

OUR GREATER SYDNEY 2056

Revised **Draft Central City District Plan**

connecting communities



October 2017

Acknowledgement of Country

The Greater Sydney Commission acknowledges the traditional owners of the lands that include Central City 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.

Central City District Blacktown Cumberland Parramatta The Hills



How to be involved

This revised draft *Central City District Plan* replaces the draft *West Central 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 Central City 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 development of the Central City District.

The District will take advantage of high population growth, cultural diversity and its comparatively affordable lifestyle. When we consider Parramatta's extraordinary heritage and civic assets, the stunning Bicentennial and Millennium Parklands and the many projects planned and underway, we see the District as one of Greater Sydney's most dynamic areas and believe it has a bright future.

We have started to draw on this ambition with our vision for Greater Parramatta and the Olympic Peninsula, known as GPOP. The District will become a premier location for 21st century innovation – its health and education precincts offer world-class jobs and educational prospects, and advanced manufacturing brings a new dimension to traditional industrial land.

Collaboration will be key to 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.

We are setting up processes so that infrastructure keeps pace with population growth. We need to plan for demographic changes and will ensure that every area of government activity — transport, infrastructure, land use, housing, health, education, heritage and environment — is coordinated. We will work positively with the private sector and councils so the District is liveable and prosperous.

I encourage everyone 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 Central City District's future.

Central City District Commissioner **Professor Edward J. Blakely**



The Central City District has a critical role in Greater Sydney's foundation and growth – and will do so into its future. Tomorrow's jobs will emerge here, at the heart of Greater Sydney.

Anchoring the Central City District is a rising world-class health and education precinct at Westmead, which has more intellectual capital than almost any other place in Australia. Adjacent to this scientific juggernaut is a ring of specialised and advanced manufacturing and urban services.

Parramatta CBD is emerging as a powerhouse of new administrative, business services, judicial and educational jobs, with Parramatta Square as its heart and Western Sydney University as its knowledge-producing engine. In parallel, Blacktown has a rapidly growing medical

precinct, while Rouse Hill and Castle Hill are introducing more education, medical and lifestyle opportunities as they become the new higher density subdivisions for the District's rapidly expanding population and job base.

The District's transport infrastructure must connect many centres to and through Parramatta CBD. Heavy rail and freight, new metros and light rail can be augmented to provide better connections.

Work to enhance the Parramatta River, Prospect Reservoir and smaller creeks and waterways, like Duck Creek and South Creek and their tributaries, will mean waterways are within easy walking distance of every household.

We will continue to shape our destiny into the future, as we have in the past.

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Future of the Central City 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 Central City District will have quicker and easier access to a wider range of jobs, housing types and activities as part of the transformation of their District.

The Central City District is part of the Central River City. Its extensive rail and road network, relative proximity to Australia's major trade gateways, along with the social connections of its multicultural communities provide links to the region, the country and the world.

The draft *Central City District Plan* guides the transition of the District within the context of Greater Sydney's three cities to improve the District's, social, economic and environmental assets.

The District is one of the most dynamic and rapidly growing regions in Australia. It plays a pivotal role in Greater Sydney's future as an economic and employment powerhouse, a core hub for transport and services, and the home of vibrant and diverse centres and communities. It will be at the core of Greater Sydney's Central River City.

Parramatta CBD will be the driver of the Central River City and will be one of the top five CBDs in Australia. The draft District Plan guides this growth and transition by capitalising on unprecedented city-scale infrastructure investments in transport, public domain, sporting and cultural institutions attracting large businesses right throughout Greater Parramatta and the Olympic Peninsula (GPOP). GPOP will be a focus of development, jobs and skills growth.

Transport connections radiating north, south, east and west from Parramatta CBD will optimise its locational advantage, improve business-to-business connections and provide quicker access for a larger number of skilled workers to businesses in Greater Parramatta.

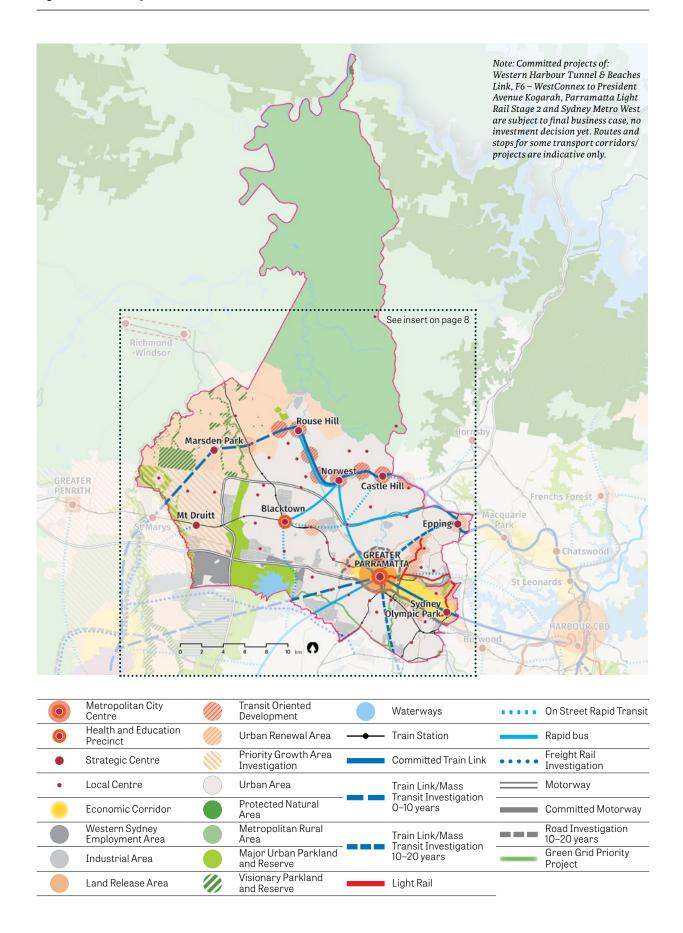
The Westmead health and education precinct will transition to an innovation district with a greater diversity of knowledge-intensive jobs. People will have easy access to walking and cycling paths through Parramatta Park and Parramatta River to move between Westmead, Parramatta CBD and Parramatta North.

A 21st century clean-tech and advanced manufacturing cluster in precincts such as Camellia, Rydalmere, Silverwater and Auburn and the protection of industrial and urban services land will provide new skilled jobs to reinforce the Central River City's development.

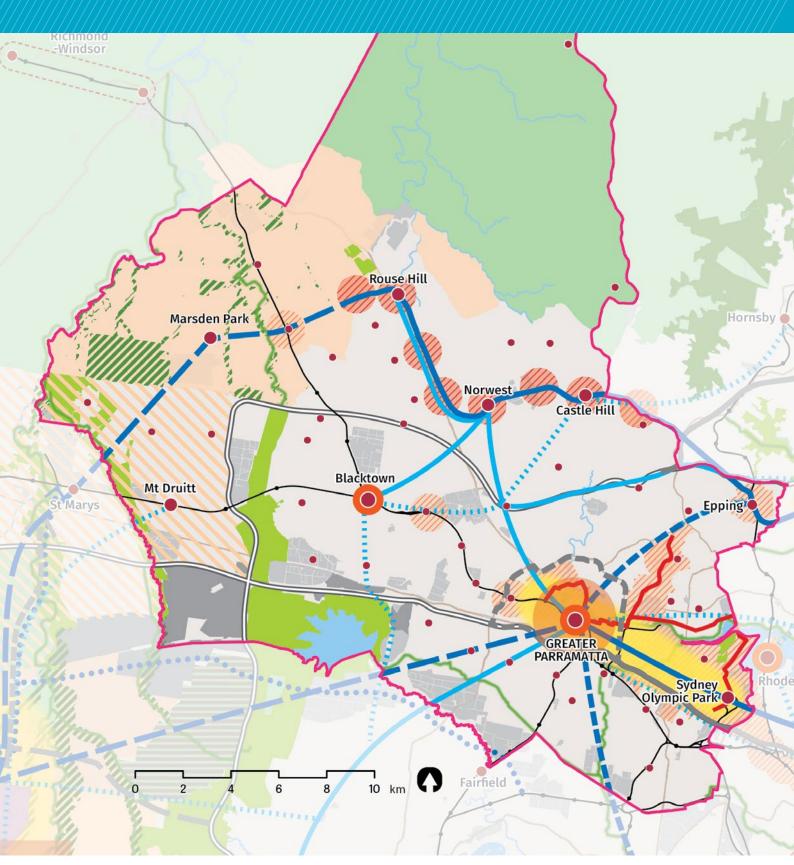
Throughout the District's transition, cohesive and socially dynamic communities will be supported by new social infrastructure such as schools and community services, new cultural and sporting facilities, and the protection and enhancement of natural landscapes through the Greater Sydney Green Grid.

The quality of the Central City District's waterways such as Parramatta River, Duck River and South Creek will be enhanced.

Figure 1: Central City District Structure Plan 2036



Central City District Structure Plan 2036 – urban area



NOTE: Committed projects of: Western Harbour Tunnel, Beaches Link Tunnel, F6 – WestConnex to President Avenue Kogarah 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.

Housing			
Existing and projected dwellings		201	6 2036
Central City District		339,00	0 546,500
Jobs			
Centre job target ranges		2016	2036
Greater Parramatta		83,400	139,000–151,500
Sydney Olympic Park		31,100	45,000-46,500
Norwest		32,400	49,000–53,000
Blacktown		13,200	17,000–19,500
Castle Hill		9,800	16,000–19,500
Rouse Hill		4,200	10,000–11,000
Mount Druitt		6,700	8,000–8,500
Marsden Park		1,600	5,000–10,000
Epping		5,100	7,000–7,500
Metropolitan City Centre	(//	Visionary Parklan	d and Reserve
Health and Education Precinct		Waterways	
Strategic Centre	•	Train Station	
Local Centre		Committed Train I	ink ransit Investigation
Economic Corridor		0-10 years	ransit Investigation
Western Sydney Employment Area		10-20 years	
Industrial Area		Light Rail	
Land Release Area Transit Oriented Development		On Street Rapid To	ransit
Urban Renewal Area		Freight Rail Invest	igation
Priority Growth Area Investigation		Motorway	
Urban Area		Committed Motor	way
Protected Natural Area		Road Investigatio	
Metropoliton Dunal Area	_	Green Grid Priorit	
Metropolitan Rural Area		ar cerraria i norn	.y Project

Greater Sydney context

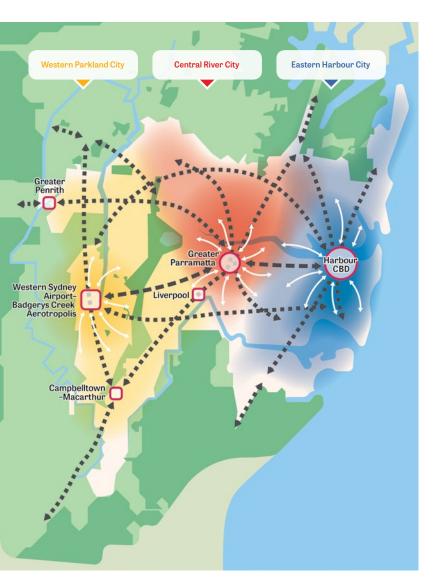


Figure 2: Metropolis of three cities

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 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 and the Olympic Peninsula (GPOP) and Western Economic Corridors.

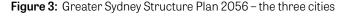
People want to live close to jobs and services, so each of the three cities will have more housing in the right places which will assist with housing affordability. Housing and jobs will be aligned with new or improved infrastructure from transport to schools, health facilities and public places under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

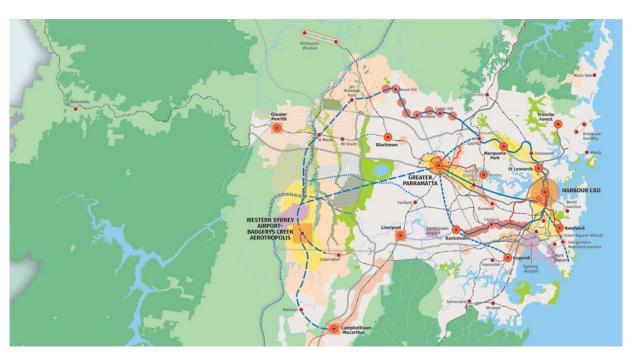
Improved transport within and between each of the three cities will produce a 30-minute city where most commuters can travel to their nearest metropolitan city centre by public transport within 30 minutes, and where everyone can travel to their nearest strategic centre by public transport seven days 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.

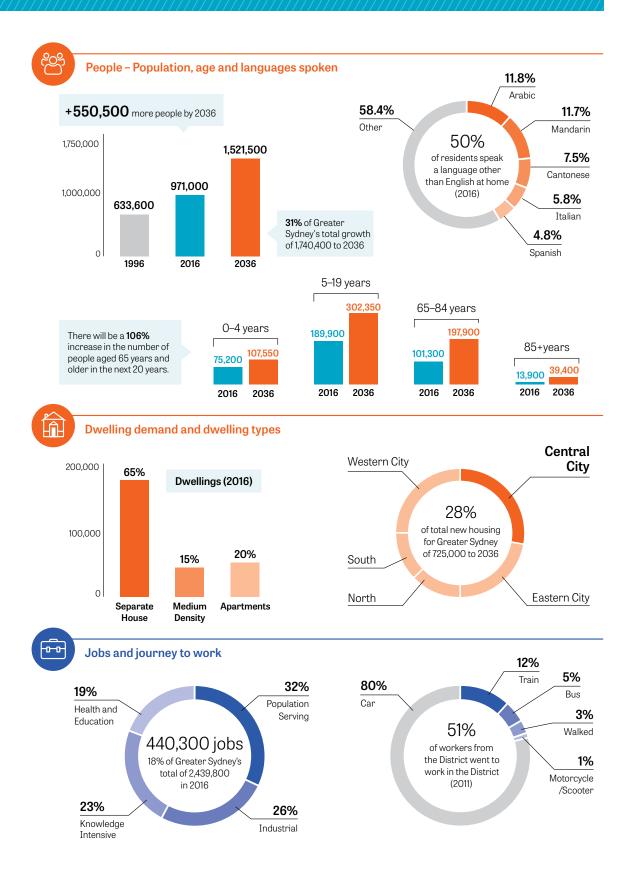
A metropolis of three cities brings liveability, productivity and sustainability benefits to all parts of Greater Sydney. It is consistent with the 10 Directions in *Directions for a Greater Sydney* which establishes the aspirations for the region over the next 40 years. The 10 Directions have been key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

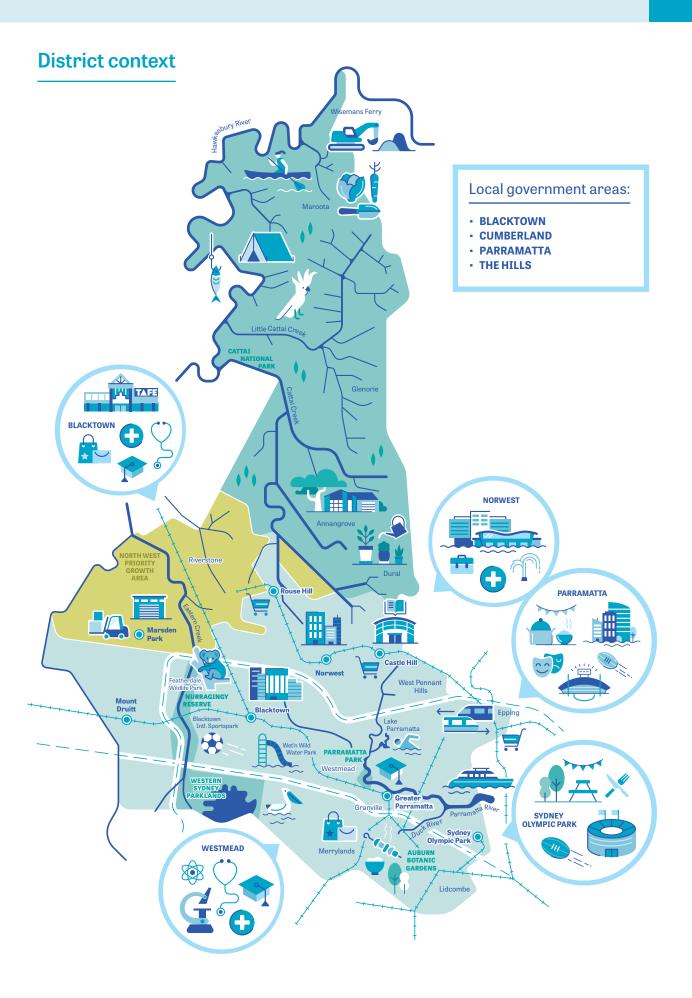




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Central City District snapshot





Ten Directions and Planning Priorities

A city of great places	Housing the city	A city for people	A collaborative city	A city supported by infrastructure
Designing places for people	Giving people housing choices	Celebrating diversity and putting people at the heart of planning	Working together to grow a Greater Sydney	Infrastructure supporting new developments
X T	評			
 Percentage of dwellings within walking distance of a local or strategic centre Percentage of dwellings within walking distance of open space 	 Number of councils on track to deliver housing targets Number of councils with schemes that implement Affordable Rental Housing Targets 	Annual survey of community sentiment	Proportion of agreed outcomes achieved in Collaboration Areas	Number of land use plans supported by infrastructure plans (NSW Department of Planning and Environment, Greater Sydney Commission, Councils)
Planning Priority C6 Creating and renewin great places and local centres, and respectir the District's heritage	Planning Priority C5 Providing housing supply, choice and affordability with access to jobs and services	Planning Priority C3 Providing services and social infrastructure to meet people's changing needs Planning Priority C4 Fostering healthy, creative, culturally rich and socially connected communities	Planning Priority C2 Working through collaboration	Planning Priority C1 Planning for a city supported by infrastructure

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	Creating the conditions for a stronger economy	Valuing green spaces and landscape	Using resources wisely	Adapting to a changing world
	TO THE PARTY OF TH			
 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 	Growth in jobs in targeted metropolitan and strategic centres. Change in number of people employed locally (five-yearly)	Proportional increase in Greater Sydney covered by urban tree canopy	Number of precincts with low-carbon initiatives	Number of local government areas undertaking resilience planning
Planning Priority C9 Delivering integrated land use and transport planning and a 30-minute city	Planning Priority C7 Growing a stronger and more competitive Greater Parramatta Planning Priority C8 Delivering a more connected and competitive GPOP economic corridor Planning Priority C10 Growing investment, business opportunities and jobs in strategic centres Planning Priority C11 Maximising opportunities to attract advanced manufacturing and innovation in industrial and urban services land Planning Priority C12 Supporting growth of targeted industry sectors	Planning Priority C13 Protecting and improving the health and enjoyment of the District's waterways Planning Priority C14 Creating a Parkland City urban structure and identity, with South Creek as a defining spatial element Planning Priority C15 Protecting and enhancing bushland and biodiversity Planning Priority C16 Increasing urban tree canopy cover and delivering Green Grid connections Planning Priority C17 Delivering high quality open space Planning Priority C18 Better managing rural areas	Planning Priority C19 Reducing carbon emissions and managing energy, water and waste efficiently	Planning Priority C20 Adapting to the impacts of urban and natural hazards and climate change

About the draft Plan

The Central City District covers the Blacktown, Cumberland, Parramatta and The Hills local government areas (refer to Figure 4).

This draft *Central City 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 of 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 for and deliver 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 District 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 Plans 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.

Figure 4: Central City District



Greater Sydney Region Plan 40 year **Greater Sydney** vision Economic, social and Infrastructure **Productivity** 20 year environmental context COMMUNITY ENGAGEMENT & collaboration plan (EP&A Act 1979) District **District Plan** 20 year Economic, social and plan environmental context Planning Priorities and Actions (EP&A Act 1979) Council area Community Strategic Local Environmental Council planning 10+ year Economic, social and Plan strategies and policies **Plans** plan environmental context

(LG Act 1993)

Figure 5: Relationship of regional, district and local plans

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.

Changes from the 2016 draft District Plan

This draft *Central City District Plan* is a revised version of the draft *West Central City District Plan* which was 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 *West Central District Plan* are outlined below.

(EP&A Act 1979)

Vision and priorities for the District

• Support for the concept of the 30-minute city.

Transport planning

 Concern regarding traffic congestion and lack of clarity around priority transport links, especially north-south and east-west connections.

Implementation

• Requests for further detail on governance and implementation of the District Plan actions.

Housing diversity and affordability

- Support for increased housing diversity and the provision of affordable housing.
- concerns about the adverse impact of high density housing on heritage values, traffic and community infrastructure.

Local, district and strategic centres

• The need for greater clarity around the role and function of centres.

View the Interim Submissions & Engagement Report and Submissions Response 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, productive and sustainable, it needs additional infrastructure and services in the right places and at the right time.

Infrastructure planning requires collaboration – managing the competing needs of a city involves all levels of government, industry and the community. 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 Sydney Metro Northwest, WestConnex, NorthConnex and Parramatta Light Rail and aligns with *Future Transport* 2056.

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

Infrastructure - planned to support orderly growth, change and adaptability - must be efficient.

Optimal use of infrastructure increases the capacity to better support communities.

For the Central City District, this means the following Planning Priorities:

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

Planning Priority C1

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 Central City District, this includes the focus on radial links to and from Greater Parramatta, and the opportunities for people to work closer to their homes that will result from investment in major transport infrastructure and urban renewal.

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 such as taxis and rideshare will help connect residents to their nearest strategic or metropolitan city centre within 30 minutes. In other areas, traditional facilities such as libraries are being reimagined as community hubs.

K	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 C2 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 Central City District, the Commission is leading the **GPOP Collaboration Area** to:

- grow the Westmead health and education precinct as a world-class innovation district
- increase the attractiveness and productivity of Parramatta CBD
- coordinate and optimise urban renewal opportunities to deliver greater liveability outcomes
- promote advanced technology and knowledge sectors on industrial and urban services land
- align infrastructure delivery with urban renewal (refer to Planning Priority C7).

Other collaborative processes include:

- North West Priority Growth Area, led by the NSW Department of Planning and Environment, which will achieve place-based outcomes in centres such as Marsden Park, where better alignment of land use and infrastructure planning can boost economic activity and deliver local jobs for the surrounding communities.
- Sydney Metro Northwest Priority Urban Renewal Corridor, led by the NSW Department of Planning and Environment, which will bring together the Commission, The Hills Shire Council, Transport for NSW, UrbanGrowth NSW Development Corporation and other State agencies to maximise the land use benefits of transport infrastructure.

Epping Town Centre, where Parramatta City
 Council is leading the review of planning controls
 and the Commission is collaborating with
 Council and other State agencies to address social
 infrastructure, traffic, heritage and commercial
 land issues.

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 Greater Sydney's Green Grid through the administration and management of the Metropolitan Greenspace Program (refer to Planning Priority C16).

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: - 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: -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: – 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: - 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: – 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 Central City District is made up of a network of distinct centres, places and landscapes that are home to a diversity of people and cultures. It attracts people from across Greater Sydney and offers a welcoming and affordable lifestyle for a growing population.

The Central City District is a place of changing built form and urban fabric. Historically, the District constituted the industrial core of Greater Sydney. Significant and unprecedented investment in public transport is now enabling urban revitalisation for a new pattern of high density transit-oriented living. The sheer volume of infrastructure spending is enabling Australia's biggest urban renewal in GPOP – a magnet for human talent, innovation and creativity.

As the overall population of around 970,000 people grows, it is also ageing. The number of residents over 65 is expected to grow by 106 per cent (or an additional 122,100 people). The number of lone person households are expected to grow by 81 per cent, although couples with children are expected to remain the dominant household type. These changes in population characteristics mean that there will be comparatively fewer working age people (20–64 years) residing in the District.¹

Together with overall population growth of around 550,500 (2016-2036), these demographic changes mean that an additional 207,500 homes will be required across the District by 2036.

Infrastructure investment will unlock development capacity in the Greater Parramatta Priority Growth Area, along Sydney Metro Northwest and in the North West Priority Growth Area.

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 Central City District and 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 heritage.



Planning Priority C3

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 Central City District (refer to Figures 6 and 7). The greatest increase in population is expected in Parramatta Local Government Area (177,900 over the 20 years to 2036) due to the anticipated urban renewal in the area and the strong growth across all age groups. The lowest growth is in Cumberland Local Government Area (a 34 per cent increase 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 colocating 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 uses of, and access to, infrastructure in new developments and is essential in land release areas.

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

Integrated and targeted delivery of services and infrastructure is needed to support growth and respond to the different needs of population groups. Accessible local health services and regional health infrastructure such as hospitals are important for all people across the District. Western 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 C6).

Children and young people

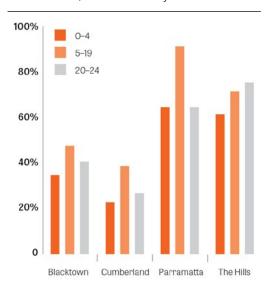
Over the 20 years to 2036, projections show an expected increase of 32,350 in children aged four years or younger, with 34 per cent of the growth in this age group anticipated in Parramatta, 32 per cent in Blacktown, approximately 21 per cent in The Hills and 13 per cent in Cumberland local government 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 89,360 students will need to be accommodated in both government and non-government schools in the Central City District by 2036. Blacktown and Parramatta local government areas will each take up 32 per cent of the District's increase in school-aged children, followed by The Hills (23 per cent) and Cumberland (14 per cent) 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.

Figure 6: Central City 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 NSW Department of Education's *School Assets Strategic Plan* sets the direction and framework for the future of school infrastructure. Schools 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.

Education and Child Care SEPP

State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017 will make 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* will assist in matters such as site selection, location and building design to meet national requirements for child care.

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 C6).

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-ofgovernment 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.

The Hills and Parramatta local government areas are projected to see the largest increase in people aged 20-24 years across the District (76 per cent and 65 per cent respectively between 2016-2036). The Central City 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

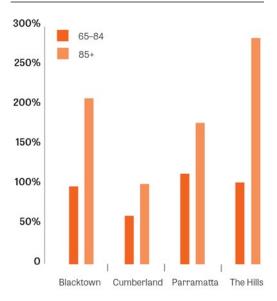
A 183 per cent proportional increase in people aged 85 and over, and a 95 per cent increase in the 65–84 age group is expected by 2036. This means 16 per cent of the District's population will be aged 65 or over in 2036, up from 11 per cent in 2016.

Parramatta and The Hills local government areas have the largest projected growth in the 65 to 84 age groups.

More compact housing types and mediumdensity 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.²

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 7: Central City 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 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 44,000 people with disability. Walkable places are universally accessible and inclusive of people of all ages and abilities.

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 they are 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 Central City District include a joint-use agreement between The Hills Shire Council and the NSW Department of Education that enables co-utilisation of a new outdoor sporting field and an indoor sports centre at the Kellyville South Public School. Similarly, a joint-use agreement between Parramatta City Council and the NSW Department of Education enables the upgrading of the existing pool at Macarthur Girls High School to provide for learn-to-swim services and limited community access, allowing Parramatta City Council to deliver interim aquatic services while plans to deliver a new aquatic facility for Parramatta are finalised.

In the Western Sydney Parklands, Blacktown City Council has committed to developing a new animal holding facility. The facility could be shared with other councils and will accommodate a growing demand for animal holding services in Greater Sydney in the years ahead.

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
- Western Sydney Local Health District, Health and Services Plan, 2012-2017
- Western Sydney Local Health District, Strategic and Healthcare Services Plan, Strategic Priorities in Health Care Delivery to 2021.

Useful links:

- Mapping the NSW Budget 2017-18
- State Environmental Planning Policy (Educational Establishment and Child Care 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 C4

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; 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 key aspects of the built environment that support healthy lifestyles and improved health outcomes: strong social connections, physical activity and access to fresh food. Consequently, the design and management of streets, places and neighbourhoods are essential. 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 49 per cent of the adult population in the Central City District are overweight or obese.⁵

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 socioeconomic 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 socioeconomic disadvantage across the Central City District are required, particularly in neighbourhoods that experience greater disadvantage.

The Central City District is home to people from many cultural and social backgrounds. 47 per cent of residents in the District are from 206 countries including India, China, Philippines, South Korea and New Zealand. As a result 50 per cent of the District's population speak more than 200 non-English languages in their homes. This is substantially higher than the 40 per cent average across Greater Sydney.⁶

The top four languages other than English are Arabic (11.8 per cent), Mandarin (11.7 per cent), Cantonese (7.5 per cent) and Hindi (6.6 per cent).

In Cumberland, 69 per cent of people speak 153 languages other than English. Arabic is the most commonly spoken language other than English in the local government area. In Parramatta, residents speak 147 languages other than English with Cantonese, Mandarin and Korean being the most commonly spoken languages.

The Central City District is home to refugees from many parts of the world. Blacktown, Cumberland and Parramatta councils are declared Refugee Welcome Zones and have made a commitment in spirit to welcoming refugees into communities and celebrating their diversity of cultures. For example, Blacktown has become a hub for support services and amenities for many Sudanese settlers, with churches and organisations such as SydWest Multicultural Services playing an important role in helping them adjust to their local areas.

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.

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 selfdetermination and economic participation.

As this draft District Plan is implemented, engagement with Aboriginal communities will be founded on self-determination and mutual respect, and 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 Central City District. The District's artistic and cultural experiences include:

- cultural events and celebrations such as NAIDOC Week, National Reconciliation Week, Parramasala, Tropfest, the Arab Film Festival, the Orange Blossom Festival, the Lunar New Year Festival, the Country Music Festival and the Maltese Folkloric Festival
- arts and cultural facilities such as Cumberland's
 Peacock Gallery, the Blacktown Arts Centre,
 The Hills Centre for the Performing Arts,
 Parramatta Riverside Theatres, Parramatta Artists'
 Studios, Form Dance Projects, Western Sydney
 Dance Action, the Powerhouse Discovery Centre,
 Sydney Olympic Park and Parramatta public art
 trails, Rouse Hill House and Farm, Elizabeth Farm
 and local public libraries
- open spaces and recreational facilities such as Parramatta Park, Lake Parramatta, Auburn Botanic Gardens, Bicentennial Park and the parklands of Sydney Olympic Park, Bella Vista Farm Park, Balcombe Heights Estate and Castle Hill Showground.

Central City District social connectors

Figure 8: Central City District social infrastructure

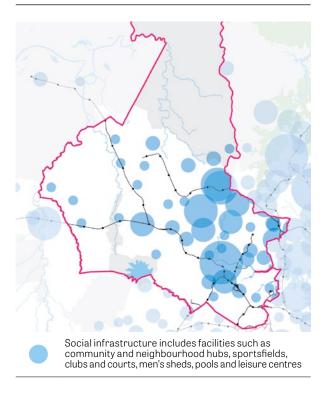


Figure 9: Central City District shared places

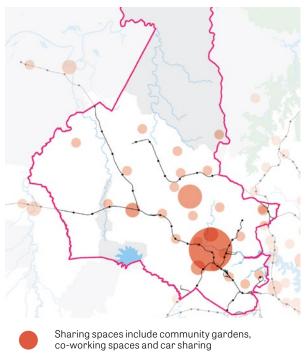


Figure 10: Central City District learning

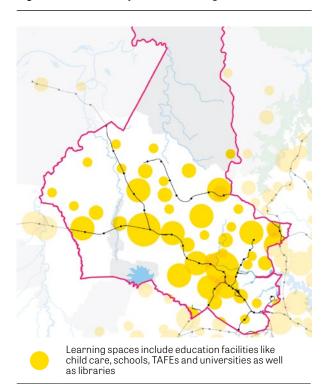
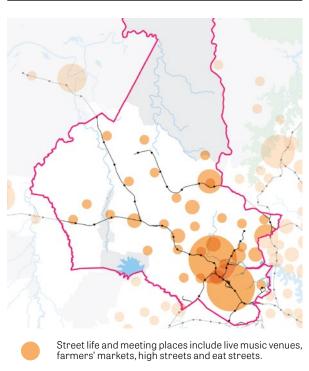


Figure 11: Central City District street life



 $Source: \textit{Greater Sydney Commission, 2017 adapted from \textit{Greater Sydney's Social Capital Study (2017), Cred \textit{Consulting.}}$

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 Figures 8–11. These preliminary maps illustrate concentrations of social connectors in and around some local centres. These social connectors provide opportunities for people to connect with one another and include:

- social infrastructure such as community and neighbourhood hubs, sportsfields, 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, coworking spaces and car sharing
- street life and meeting places including live music venues, farmers' markets and high streets and eat streets

Stronger concentrations of social connectors are indicated by larger dots. The maps illustrate examples of centres where place-based planning can 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.

Social connectors are some of the characteristics on which the local identity and distinctive functions of these centres are built. For example, street life is particularly evident in places like Parramatta CBD, Granville, Auburn and Merrylands.

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 will support local economies. 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 continue to 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 Central City 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
- diverse housing mix (density, tenure, 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 across the District.

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

*	A Addison	Responsibility
*	Actions	Responsibility
10.	Deliver inclusive places for people of all ages and abilities that support healthy, resilient and socially connected communities by: a. providing walkable places with active street life and a human scale b. co-locating schools, social, health, sporting, cultural and shared facilities.	Councils, other planning authorities and State agencies
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: a. creative arts and cultural enterprises and facilities b. creative interim and temporary uses c. 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, planning authorities, State agencies and State-owned corporations

Planning Priority C5

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 in 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 Central City District translate to a need for an additional 207,500 homes in the period between 2016 to 2036.

Central City District targets have been updated from November 2016 draft District Plan due to changes to council boundaries.

Housing diversity and choice

New housing must be in the right places to meet demand for different housing types, tenure, price points, preferred location 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 in the District, for example, is expected to increase by 81 per cent over the 20 years to 2036.

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

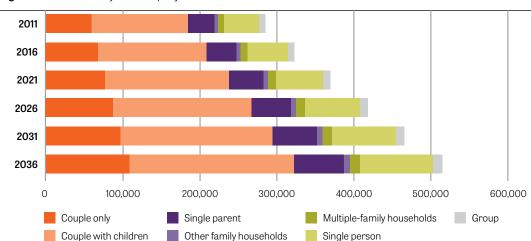


Figure 12: Central City District projected household structure 2011–2036

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

At the same time, households comprised of couples with children will remain the highest proportion of households in the District. This requires housing that can meet the needs of families and 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

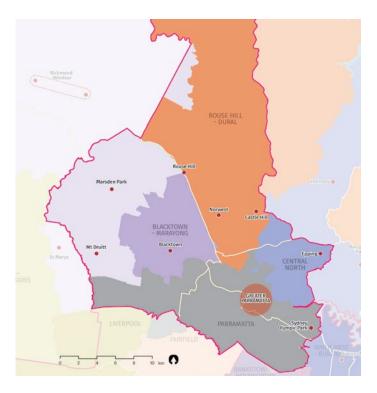
Research into housing preferences in Greater Sydney has shown that people generally prefer to remain within their local area, with 82 per cent of residents moving into a new home within 15 kilometres of their former residence. In the Central City District, there are five housing market areas (refer to Figure 13):

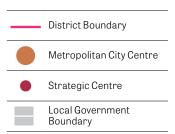
- Greater Parramatta which comprises of the whole
 of the Cumberland Local Government Area, the
 majority of the Parramatta Local Government Area,
 including the Greater Parramatta Priority Growth
 area, the Parramatta Light Rail project and the
 south section of Blacktown Local Government Area
- Rouse Hill-Dural which includes part of the Hornsby Local Government Area in the North

- District but mainly sits within The Hills Local Government Area in the Central City District
- North West which extends from St Marys east into Blacktown and includes the majority of the North West Priority Growth Area around Marsden Park as well as Richmond and Windsor
- Blacktown -Marrayong which is contained entirely in the east of Blacktown Local Government Area, south of the North West Priority Growth Area. It also contains the Blacktown strategic centre
- Central North which contains the whole of Lane Cove, Ryde Local Government Area as well as most of the urban areas of the Hornsby Local Government Area. A significant part of this housing market area stretches west to Carlingford in the Central City District and Parramatta 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: Central City 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

The Central City District is growing at a rapid pace. Dwelling approvals and completions are at their highest levels in 18 years in the Central City District, with 11,095 dwelling completions in the 2016–17 period.⁸

In the five-year period between June 2012 and July 2017 more than 35,915 additional homes were completed across the District, representing around a quarter of Greater Sydney's dwelling completions. This was more than 80 per cent higher than total dwelling completions in the previous five-year period.

Growth in the past five years was mainly concentrated in and around centres and along public transport corridors. The greatest number of dwelling completions occurred in the Parramatta Local Government Area (13,900) followed by Blacktown (11,200), The Hills (5,950) and Cumberland (4,750). After the City of Sydney Local Government Area, Parramatta and Blacktown local government areas produced Greater Sydney's highest number of new homes over the last five years.

Although more than 56 per cent of these recent completions are multi-unit dwellings existing housing stock remains dominated by detached dwellings.

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 Central City District has had an annual average dwelling completions rate of 5,560. Forecast supply of housing growth in the Central City 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:

 Greater Parramatta Priority Growth Area, incorporating housing in 12 precincts – Westmead, Parramatta North, Parramatta CBD, Harris Park, Camellia, Rydalmere, the Carlingford Corridor (including Telopea and Dundas), Silverwater, Sydney Olympic Park and Carter Street, Wentworth Point, Parramatta Road and Homebush (in the Eastern City District)

- Parramatta Road Urban Transformation Strategy, including the Granville and Auburn precincts.
- Sydney Metro Northwest Priority Urban Renewal Corridor with Priority Precincts at Showground, Bella Vista and Kellyville
- North West Priority Growth Area, which includes the suburbs of Riverstone, Vineyard, Schofields, Marsden Park and Colebee
- · Communities Plus:
 - Telopea as part of the Greater Parramatta Priority Growth Area.

Other Priority Precincts outside of the growth areas identified above include Epping, Seven Hills and Wentworthville.

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.

Beyond the urban renewal precincts, local government studies over the past 10 years have identified opportunities to increase capacity for housing supply in the Central City District.

The Blacktown Local Environmental Plan amendment 2005 increased the residential capacity of the Blacktown CBD by approximately 3,700 dwellings, with additional capacity of approximately 1,100 dwellings provided by bonus height provisions. The amendment will increase the residential capacity of development in the Mount Druitt centre by 2,100 dwellings, with potential for an additional 700 dwellings using the bonus height provisions.Parramatta City and Cumberland councils are processing a large number of market-driven planning proposals, which provide additional housing capacity in the District.

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, NorthConnex, WestConnex and Parramatta Light Rail together with other possible future NSW Government investments such as Sydney Metro West. It also acknowledges the opportunities created by enhancements to existing infrastructure such as upgrades to schools, open space including sporting facilities 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 highfrequency 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 including sport and community facilities.

In the western part of the District, a future transport corridor running north to south from Cudgegong Road to Macarthur via the Western Sydney Airport will provide access to new jobs and services in the Western Parkland City. Declaring the Greater Penrith to St Marys corridor a growth area will provide for an integration of land use and transport planning. It will guide redevelopment opportunities and identify the infrastructure required to support continued growth. The Greater Penrith to St Marys Priority Growth Area investigation covers a small part of the Central City District west of the M7 Motorway.

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:

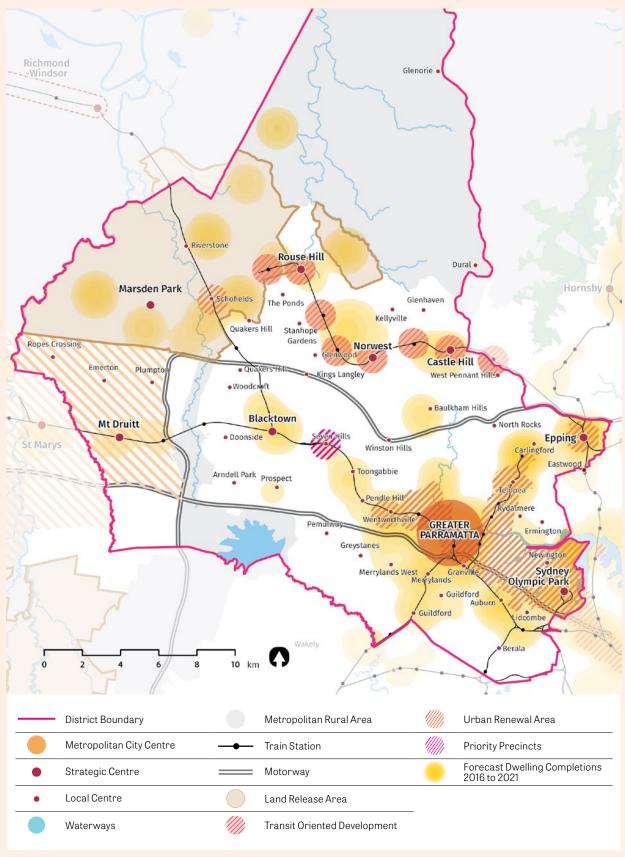
- transitional areas between urban renewal precincts and existing neighbourhoods
- residential land around local centres where links for walking and cycling help promote a healthy lifestyle
- areas with good proximity to regional transport where more intensive urban renewal is not suitable due to challenging 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 programs include significant capacity into the medium and longer term with the potential to accommodate over 90,000 new dwellings in the North West Priority Growth Area.

Figure 14: Central City District future housing supply



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

Housing strategies and targets

To address housing supply housing 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 Central City 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. This 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 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 207,500 equating to an average annual supply of 10,375 dwellings or approximately one in four of all new homes in Greater Sydney over the next 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: Central City District housing targets by local government area

LGA	0–5 year housing supply target 2016–2021
Blacktown	13,950
Cumberland	9,350
Parramatta	21,650
The Hills	8,550
Central City District Total	53,500

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 a 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.

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 moderateincome 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.

¢	Actio	ns	Responsibility
15.	a. the b. the gov c. cap the d. hou	e local or district housing strategies that address the following: delivery of five-year housing supply targets for each local government area delivery of 6-10 year (when agreed) housing supply targets for each local gernment area acity to contribute to the longer term 20-year strategic housing target for District sing strategy requirements outlined in Objective 10 of the draft <i>Greater</i> ney <i>Region Plan</i> that include: 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.	Blacktown City Council, Parramatta City Council, Cumberland Council and The Hills Shire Council
16.	Prepar	e Affordable Rental Housing Target schemes.	Councils and other planning authorities

Planning Priority C6

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; Objective 13: Environmental heritage is conserved and enhanced and Objective 28: Scenic and cultural landscapes one protected 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 Greater Parramatta, Blacktown, Castle Hill, Rouse Hill, Merrylands, riverside neighbourhoods like Wentworth Point and Rydalmere together with major shopping precincts, and distinctive dining and night-time precincts such as Harris Park, Auburn and Granville.

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 these places and to explore opportunities for innovative public places, such as rooftops and podiums.

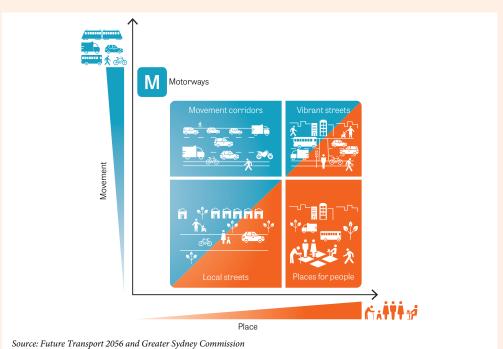
Streets as places

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

Figure 15: Movement and place framework



Source: Future Transport 2000 and Greater Sydney Commission

Places for people like Parramatta Square/ Church Street Parramatta and Blacktown's Main Street perform intense place functions with highly significant local pedestrian movements. Vibrant streets like Macquarie Street Parramatta 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 like Parramatta Road provide safe reliable 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.

Local centres vary in size, function and character, and meet a variety of needs from a cluster of local shops to a vibrant main street such as Auburn and Granville that provide culturally diverse eating and shopping experiences to retail centres such as Merrylands. These centres are highly accessible and provide interchanges for bus and rail networks linking to strategic centres. Centres such as Baulkham Hills serve as community hubs. The District's centres contain many great places.

The success of local centres and high streets should be supported through specific and flexible measures to improve activation and viability. This may include 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

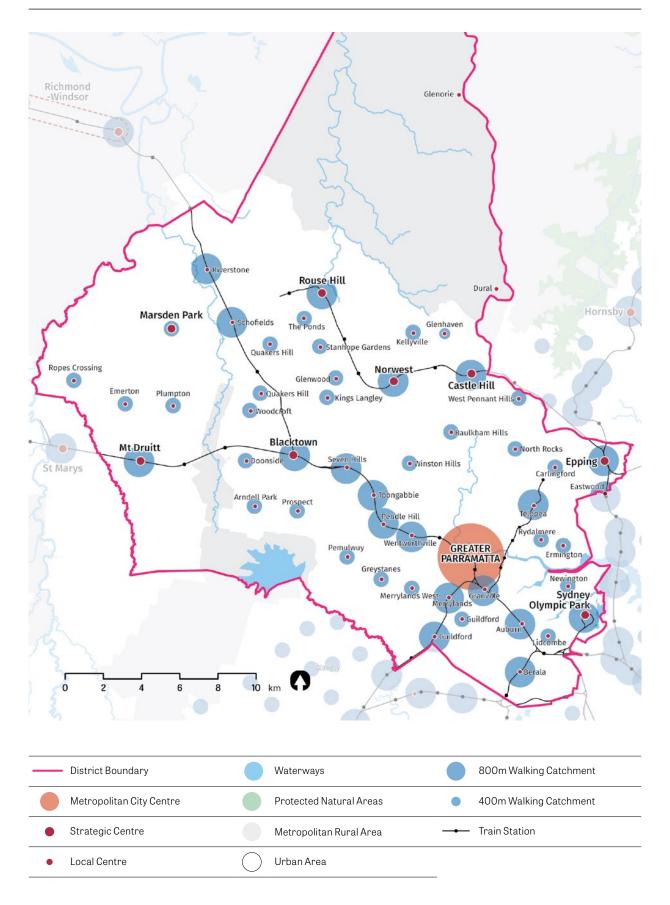
not compromise the ability of the centre to grow, expand and change over time. It is also recognised that some centres without supermarkets have specialised roles.

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, character, size, land use mix, function, catchment and potential of each local centre and the local centres hierarchy will inform housing strategies. This draft District Plan identifies an image 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: Central City District - centres



Heritage and character

Heritage and history are also important components of local identity and are important attributes of great places. A wide variety of local heritage items and heritage streetscapes also form part of the character of centres throughout the District.

The District's rich Aboriginal cultural and natural heritage reinforces its sense of place and identity. The District's communities share heritage items and historic places such as the World Heritage Listed site of Old Government House and Government Domain historic precinct in Parramatta Park, State heritage listed items such as Cumberland Hospital and Cattai Estate, significant 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, water catchment areas and ridgelines.

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 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.

Related government initiatives:

 Government Architect NSW – Better Placed

 An integrated design policy for the built environment of New South Wales

Place-based planning

Place-based planning is a design-led and collaborative way of examining the complexity of the city by viewing it as a mosaic of different places, each with 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 a 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 District presents many opportunities for improved liveability outcomes through place -based planning, such as along Parramatta Road. In Collaboration Areas this approach can help deliver innovative approaches to change over time, particularly in relation to parking and infrastructure provision. For example, the provision of precinct-based adaptable car parking in lieu of the private provision of car parking takes into account public transport accessibility.

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

Scenic and cultural landscapes

The scenic and cultural landscapes of the Central City 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.

Parklands associated with rivers and creeks, street tree planting and the public spaces in the District's

centres provide a diversity of landscapes. In recent years, the development of tall buildings in strategic centres has reinforced the need for quality design to enhance new skylines. Within the District's Priority Growth Areas, vistas to historic colonialera homesteads have been protected through the planning and design process. View corridors around key sites in the Parramatta North Urban Renewal Area have also been protected.

Continued protection of the Central City District's scenic and cultural landscapes is important for the District. It can complement the protection of biodiversity and habitat, help manage natural hazards; support tourism and also help preserve links to Aboriginal cultural heritage.

₩	Actions	Responsibility
17.	Deliver great places by: a. prioritising a people-friendly public realm and open spaces as a central organising design principle b. recognising and balancing the dual function of streets as places for people and movement c. providing fine grain urban form, high amenity and walkability d. integrating social infrastructure to support social connections and provide a community hub e. encouraging contemporary interpretation of heritage where possible f. 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: a. engaging with the community early in the planning process to understand Aboriginal, European and natural heritage values b. 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 and State agencies
20.	 In Collaboration Areas, Priority Precincts and planning for centres: a. investigate opportunities for precinct-based provision of adaptable car parking and infrastructure in lieu of private provision of car parking b. ensure parking availability takes into account the level of access by public transport c. 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 centres in decline.	Councils, other planning authorities and State agencies
22.	Identify and protect scenic and cultural landscapes.	Councils, other planning authorities and State agencies
23.	Enhance and protect views of scenic and cultural landscapes from the public realm.	Councils, other planning authorities and State agencies

4

Productivity

The vision for Greater Sydney as a metropolis of three cities – the Western Parkland City, the Central River City and the Eastern Harbour City – seeks to deliver a more productive region. This will be achieved by driving opportunities for investment, business and jobs growth; supporting economic diversity; supporting internationally competitive sectors; 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 Central City District forms the majority of the Central River City. It is the fastest growing district in Greater Sydney, with record levels of population growth, infrastructure and investment transforming the economy. Greater Parramatta sits at the heart of the Central City District. It is in a strong position to attract a critical mass of knowledge firms, health and educational institutions, convention facilities, retail, leisure, art and cultural experiences.

In the 10-year period between 2006 and 2016, the Central City experienced the highest rate of jobs growth – 2.2 per cent per annum as compared to average 1.7 per cent per annum for Greater Sydney.

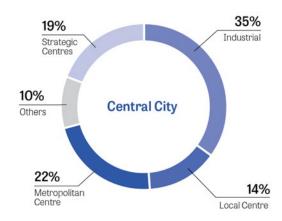
Greater Parramatta and the Olympic Peninsula (GPOP) – is being supported by a \$10 billion investment in city-scale assets. Palong with potential new transport connections, the corridor will be boosted by faster connections to skilled labour markets and the surrounding centres of Macquarie Park, Norwest and Bankstown. A growth infrastructure compact – which assesses growth scenarios for optimal land use, infrastructure

investment and community benefits – will help to achieve this.

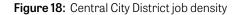
The health and education sector and advanced manufacturing are the biggest contributors to economic growth and jobs creation in the District. Westmead health and education precinct, the largest in the region, includes hospitals, universities, research institutions and allied health services. Other important health precincts are in Blacktown and Norwest. In addition, the NSW Government has identified the need for a future hospital in the north west.

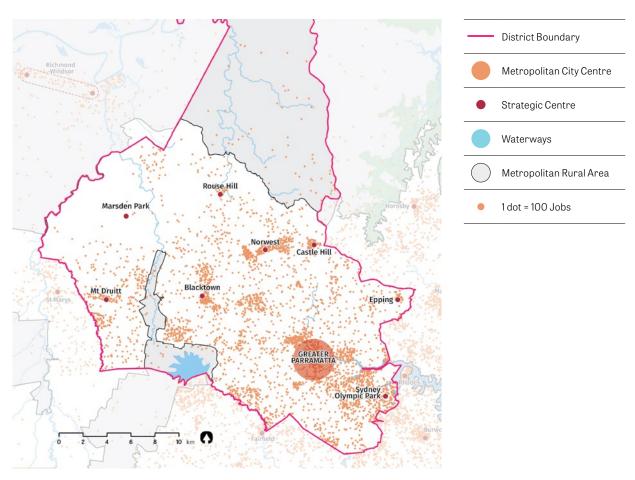
The Central City District has the largest amount of industrial and urban services land in Greater Sydney. The transition from traditional industrial to advanced manufacturing and innovation industries will further boost productivity.

Figure 17: Central City District job distribution by type of location



Source: Australian Bureau of Statistics Census 2011





Source: Greater Sydney Commission, 2016 Productivity Profile

Job targets for strategic centres will guide councils and State agencies to the potential scale of growth and inform land use and infrastructure planning. Already, more than 35 per cent of all jobs in the District are in Greater Parramatta, Sydney Olympic Park, Norwest and Blacktown. Jobs are also concentrated in the strategic centres of Mount Druitt, Marsden Park, Rouse Hill, Castle Hill and Epping (refer to Figure 18).

Growing strategic centres, and creating efficient transport connections, and safe and convenient walking and cycling routes, delivers a 30-minute city.

Integrating job growth with new or enhanced transport infrastructure will deliver a well-connected region improving business-to-business transactions and enabling skilled workers to access a larger number of jobs.

For the Central City District, productivity can be improved by the following Planning Priorities:

- Growing a stronger and more competitive Greater Parramatta.
- Delivering a more connected and competitive GPOP Economic Corridor.
- Delivering integrated land use and transport planning and a 30-minute city.
- Growing investment, business opportunities and jobs in strategic centres.
- Maximising opportunities to attract advanced manufacturing and innovation in industrial and urban services land.
- Supporting growth of targeted industry sectors.

Planning Priority C7

Growing a stronger and more competitive Greater Parramatta

In giving effect to the draft *Greater Sydney Region Plan*, this Planning Priority delivers on **Objective 19:** Greater Parramatta is stronger and better connected and **Objective 21:** Internationally competitive health, education, research and innovation precincts and the corresponding strategies.

To reinforce Greater Parramatta as one of Greater Sydney's metropolitan city centres, planning must deliver land use and infrastructure that:

- · provides capacity for jobs growth
- grows the centre's appeal and provides more opportunities for investment and business
- enhances accessibility to a larger and more diverse labour pool
- improves business-to-business interactions and access to other job agglomerations.

Covering an area of more than 1,400 hectares, Greater Parramatta encompasses Parramatta CBD, North Parramatta and Westmead, connected via Parramatta Park (refer to Figure 19). It is the core of the Central River City.

Greater Parramatta is targeted to have more than 55,000 new jobs by 2036. This requires new opportunities for medical and education services and associated commercial activities in Westmead, and greater commercial capacity in Parramatta CBD. The strong pressure for residential development in Parramatta CBD will need to be addressed to retain commercial capacity (refer to Planning Priority C10 for details on job targets).

Parramatta CBD

Parramatta CBD is already the fifth largest office market in Greater Sydney after Sydney CBD, Macquarie Park, Sydney CBD fringe and North Sydney. It provides more than 700,000 square metres of office floor space and has the potential to be transformed into one of Australia's most important business hubs (refer to Table 3). Parramatta City Council forecasts a near doubling of economic growth in Parramatta CBD by 2021. 10

Table 3: Greater Sydney 2017 office precincts

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

*component of Harbour CBD

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

To strengthen Parramatta's position as the metropolitan centre of the Central River City, planning needs to increase capacity for new knowledge-intensive jobs, including A-grade office floor space, which is currently at capacity.

Parramatta City Council's Parramatta CBD Planning Proposal seeks to expand the CBD boundaries and amend land use controls to create long-term employment opportunities supported by high density residential. The proposed amendments will provide capacity for more than 27,000 new jobs and 7,500 new dwellings by 2036 to create a dynamic and diverse city.¹¹

This growth will be supported by major transport infrastructure projects such as Parramatta Light Rail and Sydney Metro West (subject to final business cases). Planning for these transport connections will seek to expand the commercial floor space footprint of Parramatta and unlock capacity within 400 metres of transit and light rail stops.

Sydney Metro West has the potential to significantly enhance Greater Parramatta's inter-city linkage with the Harbour CBD through improved journey times and frequency of service.

Major developments delivered, planned or underway in Parramatta CBD are outlined below.

Parramatta Square is a three-hectare mixed-use redevelopment precinct that will include the new Western Sydney University Parramatta Campus; several thousand square metres of A-grade commercial office and retail spaces; community and civic spaces; a 90-storey residential buildings and 20,000 square metres of public space.

The new Western Sydney Stadium, to be located on the Pirtek Stadium site, will provide seating for 30,000.

A future **Museum of Applied Arts and Sciences** on the banks of Parramatta River will be the anchor for arts and culture for the District. The proposal also includes an upgrade to the Riverside Theatre and \$40 million to growing arts and culture in the community over the next 20 years.

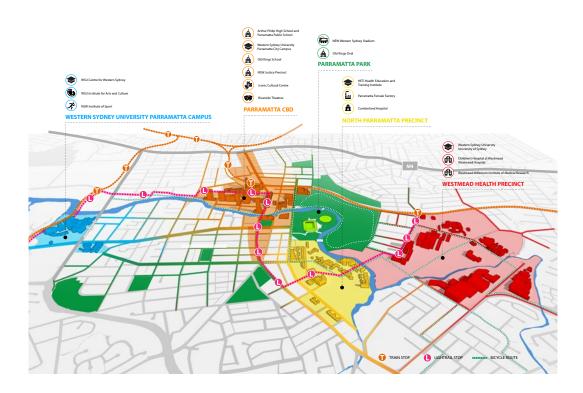
The Parramatta City River Strategy seeks to reclaim the Parramatta River as a place for walking, swimming, picnics and events. The Strategy positions Parramatta River at the heart of the CBD's redevelopment.

Parramatta CBD will also benefit from **two new multi-storey schools**: a new multi-storey
Parramatta Public School and a new high-rise Arthur
Phillip High School.

These developments will transform Parramatta and significantly increase its attractiveness to workers, students and residents.

Greater Parramatta	Jobs
2016 estimate	83,400
2036 baseline target	139,000
2036 higher target	151,500

Figure 19: Greater Parramatta



Westmead health and education precinct

As outlined 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 20).

For example, the Blacktown health and education precinct is at the Cluster stage. The Westmead health and education precinct has the potential to become an Innovation District. This needs tailored responses to progress along the Maturity Pathway based on what is already in place and what is required in the short, medium and long term. While the precinct has attributes that could be developed to become internationally competitive and achieve sufficient critical mass, it is not expected that all Precincts should, or will, develop into an Innovation District.

Westmead is one of the largest integrated health, research, education and training precincts in Australia and provides health services to almost 10 per cent of Australia's population. By 2026, it will have over 2.8 million outpatient visits and over 160,000 emergency department presentations every year.¹²

Westmead continues to play a vital role in the District's innovation economy. It is already a major contributor to the Australian Government's National Innovation and Science Agenda through its training of world-leading scientists, analysis and successful collaborations.

The Westmead Redevelopment Project is a major initiative of the NSW Government, led by NSW Health, the Western Sydney Local Health District and the Children's Hospital at Westmead. The redevelopment aims to transform Westmead into a world-class health city.

The \$900 million project and expansion of the University of Sydney and Western Sydney University Westmead campuses will increase Westmead's workforce from 18,000 to 32,000 by 2036. With additional investment, Westmead has the potential to provide 50,000 jobs. The number of students is expected to grow from 2,000 to 9,000 by 2036. 13

Key stakeholders in the development of the precinct include government, academia and industry. Through the GPOP growth infrastructure compact pilot (refer to Planning Priority C8), the Commission will work closely with these stakeholders and will have an active role in coordinating the planning and delivery of infrastructure to improve public transport connections and the road network; attract jobs; plan for new or improved schools and community facilities; and improve open spaces, public areas walking and cycling links.

Helicopter access is critical for the operations of Westmead Hospital, with its statewide trauma role and its emergency and specialist healthcare services. Surrounding development must avoid current and planned flight paths for the future operations of the hospital.

Transport connectivity

Committed major projects, like Sydney Metro West and the Parramatta Light Rail (subject to final business cases) will deliver faster business to-business links and provide easier and quicker connections for a skilled workforce as well as students and visitors.

Strategic planning must leverage these projects to attract new investment and economic development to realise the vision for Greater Parramatta and the GPOP Economic Corridor.

A number of major road corridors converge on Greater Parramatta, reflecting its role as the core of the Central River City. These corridors entangle local, cross-regional and freight flows and cause congestion. Transport for NSW and Roads and Maritime Services will investigate an outer and inner road network to circumnavigate Parramatta and Westmead and reduce unnecessary vehicle movements through and to the centres. This work will consider the needs of retail deliveries, emergency services, construction, maintenance and waste handling. Many road improvements will align with the roll-out of Parramatta Light Rail.

Car parking constrains the efficiency of the transport network including light rail, private cars, bicycles and pedestrian movements. The provision of car parking must support economic activity and business needs while reducing traffic and heavy

Principal referral **PLUS PLUS** PLUS PLUS PLUS Details: Major Hospital or hospital PLUS Multi-disciplinary University Associated Start-ups, An active collaboration medical research accelerators university, residential innovation Principal of R&D or campus institutions and venture and amenity ecosystem Referral capital firms Hospital and university + expansion, investment and fine grain Models: CLUSTER **PRECINCT** Productivity + 20% + 50% Uplift:

Figure 20: Maturity pathway for health and education precincts

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

reliance on private vehicles. The Commission supports the Parramatta City Council's strategies for shorter-term parking within the CBD and longer-term public parking outside the central core. Where possible the provision of car parking will be reduced where access to public transport is high.

Public domain and walking and cycling links

People are attracted to great places, and great places support higher levels of investment in economic opportunities. People and businesses choose to locate in cities with walkable, attractive, safe and accessible public spaces.

More walking and cycling links within and to Greater Parramatta, including enhanced walking and cycling connections between Parramatta CBD and Westmead via Parramatta Park with a 24-hour safe and well-lit path, will improve access, liveability and prospects for the Central River City.

Hawkesbury Road will be revitalised with retail and dining options, and Church Street and Parramatta Square will offer new activities and opportunities for social connections. The Commission supports investigations into policy changes and process reforms that provide flexibility and incentives for businesses to grow a diverse night-time economy.

City of Parramatta Council has a number of strategies to improve public domain, walking and cycling links, such as the *Parramatta City River Strategy*, draft *Parramatta Ways* and draft *Civic Link Framework Plan*. These strategies will also guide the development of new arts and culture precincts with fine grain spaces for local businesses, small bars, collaborative work spaces and creative industries.

The Greater Parramatta Interim Land use and Infrastructure Implementation Plan also aims to enhance Greater Parramatta's open spaces, walkways and cycleways by providing funding through the Special Infrastructure Contribution and Precinct Support Scheme.

Heritage and cultural, entertainment, arts and leisure opportunities

Parramatta has many significant heritage buildings and places such as Elizabeth Farm, the Parramatta Female Factory, Parramatta Gaol and Cumberland Hospital. From the early European settlement of Sydney, Parramatta Park is home to Australia's oldest surviving government house.

High density development and other encroachments in the vicinity of these sites must be planned to respect and celebrate the heritage and cultural significance and the natural beauty of these sites to protect them for future generations.

Parramatta is already an important cultural hub. In addition to the Riverside Theatres, Greater Parramatta hosts major cultural events and signature festivals such as Parramasala, Sydney Festival, Sydney Writers Festival and TropFest.

Critical to planning for a world-class Central River City is celebrating its rich cultural history, showcasing its diverse cultural and entertainment assets, and encouraging and incubating creativity, innovation and inspiration.

Continued investment in the arts and cultural sector will boost economic opportunities by attracting a skilled workforce and encouraging innovation in other sectors such as commercial creative firms.

Actions	Responsibility
 44. Strengthen the economic competitiveness of Greater Parramatta and grow its vibrancy by: a. enabling the development of an internationally competitive health and education precinct at Westmead b. creating opportunities for an expanded office market c. balancing residential development with the needs of commercial development d. providing for a wide range of cultural, entertainment, arts and leisure activities e. improving the quality of Parramatta Park and Parramatta River and their walking and cycling connections to Parramatta CBD f. providing for a diverse and vibrant night-time economy, in a way that responds to potential negative impacts. 	Parramatta City Council, NSW Health and other planning authorities
 Revitalise Hawkesbury Road so that it becomes the civic, transport, commercial and community heart of Westmead. 	Parramatta City Council, NSW Health and other planning authorities
6. Support emergency services transport, including helicopter access	Parramatta City Council, NSW Health and other planning authorities
 Prioritise: a. public transport investment to improve connectivity to Greater Parramatta from the Harbour CBD, Sydney Olympic Park, Westmead, Macquarie Park, Norwest and Kogarah via Bankstown. 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 Greater Parramatta. 	Parramatta City Council, other planning authorities, State agencies and State- owned corporations
8. Manage car parking and identify smart traffic management strategies.	Parramatta City Council, NSW Health and other planning authorities
9. Investigate opportunities for renewal of Westmead East as a mixed-use precinct.	Parramatta City Council, NSW Health and other planning authorities

Planning Priority C8

Delivering a more connected and competitive GPOP Economic Corridor

In giving effect to the draft *Greater Sydney Region Plan*, this Planning Priority delivers on **Objective 15:** The Eastern, GPOP and Western Economic Corridors are better connected and more competitive and corresponding actions.

Re-balancing the economic opportunities for the residents of Greater Sydney is one of the objectives sought from delivering a metropolis of three cities. Delivering a more connected and competitive GPOP Economic Corridor will support this objective.

The GPOP Economic Corridor includes the precincts of Westmead, North Parramatta, Parramatta CBD, Rydalmere, Camellia, Silverwater, Auburn, Granville and Sydney Olympic Park. The wider GPOP also includes the urban corridor along the rail line to Carlingford (refer to Figure 21). A number of these locations provide urban services for the area.

To make the most of its location at the centre of Greater Sydney, Greater Parramatta needs a radial transport network. To improve public transport access, *Future Transport 2056* identifies a number of mass transit initiatives for investigation in the next 20 years. These include connections from Parramatta to the strategic centres of Epping and Norwest, south towards Kogarah, and west towards the Western Sydney Airport in the medium to long term (refer to Planning Priority C9).

In 2016, the Commission established GPOP as its first Collaboration Area, with a vision to transform it as the unifying heart at the centre of Greater Sydney. Supported by a network of strategic centres across the District, GPOP will drive the ambition for a thriving Central River City.

The Commission assumes an active strategic planning role for GPOP and is leading the collaborative process, working with key partner agencies, institutions and businesses to achieve this vision.

The Commission will undertake a pilot of the growth infrastructure compact for GPOP. It seeks to change the current precinct-by-precinct and project-by-

project approach that can undermine the delivery of more informed, integrated and productive outcomes.

In parallel, the NSW Department of Planning and Environment has prepared an *Interim Land Use and Infrastructure Implementation Plan*. The plan defines 12 precincts in the Greater Parramatta Priority Growth Area, forecasts 72,000 new homes and 110,000 jobs by 2036 in GPOP, and identifies capacity for more, subject to further planning.

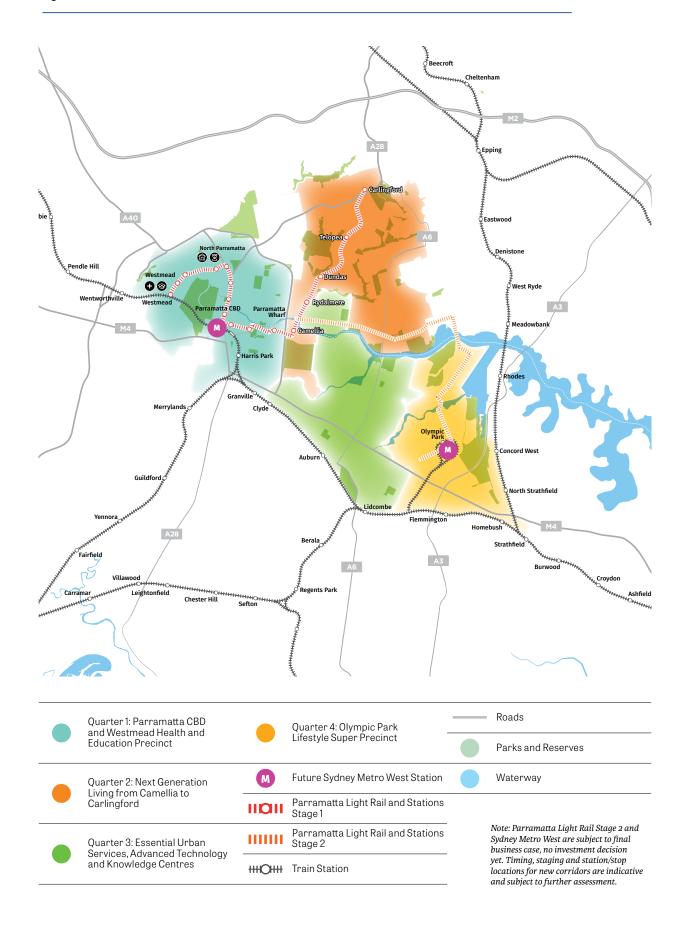
Strategic decisions about major infrastructure and the future of government-owned land is critical to shaping the future of the GPOP Economic Corridor. In addition to the activities for Greater Parramatta as outlined in Planning Priority C7, potential opportunities and synergies include:

- Synergies in water, energy and transport in Camellia – there are opportunities to evolve Camellia into a highly functional part of the Central River City, with a focus on co-existing water, energy and transport uses generating a range of employment types, including highly skilled jobs.
- Health and education uses to activate Sydney
 Olympic Park there are opportunities to attract
 public and private sports, health and physical
 education and tertiary education facilities as
 anchor tenants to activate the Sydney Olympic
 Park strategic centre.
- Urban services Camellia, Silverwater and Rydalmere have important roles as locations for urban services which need to be protected.

Actions	Responsibility
30. Prioritise public transport investment to deliver the 30-minute city objective for strategic centres along the GPOP Economic Corridor.	Councils, other planning authorities, State agencies and State-owned corporations
31. Co-locate health, education, social and community facilities in strategic centres along the GPOP Economic Corridor.	Councils, other planning authorities, State agencies and State-owned corporations



Figure 21: Parramatta CBD and GPOP.



Planning Priority C9

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 creates walkable and 30-minute cities; and **Objective 16:** Freight and logistics network is competitive and efficient and the corresponding strategies.

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 Central City District grows, planning and investment will integrate land use, transport and infrastructure, recognising and harnessing the city-shaping role of transport and 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 Greater Parramatta and surrounding 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 Eastern Harbour City and ultimately to the Western Parkland City, the Western Sydney Airport and Badgerys Creek Aerotropolis.

The draft *Greater Sydney Region Plan* and *Future Transport 2056* outline the city-shaping mass transit 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:

- Planning Priority C7: Growing a stronger and more competitive Greater Parramatta
- Planning Priority C8: Delivering a more connected and competitive GPOP Economic Corridor.

In addition, growth and change around the Sydney Metro Northwest stations from Epping to Cudgegong Road will be subject to an updated corridor strategy. This strategy will acknowledge the unique character of station precincts, plan for appropriate mix of housing and jobs, consider options for interim activation of the station precincts, and plan for the future of surplus NSW Government-owned land.

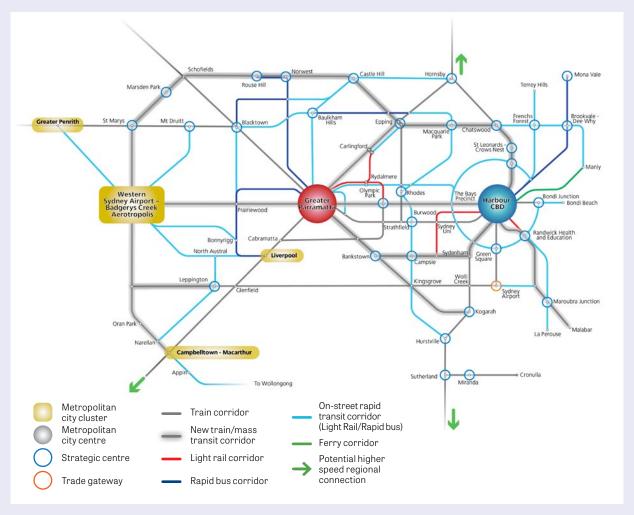
Improving access to local jobs and services

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.

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 serving customers 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:

· 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.

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

- Stage 1 of Parramatta Light Rail
- linking Liverpool Parramatta T-Way with the Northwest T-Way to boost transport capacity and improve bus services between centres to the north and south of Parramatta
- Parramatta Road and Victoria Road transport improvements to support the provision of frequent, reliable and efficient transport to Greater Parramatta and across Greater Sydney
- · additional ferries for Parramatta River
- infrastructure to support rapid bus connections between Western Sydney Airport and Blacktown

Planning work for Stage 2 of Parramatta Light Rail is also underway and a final business case for this project is expected to be completed by the end of 2018, with an investment decision and details on the timing of construction to follow. The preferred nine kilometre route will connect with Stage 1 of the project north of Parramatta River through the suburbs of Ermington, Melrose Park, Wentworth Point and on to Sydney Olympic Park.

Safeguarding the next phase of growth

Corridor protection, integrated with land use planning, will safeguard the Central City District's next phase of growth. Priority corridors identified for protection include the Western Sydney Freight Line, North South Train Link from Schofields to Western Sydney Airport as well as the Outer Sydney Orbital and Bells Line of Road – Castlereagh Connection.

Other transport corridors will be protected into the future to allow for additional transport options.

Improving walking and cycling

Walking is a fundamental part of the transport system and most journeys start and end with walking. On a typical weekday in the Central City District, people make about 1.3 million trips that are shorter than two kilometres and approximately 800,000 (61 per cent) of these are walking and cycling trips. 14 Creating pleasant and safe environments for walking and cycling contributes to great places where people and businesses choose to locate and invest in.

Transport for NSW will prioritise a network of highquality cycling links within 10 kilometres of Greater Parramatta and five kilometres of the strategic centres to provide healthy transport choices, improve access to public transport and support 30-minute city and place-making outcomes.

Prioritising safe 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 Green Grid (refer to Planning Priority C16).

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 safe cycling.

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.

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.

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, opportunities for more flexible design of streets and public spaces; for example, through car parking strategies must be considered.

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.

Freight movements

Freight-related initiatives underway or under investigation in the District include WestConnex, NorthConnex, M4 widening, the Western Sydney Freight Line and Intermodal Terminal, the Western Sydney Fuel Pipeline and the Villawood Intermodal Refurbishment. These facilities contribute to the Transport for NSW service outcomes of 24/7 access for freight to the rail network between gateways and intermodal terminals, and 40 per cent of container movements to and from Port Botany by rail by 2056.

As the Central City 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 peak times can help reduce congestion, greenhouse gas emissions and freight costs. The planning and design of communities should minimise the negative impacts of freight movements and support 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.

Useful link:

· M4 Smart Motorway program

Actions	Responsibility
32. Integrate land use and transport plans to deliver the 30-minute city.	Councils, other planning authorities and State agencies
33. Investigate, plan and protect future transport and infrastructure corridors.	Councils, other planning authorities and State agencies
34. 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
 35. Optimise the efficiency and effectiveness of the freight handling and logistics network by: 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
36. Protect transport corridors as appropriate, including the Western Sydney Freight Line, North South train link from Schofields to Western Sydney Airport as well as the Outer Sydney Orbital and Bells Line of Road-Castlereagh connection.	Councils, other planning authorities and State agencies

Planning Priority C10

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 action.

The growth, innovation and evolution of centres will underpin the economy of the Central City 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.

A centres hierarchy for the District has been established as outlined below:

- Metropolitan city centre: Greater Parramatta (refer to Planning Priority C7)
- Strategic centres: Blacktown, Sydney Olympic Park, Norwest, Castle Hill, Rouse Hill, Mount Druitt, Marsden Park and Epping
- Local centres: approximately 42 centres (refer to Planning Priority C6).

All strategic centres will be the focus of public transport investments that seek to deliver the 30-minute city objective (refer to Planning Priority C9).

Some strategic centres in the Central City 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 of the draft Planning Priority C6.

Research has shown that the Central City District will need to accommodate more than 1.76 million square metres of additional retail floor space over the next 20 years. ¹⁵ 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.

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 a core objective for centres. For this reason, job targets, expressed as a range, have been projected for each strategic centre. 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
 37. Provide access to jobs, goods and services in centres by: 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 centres f. completing and improving a safe and connected cycling network to and within the centres 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 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
38. Create new centres in accordance with the <i>Principles for Greater Sydney's Centres</i> .	Councils and other planning authorities
 Engage with the retail sector on its changing planning requirements and update planning controls as required. 	Councils and other planning authorities
40. Prioritise strategic land use and infrastructure plans for growing centres, particularly those with capacity for additional retail floor space.	Councils and other planning authorities
41. 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 based 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 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: 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 to facilitate more
 mature innovation precincts.

In all cases, delivering centres that create walkable neighbourhoods are 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.

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

To deliver on this, there is a need for of land use and infrastructure plans to 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.

Blacktown

Blacktown offers a variety of business, retail, mixed use residential and administrative functions that create vibrancy and attract investment, employment and diversity of housing. It also includes a range of community and cultural facilities such as the Blacktown Arts Centre and library. Blacktown Station is the confluence of the Western and Richmond Rail Lines, and the North West Transitway connects it with The Hills.

Blacktown Hospital and Clinical School form part of the District's health facilities and specialist services. The expansion of Blacktown Hospital will make it the third-largest public hospital in NSW, generating more than 5,000 new jobs. It is also a major teaching hospital for medical students at Western Sydney University. The health and education precinct provides opportunities for a private hospital and associated specialist medical services that support practitioners, students and patients. TAFE NSW Western Sydney and potential future tertiary education institutions could focus on innovative sports and health science. Over time, investments have the potential to grow the centre as an emerging health and education precinct.



Blacktown	Jobs
2016 estimate	13,200
2036 baseline target	17,000
2036 higher target	19,500

Actions Responsibility

- 42. Strengthen Blacktown through approaches that:
 - a. protect the commercial core to achieve the centre's job targets
 - b. reinforce the ring road network
 - c. improve pedestrian connectivity, particularly across the Western Railway Line
 - d. reinforce and capitalise on the health and education activities located in the Blacktown health and education precinct
 - e. manage land around the hospital so as not to preclude future expansion of the hospital and/ or co-location of a tertiary education facility
 - f. deliver ancillary uses which add value to the health and education facilities, including residential, aged care facilities, visitor accommodation, health and medical research activities, non-critical patient care and commercial uses which will be complementary to and help to revitalise the health precinct
 - g. improve wayfinding within the centre
 - h. promote advanced manufacturing, research and innovation in the Blacktown business park
 - i. ensure design excellence outcomes for new development within the city centre.

Blacktown City Council, other planning authorities and State agencies

Castle Hill



Castle Hill provides retail and community services to a large population catchment in Sydney's north west. A future Sydney Metro Northwest station provides the opportunity for commercial developments and a greater proportion of knowledge-intensive jobs.

Road congestion and access to surrounding centres such as Parramatta must be addressed.

Castle Hill	Jobs
2016 estimate	9,800
2036 baseline target	16,000
2036 higher target	19,500

Actions

43. Strengthen Castle Hill through approaches that:

- a. provide capacity to achieve the centre's jobs targets
- b. align State priorities for expenditure on regional roads, schools and utilities to support growth forecasts and to address current deficits
- c. $\,$ complete the upgrade of Showground Road and the Castle Hill Ring Road System $\,$
- d. develop public domain plans to enhance identified pedestrian linkages to the future Castle Hill transport hub.

Responsibility

The Hills Shire Council, other planning authorities and State agencies

Epping



Epping is 10 kilometres north east of Parramatta and about four kilometres west of Macquarie University and Macquarie Park. It already benefits from excellent public transport and will be serviced by three major rail lines once Sydney Metro Northwest is operational.

Future Transport 2056 identifies a potential mass transit connection between Parramatta and Epping for investigation. Increased public transport and the centre's proximity to GPOP and existing employment areas set the potential for Epping to grow into a centre with a more diverse range of activities, including commercial uses.

Appropriate planning for local infrastructure including improved roads, new or upgraded schools, open space and recreational facilities, will inform the Parramatta City Council's Epping Planning Review process.

Epping	Jobs
2016 estimate	5,100
2036 baseline target	7,000
2036 higher target	7,500

Actions	Responsibility
44. Continue the review of planning controls for Epping in collaboration with State agencies.	Parramatta City Council, other planning authorities and State agencies

Marsden Park

Marsden Park is an emerging strategic centre and the largest employment zone in the North West Priority Growth Area.

The Marsden Park Industrial Precinct was rezoned in 2010 predominantly for employment uses and some mediumdensity residential zones. The 2010 Indicative Layout Plan identifies the Marsden Park town centre to the north of Schofields Road/South Street.

In 2012, the NSW Government preserved a transport corridor from Cudgegong Road to Schofields and Marsden Park. The draft Greater Sydney Region Plan identifies the need to investigate a potential north-south train link connection from Cudgegong Road to Campbelltown-Macarthur linking Western Sydney Airport and Badgerys Creek Aerotropolis to economic nodes such as Sydney Science Park, St Marys, Marsden Park and Rouse Hill in the north, as well as Oran Park, Narellan and Campbelltown-Macarthur. This could catalyse growth in Sydney's Western Economic Corridor.

These transport plans warrant a review of the vision and the strategic role of Marsden Park in contributing to the growth of the Western Parkland City.

To maximise the benefits of increased transport accessibility with a potential mass transit stop in Marsden Park, planning must allow flexibility for greater land use diversity and



Marsden Park	Jobs
2016 estimate	1,600
2036 baseline target	5,000
2036 higher target	10,000

encourage higher value economic and employment activities. This must be supported by increased walking and cycling opportunities and high-quality public domain. Marsden Park has experienced rapid transformation in recent years. Planning and investment must enable this momentum to continue.

Actions

45. Strengthen Marsden Park through approaches that:

- a. facilitate a variety of activities that meet the needs of the residents of the western part of the North West Priority Growth Area
- b. establish the station location to ensure transport access does not become a constraint to the development of the Town Centre
- c. work with NSW Government to identify a corridor west of Marsden Park Town Centre to extend the public transport network to Western Sydney Airport
- d. integrate the Marsden Park Industrial Precinct with the Town Centre, including walking and cycling connections.

Responsibility

Blacktown City Council, other planning authorities and State agencies

Mount Druitt



Mount Druitt is home to retail and services, industrial uses, Mt Druitt Hospital and TAFE. Its broader catchment includes a high concentration of social housing and communities with socio-economic disadvantage. Unemployment is a major challenge.

With better public transport access, public domain and amenity improvements and increasing connectivity across the rail corridor Mount Druitt can improve its role in providing employment and services for local communities.

Mount Druitt	Jobs
2016 estimate	6,700
2036 baseline target	8,000
2036 higher target	8,500

Actions

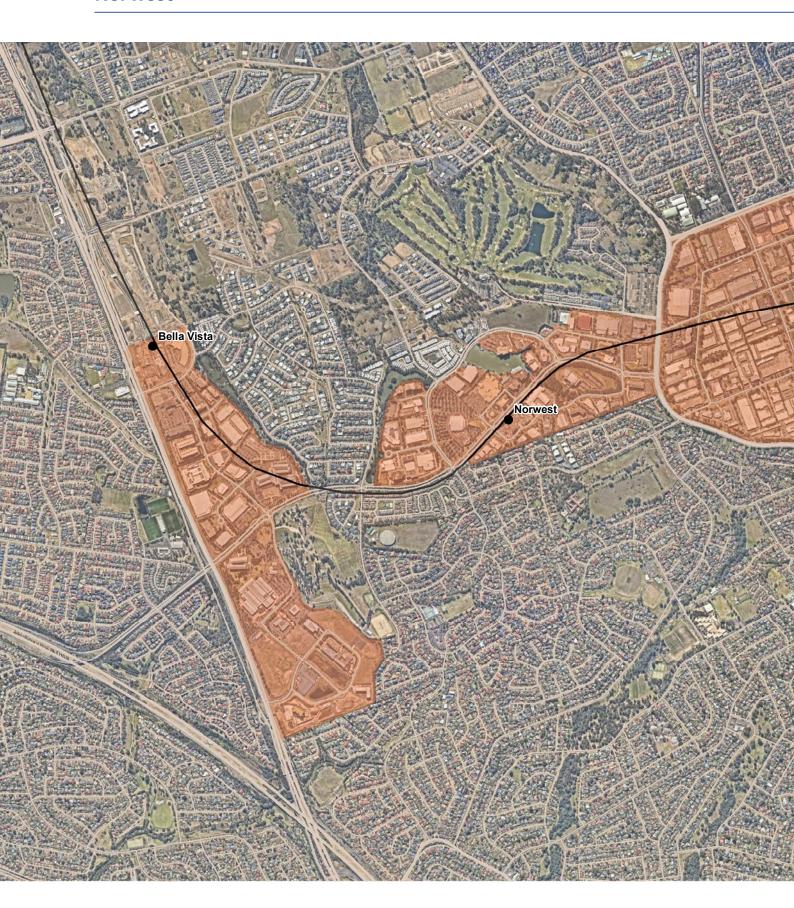
46. Strengthen Mount Druitt through approaches that:

- a. improve connectivity to employment opportunities in the Western Sydney Employment Area, the future Western Sydney Airport and Marsden Park
- b. improve accessibility to and within the centre, including connections and wayfinding between Mount Druitt Hospital, railway station and bus interchange
- c. reinforce the important role of the centre in providing social support services to communities in the broader Mount Druitt area.

Responsibility

Blacktown City Council, other planning authorities and State agencies

Norwest





Norwest Business Park is an established commercial centre. Sydney Metro Northwest and the new station at Norwest will provide the opportunity to transform the traditional 1990s-style business park model into a transit-oriented, more vibrant and diversified centre with higher employment densities and a mix of residential uses and supporting services.

Sydney Metro Northwest will also enable faster and more reliable business-to-business connections to other centres such as Macquarie Park.

Norwest	Jobs
2016 estimate	32,400
2036 baseline target	49,000
2036 higher target	53,000

Actions

Responsibility

- $\ \, 47. \ \, \text{Strengthen Norwest through approaches that:}$
 - a. retain and grow commercial capacity to achieve the centre's job targets
 - b. encourage complementary retail services around Norwest Lake and the station precinct
 - c. work with NSW Government to identify a potential future corridor for mass transit links to Greater Parramatta.

The Hills Shire Council, other planning authorities and State agencies

Rouse Hill

Rouse Hill provides retail and community services to a large population catchment in Sydney's north west. A future Sydney Metro station provides the opportunity for commercial developments and a greater proportion of knowledge-intensive jobs. A new health service for Rouse Hill will grow the health and education sector and associated services.

Road congestion and access to surrounding centres such as Parramatta must be addressed.

Rouse Hill	Jobs
2016 estimate	4,200
2036 baseline target	10,000
2036 higher target	11,000



Actions

ACTIONS

- $48. \ \ Strengthen \ Rouse \ Hill \ through \ approaches \ that:$
 - a. investigate opportunities for future expansion of the centreb. enhance pedestrian and cycleway linkages, particularly across Windsor Road
 - c. $\,$ promote complementary business uses on land adjacent to the Rouse Hill Town Centre
 - d. leverage government owned land around Caddies Creek to provide additional active sporting opportunities.

Responsibility

The Hills Shire Council, other planning authorities and State agencies

Sydney Olympic Park



Sydney Olympic Park provides worldclass sporting and event venues and residential, commercial and recreational activities. Over the next 20 years, the area will develop into a lifestyle precinct, offering the potential to attract anchor tenants specialising in sports, health and physical education.

The Royal Agricultural Society of NSW supports Sydney Olympic Park with its connections to food and family events. This creates the potential for Sydney Olympic Park to be a go-to destination for a great outdoor fresh food and organics market, with a program of pop-up events.

Sydney Olympic Park requires a total transport solution, including walking and cycling connections, integrated with land use planning. Parramatta Light Rail Stage 2 and Sydney Metro West would significantly increase accessibility and contribute to achieving the job targets.

Through the GPOP growth infrastructure compact pilot, the Commission will work with Sydney Olympic Park Authority and other stakeholders to coordinate infrastructure delivery.

Sydney Olympic Park	Jobs
2016 estimate	31,100
2036 baseline target	45,000
2036 higher target	46,500

Actions Responsibility

- 49. Strengthen Sydney Olympic Park through approaches that:
 - explore opportunities to attract public and private sports, health and physical education and tertiary education facilities as anchor tenants to activate the Sydney Olympic Park Town Centre
 - coordinate land use and infrastructure planning around the future Parramatta Light Rail
 Stage 2 and Sydney Metro West stations at Olympic Park.

Parramatta City Council, other planning authorities and State agencies

Planning Priority C11

Maximising opportunities to attract advanced manufacturing and innovation in 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** and 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 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.

Industrial land supply

The Central City District has 5,400 hectares of industrial and urban services land, spread over 75 precincts (refer to Figure 22). This represents the highest proportion of Greater Sydney's total stock of industrial and urban services land (40 per cent). About 24 per cent (1,300 hectares) is undeveloped.¹⁶

The largest industrial and urban services lands in the Central City District are listed in Table 4.

There are 21 industrial precincts in the Parramatta City Local Government Area. Around 80 per cent of all jobs in industrial areas are in manufacturing, wholesale, transport, postage and warehousing. Other activities include construction, education, waste management, fuel distribution and bulky goods retail.

Fuel storage and distribution terminals at Parramatta and Clyde supply 50 per cent of NSW's petroleum requirements. 17

Industrial and urban services land in The Hills Local Government Area ranges from traditional industrial areas to business and technology parks, with activities including light industry, heavy industry, manufacturing, high-tech, urban services, warehousing and logistics.

Industrial and urban services land in Cumberland Local Government Area is required for emerging innovative industries in digital innovation, media, arts, creative industries, food and beverage manufacturing, allied health, research and development and advanced technology manufacturing. Given their proximity to Greater Parramatta and their access to transport and freight routes, these sites are ideally positioned to provide innovation and important urban services that support the growth of the Central City District.

Cumberland Council's draft *Employment and Innovation Lands Strategy and Land Use Planning Framework* recognises the opportunity to transition its economy into higher order and productive industries and the knowledge-intensive economy. It seeks to develop an innovation ecosystem and grow a number of key sectors: digital technologies/media, advanced manufacturing, food and beverage, manufacturing, creative industries, fashion, allied health, advanced knowledge services and freight and logistics.

In Blacktown Local Government Area, a major industry cluster of transport and logistics, storage, warehousing and distribution is developing. This cluster, together with more established industrial precincts, will capitalise on the growth of the Western Parkland and Central River cities.

A future Western Sydney Freight Line through the southern part of the District will make surrounding industrial land more accessible and valuable for freight, warehousing and logistics businesses.

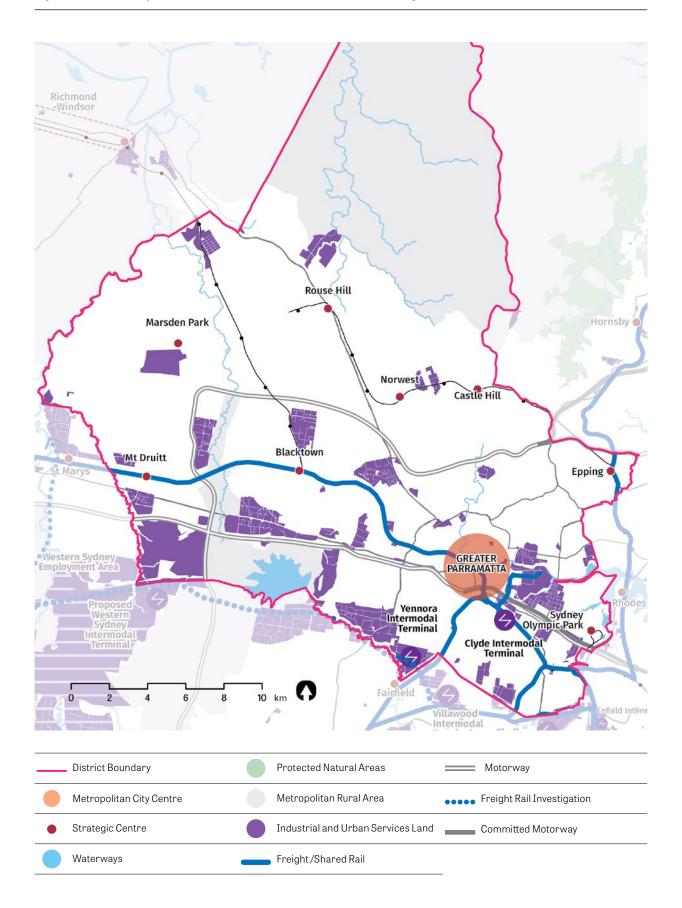
Table 4: Central City District largest industrial and urban services precincts by local government area

LGA	Precinct	Undeveloped Land (ha)	Developed Land (ha)	Total (ha)
	Eastern Creek	359	203	562
	Glendenning	28	168	196
Blacktown	Kings Park	2	210	211
BIACKLOWN	Marsden Park	218	21	238
	Ropes Creek	186	0	186
	Seven Hills	12	186	198
	Greystanes	48	114	162
Cumberland	Smithfield, North	13	341	354
	Yennora	1	187	188
Parramatta	Camellia/Rose Hill	18	218	236
	Silverwater	9	142	151
	Rydalmere	2	103	105
The Hills	Annangrove	115	30	145

Source: NSW Department of Planning and Environment, Employment Lands Development Program 2015 Report (ELDP 2015 Report), NSW Government, Sydney

Note: Figures are rounded to the nearest whole number.

Figure 22: Central City District industrial and urban services land and freight assets



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.

There is growing pressure on industrial and urban services land to be converted to residential or retail uses. In the Central City District, this pressure is particularly strong in parts of GPOP in areas such as Rydalmere, Camellia, Silverwater and Auburn. Industrial land in GPOP provides capacity for a range of activities that are critical to supporting population and jobs growth. This includes land for bus depots, production of building material, waste processing and water recycling.

The Commission will prioritise a strategic review of the Central City District's industrial land to tailor future management of these precincts.

As GPOP undergoes transition, careful planning will maintain capacity for a range of industrial activities that are fundamental to the function of the city. Planning will also provide assurance that industrial and urban services activities can coexist with existing and new development.

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 compared 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 Central City District, the per person amount exceeds the benchmark in 2016, and the per capita amount is anticipated to reduce between 2016 and 2036.

The Commission will prioritise a strategic review of the Central City District's industrial land to tailor future management of these precincts. The review will include consultation with land owners, business operators, developers and councils (refer to Action 50).

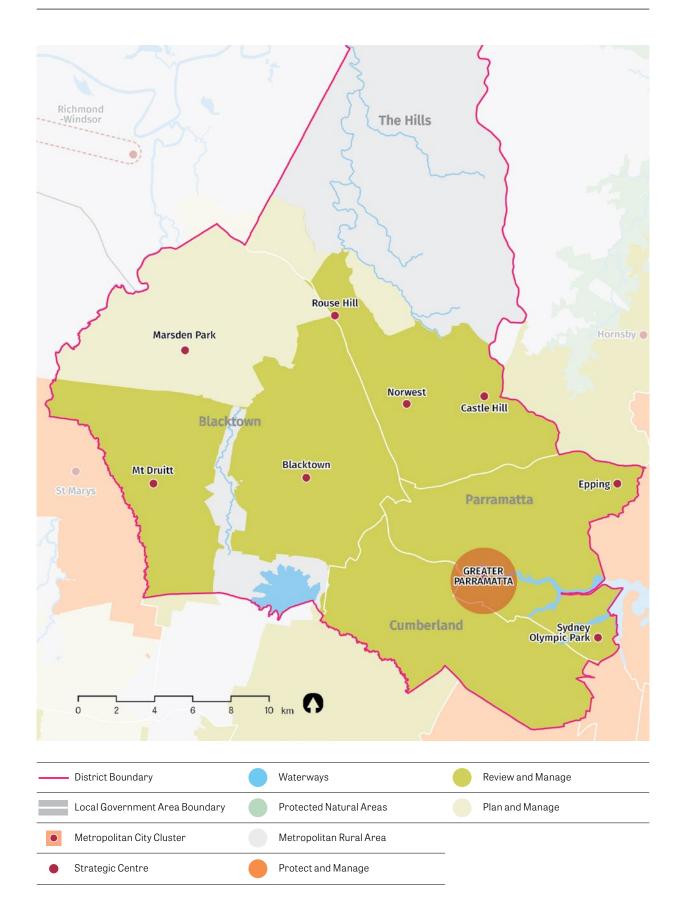
In the meantime, given that housing supply needs can be met in areas zoned for residential development, the role of industrial and urban services land in providing future capacity for jobs should not be compromised.

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, considering evolving business practices and how they can best be supported through local environmental plans' permitted uses. Any review should take into consideration findings of the industrial, commercial and centres strategies for the local government area and/or district.

In the Central City District, it is important that industrial and urban services land is reviewed and efficiently managed to support the growth of the Central River City. In particular, advanced manufacturing has strong prospects for jobs growth in the Central River City District, with its established manufacturing base, the availability of relatively affordable industrial land and significant freight and logistics assets. Strategic planning must facilitate and encourage the growth of this sector. The NSW Department of Industry is developing an Advanced Manufacturing Industry Development Strategy to maximise economic outcomes in the Central and Western cities (refer to Planning Priority C12).

Given the substantial long-term population growth and development in land release areas, there may be a need for additional industrial and urban services land in Blacktown and The Hills local government areas. The Commission will work with the NSW Department of Planning and Environment and councils as strategic plans are prepared to determine whether additional land is required.

Figure 23: Industrial land approaches



*	Actions	Responsibility
50.	Manage industrial lands in the identified government areas (refer to Figure 23) 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, in light of the changing nature of industries in the area. In limited cases, where conversion to other uses is identified as appropriate to the needs of the city, take a more tailored approach. In some locations such as GPOP, specifically Camellia and Silverwater, the protection of industrial activities will be a starting objective.	Greater Sydney Commission, Blacktown City Council, Cumberland Council, City of Parramatta Council, The Hills Shire Council and other planning authorities
51.	Manage industrial land in the identified local government areas (refer to Figure 23) by creating additional industrial and urban services land where required in land release areas to service the growing population.	Blacktown City Council, The Hills Shire Council, and other planning authorities
52.	Facilitate the contemporary adaptation of industrial and warehouse buildings through increased floor to ceiling heights.	Councils and other planning authorities
53.	Manage the interfaces of industrial areas, trade gateways and intermodal facilities by: Land use activities 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	Councils and other planning authorities, State agencies and State-owned corporations
	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	
	Transport operations	
	e. providing the required commercial and passenger vehicle, and freight and passenger rail access	
	f. improving the road connectivity from Villawood to Eastern Creek, via Yennora, Smithfield and Wetherill Park to improve business-to-business and supply chain connectivity along this industrial corridor.	

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.

The NSW Government recognises that these sectors are important in fostering innovation in the development of highly skilled jobs which drive productivity and global competitiveness.

The strategies are being developed in consultation with industry, government partners and other key stakeholders. They 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 by considering the barriers to growth, including regulatory barriers.

The draft *Greater Sydney Region Plan* also identifies a number of the key economic sectors for the three cities. The Central City District is part of the Central River City where the key economic sectors include:

advanced manufacturing (including defence industries)

- · medical technology
- · tertiary education
- financial and professional services (including insurance and real estate)
- · public/government administration and safety
- · health and education
- · visitor economy.

The Central City District also includes part of Greater Sydney's 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
- protect and support agricultural production and mineral resources.

Tourism and visitation

The Central City District's tourism and visitation offer is multifaceted. Sydney Olympic Park is a major attractor, hosting sporting and cultural events, and investment in industries which is set to increase with the Western Sydney Stadium, Stadium Australia and the Museum of Applied Arts and Sciences.

The District is also increasingly hosting a number of cultural events such as Tropfest, the Arab Film Festival, the Orange Blossom Festival, the Lunar New Year Festival, the Country Music Festival and the Maltese Folkloric Festival, which attract tourists and visitors to the District.

Agriculture

The rural area of the Central City District includes agricultural clusters at Maroota, Middle Dural, Gaston and Arcadia. The District also has mineral and extractive resources at Maroota, producing construction materials such as sand.

The proximity of rural residential development to agricultural, mining and extracting industries that generate odour, noise and other pollutants can be a source of conflict. There is a need to provide important rural industries with certainty and ensure their operations can continue without encroachment from incompatible land uses. At the same time the protection of biodiversity and rehabilitation of exhausted resource extraction areas support the reestablishment of significant ecological communities in the rural area into the future.

Adapting to changing technologies

Rapid technological changes and digital advancements are disrupting established business models and the workplace worldwide. These are dramatically changing the way people and goods move around, providing more efficient transport services. While technological changes can reduce demand for certain types of jobs, they also help to deliver innovation, new knowledge-intensive jobs and business opportunities. As governments continue to engage with industry, assess regulatory barriers and update governance and policies to capitalise on changes, strategic land use planning needs to respond by providing a regulatory environment which enables the economic opportunities created by changing technologies.

Actions	Responsibility
 54. Facilitate health and education precincts that: 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, other planning authorities and State agencies
55. Provide a regulatory environment which enables economic opportunities created by changing technologies.	Councils and other planning authorities
56. Consider the barriers to the growth of internationally competitive trade sectors, including engaging with industry and assessing regulatory barriers.	Councils and other planning authorities
57. 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
58. Consider opportunities to implement place-based initiatives to attract more visitors, improve visitor experiences and ensure connections to transport at key tourist attractions.	Councils and other planning authorities
59. Consider opportunities to enhance the tourist and visitor economy in the district, including a coordinated approach to tourism activities, events and accommodation.	Councils, other planning authorities and State agencies
60. When preparing plans for tourism and visitation, consider: 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

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 Central City District's urban neighbourhoods are set amongst the wide-open spaces and waterways of the Cumberland Plain. Further north towards the Hawkesbury River, the Cumberland Plain gives way to more rugged ridges and valleys, where the District has large tracts of bushland, pockets of farmland and rural towns and villages. The Central City District is hotter and drier than coastal parts of Greater Sydney and includes neighbourhoods such as the South Creek corridor and the Greater Parramatta and the Olympic Peninsula (GPOP), which will grow and change significantly over the next 40 years.

The Greater Sydney Green Grid will provide cool, green links throughout the District, 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.

Maintaining and improving the health of the Parramatta and Hawkesbury-Nepean rivers and their tributaries as natural, cultural and recreational assets also contribute to cooling the environment and providing habitat for aquatic ecosystems.

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 heatwaves, bushfire, flooding and storms. 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 Central City District an integrated approach to improving sustainability can be achieved by the following Planning Priorities:

- Protecting and improving the health and enjoyment of the District's waterways.
- Creating a Parkland City urban structure and identity, with South Creek as a defining spatial element.
- Protecting and enhancing bushland and biodiversity.
- Increasing urban tree canopy cover and delivering Green Grid connections.
- · Delivering high quality open space.
- Better managing rural areas.
- 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.

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.



Protecting and improving the health and enjoyment of 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 Central City District's waterways help 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 that they continue to support a wide range of activities.

The waterways and rivers of the Central City 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. More than 50 per cent of the District's population lives within a kilometre of a waterway, highlighting the role waterways play in creating a sense of place and connecting communities to the natural landscape. The District's catchments and waterways are shown in Figure 24.

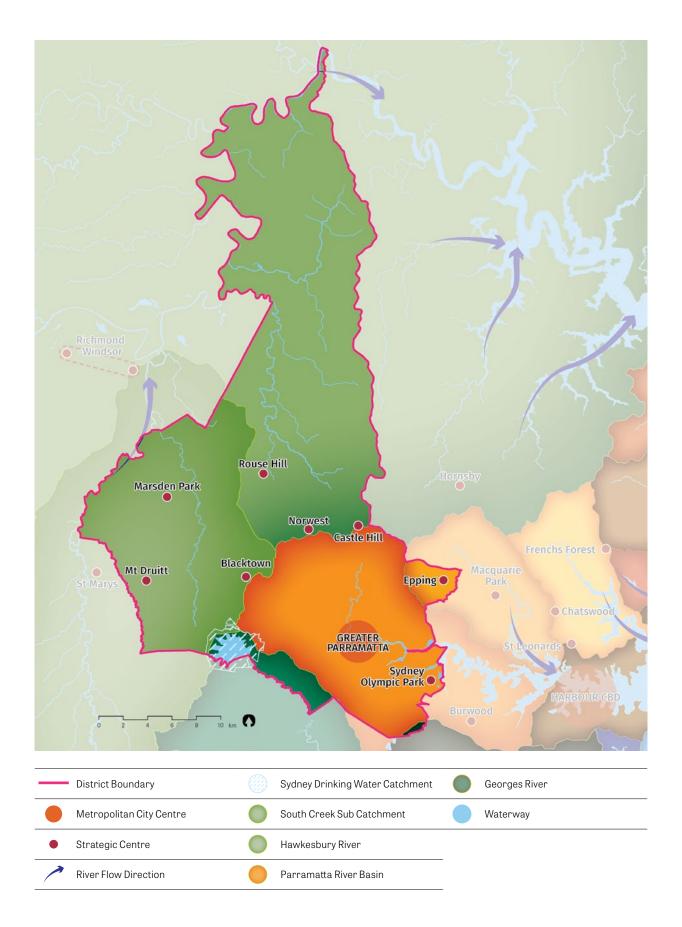
A legacy of historical land uses, contaminated land, aged infrastructure and the pattern of urban development have impacted some of the District's waterways. Other waterways, such as Lake Parramatta, are in better health, provide habitat, are accessible and are popular settings for swimming.

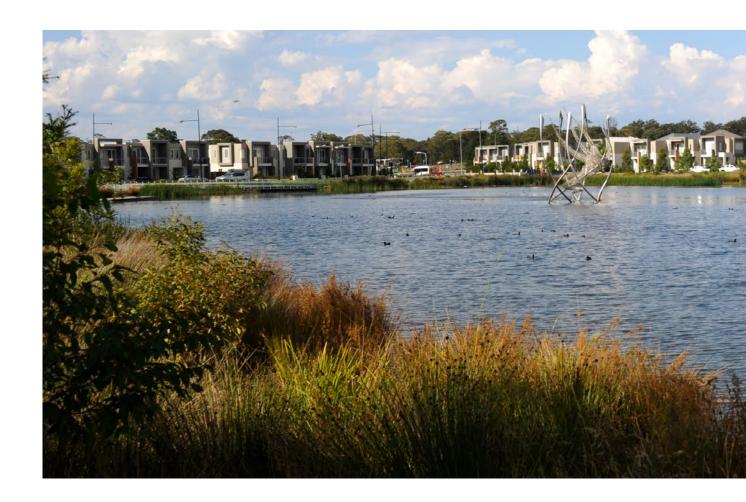
Urban development, the clearing of vegetation and more impermeable surfaces have resulted in elevated run-off, reduced water quality and loss of habitat. Urban stormwater carries litter and contaminants into the District's waterways. The District's waterways often flow through more than one local government 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 provide 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 waterways within the District should be prioritised. This includes access for pedestrians as well as boats and other watercraft. The delivery of the Greater Sydney Green Grid (refer to Planning Priority C16) will enhance connections to the Parramatta River, Duck Creek, South Creek and its tributaries.

Figure 24: Central City District's catchments and waterways





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 estuarine management and land use planning, the *Fisheries Management Act 1994* protects aquatic biodiversity, and Sydney Regional Environmental Plan No.20 – Hawkesbury-Nepean River (1997) sets out planning considerations to protect the environment of the river system. 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.

The Metropolitan Water Plan 2017 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.

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

An integrated approach to the protection and management of waterways will 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 levels of government and with the community is needed to deliver the green space, urban cooling and integrated water management outcomes required to support the Central City 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 mooring, marinas and boat launching facilities while ensuring public access to the waterways and opportunities for swimming, and small boat and kayak launching from publiclyowned land.

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, including Lake Parramatta, are already open for swimming and a number of potential swimming sites have been identified for further investigation. The Masterplan adopts the Office of Environment and Heritage and NSW 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, including the Duck River 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.

Improving the health of Parramatta River's tributaries will also improve the liveability of communities across the western part of the District, help cool the District and restore habitat for aquatic species. This will complement improvements to parks and open spaces along river corridors.

Useful links:

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

Actions	Responsibility
61. Protect environmentally sensitive waterways.	Councils, other planning authorities, State agencies and State-owned corporations
62. Enhance sustainability and liveability by improving and managing access to waterways and foreshores for recreation, tourism, cultural events and water-based transport.	Councils, other planning authorities, State agencies and State-owned corporations
63. 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
64. Reinstate more natural conditions in highly modified urban waterways.	Councils, other planning authorities, State agencies and State-owned corporations

Creating a Parkland City urban structure and identity, with South Creek as a defining spatial element

In giving effect to the draft *Greater Sydney Region Plan*, this Planning Priority delivers on **Objective 26: A cool and green parkland city in the South Creek corridor** and the corresponding strategy and action.

South Creek is at the heart of the Western Parkland City. It crosses one of the hottest, driest and flattest parts of Greater Sydney. Rapid and sustained growth in the Western Parkland City, particularly in Priority Growth Areas close to South Creek and tributaries such as Kemps Creek, Lowes Creek and Badgerys Creek, will see its population grow to well over 1.5 million by 2056 (refer to Figure 25).

The Central City District shares the landscape around South Creek and its major tributaries including Eastern Creek, with the Western City District.

The draft *Greater Sydney Region Plan* vision for South Creek is to transform its water management, while using the creek corridor to form the spine of the Western Parkland City. This conceptualises a green corridor that provides sites for parks, community facilities, and ecological services including nutrient capture, urban cooling, walking and cycling trails as well as local habitat. Areas of higher density and high quality public spaces orientate towards waterways, making the most of this green infrastructure (refer to Figure 26).

Walking and cycling trails will connect the creek's open spaces and regularly spaced bridge crossings will enable people to experience the landscape and connect communities. The design of bridges will respect the local context and environment, and support the movement of wildlife.

Maintaining riparian corridors in public ownership for future generations will support habitat, creating opportunities for new open space, including sporting facilities and helping to support healthy waterways by managing flows of water and nutrients.

Retaining more water in the landscape, for example by creating new wetlands, irrigating the urban tree canopy and retaining smaller intermittent streams at the ground level, will help mitigate the urban heat island effect and manage flows of stormwater.

Creating contiguous corridors of public open space and expanding the urban tree canopy (refer to Planning Priority C16) will also help mitigate the urban heat island effect, manage flows of stormwater and create attractive locations for new and growing communities that support liveability and productivity.

Actions	Responsibility
65. Implement the South Creek Corridor Plan and use the design principles for South Creek to deliver a cool and green Western Parkland City.	Councils, other planning authorities, State agencies and State-owned corporations

Figure 25: Central City District's South Creek Catchment

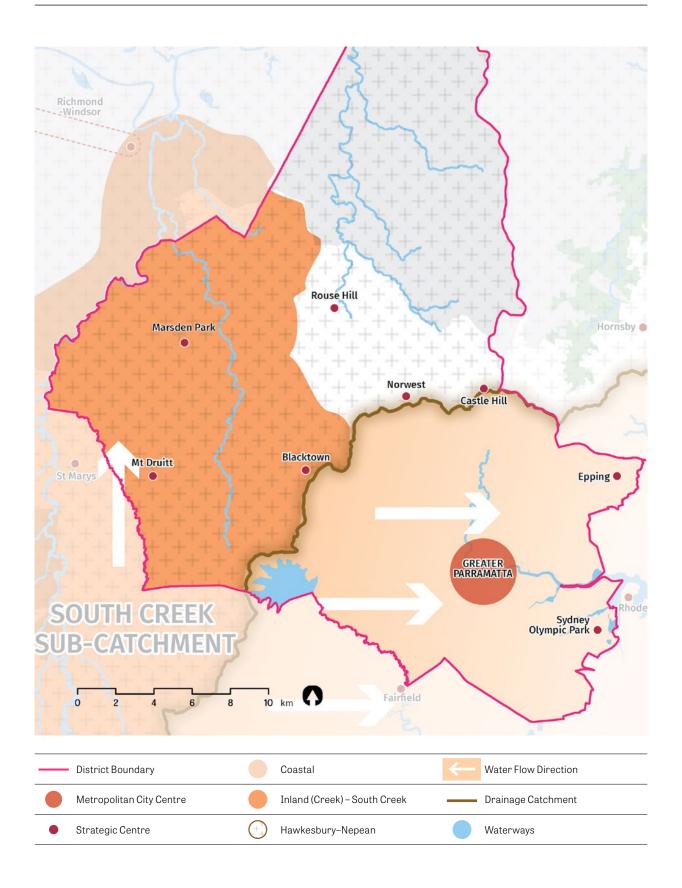


Figure 26: South Creek urban design principles









New city centre

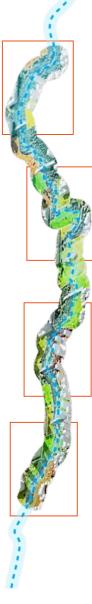
- Pedestrian-oriented promenade with active frontages
- · Density and fine grain
- 300–400m bridge spacing
- Mass transit 1–2 blocks from creek
- · Regional civic anchors
- · High transport connectivity



New inner city neighbourhood

- Fine grain residential terraces and mid rise apartments
- 400-600m bridge spacing
- · Mass transit 2 blocks from creek
- · Local civic anchors





Established suburbs

- · Studios and apartments added
- · Connections between streets and to creek
- · Programmed activity space
- · Multiple pedestrian walkways
- Shared street promenade



New business and industrial areas

- · Creek-facing employment hubs
- · Realigned car parking
- · Recreation spaces for workers
- · Accessible transit plaza
- · Pedestrian only promenade



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 strategy.

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 biodiversity conservation legislation to information such as biodiversity mapping. This Planning Priority reinforces the importance of Objective 27 and provides a context to District issues.

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



Bushland covers around 7 per cent of the Central City District¹⁸, with valuable areas of bushland and remnant vegetation within the urban and rural parts of the District. National parks and reserves in the District include Cattai National Park, Prospect Nature Reserve, Newington Nature Reserve and Wianamatta Regional Park. These preserve a number of important ecological communities.

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

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

For the Central City District, conservation planning will focus on opportunities to protect and enhance areas of endangered ecological communities such as Sydney Turpentine-Ironbark Forest and Cumberland Plain Woodland, the critically endangered Blue Gum High Forest ecological community and other valuable native vegetation close to existing national parks.

A strategic approach to protecting the biodiversity in the Central City 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 (refer to Planning Priority C18). 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
66. Protect and enhance biodiversity by: a. supporting landscape-scale biodiversity conservation and the restoration of bushland corridors	Councils, other planning authorities and State agencies
 b. managing urban bushland and remnant vegetation as green infrastructure. 	

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.

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, waterway and 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 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. ¹⁹ 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

In 2011, the urban areas of the Central City District had 19 per cent tree canopy cover (refer to Figure 33).

The Hills Shire enjoys extensive urban tree canopy cover and maintains its image as a garden shire with an extensive network of parks, open spaces and rural lands. Blacktown, parts of Parramatta and Cumberland local government areas generally have more limited tree canopy cover.

Trees are valued by residents and contribute to the streetscapes, 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.

Urban renewal and transformation projects in the District, including Parramatta Road, GPOP and the Sydney Metro Northwest Priority Urban Renewal Corridor provide the opportunity to improve the public domain. A critical part of this will be 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.

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 air quality. 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 Environment and Planning'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 Central City District is shown in Figure 27. 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 diversity and recreation purposes.

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

The NSW Government also supports delivery of regional open space, using Special Infrastructure Contributions. The NSW Government allocated \$123 million funding for 2017–18 (administered by the Commission) for the revitalisation of Parramatta Road as part of the Parramatta Road Urban Amenity Improvement Program. Transport for NSW is establishing a Principal Bicycle Network in collaboration with councils. This network will be integrated with 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.

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

Table 5: Central City District Green Grid Priority Projects

Priority Projects



Parramatta River Foreshore

A continuous open space corridor along both sides of the Parramatta River, connecting Westmead and Parramatta Park to Sydney Olympic Park and Rhodes, with future connections eastward towards Iron Cove.



Duck River Open Space Corridor

A continuous walking and cycling north-south link between Parramatta, Camellia, Granville, Auburn, Regents Park and south to Bankstown. Enhancing and expanding the existing open space assets will establish the corridor as a regional open space destination with improved recreational space, habitat for ecological communities and better treatment of stormwater.



Prospect Reservoir Water Pipeline Corridor

A connected open space corridor linking Prospect Reservoir and Western Sydney Parklands through Pemulwuy, Greystanes, Merrylands, Smithfield, Guildford, Chester Hill and Regents Park. This project will also connect with other projects including the Duck River Open Space Corridor.



Western Sydney Parklands extension and connections

Will enhance access to open space, recreation and greener urban landscapes for the growing population of the North West Priority Growth Area. Future extensions north along Eastern Creek could connect the Western Sydney Parklands to South Creek and the Hawkesbury River.

Other important projects to deliver Greater Sydney's Green Grid in the Central City District are:

5

Cattai and Caddies Creek Corridors

This will use the creek corridors for recreation, active transport, urban greening, improved water quality and stormwater treatment and ecological protection, and create east-west links to provide access between the parallel creek corridors.

6

Parramatta Road Corridor

The transformation and renewal along Parramatta Road will create improved north-south green links between existing areas of regional open space, the Parramatta River and Cooks River.



Ropes Creek Corridor

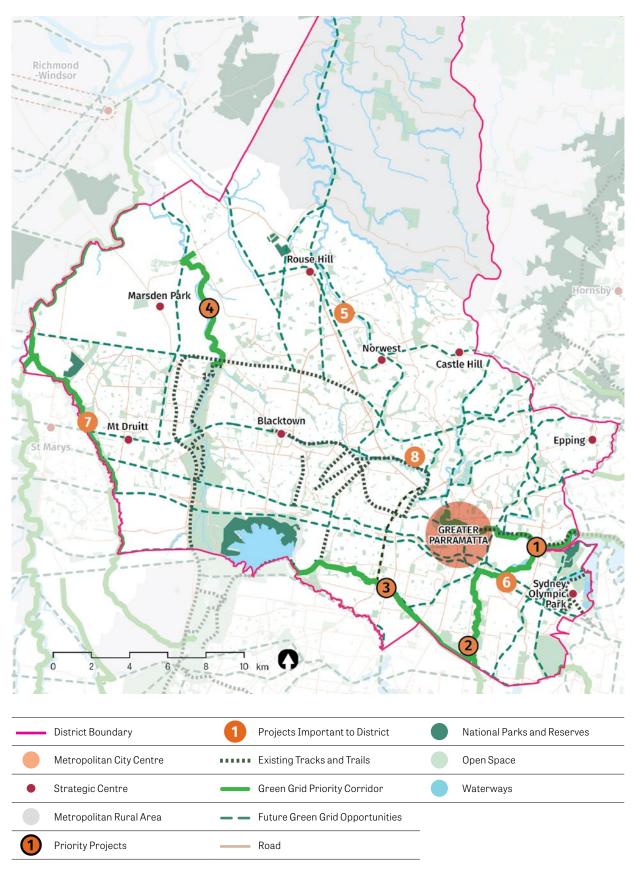
A green link will connect Cecil Hills, Erskine Park, Minchinbury, Mount Druitt, Oxley Park, St Marys and Ropes Crossing. This project will also help protect the ecology of the creek, improve water quality and provide walking and cycling trails and enhance access to Wianamatta Regional Park.

8

Parramatta RiverToongabbie and Blacktown Creeks Corridor

A high-quality link between Blacktown and Parramatta will increase access to regional open space and restore degraded bushland. A high-quality link between Blacktown and Parramatta will increase access to regional open space and restore degraded bushland.

Figure 27: Central City District Green Grid opportunities



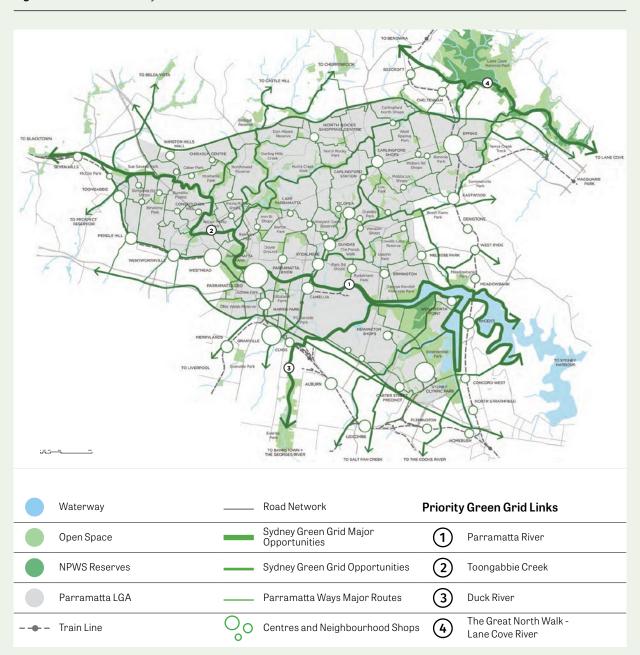
Source: Greater Sydney Commission, 2017, adapted from Sydney Green Grid, report prepared by Tyrell Studio and Office of the Government Architect for the Greater Sydney Commission.

Parramatta Ways - Implementing Greater Sydney's Green Grid

Developed by the Parramatta City Council and funded under the Metropolitan Greenspace Program, Parramatta Ways is a plan to better connect communities to each other and to open space. It delivers and expands on the Greater Sydney Green Grid to increase the liveability, use and accessibility of open space. Parramatta Ways aims to complement existing initiatives in areas such as transport, streetscapes, urban greening, recreation, environment, place making, city activation, water sensitive urban design, heritage promotion and urban heat island effect mitigation.

The project is anticipated to assist stakeholders through the identification and prioritisation of important connections. Parramatta Ways demonstrates the delivery of State Government policy at local level.

Figure 28: Parramatta Ways





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 strategy and action.

Public open space is a form of green infrastructure that enhances the character of the Central City 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 need 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, and in Priority Precints and Priority Growth Areas, local open space is important to provide places for workers to relax and for people to meet and socialise. It also provides for tree and vegetation planting in the centre. Place-based planning can identify opportunities to improve the quality, management and use of existing open space, and to provide new open space.

Thirteen per cent of the Central City District is open space (refer to Figure 29). There are pockets of high quality open space such as the Western Sydney Parklands, Millennium Parklands, Duck Creek open space corridor and Rouse Hill Regional Park that cater for the active recreation and open space needs of the District's communities.

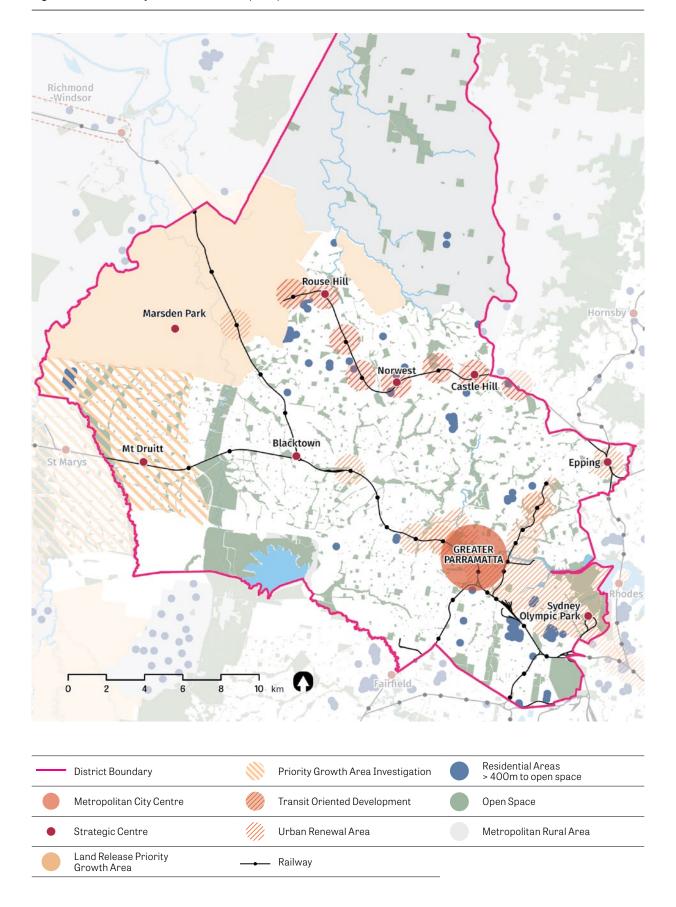
Access to open space for residents in some parts of strategic centres including Rouse Hill, Castle Hill and Norwest is greater than 400m. For residents of high density housing, improving access to local open space together with its quality will be essential.

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

Delivering connectivity of walking and cycling 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.

Figure 29: Central City District access to open space



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 District's waterways provide opportunities for enhanced passive and active open space. For example, Prospect Reservoir has the potential to become a valuable recreational location. It is a magnificent 520-hectare water body with an adjacent nature reserve around its northern perimeter and the Western Sydney Parklands nearby. There could be opportunities to enhance and activate the recreational areas along the waterfront. This could also integrate the reservoir into the wider Western Sydney Parklands tourism precinct.

By protecting and enhancing existing access to natural landscapes, parks and sportsgrounds, more active lifestyles are encouraged. Liveability outcomes will also be enhanced by greater sharing of sports and community facilities across the District.

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

Useful link:

• NSW Urban Green Cover Technical Guidelines

Actions Responsibility 70. Maximise the use of existing open space and protect, enhance and expand Councils, other planning authorities, State agencies and public open space by: State-owned corporations 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. 71. Explore new recreational opportunities at Prospect Reservoir in Western Sydney Parklands collaboration with Sydney Water, the Commission and other stakeholders.

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 Central City 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 includes bushland, areas of productive agriculture, and rural residential communities at Middle Dural, Kenthurst and Annangrove in The Hills Shire. The rural area of Dural spans the local government areas of Hornsby in the North District and The Hills Shire (refer to Figure 30). This land is increasingly under pressure for urban development.

The District has two agricultural clusters: a multiuse cluster horticulture (vegetable and tree fruits) at Maroota; and part of the multi-use cluster horticulture (vegetable and tree fruits) at Middle Dural, Galston and Arcadia (within the North District).

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.

Most of the rural area in the District is of high environmental value and is identified in The Hills Local Environmental Plan 2012 as having biodiversity value or being constrained land, or being subject to a Conservation Agreement.

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.

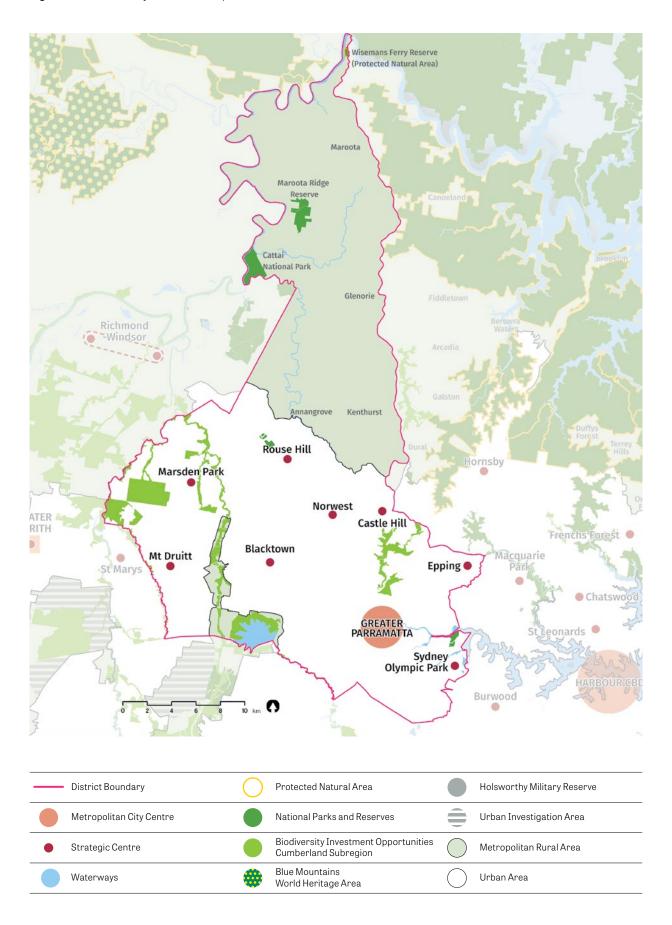
Therefore, urban development in the Metropolitan Rural Area will only be considered in the investigation areas identified in the draft *Greater Sydney Region Plan*. There are no investigation areas in the Central City District.

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
72. 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
73. Limit urban development to within the Urban Area.	Councils, other planning authorities, State agencies and State-owned corporations

Figure 30: Central City District Metropolitan Rural Area and Protected Natural Area.



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 Central City 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, 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 this area to improve 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 nonresidential 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 stormwater 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.

The planning and design of new developments should support the sustainable and effective collection and management of waste.

The Environment Protection Authority has prepared a range of guidelines and other information to assist in the sustainable waste management.

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.

Blacktown, Parramatta and Cumberland councils use alternative waste treatment, which entails the red general waste bins going through an additional process at the waste recovery facility to reprocess materials. This process helps to increase the recycling rate.

In higher density neighbourhoods, innovative precinct-based waste collection, re-use and recycling would improve efficiency, reduce truck movements and boost the recycling economy. This approach could be initially established in the District's larger centres, such as Greater Parramatta, Blacktown, Sydney Olympic Park and Norwest. Where possible, additional land should be identified for waste management, re-processing, re-use and recycling.

GPOP

By 2050, GPOP residents will consume more than 40 gigalitres of water each year. To address this, non-drinking water will be used for toilet flushing, irrigation of green spaces and other appropriate uses in homes.

GPOP presents the opportunity to change the way that water resources are managed. This will shift from reliance on coastal treatment and ocean discharge of treated wastewater and will plan a new facility on a site up to 17 hectares in GPOP's urban services area.

Collaboration and strategic partnerships can develop a hub where this valuable resource is managed and recycled locally. This facility would become an innovative and integrated resource recovery facility which, through high technology,

would produce recycled water; co-digest domestic biosolids and food waste to generate energy; and potentially be a net electricity exporter to the grid.

Exploring opportunities to leverage the Olympic legacy of the 'Green Games' and the *Sydney Olympic Park Authority Act* that encourages the use of renewable energy with the goal of developing and attracting clean and green industries.

Precinct-scale approaches have also been adopted in the Rouse Hill Town Centre, which is a low-water, low-energy and renewable energy-based precinct. These principles could be extended to other priority growth areas and urban renewal projects.

ł¢	Actions	Responsibility
74.	Support initiatives that contribute to the aspirational objective of achieving net- zero emissions by 2050, especially through the establishment of low-carbon precincts in Priority Growth Areas, Priority Precincts, Collaboration Areas, State Significant Precincts and Urban Transformation projects.	Councils, other planning authorities, State agencies and State-owned corporations
75.	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
76.	Protect existing, and identify new, locations for waste recycling and management.	Councils, other planning authorities and State agencies
77.	Support innovative solutions to reduce the volume of waste and reduce waste transport requirements.	Councils, other planning authorities and State agencies
78.	Encourage the preparation of low-carbon, high efficiency strategies to reduce emissions, optimise the use of water, reduce waste and optimise car parking provision where an increase in total floor area greater than 100,000 square metres is proposed in any contiguous area of 10 or more hectares.	Councils, other planning authorities, State agencies and State-owned corporations
79.	Investigate potential regulatory mechanisms such as a Protection of the Environment Policy (PEP) that sets low-carbon, high efficiency targets to be met through increased energy efficiency, water recycling and waste avoidance, reduction or 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.	Environment Protection Authority

Useful links:

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

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 and storms. Climate change will exacerbate these natural hazards. While planning for resilience has traditionally focused on responses to natural hazards and climate change, it is increasingly being used to consider a wider range of social and economic shocks and stresses.

Effective planning 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 developments in hazardous areas or increasing the density of development in areas with limited evacuation options increases risk to people and property.

The NSW Government has identified Hawkesbury-Nepean Valley as having the greatest single flood exposure in NSW, posing a significant danger to life and property in Western Sydney.

The size and topography of the Hawkesbury-Nepean Valley means it has the greatest flood exposure in NSW. Unlike most other river catchments in Australia, the Hawkesbury-Nepean Valley floodplain has significantly higher depths during flood events, created by several narrow gorges in the Valley that constrict the flow of floodwater downstream. There

is a complex interaction between the main flow of the river and the multiple rivers and creeks that contribute to the catchment, creating what is known as a bathtub effect. Evacuation of people in extreme events is made complicated by the size of the area affected and the need to evacuate certain areas before they become isolated by rising flood waters.

Some communities are built on 'flood islands' that can become isolated during floods, and key evacuation routes can face congestion or inundation during higher floods. This creates challenges for urban development and emergency management planning in the catchment.

Flooding constraints also exists in other areas across the District, many of which are undergoing significant growth and redevelopment. This includes the Parramatta CBD, which is prone to flash flooding. Strategic planning for growth in flood-prone areas must build flood resilience to ensure buildings and communities can withstand flood events and quickly return.

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 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*.

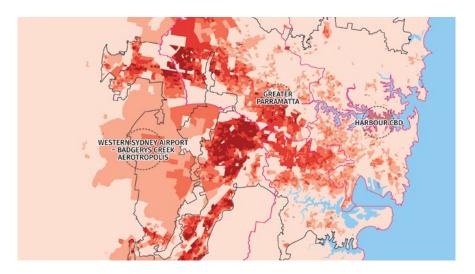
Adapting to climate change

The most significant natural hazards and acute shocks that affect the Central City District include bushfire, flooding and severe storms. 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 increase 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.

Figure 31 shows different levels of vulnerability to heatwaves. Areas are ranked by their combined level of socioeconomic disadvantage and exposure to heat during a heatwave and Figure 32 shows land surface temperatures during heatwave conditions. Figure 33 shows tree canopy cover as at 2011.

Figure 31: Vulnerability to heatwaves

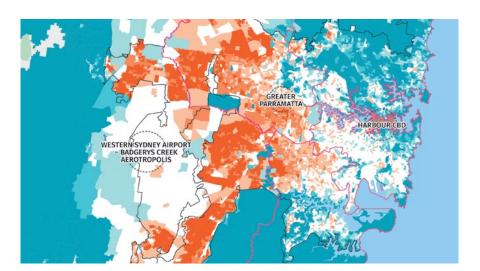


Less vulnerable

More vulnerable

Source: Australian Bureau of Statistics Socioeconomic Index For Areas (2011) & CSIRO Landsat 5 LST (Land surface temperature) for 02/02/2011 (2011). Analysis by Kinesis (2016)

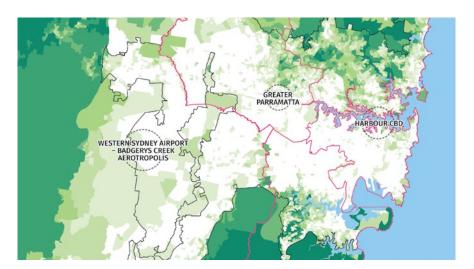
Figure 32: Land surface temperature during a heatwave



_	District Boundary
	Metropolitan Rural Area boundary
	< 37
	37-38
	38-39
\bigcirc	39 – 41
	41 – 42
	42 - 43
	> 43

Source: CSIRO Landsat 5 LST (Land surface temperature) for 02/02/2011 (2011). Averaged to SA1 (2016)

Figure 33: Tree canopy cover at 2011



\bigcirc	< 10%
	10%-20%
	20%-30%
	30% – 40%
	40% – 50%
	50%-60%
	> 60%

Source: SPOT5 Woody Extent and Foliage Projective Cover (FPH) 5-10m, 2011, NSW Office of Environment and Heritage. Averaged to SA1 (2016) 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. 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 Central City 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, 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
80. Support initiatives that respond to the impacts of climate change.	Councils, other planning authorities and State agencies
81. Mitigate the urban heat island effect and reduce vulnerability to extreme heat.	Councils, other planning authorities and State agencies
82. Respond to the direction for managing flood risk in the Hawkesbury- Nepean Valley as set out in Resilient Valley, Resilient Communities – Hawkesbury-Nepean Valley Flood Risk Management Strategy.	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 34)
- 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.

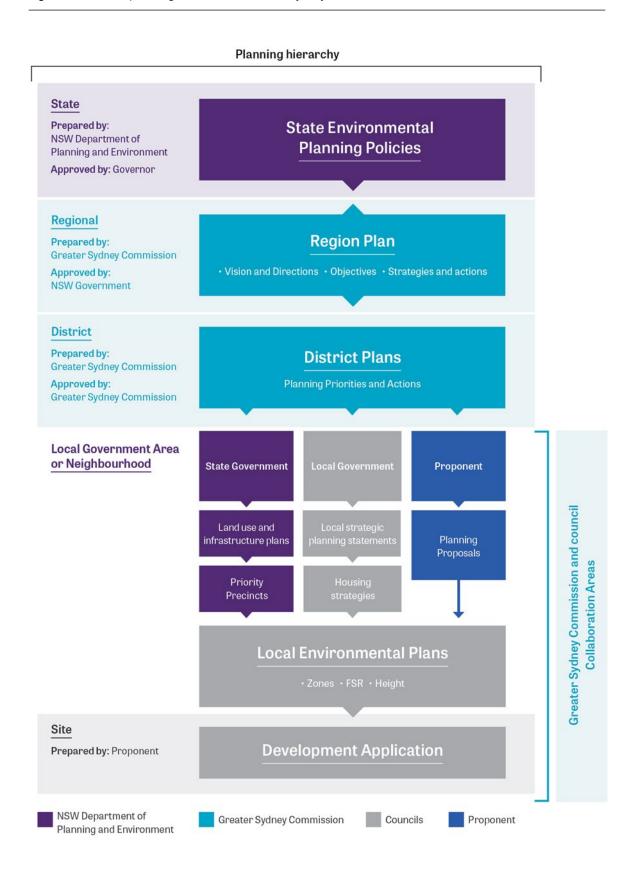
On finalisation of the district plans, councils are required to update their local environmental plan to give effect to the district plan. The NSW Government has outlined, in the recently released A Fair Go for First Home Buyers, that councils are to complete the update of their local environmental plan 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.

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 34: 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 Central City 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 Central City 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)
	A city supported by infrastructure	Number of land use plans supported by infrastructure plans (NSW Department of Planning and Environment, Greater Sydney Commission, Councils).
The state of the s	2. A collaborative city	Proportion of agreed outcomes achieved in Collaboration Areas.
	3. A city for people	Annual survey of community sentiment.
	4. Housing the city	 Number of councils on track to deliver housing targets. Number of councils with schemes that implement Affordable Rental Housing Targets.
4	5. A city of great places	 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	 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	 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	Proportional increase in Greater Sydney covered by urban tree canopy.
***	9. An efficient city	Number of precincts with low-carbon initiatives.
	10. A resilient city	Number of local government areas undertaking resilience planning.

7

Endnotes

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- Ahmadpour, N., Keirnan, A. (2016). Design for Ageing-inplace: Evidence from Australia. Proceedings of DRS 2016, Design Research Society 50th Anniversary Conference. Brighton, UK, 27–30 June 2016
- 3. Australian Bureau of Statistics, 2016 Census of Population and Housing
- 4. NSW Ministry of Health Centre of Epidemiology and Evidence, 2015, NSW Population Health Survey (SAPHa R1), NSW Government, Sydney
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- $6. \quad \text{Australian Bureau of Statistics, 2016 Census of Population and } \\ \text{Housing, ABS, Canberra}$
- City Futures Research Centre, 2013. Implementing metropolitan planning strategies: taking into account local housing demand, Technical Report, UNSW
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- Parramatta City Council, draft Economic Development Plan 2017–2021
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- Western Sydney Health District, Westmead Redevelopment Stage 1 Overview, August 2016
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- 14. Trips made to, from or within the Central City District based on a 5-year pool of data from the Household Travel Survey.
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- NSW Department of Planning and Environment, 2016, Employment Lands Monitor, NSW Government Sydney
- 17. Viva Energy Australia_https://www.vivaenergy.com.au/operations/clyde
- 18. Open Space Audit, December 2016
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Note: The source of population, dwellings and household data in this draft District 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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