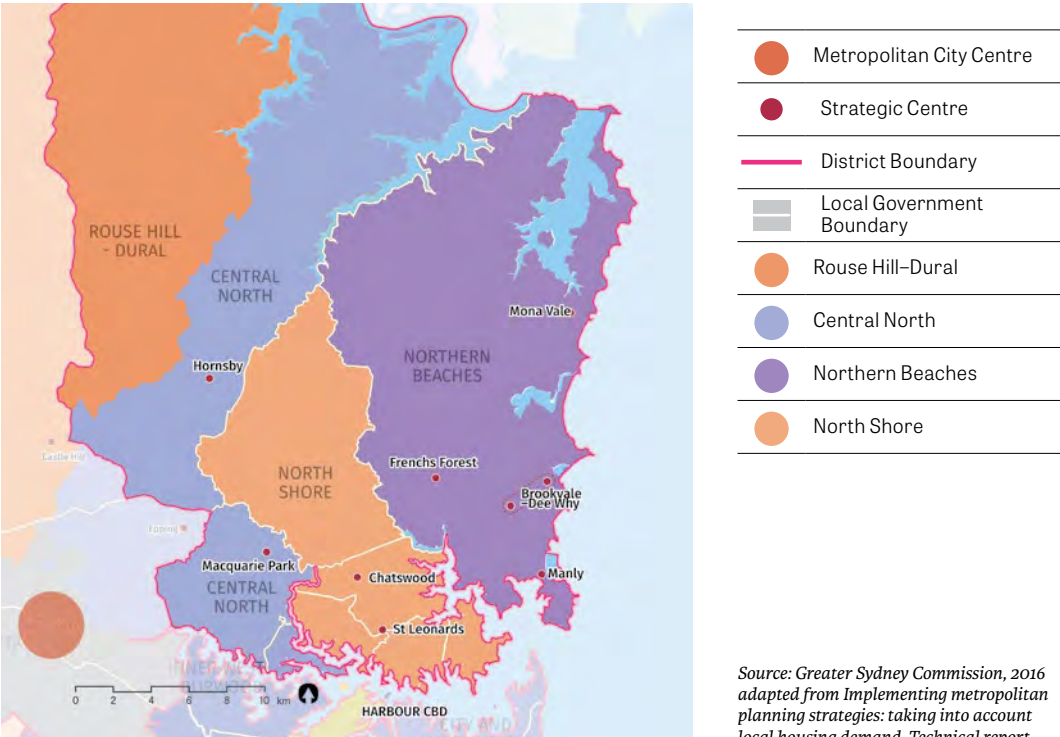
Research into housing preferences in Greater Sydney has shown that people generally prefer to remain within their local area, with 82 per cent of residents moving into a new home within 15 kilometres of their former residence.⁴

In the North District, there are four housing market areas (refer to Figure 13):

- **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 13: North District housing market areas



Source: Greater Sydney Commission, 2016 adapted from Implementing metropolitan planning strategies: taking into account local housing demand. Technical report (2013). City Futures Research Centre UNSW.

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.

In 2016–2017 completions for the North District totalled 4,408 dwellings. In the 10 years from 2007–8 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.

Apartments 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. They are more prevalent in the west of the District.

Over the past 10 years the North District has had an annual average dwelling completions 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 Priority Precinct
- Cherrybrook Station Priority Precinct
- Frenchs Forest Priority Precinct
- Ingleside Priority Growth Area.
- Communities Plus:
 - Ivanhoe Estate as part of the Macquarie Park Urban Renewal Area.

The Priority Precincts will be consistent with the objectives and strategies of the *Greater Sydney Region Plan* and the relevant District Plans to enhance liveability, sustainability and productivity. These projects will be well planned and designed and will be delivered in collaboration with councils and informed by key 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, 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 such as Pennant Hills Road
- connecting 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 for the next generation needs to be linked to local infrastructure – both to optimise existing infrastructure use and to maximise investment in new infrastructure. Opportunities for capacity can be realised by urban renewal, local infill developments and land release areas (refer to Figure 14).

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 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.

The Commission proposes locational criteria for urban renewal investigation opportunities to include:

- Alignment with investment in regional and district infrastructure. This acknowledges the catalytic impacts of infrastructure such as Sydney Metro Northwest and Sydney Metro City & Southwest, NorthConnex, Northern Beaches Hospital together with other committed NSW Government investments in projects that are subject to final business case and funding such as Western Harbour Tunnel & Beaches Link. It also acknowledges the opportunities created by enhancements to existing infrastructure such as upgrades to schools, open space and transport.
- Accessibility to jobs, noting close to half of Greater Sydney's jobs are generated in 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.
- The catchment area that is within walking distance of centres with rail, light rail or regional bus transport.

Other matters to be carefully considered include:

- the feasibility of development, including financial viability across a range of housing configurations (one, two, three or more bedrooms) and consistency with market demand
- heritage and cultural elements, visual impacts, natural hazards such as flooding, special land uses and other environmental constraints
- local features such as topography, lot sizes, strata ownership and the transition between different built forms
- the staging of enabling infrastructure, upgrades or expansions of social infrastructure such as local schools, open space and community facilities.

Local infill development

Medium density housing which includes villas and town houses within existing areas can provide greater housing variety while maintaining the local appeal and amenity of an area.

Councils are in the best position to investigate and confirm what locations in their local government areas are suited to additional medium density opportunities. In doing this the Commission proposes that 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.

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 Priority Growth Area programs of the NSW Department of Planning and Environment guide the development of new communities in land release areas. The current program includes the Priority Growth Area of Ingleside with the potential for a new community of 3,400 dwellings.

Figure 14: North District future housing supply



	Metropolitan City Centre		Metropolitan Rural Area		Transit Oriented Development
	Strategic Centre		District Boundary		Priority Growth Areas / Urban Renewal Corridor
	Local Centre		Train Station		Priority Precincts
	Waterways		Motorway		Forecast Dwelling Completions 2016 to 2021
	Protected Natural Area		Land Release Priority Growth Areas, Priority Precincts		

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

Housing strategies and targets

To address housing supply, strategies are to be developed by councils to:

- make provision to meet the five and 10-year (when agreed) housing targets and identify capacity to contribute to a rolling program to deliver the 20-year district strategic supply
- inform the Affordable Rental Housing Target 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 the draft *Greater Sydney Region Plan* in Objective 10.

Table 2 sets five-year housing targets for the North District which are the same as published in the November 2016 draft District Plan. These are based on the District's dwelling needs and the existing opportunities to deliver supply. They include all types of housing – traditional detached and attached houses, apartments, seniors housing, granny flats and aged care.

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.

Meeting the housing demand over 20 years requires a longer-term outlook. The draft *Greater Sydney Region Plan* 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 20 years. The Commission will work with each council to develop 6–10 year housing targets.

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.

Table 2: North District housing targets by local government area

LGA	0–5 year housing supply targets: 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
North District Total	25,950



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



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.

The Commission's research and testing of needs through stakeholder and community consultation reaffirms the critical importance of providing a diversity of housing outcomes across the housing continuum in Greater Sydney.

Ensuring a steady supply of market housing in locations well supported by existing or planned services and amenity with an emphasis on public transport access is outlined in Objective 10 in the draft *Greater Sydney Region Plan*.

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.

The NSW Department of Planning and Environment and the Commission will jointly investigate ways to facilitate housing diversity through innovative purchase and rental models.

This draft District Plan recommends the NSW Government adopt Affordable Rental Housing Targets for very low to low-income households in Greater Sydney as a mechanism to deliver supply of affordable housing.

The Commission's testing reaffirms that across Greater Sydney targets generally in the range of 5–10 per cent of new residential floor space are viable.

The Commission will work with the NSW Department of Planning and Environment to develop the mechanisms required for delivery of the proposed 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 clever 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.



Planning Priority N6

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

In giving effect to the draft *Greater Sydney Region Plan*, this Planning Priority delivers on **Objective 12: Great places that bring people together** and **Objective 13: Environmental heritage is conserved and enhanced** and the corresponding strategies.

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. They exhibit design excellence and start with, and focus on, open space and a people-friendly public realm.

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 the draft *Greater Sydney Region Plan*:

- 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 of human scale, walkable with a mix of land uses including public buildings 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 together with 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 point 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.

Places best achieve these outcomes when they exhibit human scale and provide fine grain urban form and land use mix at the heart of neighbourhoods. Accessibility for people of all ages and abilities is central to creating and renewing great places, particularly walking and cycling connections to and within local places.

Improving liveability in urban environments necessitates planning for a mix of high-quality places that engage, activate and connect people and communities. Co-locating activities and social infrastructure in mixed use areas delivers 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.

With growth and change, more high-quality public places will be required in and around centres. Renewal will increase opportunities to expand and connect public places and to explore opportunities for innovative these places, such as rooftops and podiums.

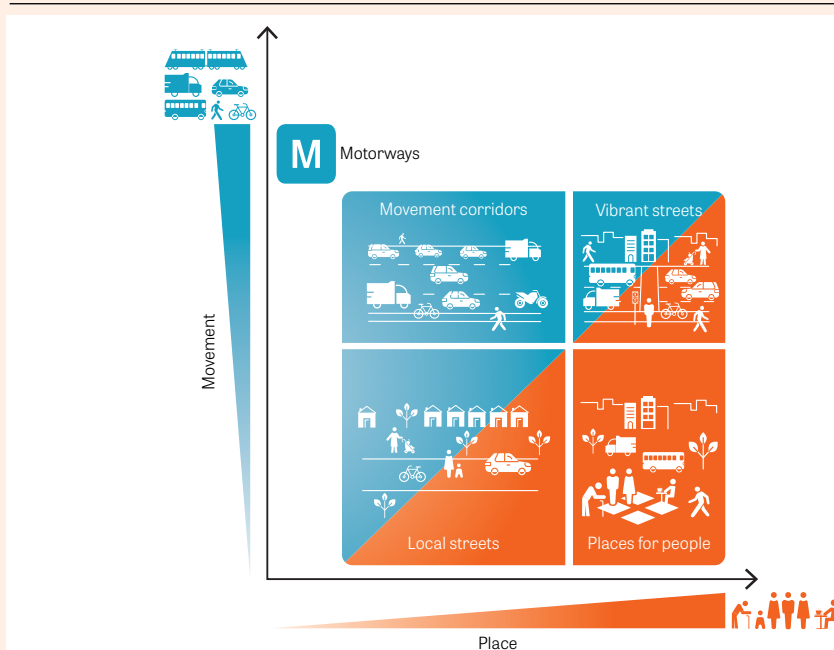
Streets as places

Creating and renewing great places also requires recognition of the function of streets as places (refer to Figure 15). 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.

Much of people's experience of the public realm is in a street environment. Consequently, the way the street meets people's different movement and place needs determines the character of the street and shapes people's experience of a city. Creating and renewing streets as great places is therefore key to improving liveability.

Although streets differ in their function and character, maximising opportunities for walking, 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.

Figure 15: Movement and place framework



Source: Future Transport 2056 & 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 are important places for people as they 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 Pennant Hills Road provide safe and efficient movement between centres, neighbourhoods and places.

Local centres

Local centres are the focal point of neighbourhoods and where they are a focus for public transport, they are an important part of a 30-minute city.

Local centres with supermarkets greater than 1,000 square metres account for nearly 18 per cent of all jobs in Greater Sydney. They also meet residents' needs for shopping, social interaction, cultural and creative expression.

Centres vary in size, function and character, and meet a variety of needs from a cluster of local shops, like those at Killarney Heights, to Eastwood and West Ryde that provide culturally diverse eating and shopping experiences, to large retail centres such as North Ryde and Chatswood. These centres are highly accessible and provide interchanges for bus and rail networks linking to strategic centres. Ryde Town Centre has potential 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, Cherrybrook and Dural villages are emerging as destinations for eateries and cafes offering unique neighbourhood qualities and cultural facilities.

The success of small local centres and high streets should be supported through specific and flexible measures to improve activation and viability. This might be through provision of creative workspaces, opportunities for social, creative or cultural enterprise, pop-up retail and other innovative uses. Activation of side streets may assist in some locations.

Rapid changes in technology and retail trends, emerging night-time economies and population growth require councils to be agile and responsive in their planning for the growth of centres. Adaptive and flexible spaces may be required because of an increasing demand for workspaces from start-up and creative industries.

A vibrant and safe night-time economy will enhance Greater Sydney's standing as a global city, while meeting the social and recreational needs of communities. Planning for a night-time economy in centres includes supporting a diverse range of small businesses such as retail, and cultural events and assets, accompanied by a suitable regulatory environment.

The accessibility of local centres with supermarkets greater than 1,000 square metres is illustrated in Figure 16. As a result of this walkability, many of these local centres will be increasingly supported by residential development. However, housing should not compromise the ability of the centre to grow, expand and change over time. It is also recognised that some centres without supermarkets have specialised roles.

The management of local centres is predominantly led by councils. Considerations for a local hierarchy of centres within this classification should be informed by a strategic planning process at a local level including an assessment on how the proposed hierarchy influences decision-making for commercial, retail and other uses.

An understanding of the unique identity, size, land use mix, catchment and potential of each local centre and the local centres hierarchy will inform housing strategies. This draft District Plan identifies a range of specific matters for consideration in place-based planning for centres. They include:

- 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
- support the night-time economy
- integrate and support arts and creative enterprise and expression
- augment or provide community facilities and services 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.

Figure 16: North District – centres



District Boundary	Urban Area	Local Centre
Waterways	800m Walking Catchment	Train Station
Protected Natural Areas	400m Walking Catchment	
Metropolitan Rural Area	Strategic Centre	

Heritage and character

Heritage and history are also important components of local identity and are important attributes of great places. The District's rich Aboriginal, cultural and natural heritage reinforces its sense of place and identity. This includes items listed on the State Heritage Register such as the Sydney Harbour Bridge, Aboriginal Place listings, rock art sites and middens, and Conservation Areas. The District's important natural and cultural heritage values are reflected in its landscape and rural areas including Sydney Harbour National Park, West Head, the Northern Beaches, water catchment areas and ridgelines.

A wide variety of local heritage items and heritage streetscapes also form part of the character of centres throughout the District.

The conservation and interpretation of places and values of heritage significance is required to give current and future generations a better understanding of history and people's past experiences. Sympathetic adaptive re-use of heritage is an important way to conserve heritage significance. Improved public access and connection to heritage through interpretation is also essential.

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 responds to place-specific considerations, local qualities and community needs.

It is also a way of managing change over time in places, by recognising the value and need for local expertise, knowledge, responsibility and investment.

The process itself is a means of better understanding the place, and building relationships and collaboration to deliver solutions that respond to place's potential. Staging and sequencing in a place-based context also allows for continual adjustment and improvements.

People involved in the process will vary depending on the circumstances, nature and scale of the task and may include the community, local businesses, residents, State and local government and other stakeholders. A compelling and shared vision for

a place that resolves different perspectives and interests can then be created.

The products of place-based planning extend beyond a shared vision. A spatial framework for a place provides 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, managed and re-visioned over time.

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

The Government Architect NSW has prepared *Better Placed: An integrated design policy for the built environment of NSW* which supports the creation and renewal of great places for use by all place makers including, State and local government, business and the community.

Related government initiatives:

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

 Actions	Responsibility
17. Deliver great places by: <ol style="list-style-type: none"> prioritising a people-friendly public realm and open spaces as a central organising design principle recognising and balancing the dual function of streets as places for people and movement providing fine grain urban form, high amenity and walkability integrating social infrastructure to support social connections and provide a community hub encouraging contemporary interpretation of heritage where possible using a place-based and collaborative approach throughout planning, design, development and management. 	Councils, other planning authorities, State agencies and State-owned corporations
18. Conserve and enhance environmental heritage by: <ol style="list-style-type: none"> engaging with the community early in the planning process to understand Aboriginal, European and natural heritage values conserving and interpreting Aboriginal, European and natural heritage to foster distinctive local places. 	Councils, other planning authorities, State agencies and State-owned corporations
19. Use place-based planning to support the role of centres as a focus for connected neighbourhoods.	Councils, other planning authorities, State agencies and State-owned corporations
20. In Collaboration Areas, Priority Precincts and planning for centres: <ol style="list-style-type: none"> investigate opportunities for precinct-based provision of adaptable car parking and infrastructure in lieu of private provision of car parking ensure parking availability takes into account the level of access by public transport consider the capacity for places to change and evolve, and accommodate diverse activities over time. 	Councils, other planning authorities, and State agencies
21. Use flexible and innovative approaches to revitalise high streets in decline.	Councils and other planning authorities

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 an internationally competitive freight and logistics sector; and rebalancing the region's eastern economic focus so that all three cities benefit from growth.

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 between businesses and large numbers of skilled workers; and enhancing business-to-business interactions.

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 17 and 18).

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.

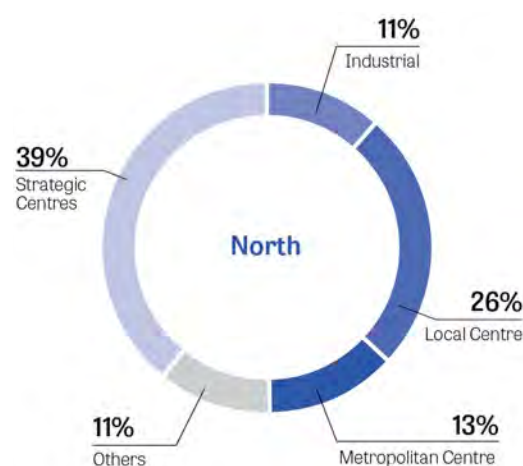
Sydney Metro will provide faster transport connections which will bolster the influx of businesses to the North District and boost employment growth.

The North District has a high proportion of knowledge and professional services jobs, as well as 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.

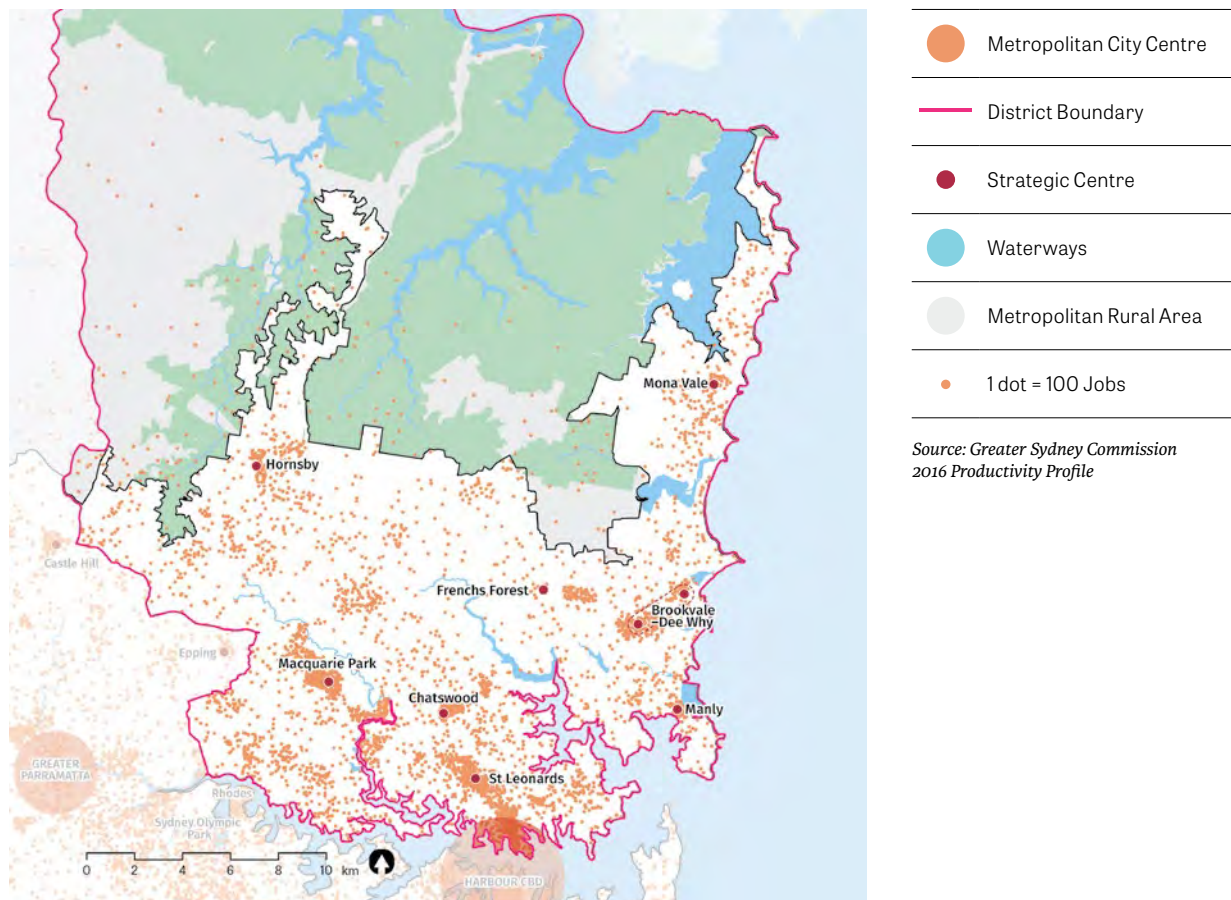
Intensification of health and education facilities and ancillary businesses will occur at Macquarie Park, Frenchs Forest to support the Northern Beaches Hospital and St Leonards, which have all been identified as health and education precincts. Macquarie Park is the largest non-CBD office market in Australia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

Figure 17: North District job distribution by type of location



Source: Australia Bureau of Statistics Census 2011

Figure 18: North District job density



The North District has the least amount of industrial and urban services land in Greater Sydney. The transition from traditional industrial to advanced manufacturing and innovation industries will further boost productivity. It is critical to maintain this land and provide important services and jobs for the District.

Knowledge and professional services jobs as well as health and education jobs are the biggest contributors to economic growth in 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:

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

Planning Priority N7

Growing a stronger and more competitive Harbour CBD

In giving effect to the draft *Greater Sydney Region Plan*, this Planning Priority delivers on **Objective 18: Harbour CBD is stronger and more competitive** and the corresponding strategies and actions.

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. 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.

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

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 complementing 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.⁵

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 reasons, 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

Actions

Responsibility

22. Grow economic development in 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.
23. Prioritise:
 - a. public transport projects to the Harbour CBD to improve business-to-business connections and support the 30-minute city
 - b. infrastructure investments which enhance walkability and cycling, particularly those focused on access to the transport network, and within five kilometres of any strategic centre 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 the draft *Greater Sydney Region Plan*, this Planning Priority delivers on **Objective 15: The Eastern, GOP and Western Economic Corridor are better connected and more competitive** and the corresponding actions.

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.

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-10 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 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 and job opportunities in strategic centres.

Table 3: Greater Sydney office precincts 2017

Precinct	Office floor space (m2)
Sydney CBD*	5,079,899
Macquarie Park	878,950
Sydney CBD fringe*	864,640
North Sydney*	822,496
Greater Parramatta	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
TOTAL	9,740,594

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

*Components 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 potential mass transit link from Parramatta to Epping will 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 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.



Actions

24. Prioritise public transport investment to deliver the 30-minute city objective for strategic centres along the Eastern Economic Corridor.

Responsibility

Councils, other planning authorities and State agencies

Planning Priority N9

Growing and investing in health and education precincts

In giving effect to the draft *Greater Sydney Region Plan*, this Planning Priority delivers on **Objective 21: Internationally competitive health, education, research and innovation precincts** and the corresponding strategy.

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:

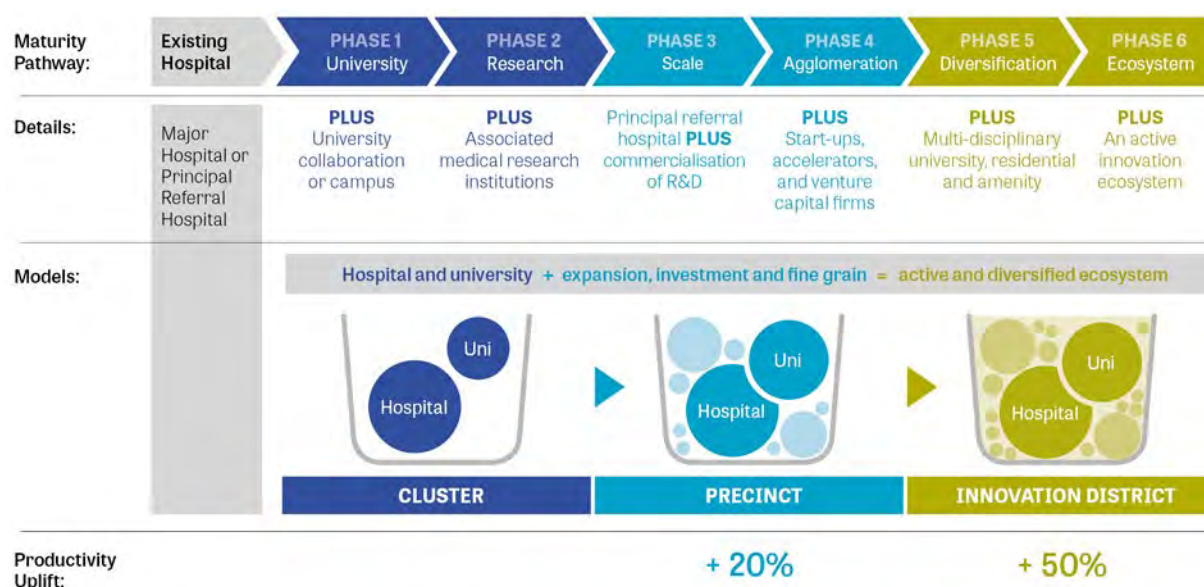
- diversify job opportunities across Greater Sydney
- facilitate jobs closer to home
- strengthen the international competitiveness of the economy, particularly in the area of innovation.

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 that includes 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 3: Maturity pathway for health and education precincts



Source: Deloitte 2016, Westmead Innovation District: Building Western Sydney's job engine 2016-2036

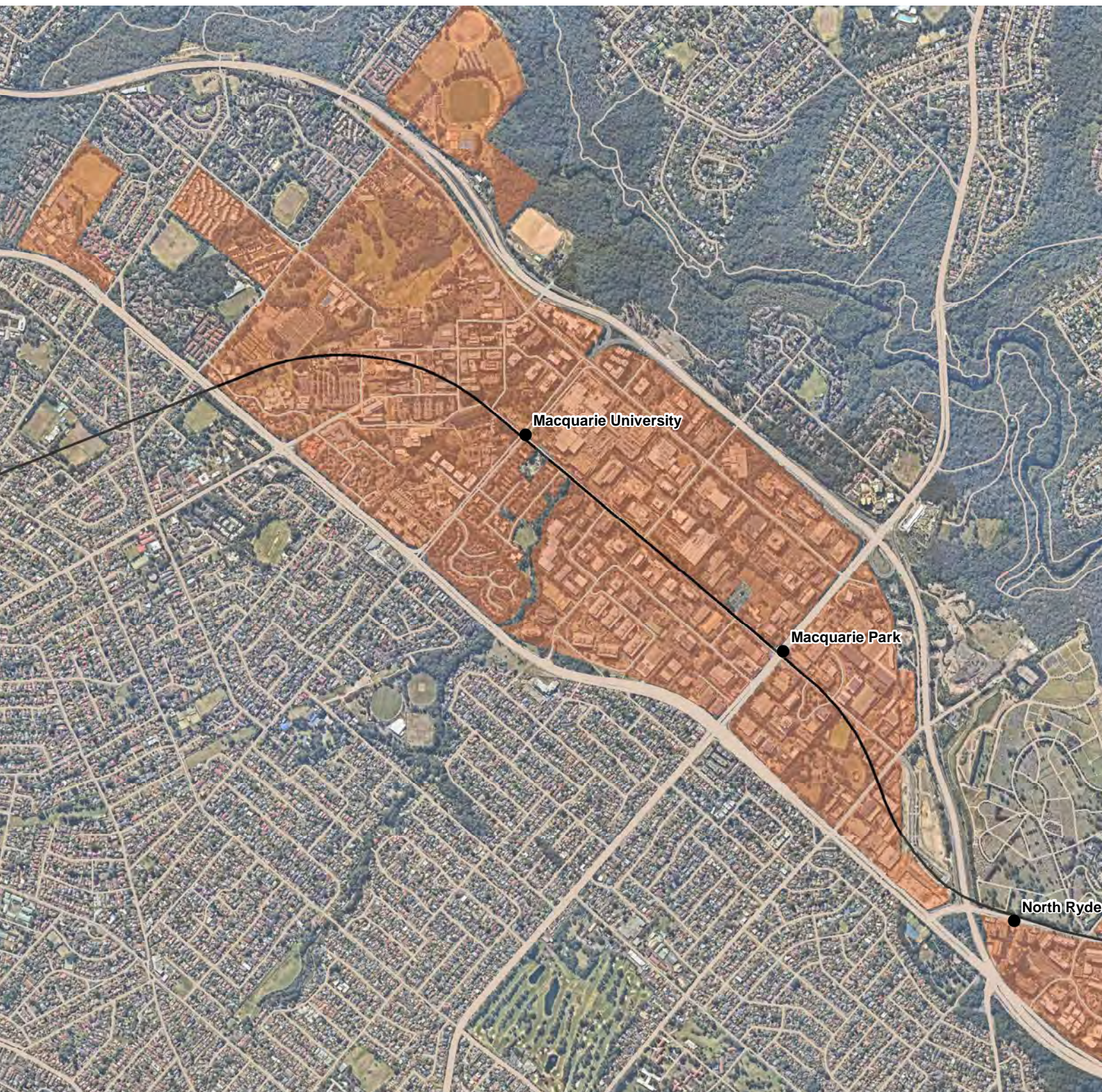
As described in the draft *Greater Sydney Region Plan*, the evolution of health and education precincts follow a Maturity Pathway. As precincts evolve, the economic productivity of the precinct increases substantially. This corresponds to three general models, which become progressively more complex: Clusters, Precincts and Innovation Districts (refer to Figure 19). 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, 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
25. Facilitate health and education precincts that: <ul style="list-style-type: none"> 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 b. have high levels of accessibility c. attract associated businesses, industries and commercialisation of research d. include housing opportunities for students and workers within 30 minutes of the precinct. 	Councils and other planning authorities
26. 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
27. 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
28. 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





The Commission has identified the strategic centre of Macquarie Park as 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 854,254sqm of office floor space (Jan 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.⁶

In 2016, the centre was estimated to generate 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.⁷

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 for the area.

The Commission has identified the centre as a Collaboration Area given its important health and education uses.

The area 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 and Department of Industry.

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



Actions

29. 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.

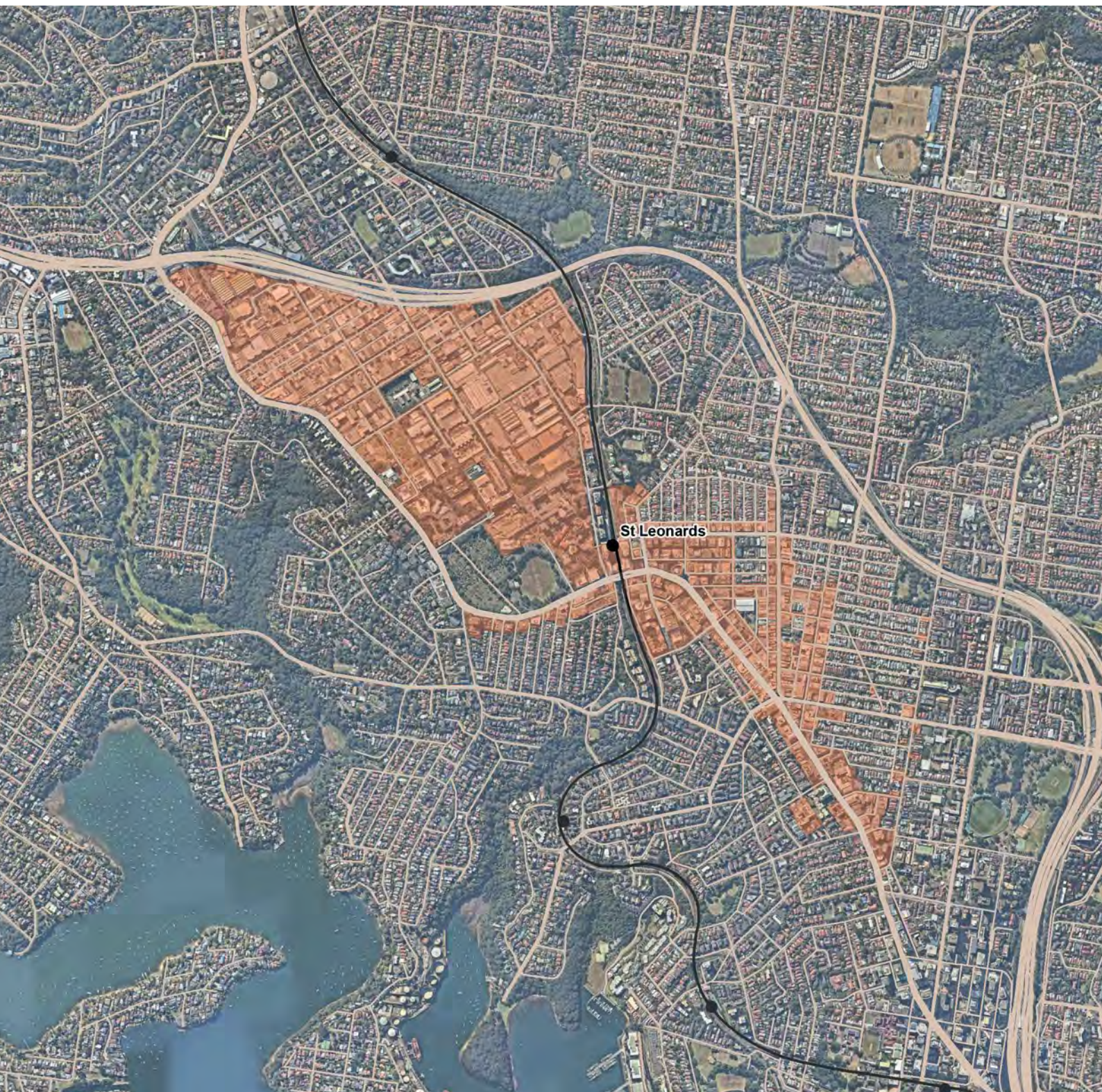
Responsibility

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



Jobs and services

St Leonards





The Commission has identified the strategic centre of St Leonards as 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.⁸

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 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 Metro station proposed at Crows Nest, presents an opportunity for renewal and activation.

The Commission has identified the area as a Collaboration Area given its important health and education uses.

St Leonards-Crow Nest is a Priority 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 Department of Industry and TAFE NSW.

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



Actions

30. 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. protect 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



Jobs and services

Frenchs Forest



The Commission has identified the strategic centre of Frenchs Forest as 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 will provide knowledge-intensive jobs, innovation and service delivery. The NSW Government is undertaking road upgrades 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. The Commission has identified the centre as a Collaboration Area given the important health uses proposed for the precinct.

Frenchs Forest is identified as a Priority Precinct with the NSW Department of Planning and Environment leading planning in this area in collaboration with the Commission, Northern Beaches Council, 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

31. Strengthen Frenchs Forest through approaches that:
 - a. leverage the investment in the Northern Beaches Hospital to provide a vibrant and well connected strategic centre
 - b. deliver an urban core with a mix of commercial and residential uses and community facilities
 - c. provide new housing, including affordable housing
 - d. encourage walkability and cycling within the precinct
 - e. enhance the natural setting of the area by embellishing existing open space
 - f. attract new, innovative health and medical related commercial premises to support the hospital
 - g. reinforce the centre as an employment hub for the Northern Beaches, building on the existing business park east of the Wakehurst Parkway
 - h. continue to investigate a high frequency public transport link, in partnership with State agencies.

Responsibility

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 the draft *Greater Sydney Region Plan*, this Planning Priority delivers on **Objective 22: Investment and business activity in centres** and the corresponding strategies and actions.

The growth, innovation and evolution of centres will underpin the economy of the North District. Centres provide important services and jobs for local residents and places for communities to meet. Their vitality and viability is 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.

To manage the growth and change of the North District's centres a centres hierarchy has been established as outlined below:

- Metropolitan city 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: approximately 36 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 and walkability
- areas identified for commercial uses, and where appropriate, commercial cores.

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

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. 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 where people live. This requires growth in either existing or new centres. The principles for developing new centres are outlined in this Planning Priority.

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 centre 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 other small businesses, government and corporate organisations. Opportunities for smart work hubs in strategic centres should be encouraged.

Delivering housing within a walkable distance of strategic centres encourages non-vehicle trips, which also fosters 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.

Jobs growth and community access to goods and services is the core objective for centres. For this reason, job targets, expressed as a range, have been projected for each strategic centre as well as 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.

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.

 Actions	Responsibility
32. Provide access to jobs, goods and services in centres by: <ul style="list-style-type: none"> a. attracting significant investment and business activity in strategic centres to provide jobs growth b. diversifying the range of activities in all centres c. creating vibrant, safe places and quality public realm d. balancing the efficient movement of people and goods with supporting the liveability of places on the road network e. improving the walkability within and to the centre f. completing and improving a safe and connected cycling network to and within the centre. g. improving public transport services to all strategic centres h. creating the conditions for residential development within strategic centres and within walking distance, but not at 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. 	Councils, other planning authorities, and State agencies
33. Create new centres in accordance with the <i>Principles for Greater Sydney's Centres</i> .	Councils and other planning authorities and State agencies
34. Engage with the retail sector on its changing planning requirements and update planning controls as required.	Councils and other planning authorities
35. Prioritise strategic land use and infrastructure plans for growing centres, particularly those with capacity for additional retail floor space.	Councils and other planning authorities
36. Encourage opportunities for new smart work hubs.	Councils and other planning authorities
37. 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

Principles for Greater Sydney's centres

As Greater Sydney's population grows over the next 20 years, there will be a need for over five million square metres of additional retail floor space and new office precincts.

For Greater Sydney to remain competitive, the market needs to be able to deliver this floor space in an efficient and timely manner. Numerous regulatory reviews across Australia have emphasized this issue.

There will be a need to grow existing centres, particularly strategic centres and supermarket-based local centres; create new centres including business parks; and to attract health and education activities in centres. The principles for developing these centres are outlined below:

- **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 will be critical to enabling these situations. 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, this will include a wide range of centre types, including local and large centres which will grow and evolve into new strategic centres.
 - In land release areas, strategic planning should maximise the number and capacity of centres on existing or planned rail corridors. To deliver this outcome the centres need to be identified early to allow their incorporation into transport infrastructure plans.
 - In the Western Parkland City, where South Creek is to be planned as the central organising element for the city, opportunities for new centres to address South Creek are to be maximised.
 - In established areas, there are likely to be innovative approaches to creating new centres as 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 street network built form of these business parks is

critical; that is, they must be developed as urban places which can transition into higher amenity and vibrant places while maintaining the main role as employment precincts. Councils' retail and employment strategies should guide the transition of business parks into mixed employment precincts including, where appropriate, ancillary residential 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 be co-located with supporting transport infrastructure. Built form is also critical to facilitate the transition of centres with health and education uses to facilitate more mature innovation precincts.

In all cases, delivering centres that create walkable neighbourhoods is a high priority, and in this context additional centres which improve walkability are encouraged.

Land use and infrastructure plans inform decisions for the location of new centres and the expansion of existing centres.

Where there is a prevalence of retail in an industrial area, there may be exceptional cases to support the development of a new centre. Any such opportunities 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 Commission. 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 stand-alone 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 and deemed to have an acceptable impact on the operation of existing businesses in the locality and the viability of surrounding centres.

Brookvale–Dee Why





The strategic centre which 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 the Northern Beaches residents.

Dee Why is a vibrant 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

38. 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 with 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 with regional shopping centres with Westfield, Chatswood Chase, Mandarin Centre and other centres combining to provide one of the largest shopping precincts in Greater Sydney. Entertainment facilities such as The Concourse and Zenith Theatre contribute to the amenity of the centre. Chatswood provides a vibrant night-time economy.

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 to the centre. Further investigation regarding bus operations and accessibility on the western side of the railway would improve amenity for the commercial core.



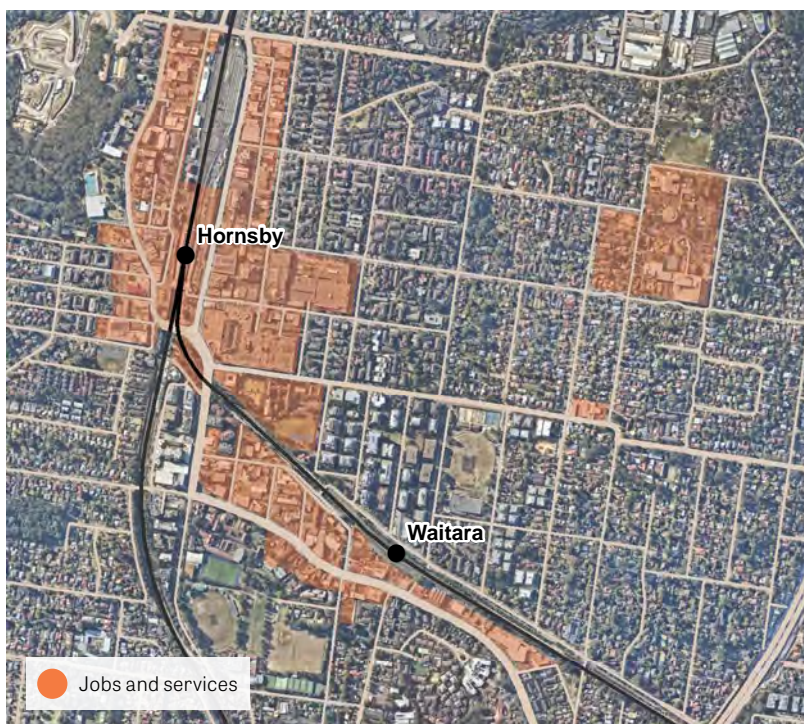
Chatswood	Jobs
2016 Estimate	24,700
2036 Baseline Target	31,000
2036 Higher Target	33,000

Actions	Responsibility
<div>39. Strengthen Chatswood through approaches that:<div><div>a. protect and grow the commercial core</div><div>b. maximise the land use opportunities provided Sydney Metro</div><div>c. promote the role of the centre as a location for high quality, commercial office buildings and a diverse retail offering</div><div>d. enhance the role of the centre as a destination for cultural and leisure activities</div><div>e. promote and encourage connectivity, and upgrade and increase public open spaces</div><div>f. further investigate bus services and accessibility on the western side of the railway line.</div></div></div>	<div>Willoughby City Council, other planning authorities and State agencies</div>

Hornsby

Hornsby strategic centre includes Westfield Hornsby as a retail centre local as well as 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.



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

Actions

40. 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, placemaking initiatives and a new civic space.

Responsibility

Hornsby Shire Council,
other 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 with its stunning beaches provide economic opportunities for the centre including 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.



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

Actions	Responsibility
<div>41. Strengthen Manly through approaches that:<div><div>a. further develop Manly as a cultural, tourist, retail and entertainment precinct</div><div>b. improve public transport connections to Manly Wharf from other lower Northern Beaches suburbs</div><div>c. provide improved public transport to Chatswood, Frenchs Forest, St Leonards, Macquarie Park and Macquarie University</div><div>d. encourage diversified commercial activity to improve economic resilience</div><div>e. encourage eco-tourism around North Head and the Cabbage Tree Bay Aquatic Reserve.</div></div></div>	Northern Beaches Council, other 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 will be improved with the commencement of the B-Line bus service.



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

Actions

42. Strengthen Mona Vale through approaches that:
- protect and enhance the commercial and retail function of the centre to provide employment growth and maintain high job containment
 - ensure sufficient retail and commercial floor space is provided to meet future demand
 - 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
 - improve access and linkages to local destinations, such as Mona Vale Hospital, through priority pedestrian networks
 - promote walking and cycling to and within the centre
 - retain and protect the industrial precinct to the north of the centre to serve the growing population
 - prioritise place making and urban activation, including enlivening the centre.

Responsibility

Northern Beaches Council,
other planning authorities and
State agencies

Planning Priority N11

Protecting and managing industrial and urban services land

In giving effect to the draft *Greater Sydney Region Plan*, this Planning Priority delivers on **Objective 23: Industrial and urban services land is planned, protected and managed the corresponding strategies.**

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

Urban services activities includes 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 also 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 protected 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 571.7 hectares of industrial and urban services land, spread over 43 precincts (refer to Figure 20).⁹ This represents four per cent of Greater Sydney's total stock of industrial and urban services land. Only approximately eight per cent (41 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 2015.¹⁰ It also accommodated for approximately 68,000 jobs (four per cent of jobs) in the District .

Table 4: Six largest industrial and urban services precincts in the North District

Precinct	LGA	Undeveloped Land (ha)	Developed Land (ha)	Total (ha)
Asquith	Hornsby	5	39	44
Mount Ku-ring-gai	Hornsby	10	55	66
Lane Cove West	Lane Cove	6	45	51
Brookvale	Northern Beaches	0	86	86
Cromer	Northern Beaches	0	44	44
Artarmon	Willoughby	4	61	65

Source: NSW Department of Planning and Environment, 2016, *Employment Lands Monitor*, NSW Government, Sydney;

Note: Figures are rounded to the nearest whole number.

Figure 20: North District industrial and urban services land and freight assets



— District Boundary	● Protected Natural Area	— Motorway
● Metropolitan City Centre	● Metropolitan Rural Area	— Committed Motorway
● Strategic Centre	● Industrial and Urban Services Land	
● Waterways	— Freight/Shared Rail	

The largest industrial and urban services lands in the North District are listed in Table 4. A total of 2,212 businesses operated within the District. 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

While industrial activity and urban services remain important, the nature of this economic sector is changing, 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.

Industrial and urban services land provides space for emerging future industries.

Since 2011, nine hectares of industrial and urban services land in the North District were rezoned for other uses. 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 dominates in areas that are more accessible and valuable, such as locations close to hospital upgrades and transport improvements (for example, St Leonards, Northern Beaches 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 they 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 prepared for the Commission compares urban services provision in Greater Sydney with the ACT 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 2036.¹¹

Therefore, existing industrial and urban services land needs to be protected from conversion to residential and mixed use development and must be managed to accommodate businesses supporting the local economy and serving the local population.

As the Hornsby Local Government Area undergoes transition, careful planning will maintain capacity for a range of industrial activities, and provide assurance that industrial and urban services activities can co-exist with existing and new development.


As part of its broader review of the established industrial lands, the Commission will prioritise a strategic review of the industrial land in the Hornsby Local Government Area, to tailor future management of the relevant precincts. The review will include consultation with land owners, business operators, developers and councils.

In the context of retaining industrial and urban services activities, there may be a need, from time to time, to review the list of appropriate activities within any precinct to allow flexibility for new and evolving business practices, new industries and emerging technologies. Any review should take into consideration findings of the industrial, commercial and centres strategies for the local government area and/or district.

Figure 21: North District industrial land approaches



— District Boundary	● Protected Natural Areas	● Protect and Manage
— Local Government Area Boundary	● Metropolitan Rural Area	● Review and Manage
● Waterways		

 Actions	Responsibility
43. Manage industrial land in the identified local government areas (refer to Figure 21) by protecting all industrial zoned land from conversion to residential development, including conversion to mixed use zonings.	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
44. Manage industrial land in the identified local government areas (refer to Figure 21) by undertaking a review of all industrial land to confirm their protection 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
<p>45. Manage the interfaces of industrial areas by:</p> <p>Land use activities</p> <ul style="list-style-type: none"> a. providing buffer areas to nearby activities, such as residential uses, that are sensitive to emissions from 24-hour freight functions b. protecting 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 c. identifying and preserving land for future intermodal and rail infrastructure d. accommodating advanced manufacturing where appropriate by zoning that reflects emerging development models. <p>Transport operations</p> <ul style="list-style-type: none"> e. providing the required commercial and passenger vehicle, and freight and passenger rail access. 	Councils, other planning authorities, State agencies and State-owned corporations
46. Facilitate the contemporary adaption of industrial and warehouse buildings through increased floor to ceiling heights.	Councils and planning authorities

Useful links:

- NSW Department of Planning and Environment, Employment Lands Development Program



Planning Priority N12

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

In giving effect to the draft *Greater Sydney Region Plan*, this Planning Priority delivers on **Objective 14: A metropolis of three cities – integrated land use and transport create walkable and 30-minute cities** and the corresponding strategies and actions.

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, the *Future Transport 2056* and the draft *Greater Sydney Region Plan* 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 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:

- high-capacity mass transit links to better link people to centres and services
- capacity and reliability improvements on existing transport corridors serving the Harbour CBD and strategic centres
- improved transport links between strategic centres, and as feeders into mass transit
- improvements to the strategic road network and key intersections to improve traffic flows through the District and access to strategic centres.
- city-to-city links to the Central River City and ultimately to the Western Parkland City, the Western City Airport and Badgerys Creek Aerotropolis.

The draft *Greater Sydney Region Plan* and *Future Transport 2056* outline the city-shaping train network and strategic road network initiatives which are integrated with the land use objectives for Greater Sydney.

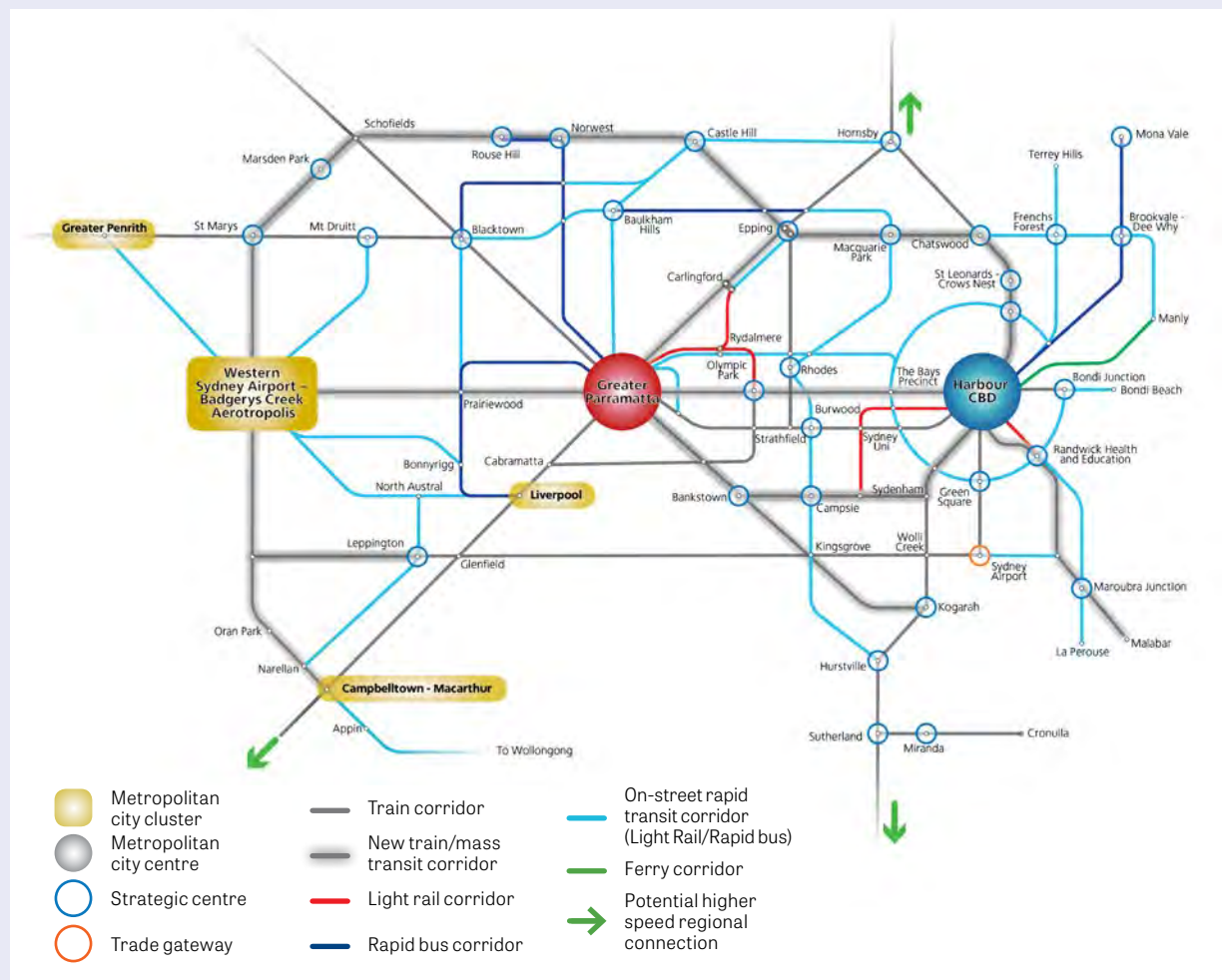
The relevant transport initiatives for this District, and their role in supporting land use outcomes are outlined in the following Planning Priorities:

- Planning Priority N7: Growing a stronger and more competitive Harbour CBD
- Planning Priority N8: aEastern Economic Corridor is better connected and more competitive
- Planning Priority N9: Growing and investing in health and education precincts.

This draft 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).

Intermediate transit 2036

Source: Transport for NSW



Note: Committed projects of: Western Harbour Tunnel & Beaches Link, F6 – WestConnex to President Avenue Kogarah, Parramatta Light Rail Stage 2 and Sydney Metro West are subject to final business case, no investment decision yet. Routes and stops for some transport corridors/projects are indicative only.

Intermediate transit includes buses, ferries, light rail and point-to-point transport such as taxis and rideshare.

It has a key role in providing access for customers to the train network and servicing customers on corridors where trains do not operate. These roles underpin the vision for the future intermediate transit network as one that will provide coverage for customers across Greater Sydney, be easy-to-understand and well-integrated with the train network.

As Greater Sydney transitions to a metropolis of three cities, public transport will play an increasingly important role in enabling customers to access their nearest metropolitan and strategic centre within 30 minutes and travel across the city. This requires the public transport system to not only support reliable and efficient access to centres but also to reach destinations across Greater Sydney efficiently and reliably.

Intermediate transit will support this by performing two critical roles:

providing frequent, reliable and efficient transport between local areas and nearby train stations where customers can access high capacity transport to travel to their nearest centre and other destinations across Greater Sydney

providing direct access to centres for customers on corridors where trains do not operate.

The future intermediate transit network will enable this by providing coverage across Greater Sydney through a combination of strategic routes and local routes, being easy-to-understand and connecting to interchanges on train lines. This means that new routes in the Western Parkland City will be investigated to support growth, additional connections to Greater Parramatta will be investigated, including light rail extensions to support urban renewal, and new routes will be investigated in the Eastern Harbour City to support more efficient access to train corridors. As the train network grows, the intermediate transit network will also evolve to enable customers to reach their nearest station.

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 intermediate transit modes and an improved road network.

Northern Beaches B-Line is a committed intermediate transit 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.

Key elements of the intermediate transit network to be considered in the next 20 years include:

- additional ferries for Parramatta River
- Northern Beaches to Chatswood bus improvements
- Victoria Road transport improvements to support frequent, reliable and efficient transport to the Harbour CBD and Greater Parramatta.

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. The early preservation of corridors also reduces the potential for conflict in the future.

Improving walking and cycling

Walking is a fundamental part of the transport system and most journeys start and end with walking. Creating pleasant and safe environments for walking and cycling contribute to great places where people and businesses choose to locate and invest in.

Prioritising cycling for short trips to centres, transport interchanges and local services such as schools and health services will free capacity for people that need to travel further by road and public transport.

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 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

The 21st Century is an era of unprecedented and rapidly accelerating change. 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 program, 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.

Useful link:

- M4 Smart Motorway project

Actions	Responsibility
47. Integrate land use and transport plans to deliver the 30-minute city.	Councils, other planning authorities and State agencies
48. Investigate, plan and protect future transport and infrastructure corridors.	Councils, other planning authorities and State agencies
49. 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
50. 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 the draft *Greater Sydney Region Plan*, this Planning Priority delivers on **Objective 24: Economic sectors are targeted for success** and the corresponding strategies.

The draft *Greater Sydney Region Plan* 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.

The draft *Greater Sydney Region Plan* 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 the draft *Greater Sydney Region Plan* emphasises the need to work with internationally competitive trade sectors to identify the barriers to growth, including regulatory barriers.

The draft *Greater Sydney Region Plan* also identifies key economic sector for Greater Sydney's three cities. The North District is part of the Eastern Harbour City where the key economic sectors include:

- financial and professional services (including insurance and superannuation)
- creative industries

- information, communication and technology (including cyber security)
- construction and infrastructure
- health and medical technology
- tertiary education
- visitor economy.

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.

Approximately 1.8 million visitors stayed overnight in the District in 2015–2016, 82 per cent of which were domestic visitors. Visitors spend \$2.56 billion each year on accommodation, hospitality, entertainment and leisure.¹²

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.

Attractions include:

- world-class locations on the north shore of Sydney Harbour including Luna Park, 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 Quarantine Station at Manly and Barrenjoey Head.

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 Eastwood) 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 vibrant and popular night-time economies.

Manly also benefits from its ferry connections to the Harbour CBD. The recently announced pedestrian and cycleway from Palm Beach to Manly will provide further tourism opportunities.

Improving public transport will support tourists and visitors to access 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.

Weekend and night markets, events and festivals attract visitors, promote lively centres and contribute to local economies.

Encouraging tourism in natural areas must ensure the environment is protected. 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, with vegetables and fruit trees 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.

Adapting to changing technologies

The digital economy is disrupting business and the workforce worldwide with emerging technologies and innovations including the development of artificial intelligence, quantum computing and big data, robotics, autonomous vehicles, 3D printing and nanotechnology.

It is dramatically changing the way people and goods move around, providing more efficient transport services.

Digital technology has improved efficiencies in administration, manufacturing, wholesale and retail

and is increasingly transforming the knowledge and professional service sectors. While advancements can reduce demand for certain types of jobs, they enable innovation, new knowledge-intensive jobs and business opportunities.

Economic development strategies must embrace the digital economy and capture its benefits and productivity improvements. They must focus on sectors that will enhance Greater Sydney's global competitiveness and the creation of high-value jobs.

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) who 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 by SMEs and start-ups through TechVouchers.

In the North District, the delivery partners include the Australian Catholic University, Macquarie University and CSIRO Lindfield. The new Boost 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 – under the program, ACU Collaborate Plus is establishing multidisciplinary collaborative spaces in North Sydney to facilitate sustainable partnerships with organisations.
- Macquarie University – under the program, the University is establishing co-working space, providing access to expertise and technical equipment and other initiatives.

- Commonwealth Scientific and Industrial Research Organisation (CSIRO) Lindfield – under the program, CSIRO is offering collaborative works 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. There are already smart hub business providers located in North Sydney. These businesses can be supported by providing infrastructure including smart work hubs and meeting spaces across the District.

 Actions	Responsibility
51. Consider the barriers to the growth of internationally competitive trade sectors, including engaging with industry and assessing regulatory barriers.	Councils and other planning authorities
52. When preparing plans for tourism and visitation, consider: <ul style="list-style-type: none"> a. encouraging the development of a range of well-designed and located facilities b. enhancing the amenity, vibrancy and safety of centres, places and precincts c. supporting the development of places for artistic and cultural activities d. improving public facilities and access e. protecting heritage and biodiversity to enhance cultural and eco-tourism f. supporting appropriate growth of the night-time economy g. developing industry skills critical to growing the visitor economy. 	Councils and other planning authorities
53. 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
54. Provide a regulatory environment which enables economic opportunities created by changing technologies.	Councils and other planning authorities and State agencies
55. Consider opportunities to implement place-based initiatives to attract more visitors, improve visitor experiences and ensure connections to transport at key tourist attractions.	Councils, other planning authorities and State agencies
56. 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 the draft *Greater Sydney Region Plan*, this Planning Priority delivers on **Objective 16: Freight and logistics network is competitive and efficient** and **Objective 17: Regional transport is integrated with land use** and the corresponding strategies.

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 international 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.

The North District provides the main road and rail infrastructure from the north 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 other agricultural products.

Improving north-south connections between the five cities will allow greater opportunities for residents, to access a wider range of job opportunities and enhance business-to-business linkages collectively enhancing their productivity. Improved regional connections of this type are increasingly a characteristic of numerous cities across the world. Equally, improved connections will provide greater choices for where people can choose to live and in the long term, provide increased growth management choices.

Hornsby provides an important interchange for the catchment of workers 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 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 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. It will improve the efficient movement of state and national freight with resultant benefits for motorists.

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.

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

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. It has four connected elements: waterways; urban bushland; urban tree canopy and green ground cover; parks and open spaces.

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 providing habitat for aquatic ecosystems.

Cool, green links throughout the District will provide the Greater Sydney Green Grid – the regional network of high quality green spaces that supports walking, cycling and community access to open spaces – and with urban tree canopy lining streets and neighbourhoods.

The District's extensive rural areas include farmland and mineral resources which supply fresh local produce and construction materials as well as bushland which can provide habitat for wildlife and offset sites for biodiversity.

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

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

- Protecting and improving the health and enjoyment of Sydney Harbour and the District's waterways
- Protecting and enhancing bushland and biodiversity
- Protecting and enhancing scenic and cultural landscapes
- Better managing rural areas
- Increasing urban tree canopy cover and delivering Green Grid connections
- Delivering high quality open space
- Reducing carbon emissions and managing energy, water and waste efficiently
- 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 Government Architect NSW is working on a Green Infrastructure framework to guide the delivery of green infrastructure across NSW through planning, designing and managing green infrastructure as an interconnected network.

The Green Infrastructure framework will have three 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.



Planning Priority N15

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

In giving effect to the draft *Greater Sydney Region Plan*, this Planning Priority delivers on **Objective 25: The coast and waterways are protected and healthier** and the corresponding strategies.

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 dependant ecosystems, which benefit from continuing protection and management. They support threatened ecological communities and accommodate the disposal of stormwater and wastewater. The Districts catchments and waterways are shown on Figure 22.

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

The North District's waterways support significant biodiversity. Five aquatic reserves – at 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'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 for the District, with visitors and residents using the foreshore for leisure and recreation. Many

recreational activities including water skiing, fishing and canoeing are also located on the Hawkesbury River.

A legacy of historical land uses, contaminated land, 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 settings for swimming.

Urban development, the clearing of vegetation and more impermeable surfaces have resulted in elevated 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 agencies and stakeholders, so water quality and waterway health is best managed at a catchment and sub-catchment level.

Growth and new investment 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 flora and fauna, and urban bushland; 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 Greater Sydney Green Grid connections (refer to Priority N19) will enhance connections to Sydney Harbour, the Parramatta River and the coastline from Palm Beach to Manly.

Figure 22: North District catchments and waterways



District Boundary	Lane Cove River Basin	Narrabeen Lagoon
Strategic Centre	Middle Harbour Creek Basin	Pittwater
River Flow Direction	Manly Lagoon	Coastal Catchment
Hawkesbury-Nepean River Basin	Port Jackson Basin	Waterway
Parramatta River Basin	Dee Why Lagoon / Curl Curl Lagoon	

There is legislation, as well as policies and plans, already 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 Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005 coordinates development decisions for Sydney Harbour and its tributaries. NSW Government agencies and councils also manage the health of waterways through planning and development decisions, environmental programs and through the management of public land.

Protecting and improving the environmental health of the District's waterways safeguards the health of the coast and ocean.

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 the Greater Sydney region, now and for the future. It established the WaterSmart Cities program, which 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 is preparing a Marine Estate Management Strategy which will support a clean, healthy and productive marine environment.

Local land use planning controls also protect environmentally sensitive coastlines, waterways and foreshores, and the health of catchments above these waterways.

Protecting and improving the environmental health of the District's waterways safeguards the health of the coast and ocean. 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 approaches and encourage water sensitive urban design.

The draft 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 can provide environmental, social and economic benefits to communities
- integrating approaches to protecting environmentally sensitive waterways within a larger network of green infrastructure
- addressing the cumulative impacts of development and land management decisions across catchments in a way that improves 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 facilitates a coordinated approach to the management of the Parramatta River.

Catchment-scale management and coordination can:

- solve multiple problems – for example, catchment condition and water scarcity, or addressing 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
- enable both public and private benefits to be achieved – for example, stormwater from private land could provide a benefit to public management of green space and urban waterways.

Strategic planning needs to manage the cumulative impact of activities and associated infrastructure such as moorings, marinas and boat launching facilities while ensuring public access to the waterways and opportunities for swimming, and small boat and kayak launching from publicly-owned land.



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. The Harbour and its tributaries also act as a major transport corridor, flora and fauna habitat and recreation area. It is a significant natural scenic feature with its many tributaries, estuaries, beaches and bays providing abundant biodiversity. There is also a rich Aboriginal and European heritage associated with the Harbour.

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

Sydney Harbour 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 also a working waterway,

with defence and military operations, recreational watercraft industries, ferries and water taxis and cruise ships. Conflicts between recreational, residential and industry uses require thought leadership and a collaborative approach to resolve.

Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005 (SREP) is the principal management framework for the Harbour. The SREP aims to ensure that the catchment, foreshores, waterways and islands of Sydney Harbour are recognised, protected and maintained as nationally significant natural and public assets for existing and future generations.

The NSW Government is currently reviewing planning controls for Sydney Harbour. Updated planning controls and continued ongoing coordinated management of Sydney Harbour by NSW Government, councils and other stakeholders will enhance its environmental qualities and support ongoing tourism, economic, recreation, heritage and cultural values.

Parramatta River

Parramatta River is central to Greater Sydney's Aboriginal and colonial history and the development of modern Sydney. Its foreshore is the focal point for 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 further investment and a catchment-wide approach would provide further benefits.


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 potential swimming 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.

Making more sites along the Parramatta River swimmable will require 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.

Useful links:

- Parramatta River Catchment Group Strategic Plan 2016–2018
- Making the Parramatta River swimmable again
- Risk-based Framework for Considering Waterway Health Outcomes in Strategic Land-use Planning Decisions (2017)

 Actions	Responsibility
59. Protect environmentally sensitive coastal areas and waterways.	Councils, other planning authorities, State agencies and State-owned Corporations
60. 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
61. Improve the health of catchments and waterways through a risk-based approach to managing the cumulative impact of development including coordinated monitoring of outcomes.	Councils, other planning authorities, State agencies and State-owned Corporations
62. Reinstate 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 the draft *Greater Sydney Region Plan*, this Planning Priority delivers on **Objective 27: Biodiversity is protected, urban bushland and remnant vegetation is enhanced** and the corresponding strategies.

Objective 27 in the draft *Greater Sydney Region Plan* outlines how the NSW Government seeks to protect and manage biodiversity values across Greater Sydney, from national and state 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. While 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 Sydney Turpentine-Ironbark Forest, and protect vulnerable and endangered species. Figure 23 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 urban bushland is found on privately owned land.

These areas of urban bushland, close to some of the District's most densely populated areas, support opportunities for nature-based recreation and enhance liveability. Areas of bushland at the edges of urban neighbourhoods will need to be managed and enhanced to reduce impacts from urban areas, such as pollution and nutrients from stormwater, weeds and litter.





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. This strategic approach complements the delivery of the Greater Sydney Green Grid.

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.

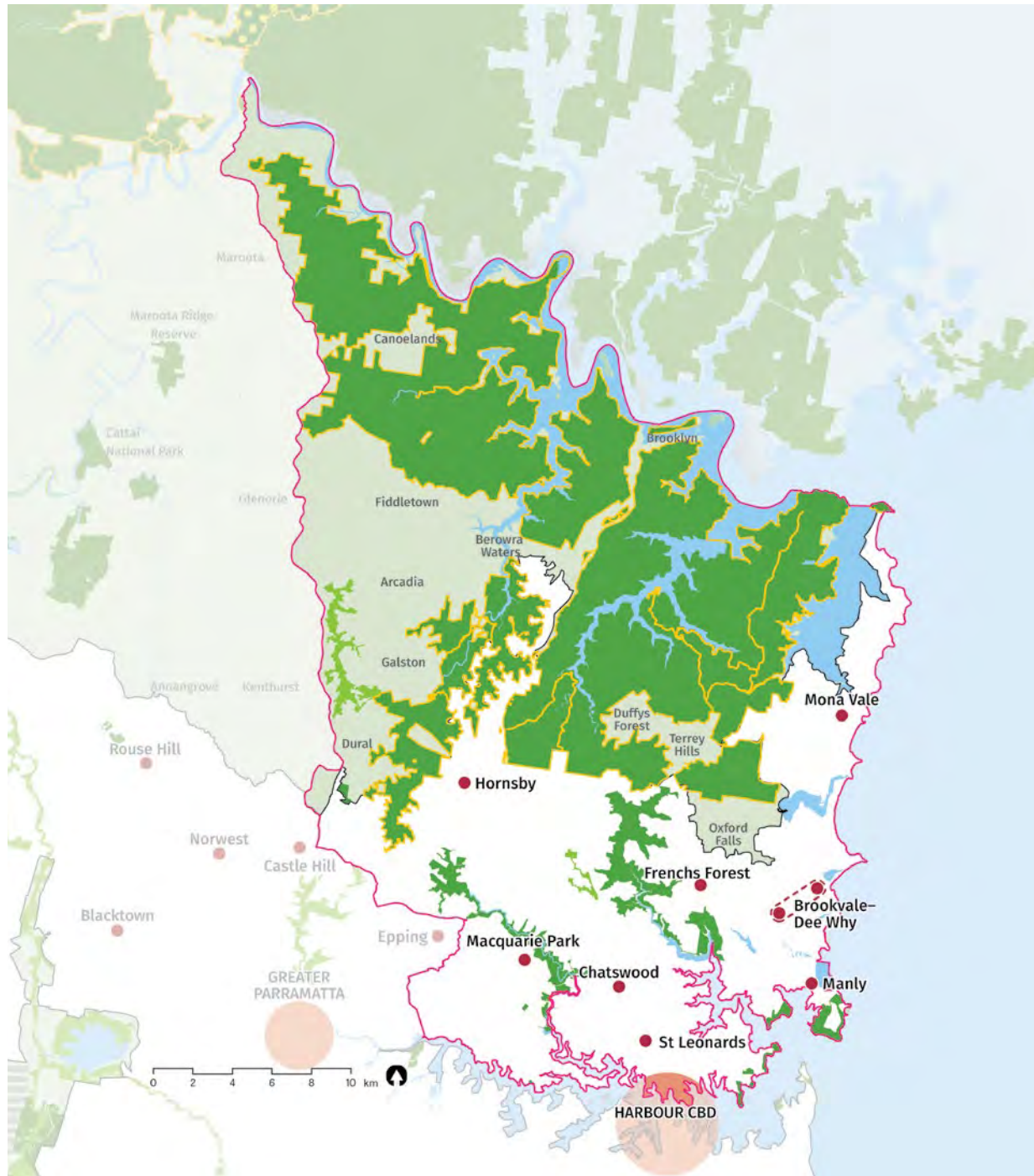
The *Biodiversity Conservation Act 2016* provides a framework and tools to avoid, minimise and offset impacts on biodiversity through the planning and development assessment process.

Useful link:

- Cumberland Subregion Biodiversity investment Opportunities Map (BIO Map)

Actions	Responsibility
63. Protect and enhance biodiversity by: <div><div>a. supporting landscape-scale biodiversity conservation and the restoration of bushland corridors</div><div>b. managing urban bushland and remnant vegetation as green infrastructure.</div></div>	Councils, other planning authorities and State agencies

Figure 23: North District Protected Natural Area and Metropolitan Rural Area



— District Boundary	 Protected Natural Area	 Urban Area
● Strategic Centre	 National Parks and Reserves	
 Waterways	 Metropolitan Rural Area	

Planning Priority N17

Protecting and enhancing scenic and cultural landscapes

In giving effect to the draft *Greater Sydney Region Plan*, this Planning Priority delivers on **Objective 28: Scenic and cultural landscapes are protected** and the corresponding strategies.

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 and escarpments such as West Head provide viewing locations which need to 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 buildings previously used to regulate the risk of disease from new arrivals to Australia in the colonial era. This cultural landscape is already protected for its scenic and cultural landscape.

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
64. Identify and protect scenic and cultural landscapes.	Councils and other planning authorities
65. Enhance and protect views of scenic and cultural landscapes from the public realm.	Councils and other planning authorities

Planning Priority N18

Better managing rural areas

In giving effect to the draft *Greater Sydney Region Plan*, this Planning Priority delivers on **Objective 29: Environmental, social and economic values in rural areas are maintained and protected** and the corresponding strategies.

The North District's rural areas contribute to habitat and biodiversity, support productive agriculture, provide mineral and energy resources, and sustain the 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 23 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 extends into the Central City District. There are opportunities to increase agricultural production in this area, particularly through more efficient use of vacant and underused rural land.


The District has mineral and extractive resources around Maroota, producing construction materials such as sand. Maintaining local supplies of construction materials will support the growth of the District and 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. The draft *Greater*

Sydney Region Plan takes a strategic approach to managing Greater Sydney's needs for new land release areas. Therefore urban development in the Metropolitan Rural Area will only be considered in the investigation areas identified in the draft *Greater Sydney Region Plan*. There are no investigation areas in the North District.

Design-led place-based planning in the Metropolitan Rural Area will help manage its environmental, social and economic values, maximise the productive use of land and incentivise biodiversity protection for remnant vegetation. 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.

In some circumstances, careful planning of rural residential development can provide the necessary incentive to enable greater investment in the management of bushland, waterways and scenic landscapes, using effective buffers around rural industries.

 Actions	Responsibility
66. Maintain or enhance the values of the Metropolitan Rural Area using place-based planning to deliver targeted environmental, social and economic outcomes, including rural residential development.	Councils and other planning authorities
67. Limit urban development to within the Urban Area.	Councils and other planning authorities, State agencies and State-owned Corporations

Planning Priority N19

Increasing urban tree canopy cover and delivering Green Grid connections

In giving effect to the draft *Greater Sydney Region Plan*, this Planning Priority delivers on **Objective 30: Urban tree canopy cover is increased** and **Objective 32: The Green Grid links parks, open spaces, bushland and walking and cycling paths** and the corresponding strategies and actions.

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 emerging 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.¹³ The urban tree canopy also supports cleaner air quality and water and provides local habitat. Trees remove fine particles from the air and help insulate against urban noise pollution. This is particularly important along busy road corridors where air quality can be improved. 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. Sustaining boulevards of trees along the District's busiest roads (such as Epping Road, Pacific Highway, Victoria Avenue, Albert Avenue, and Archer Street, Pittwater Road and Warringah Road) is an important step towards improving amenity and air quality, and cooling the North District. Figure 28 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 ground cover, 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 the urban tree canopy will become even more important for supporting 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.

Extending the urban tree canopy in public and private areas requires the resolution of issues such as the design of road space, competition with above and below ground infrastructure and the need to protect access to sunlight for homes and solar energy panels.

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.

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 recreation and exercise, encourage social interaction, support walking and cycling connections and improve resilience.

The draft *Greater Sydney Region Plan* describes how the Greater Sydney Green Grid sets a long-term vision for a network of high quality green areas. The long-term vision for the Greater Sydney Green Grid in the North District is shown on Figure 24.

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 Priority Projects for the District.

Councils will lead 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 Section 94 Contributions and Voluntary Planning Agreements.

State regional and district parklands and reserves form a principle 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. This network will be integrated with the Green Grid.

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

Useful link:

- NSW Urban Green Cover Technical Guidelines


 Actions	Responsibility
68. Expand urban tree canopy in the public realm.	Councils and State agencies
69. Progressively refine the detailed design and delivery of: a. Greater Sydney Green Grid priority opportunities b. connections that form the long-term vision of the network.	Councils, planning authorities and State agencies

Table 5: North District Green Grid Priority Projects

North District projects identified as high priorities

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.

Other important projects to deliver the Greater Sydney Green Grid in the North 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 opportunities 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.

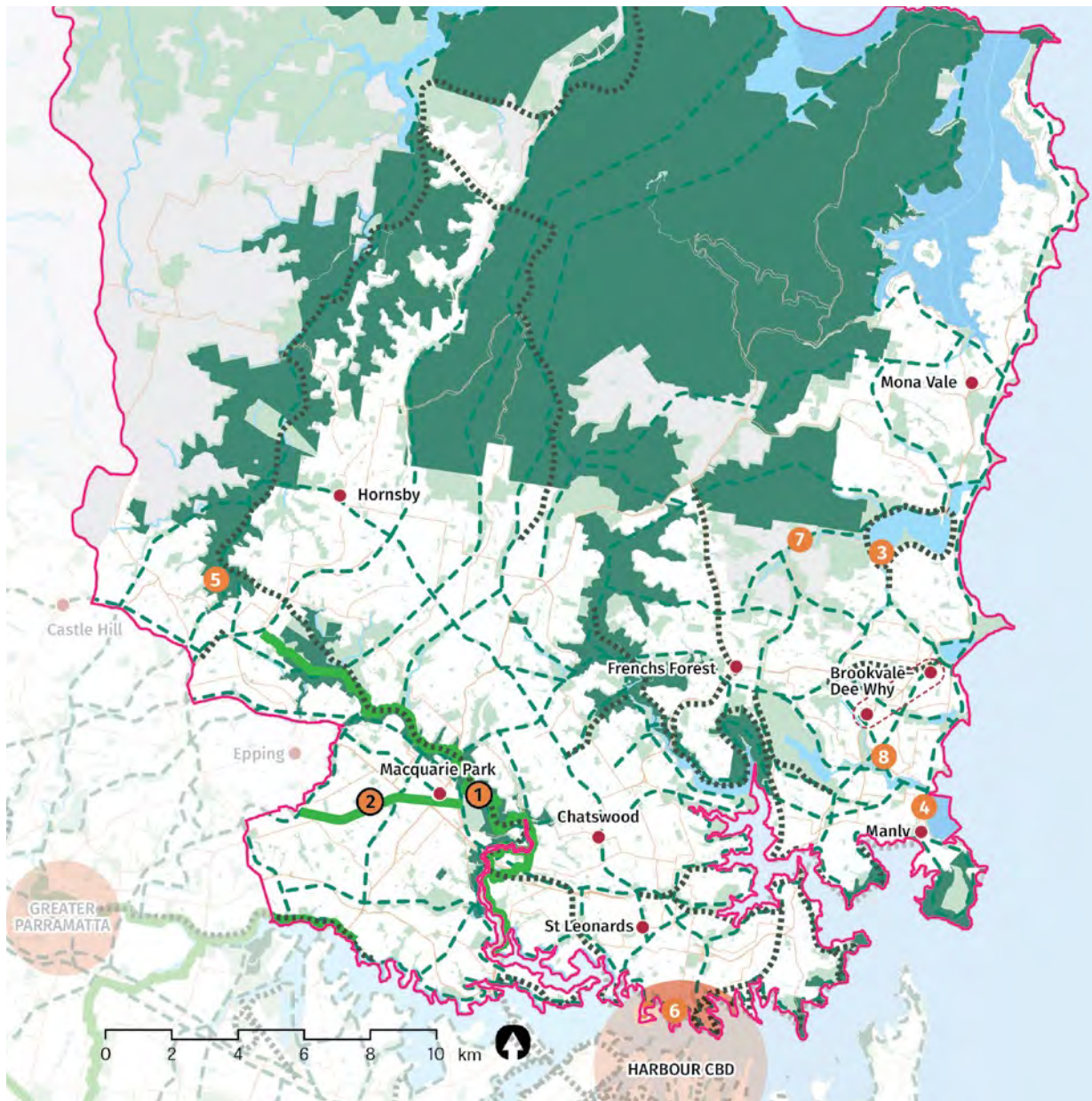
7 Garigal National Park – Oxford Falls and Deep Creek

Improving links to the new Northern Beaches Hospital Precinct, improving walking and cycling links through to Narrabeen Lagoon and protecting the national park from 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 24: North District Green Grid opportunities



	District Boundary		Projects Important to District		National Parks and Reserves
	Metropolitan City Centre		Existing Tracks and Trails		Open Space
	Strategic Centre		Green Grid Priority Corridor		Waterways
	Metropolitan Rural Area		Future Green Grid Opportunities		
	Priority Corridors		Road		

Source: Greater Sydney Commission, 2017, adapted from Sydney Green Grid, published 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 the draft *Greater Sydney Region Plan*, this Planning Priority delivers on **Objective 31: Public open space is accessible, protected and enhanced** and the corresponding strategies and action.

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.

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.

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, multi-purpose 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, 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.

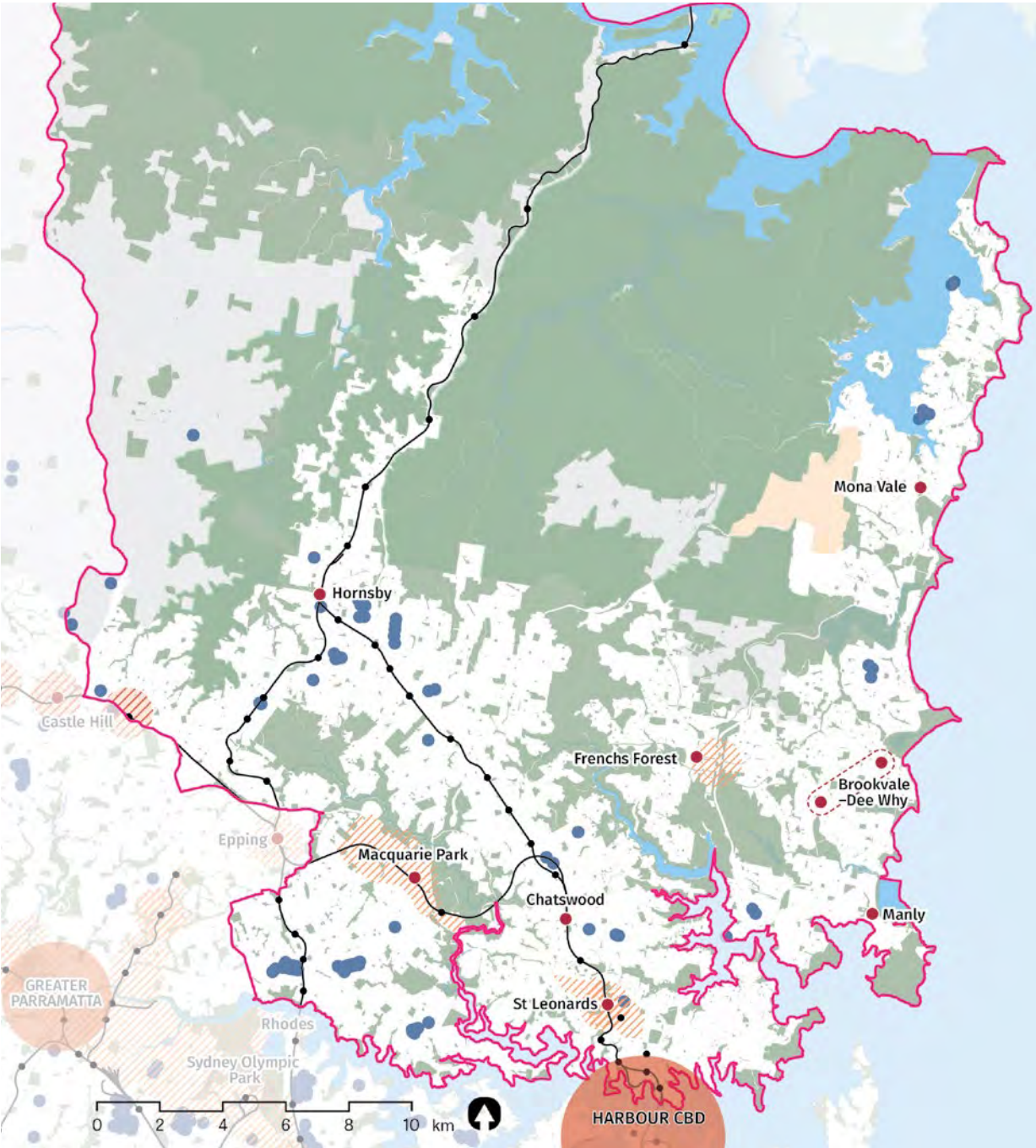
While 48 per cent of the District is open space, most of this is protected national parks and reserves along the Hawkesbury River and its tributaries, such as Ku-ring-gai National Park and Berowra Valley National Park. Existing open space within the District is shown on Figure 25.

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

Open space for formal outdoor sport use makes up only four per cent of the local open space in the District. The District is characterised by high levels of participation in active sports, which results in considerable wear and tear on playing fields and places demands on local government to maintain these facilities for year-round use.

Additional open space areas and sports and recreation facilities and innovative use of existing ones will be needed to accommodate the needs of the growing population, especially in areas where residential density is increasing. This will be important in areas in and around strategic centres, priority Precincts and Priority Growth Areas. New ovals, upgraded fields and facilities are required to accommodate the displaced demand.

Figure 25: North District access to open space



	District Boundary		Land Release Priority Growth Area		Existing Open Space
	Metropolitan City Centre		Infill Priority Precinct/ Urban Renewal Corridor		Metropolitans Rural Area
	Strategic Centre		Railway		
	Transit Oriented Development		Residential Areas > 400m to open space		


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

Delivering connectivity of walking, cycling and/or horse riding trails is an important objective to maximise their utility. The District's Greater Sydney Green Grid projects will improve regional-scale open spaces and walking and cycling links.

Where the future of any larger spaces used for activities such as golf courses are uncertain due to declining membership and attendance figures, any land or facilities in public ownership should be retained as open space and transition 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.

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 is reliant on collaboration and innovative re-use of shared spaces in response to the rising demand for active open space.

The Government Architect's Office is developing an open space toolkit, a resource for Councils to use for open space planning.

 Actions	Responsibility
<p>70. Maximise the use of existing open space and protect, enhance and expand public open space by:</p> <ul style="list-style-type: none"> a. investigating opportunities to expand a network of diverse, accessible, high quality open space that responds to the needs and values of communities as populations grow 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 are within 200 metres of open space c. requiring large urban renewal initiatives to demonstrate how access to high quality and diverse local open space is maintained or improved d. planning new neighbourhoods with a sufficient quantity of new open space e. delivering shared and co-located sports and recreational facilities, including shared school grounds and repurposed golf courses f. delivering on, or complementing, the Greater Sydney Green Grid. 	<p>Councils, other planning authorities, State agencies and State-owned Corporations</p>

Planning Priority N1Planning Priority N21

Reducing carbon emissions and managing energy, water and waste efficiently

In giving effect to the draft *Greater Sydney Region Plan*, this Planning Priority delivers on **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; and Objective 35: More waste is re-used and recycled to support the development of a circular economy and the corresponding strategies.**

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, centres and Collaboration Areas. Adopting a place-based approach is necessary to achieve the best sustainability outcomes, including renewing and replacing inefficient infrastructure and organising utilities, 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 organic waste-to-energy facility.

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 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

- new building standards and retrofits to design energy, water and waste systems to operate as efficiently as possible (for residential and non-residential buildings)
- building and precinct-scale renewables
- waste diversion from landfill.

How Greater Sydney's urban structure and built form develops in future can support NSW's transition towards net-zero emissions. More closely 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. Emerging transport technologies will reduce the need for parking spaces and help reduce congestion.

Designing high efficiency buildings and incorporating renewables will reduce emissions and reduce costs. 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

In coming years, several large landfills in Greater Sydney will close as they reach capacity, meaning waste will have to be transported outside of the region or new facilities developed. This limits economic and transport efficiency, and increases costs. 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 districts 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, currently serves the waste disposal needs of the District, and a new recycling and waste processing facility being built at Kimbriki is expected to open by 2019–20. This facility will turn food and vegetation waste into compost, increasing the recycling rate in the District and reducing waste going to landfill.

The planning and design of new developments should support the sustainable and effective collection and management of waste. The Environment Protection Authority has a range of guidelines and other information to assist in the sustainable management of waste.




Source: NSW EPA

Separating organics from other forms of waste, and valuing it as a resource which can be processed through a waste-to-energy facility to recover energy, will reduce waste being diverted to landfill. Recovering energy and capturing methane through organic waste to energy also helps to 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.

Useful links:

- NSW Waste and Resource Recovery Strategy 2014–21
- Environment Protection Authority NSW Waste Guidelines and Information
- Climate Change Fund Draft Strategic Plan

 Actions	Responsibility
71. Support initiatives that contribute to the aspirational objective of achieving net-zero emissions by 2050, especially through the establishment of low-carbon precincts in Priority Growth Areas, Priority Precincts, Collaboration Areas, State Significant Precincts and Urban Transformation projects.	Councils, other planning authorities, State agencies and State-owned corporations
72. Support precinct-based initiatives to increase renewable energy, and energy and water efficiency, especially in Priority Growth Areas, Priority Precincts, Collaboration Areas, State Significant Precincts and Urban Transformation projects.	Councils, other planning authorities, State agencies and State-owned corporations
73. Protect existing, and identify new, locations for waste recycling and management.	Councils, other planning authorities and State agencies
74. Support innovative solutions to reduce the volume of waste and reduce waste transport requirements.	Councils, other planning authorities and State agencies
75. 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 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
76. 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 reuse. This could include a framework for the monitoring and verification of performance for precincts in Priority Growth Areas, Priority 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 the draft *Greater Sydney Region Plan*, this Planning Priority delivers on **Objective 36: People and places adapt to climate change and future shocks and stresses; Objective 37: Exposure to natural and urban hazards is reduced and Objective 38: Heatwaves and extreme heat are managed** and the corresponding strategies.

The District's climate and natural landscape can create natural hazards such as heatwaves, bushfire, flooding, storms, and 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 increasing being used to consider a wider range of social and economic shocks and stresses.

Effective planning has a fundamental role in reducing the exposure to natural and urban hazards and building resilience to shocks and stresses. Growth and change needs to be considered at a local level, and when making decisions about growth and considering cumulative impacts at district and regional levels.

Natural and urban hazards

The climate, vegetation, topography and pattern of development in the District mean that bushfire and flooding will continue to be a hazard. 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 or inundation, such as at Collaroy.

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 play a significant role in reducing exposure to noise and air pollution along busy road and rail corridors. Public transport, walking and cycling, as well as electric cars provide opportunities to 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 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 cumulative impacts includes avoiding locating 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 the tree canopy is important to help reduce those impacts. The *State Heatwave Sub Plan*, which sits under the *NSW State Emergency Management Plan*, details the control and coordination arrangements across State and local government 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 land that 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 development to comply with the provisions of *Planning for Bush Fire Protection 2006*.

Figure 26: Vulnerability to heatwaves

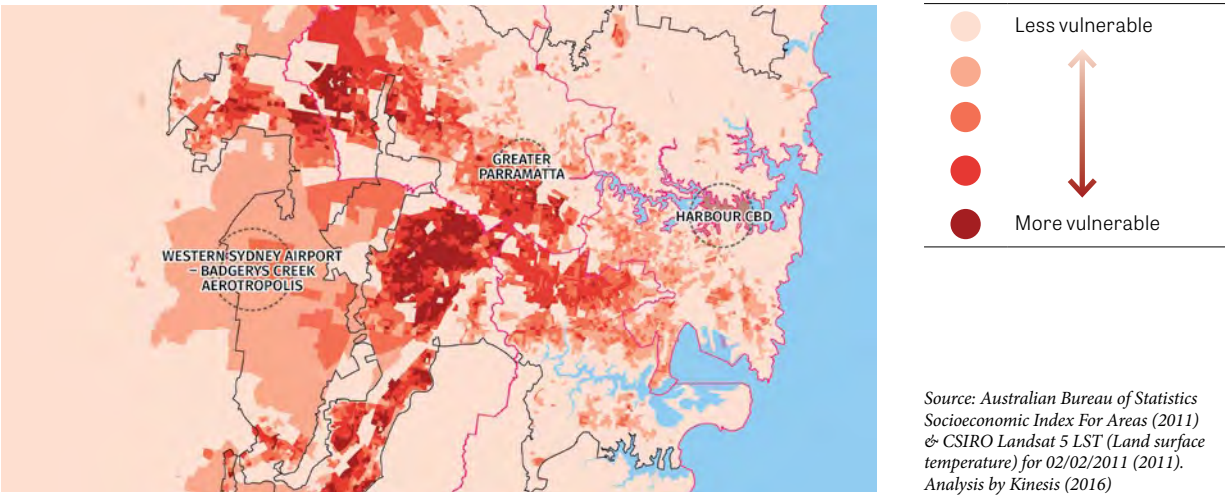


Figure 27: Land surface temperature during a heatwave

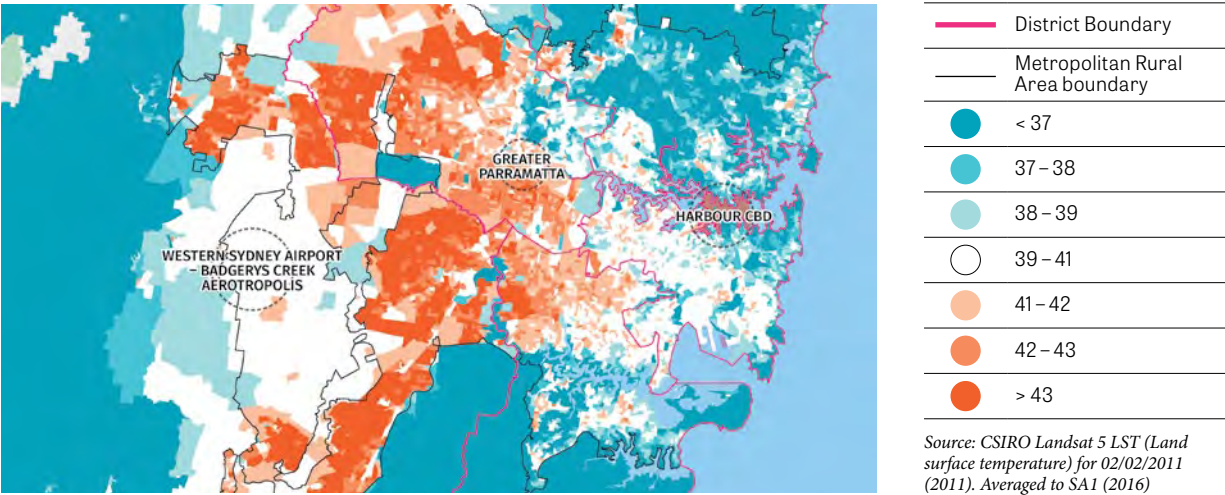


Figure 28: Tree canopy cover at 2011



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.

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 the tree canopy is important to help reduce those impacts.

Highly developed parts of the District can be exposed to extreme heat as a result of the urban heat island effect.

Figure 26 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 27 shows land surface temperatures during heatwave conditions. Figure 28 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 ground cover, verandahs and awnings, and minimising dark coloured materials and surfaces will minimise these effects.

Water-play features and connections with water will become essential elements of urban areas. The incorporation of green walls, green roofs and initiatives such as rain gardens should be designed into urban environments. More cooling elements should also be used in construction and building materials. Retaining more water in the landscape and integrating waterways in the design of new communities will help create a greener and cool city.


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 measures that will strengthen community resilience.

Useful links:

- Floodplain Development Manual 2005
- Planning for Bush Fire Protection 2006
- State Heatwave Sub Plan
- Adapt NSW
- Australian Government Australia's Strategy for Protecting Crowded Places from Terrorism
- 100 Resilient Cities

 Actions	Responsibility
77. Support initiatives that respond to the impacts of climate change.	Councils, other planning authorities and State agencies
78. Mitigate the urban heat island effect and reduce vulnerability to extreme heat.	Councils, other planning authorities and State agencies

6

Implementation

District plans are the first step in the implementation of the region plan for the Greater Sydney Region. They must give effect to the region plan. More particularly, they have to outline the planning priorities consistent with the region plan, and the actions to achieve the priorities.

Successful implementation of the district plans is more than updating council local environmental plans. It also requires:

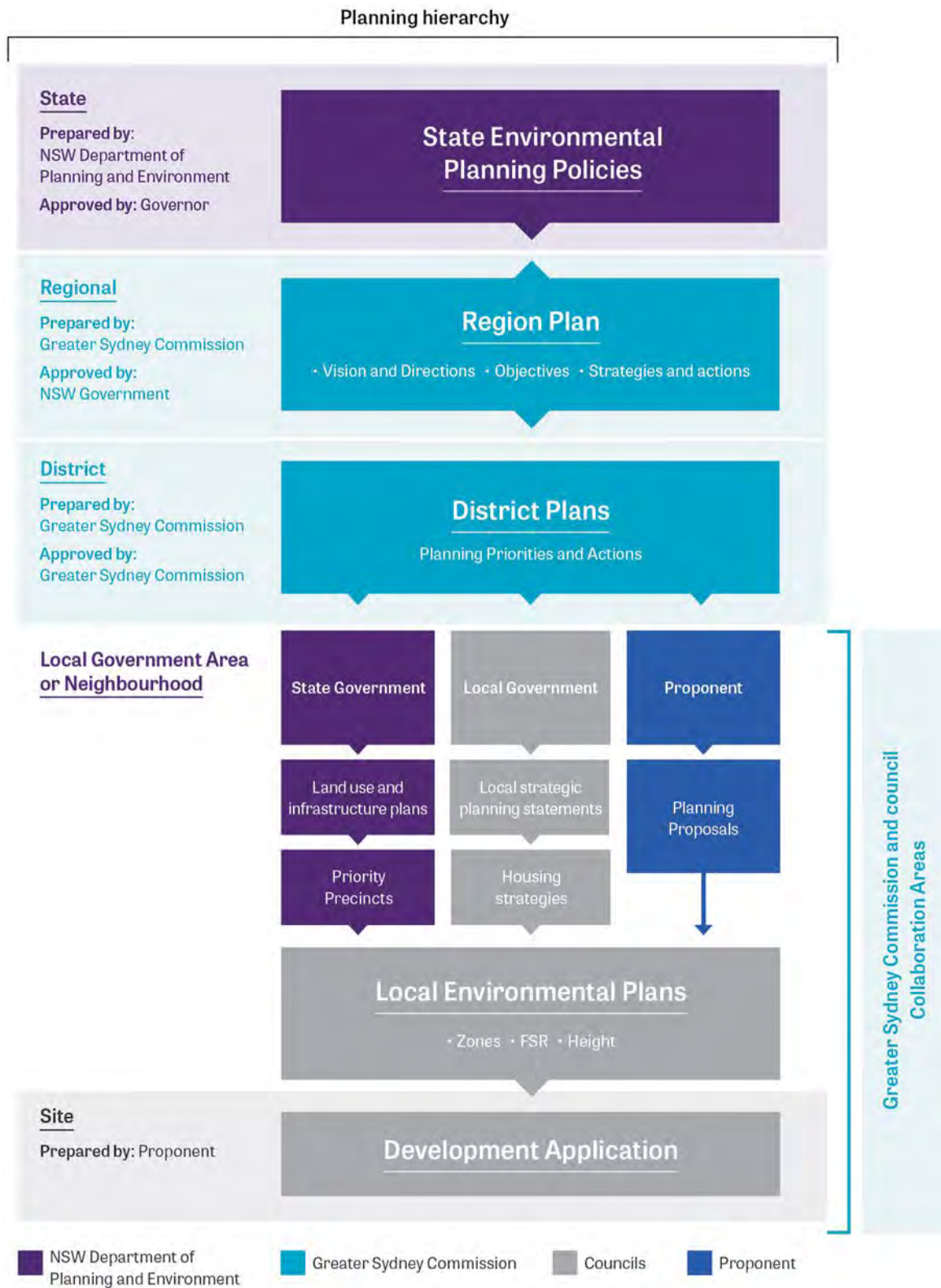
- collaboration across government and with local government and the private sector where each have clear roles and responsibilities (refer to Figure 29)
- private sector investment in line with the expectation for housing, commercial, retail and industrial development
- infrastructure delivery which is responsive to the draft District Plan's priorities and growth patterns across the District
- ongoing engagement to inform implementation activities
- annual monitoring of the performance of the draft District Plan and the status of delivering the actions.

On finalisation of the district plans, councils are required to update their local environmental plan to give effect to the district plan. The NSW Government has outlined, in the recently released *A Fair Go for First Home Buyers*, that councils are to complete the update of their local environmental plan within three years of the district plans being finalised or within two years for those councils receiving funding under the 'Priority Councils' initiative.

As drafts, district plans have a role in informing the preparation of planning proposals. Information Note 6, released concurrently with the draft district plans, outlines the status of the district plans in regard to planning matters.

In undertaking strategic planning processes, and/or preparing or considering planning proposals, planning authorities must give effect to the draft District Plan, specifically the planning priorities and actions.

Figure 29: Roles of planning authorities in Greater Sydney



Monitoring and reporting

The draft *Greater Sydney Region Plan* outlines metrics to monitor the performance of that Plan. The same metrics will be used to monitor the performance of this draft District Plan. The Commission will report annually to the NSW Government on the metrics as outlined in Table 6.

Monitoring and reporting will provide transparency to the community and other stakeholders. The Commission will also provide an annual report to the NSW Government on the status of the actions in this draft District Plan.

In addition, the Commission maintains a data hub — an online profile of the region. Incorporating data from the latest Australian Bureau of Statistics Census of Population and Housing, the data hub helps to track broad trends, identify geographic differences and explain how the region is changing. Data is regularly updated.

On the making of the District Plan, each council is to report to the Commission on the:

- review by the council of the local environmental plans for the area
- preparation of planning proposals under section 55 of the *Environmental Planning and Assessment Act, 1979* to give effect to the District Plan.

Next steps

This draft District Plan is on formal public exhibition until 15 December 2017. The draft District Plan is aligned with the draft *Greater Sydney Region Plan*.

Public exhibition is an opportunity to contribute to the future of the North District by providing feedback on the proposed planning priorities and actions in this draft District Plan.

A range of engagement activities will help the public to get involved in the future of the North District – visit the dedicated engagement portal at www.greater.sydney to find out more.

This is an opportunity to participate in the story of Our Greater Sydney 2056 A metropolis of three cities – connecting people.

Table 6: Metrics to monitor the Plan

10 Directions	Plan metric (service)
 1. A city supported by infrastructure	<ul style="list-style-type: none"> • Number of land use plans supported by infrastructure plans (NSW Department of Planning and Environment, Greater Sydney Commission, Councils).
 2. A collaborative city	<ul style="list-style-type: none"> • Proportion of agreed outcomes achieved in Collaboration Areas.
 3. A city for people	<ul style="list-style-type: none"> • Annual survey of community sentiment.
 4. Housing the city	<ul style="list-style-type: none"> • Number of councils on track to deliver housing targets. • Number of councils with schemes that implement Affordable Rental Housing Targets.
 5. A city of great places	<ul style="list-style-type: none"> • Percentage of dwellings within walking distance of a local or strategic centre. • Percentage of dwellings within walking distance of open space.
 6. A well-connected city	<ul style="list-style-type: none"> • Percentage of dwellings located within 30 minutes by public transport of a metropolitan city centre /cluster. • Percentage of dwellings located within 30 minutes by public transport of a strategic centre.
 7. Jobs and skills for the city	<ul style="list-style-type: none"> • Growth in jobs in the following metropolitan and strategic centres, Blacktown, Campbelltown - Macarthur, Greater Parramatta, Greater Penrith, Harbour CBD, Kogarah, Liverpool, Macquarie Park and Western Sydney Airport / Badgerys Creek Aerotropolis. • Change in number of people employed locally (five year).
 8. A city in its landscape	<ul style="list-style-type: none"> • Proportional increase in Greater Sydney covered by urban tree canopy.
 9. An efficient city	<ul style="list-style-type: none"> • Number of precincts with low carbon initiatives.
 10. A resilient city	<ul style="list-style-type: none"> • Number of local government areas undertaking resilience planning.

7

Endnotes

1. Australian Bureau of Statistics, 2016 Census of Population and Housing
2. NSW Ministry of Health Centre for Epidemiology and Evidence, 2015, New South Wales Population Health Survey, NSW Government Sydney
3. NSW Ministry of Health Centre for Epidemiology and Evidence, 2015, New South Wales Population Health Survey, NSW Government Sydney
4. City Futures Research Report, 2013: Implementing metropolitan planning strategies: taking into account local housing demand, Technical Report UNSW.
5. North Sydney Economic Development Strategy, prepared by SGS, 2016
6. Colliers International, Sydney Office Market Research Report, 2017 (unpublished)
7. Transport Performance & Analytics (TPA) (formerly known as Bureau of Transport Statistics), Transport for NSW, Strategic Travel Model (STM) outputs, 2016, NSW Government, Sydney
8. HillPDA, 2015, Industrial Precinct Review, Background evidence to support Sydney's Subregional Planning, prepared for the NSW Department of Planning and Environment, 2015 Sydney
9. NSW Department of Planning and Environment 2016, Employment Lands Monitor, NSW Government Sydney
10. HillPDA, 2015, Industrial Precinct Review, Background evidence to support Sydney's Subregional Planning, prepared for the NSW Department of Planning and Environment, 2015 Sydney
11. HillPDA, 2015, Industrial Precinct Review, Background evidence to support Sydney's Subregional Planning, prepared for the NSW Department of Planning and Environment, 2015 Sydney
12. Destination NSW, 2014
13. NSW Government, 2015, Technical Guidelines for Urban Green Cover in NSW, Office of Environment and Heritage

Note: The source of population, dwellings and household data in this draft 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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Draft North District Plan
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