Acknowledgement of Country

The Greater Sydney Commission acknowledges the traditional owners of the lands that include South 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.
I am delighted to present the South District Plan, which sets out planning priorities and actions for improving the quality of life for residents as the District grows and changes.

The Plan recognises that the District’s natural waterways and bushland are great assets and attractors, sustaining and supporting a diverse and multicultural community and bringing visitors from Greater Sydney and beyond. We know that as the South District accommodates a growing population, the Sydney Metro City & Southwest rail system will reinforce its connections to the Harbour CBD.

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

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

We will continue advocating for effective infrastructure to keep pace with population growth and demographic changes such as increases in the number of children and frail aged in the community. We will be supporting the coordination of government activity and delivery – transport, infrastructure, land use, housing, health, education, heritage and environment. We will continue working positively with the private sector and councils to make sure the South District is liveable and prosperous.

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

The South District offers something for everyone. It is home to beaches, bushland and parks; a range of vibrant multicultural communities and cultural events; and is close to the nation’s trade gateways of Port Botany and Sydney Airport. The District includes the Royal National Park – the world’s second oldest national park, and Australia’s oldest.

These environmental, social and economic assets contribute to a highly liveable and sustainable district. As the District grows, there is enormous potential in the development of economic assets. These include an innovation and research precinct based around the Australian Nuclear Science and Technology Organisation at Lucas Heights; the growth and diversification of businesses at Bankstown Airport; and the growth of knowledge-intensive jobs at Kogarah’s health and education precinct.

The South District Plan builds on the District’s assets to make it easier for residents to access more of the jobs, services and places that create a high quality of life. We will continue to prioritise the protection of our natural areas and our heritage, and will do so while boosting the number and types of jobs in the District. The Plan will lead to more people working in the District, in 21st century jobs that build skills and economic resilience.

This District Plan is part of a continuing conversation between all of us who live and work here, about how we can come together to create the District we aspire to. I’m eager for as many people as possible to get involved as we implement the Plan. It’s an important step in helping to shape the decisions that will drive the District’s future.
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Planning Priority S20. Monitoring and reporting on the delivery of the plan

7 Endnotes
The vision for Greater Sydney as a Metropolis of Three Cities – the Western Parkland City, the Central River City and the Eastern Harbour City and a 30 minute city – means residents in the South District will have quicker and easier access to a wider range of jobs, housing types and activities. The vision will improve the District’s lifestyle and environmental assets.

The South District is part of the Eastern Harbour City. Its vision will be achieved by:

• Supporting the growth of the ANSTO innovation precinct, health and education precincts, Bankstown Airport-Milperra industrial area and the District’s strategic centres

• Retaining industrial and urban services land and freight routes

• Optimising on the District’s locational advantage of being close to Sydney Airport, Port Botany, the Illawarra and Port Kembla

• Building on the District’s connections to Parramatta, and in the longer term to Liverpool and Western Sydney Airport

• Sustaining vibrant public places, walking and cycling, and cultural, artistic and tourism assets

• Matching growth and infrastructure, including social infrastructure

• Protecting and enhancing natural assets including waterways and beaches, bushland and scenic and cultural landscapes

• Providing innovation in providing recreational and open spaces, and increased urban tree canopy

• Transitioning to a low-carbon, high efficiency District through precinct-scale initiatives
Connecting Communities

Riverwood
- Communities Plus urban renewal major project
- Planned Precinct
- Greater Sydney Green Grid Priority – Corridor Salt Pan Creek

Sydney Metro City & Southwest
- Sydenham to Bankstown Urban Renewal Corridor

Greater Sydney Green Grid Priorities
- Bankstown to Sydenham Open Space Corridor
- Cooks River Open Space Corridor
- Wolli Creek Regional Park and Bardwell Valley Parkland

Urban Renewal
- Arncliffe
- Banksia

Collaboration Areas
- ANSTO
- Bankstown Education and Health Precinct
- Bankstown Airport and Milperra Industrial Area
- Kogarah Education and Health Precinct

Protected Natural Area
- Heathcote National Park
- Royal National Park
- Holsworthy military area
- Drinking water catchment areas

Metropolitan Rural Area
- Including villages at Bundeena, Maianbar and Waterfall

Sydney Metro City & South West
- Sydenham to Bankstown Urban Renewal Corridor
Collaboration Areas include the ANSTO innovation precinct, the Kogarah health and education precinct and the Bankstown health and education precinct and the Bankstown Airport and Milperra industrial area.

Infrastructure and collaboration

Increasing the number of jobs in the health, education and scientific and professional industries, as well as population-serving industries will underpin the District’s economy.

Industrial and urban services land will be retained, and support transition from traditional to advanced manufacturing and innovation industries to strengthen productivity and local jobs.

Liveability

The South District will continue to grow over the next 20 years with demand for an additional 83,500 dwellings. This will be provided through urban renewal, around new and existing infrastructure, and infill developments.

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

Productivity

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

Greater Sydney’s three cities reach across five districts: Western City District, Central City District, Eastern City District, North District and South District. The South District forms part of the Eastern Harbour City. The District connects to the Central River City through Bankstown and to the Western Parkland city through Liverpool.

The Australian Nuclear Science and Technology Organisation (ANSTO) at Lucas Heights, and the health and education facilities at Kogarah, Sutherland, Hurstville and Bankstown contain the largest concentrations of knowledge-intensive jobs in the District.

Road and rail investments such as the Sydney Metro City & Southwest and WestConnex will benefit workers and businesses.

Enhancing transport infrastructure to research, health and education precincts, the nationally significant trade gateways of Sydney Airport, Port Botany and Port Kembla, and freight networks across Greater Sydney and other regions, will increase productivity and access to jobs.

Sustainability

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

The Greater Sydney Green Grid will provide cool, green links which will support walking, cycling and community access to open space.
### Population growth (2016–36)

- **South District**
  - 204,100 |
  - 12% of Greater Sydney total (1,740,400)

### Population growth by age (2016–36)

- **0–4 years**
  - 2016: 53,300
  - 2036: 62,600 (17% increase)
- **5–19 years**
  - 2016: 136,900
  - 2036: 177,550 (30% increase)
- **65–84 years**
  - 2016: 94,850
  - 2036: 148,700 (57% increase)
- **85+ years**
  - 2016: 17,450
  - 2036: 32,250 (85% increase)

### Housing growth (2016–36)

- **South District**
  - 83,500 |
  - 12% of Greater Sydney total (725,000)

### Housing type (2016)

- 58% separate house
- 14% medium density
- 28% apartments

### Jobs (2016)

- **South District**
  - 241,500 |
  - 10% of Greater Sydney total (2,439,800)

### Journey to work (2016)

- 60% Car
- 22% Train
- 5% Bus
- 2% Walk
- 15% Other

### Jobs by sector (2016)

- 24% Health and education
- 19% Knowledge-intensive
- 15% Other
- 21% Industrial
- 36% Population serving

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Greater Sydney Commission | South District Plan
Structure Plan for the South District

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.
Ten Directions for a metropolis of three cities
A liveability, productivity and sustainability framework

Delivering and monitoring the Plan – planning priorities and indicators

<table>
<thead>
<tr>
<th>Directions</th>
<th>A city supported by infrastructure</th>
<th>A collaborative city</th>
<th>A city for people</th>
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<th>A city of great places</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infrastructure supporting new developments</td>
<td>Infrastructure supporting new developments</td>
<td>Working together to grow a Greater Sydney</td>
<td>Celebrating diversity and putting people at the heart of planning</td>
<td>Giving people housing choices</td>
<td>Designing places for people</td>
</tr>
<tr>
<td>Potential indicator: Increased 30-minute access to a metropolitan centre/cluster</td>
<td>Potential indicator: Increased use of public resources such as open space and community facilities</td>
<td>Potential indicator: Increased walkable access to local centres</td>
<td>Potential indicators: Increased housing completions (by type) Number of councils that implement Affordable Rental Housing Target Schemes</td>
<td>Potential indicator: Increased access to open space</td>
<td></td>
</tr>
<tr>
<td>Planning Priority S1 Planning for a city supported by infrastructure</td>
<td>Planning Priority S2 Working through collaboration</td>
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<td>Planning Priority S5 Providing housing supply, choice and affordability with access to jobs, services and public transport</td>
<td>Planning Priority S6 Creating and renewing great places and local centres, and respecting the District’s heritage</td>
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</tbody>
</table>

*Indicators will be developed in consultation with State and local Government to optimise regional, district and local monitoring programs.*
### A well connected city

**Developing a more accessible and walkable city**

**Potential indicator:** Percentage of dwellings located within 30 minutes by public transport of a metropolitan centre/cluster

Percentage of dwellings located within 30 minutes by public transport of a strategic centre

- **Planning Priority S12** Delivering integrated land use and transport planning and a 30-minute city

### Jobs and skills for the city

**Creating the conditions for a stronger economy**

**Potential indicator:** Increased jobs in metropolitan and strategic centres

- **Planning Priority S7** Growing and investing in the ANSTO research and innovation precinct
- **Planning Priority S8** Growing and investing in health and education precincts and Bankstown Airport trade gateway as economic catalysts for the District
- **Planning Priority S9** Growing investment, business opportunities and jobs in strategic centres
- **Planning Priority S10** Retaining and managing industrial and urban services land
- **Planning Priority S11** Supporting growth of targeted industry sectors

### A city in its landscape

**Valuing green spaces and landscape**

**Potential indicators:**
- Increased urban tree canopy
- Expanded Greater Sydney Green Grid

- **Planning Priority S13** Protecting and improving the health and enjoyment of the District’s waterways
- **Planning Priority S14** Protecting and enhancing bushland, biodiversity and scenic and cultural landscapes and better managing rural areas
- **Planning Priority S15** Increasing urban tree canopy cover and delivering Green Grid connections
- **Planning Priority S16** Delivering high quality open space

### An efficient city

**Using resources wisely**

**Potential indicators:**
- Reduced transport-related greenhouse gas emissions
- Reduced energy use per capita

- **Planning Priority S17** Reducing carbon emissions and managing energy, water and waste efficiently

### A resilient city

**Adapting to a changing world**

**Potential indicator:** Number of councils with standardised statewide natural hazard information

- **Planning Priority S18** Adapting to the impacts of urban and natural hazards and climate change

### Implementation

- **Planning Priority S19** Preparing local strategic planning statements informed by local strategic planning
- **Planning Priority S20** Monitoring and reporting on the delivery of the Plan
About the Plan

The South District covers the Canterbury-Bankstown, Georges River and Sutherland local government areas (refer to Figure 1).

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

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

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

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

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

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

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

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**Figure 1:** South District

![South District Map](image)
Requirements of the Plan

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

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

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

Giving effect to the Plan

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

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

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

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

The relationship between the plans and their implementation is further discussed in Chapter 6.
Directions for infrastructure and collaboration

A city supported by infrastructure

Planning Priority S1
Planning for a city supported by infrastructure

A collaborative city

Planning Priority S2
Working through collaboration
Greater Sydney is a successful and growing city, but to become more liveable, productive and sustainable, it needs additional infrastructure and services in the right places and at the right time.

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

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

This District Plan responds to major transport and health investments underway across the District, such as the expansion of St George Public Hospital, Sydney Metro City and Southwest and WestConnex which 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 adaptability in infrastructure planning is critical.

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

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

S1. Planning for a city supported by infrastructure

S2. Working through collaboration.
Planning Priority S1
Planning for a city supported by infrastructure

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

**Objective 1**
Infrastructure supports the three cities.

**Objective 2**
Infrastructure aligns with forecast growth – growth infrastructure compact.

**Objective 3**
Infrastructure adapts to meet future needs.

**Objective 4**
Infrastructure use is optimised.

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

For the South District, this includes Sydney Metro City & Southwest which will create opportunities for people in the South District to work closer to their homes. WestConnex will deliver significant benefits to local communities by easing congestion and help improve safety, local air quality and reduce traffic noise.

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

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

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

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

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

The growth infrastructure compact could also provide greater context for coordination with infrastructure delivered by local governments. In time, and as appropriate, this approach could be expanded to include local infrastructure requirements.
Planning for infrastructure considers infrastructure in terms of its function: city-shaping such as major transport investments that generate demand for and influence land uses; enabling infrastructure such as electricity and water, without which development cannot proceed; and supporting infrastructure such as local bus services that meets demand in growing communities.

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

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

<table>
<thead>
<tr>
<th>Actions</th>
<th>Responsibility</th>
</tr>
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<tbody>
<tr>
<td>1. Prioritise infrastructure investments to support the vision of A Metropolis of Three Cities.</td>
<td>Councils, other planning authorities, State agencies and State-owned corporations</td>
</tr>
<tr>
<td>2. Sequence growth across the three cities to promote north-south and east-west connections.</td>
<td>Councils, other planning authorities, State agencies and State-owned corporations</td>
</tr>
<tr>
<td>3. Align forecast growth with infrastructure.</td>
<td>Councils, other planning authorities, State agencies and State-owned corporations</td>
</tr>
<tr>
<td>4. Sequence infrastructure provision using a place-based approach.</td>
<td>Councils, other planning authorities, State agencies and State-owned corporations</td>
</tr>
<tr>
<td>5. Consider the adaptability of infrastructure and its potential shared use when preparing infrastructure strategies and plans.</td>
<td>Councils, other planning authorities, State agencies and State-owned corporations</td>
</tr>
<tr>
<td>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.</td>
<td>Councils, other planning authorities, State agencies and State-owned corporations</td>
</tr>
</tbody>
</table>
Planning Priority S2
Working through collaboration

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

**Objective 5**
Benefits of growth realised by collaboration of governments, community and business.

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

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

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

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

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

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

The responsibility for creating great places does not rest with any one organisation. As a non-statutory initiative, Collaboration Areas offer a new way of working to deliver improved planning outcomes that support growth and change. Collaboration Areas are a place-based process led by the Greater Sydney Commission to address complex issues that require cross-stakeholder solutions. This will be undertaken by identifying and aligning the activities and investments of government and stakeholders, based on evidence, to deliver significant regional and district liveability, productivity and sustainability outcomes.

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

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

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

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

- establish a shared vision for the area
- identify impediments and opportunities
- agree to priorities for the Collaboration Area
- identify projects and initiatives to deliver the vision.
These elements will be documented in a Place Strategy which will identify the roles of State agencies and local councils, governance arrangements, strategies and action required to deliver the desired outcomes for the area. It is also likely that these outcomes will be reflected in updates to the District Plan to provide enhanced clarity on the priorities for the area and: provide certainty to the community and the private sector, and inform the NSW Government’s investment and policies to creating great places (refer to Planning Priority S6).

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

- the ANSTO innovation precinct (2018–2019), includes collaboration between the Commission, ANSTO, Sutherland Shire Council and government agencies
- the Kogarah health and education precinct (2018–2019), where the Commission will partner with the NSW Department of Planning and Environment, Georges River Council, Bayside Council and State agencies
- the Bankstown health and education precinct and the Bankstown Airport and Milperra industrial area (2018–2019), where the Commission will plan with the NSW Department of Planning and Environment, Canterbury–Bankstown Council, NSW Department of Planning and Environment, Bankstown Airport Limited and State agencies. Bankstown CBD has also been identified as a potential Collaboration Area to plan for the strategic transformation of the centre.
Other collaborative processes in the District include:

- NSW Department of Planning and Environment-led housing initiatives in the **Sydenham to Bankstown Urban Renewal Corridor** including the precincts of Hurlstone Park, Canterbury, Campsie, Punchbowl, Lakemba, Wiley Park and Bankstown, in partnership with Canterbury-Bankstown Council

- Land and Housing Corporation housing initiatives for the renewal of the **Riverwood Estate State Significant Precinct**, in collaboration with the NSW Department of Planning and Environment

- NSW Department of Planning and Environment-led housing initiatives in the revitalisation of the **Planned Precincts of Riverwood**, in partnership with Canterbury-Bankstown Council and Georges River Council; and **Bardwell Park**, in collaboration with Canterbury-Bankstown Council and Bayside Council.

- Collaboration is key in delivering other land use improvements that support growth and change.

Planned Precincts will be consistent with the objectives and strategies of *A Metropolis of Three Cities* and the relevant District Plan. They will be delivered in collaboration with councils and informed by the asset plans of relevant agencies.

Planned Precincts will be supported by a Special Infrastructure Contribution or similar satisfactory arrangement to help fund the delivery of essential community infrastructure such as health facilities, schools, open space and roads.

Greater Sydney Green Grid and improvements to regional open space will be delivered by collaboration between the Greater Sydney Commission and councils through the administration of the Metropolitan Greenspace Program (refer to Planning Priority S15).

<table>
<thead>
<tr>
<th>Action</th>
<th>Responsibility</th>
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<tbody>
<tr>
<td>7. Identify, prioritise and deliver Collaboration Areas.</td>
<td>Greater Sydney Commission</td>
</tr>
</tbody>
</table>
Directions for liveability

A city for people

Planning Priority S1
Providing services and social infrastructure to meet people’s changing needs

Planning Priority S2
Fostering healthy, creative, culturally rich and socially connected communities

Housing the city

Planning Priority S3
Providing housing supply, choice and affordability, with access to jobs and services

A city of great places

Planning Priority S4
Creating and renewing great places and local centres, and respecting the District’s heritage
Liveability

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

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

The South District is a place of variety and contrast, from the leafy neighbourhoods of Yowie Bay and East Heathcote to the diverse urban areas of Hurstville, Canterbury and Bankstown in the north.

The District’s distinct neighbourhoods are close to bushland, beaches, the Royal National Park, and the Cooks, Georges and Port Hacking rivers. Many residents take advantage of the District’s outdoor, sporting and recreational opportunities. Street life is also an important part of the District at vibrant places such as Campsie, Cronulla, Engadine, Hurstville, Peakhurst, Riverwood, Earlwood, Canterbury and Bankstown.

As the District’s overall population of around 740,000 people grows, it is also ageing. By 2036, the number of residents over 65 is expected to grow by 61 per cent (or an additional 83,500 people). The number of single-person households is expected to rise by 46 per cent, although couples with children are expected to remain the dominant household type. The number of children aged 0–4 years is also projected to grow by 17 per cent or 9,300 children. This means, there will be comparatively fewer working age people (24–64 years) living in the District (refer to Planning Priority E6).

Together with overall population growth of around 204,000 (2016–2036), these demographic changes mean that an additional 83,500 homes will be required across the District by 2036. New homes in the Sydenham to Bankstown Urban Renewal Corridor will benefit from Sydney Metro City & Southwest. New homes will also be concentrated around centres with good transport connections.

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

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

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

**S3. Providing services and social infrastructure to meet people’s changing needs**

**S4. Fostering healthy, creative, culturally rich and socially connected communities**

**S5. Providing housing supply, choice and affordability, with access to jobs services and public transport**

**S6. Creating and renewing great places and local centres, and respecting the District’s heritage.**
Planning Priority S3
Providing services and social infrastructure to meet people’s changing needs

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

**Objective 6**
Services and infrastructure meet communities’ changing needs.

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

Population projections show distinct differences in projected growth in some age groups in the District’s local government areas (refer to Figures 3 and 4). In the South District the greatest increase in population is expected in Canterbury-Bankstown Local Government Area, where 70 per cent of new residents (142,450 additional people by 2036) will be accommodated due to anticipated urban renewal. The next largest increase is anticipated to be in Sutherland Local Government Area, where the population will increase by 13 percent.

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

Facilities can be the focus of neighbourhoods with the co-location of schools, youth and health services, aged care, libraries, community and cultural facilities, parks and recreation areas. These facilities need to be accessible with direct and safe walking and cycling connections that can be used by people of all ages and abilities. This encourages people to be more physically and socially active, improves health outcomes and enhances the overall liveability of a neighbourhood or centre.

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

Creating opportunities to increase shared use and more flexible use of underutilised facilities such as schools, sports facilities, halls and creative spaces can support growth and respond to the different needs of local demographic groups. Multipurpose and intergenerational facilities are the key to better use of, and access to, infrastructure and services in urban renewal and land release areas.

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

Integrated and targeted delivery of services and infrastructure is needed to support growth and respond to the different needs of population groups. Accessible local health services and regional health infrastructure such as hospitals are important for all people across the District. South East Sydney Local Health District focuses on healthy communities through community health services, obesity prevention and promotion of a healthy built environment (refer to Planning Priority S4).

Cemeteries and crematoria are key social infrastructure that also need to be accessible geographically and economically, and reflective of a diversity of cultures and backgrounds. A growing Greater Sydney requires additional land for burials and cremations with associated facilities such as reception space and car parking.
Children and young people
Over the 20 years to 2036, projections show an expected increase of 9,300 children aged four years and younger who will make up the District’s population, with almost 90 per cent of the anticipated growth in the Canterbury-Bankstown Local Government Area.

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 that an extra 31,600 students will need to be accommodated in both government and non-government schools in the District by 2036. A projected increase in school-aged children of 30 per cent necessitates planning for new and more innovative use of existing schools. The Canterbury-Bankstown Local Government Area will need to accommodate a substantial 72 per cent of this growth.

The NSW Department of Education’s high-level School Assets Strategic Plan Summary 2017 coordinates planning for, and delivery of, both new and expanded schools. It encourages the joint and shared use of school facilities with local government and the private sector to develop innovative ways to provide school infrastructure. School Infrastructure NSW, a new specialist unit within the Department, will undertake school community planning and deliver the education infrastructure program, working with other State agencies and community groups to develop schools as community hubs.

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

The design and management of open space, cultural spaces and the public realm need to consider the needs of children and young people (refer to Planning Priority S6).

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

Canterbury-Bankstown Local Government Area is projected to see the largest growth in people aged 20–24 years (36 per cent) between 2016 and 2036.

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

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

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

Older people

An 85 per cent proportional increase in people aged 85 and over and a 57 per cent increase in the 65–84 age group is expected by 2036. This means 19 per cent of the District’s population will be aged 65 or over in 2036, up from 15 per cent in 2016.

Canterbury-Bankstown Local Government Area will see the highest growth in older people, with 35,900 additional people aged 65 or over. In the Sutherland Shire Local Government Area, the number of people aged 65 or over will increase by 19,450 – meaning almost half its population growth will be in the 65–84 age group.

More diverse housing types and medium density housing and 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.

Coordinated additional health, social and aged care services and collaborative responses across government and industry are needed to meet the expected increase in demand for local aged care facilities and respite services, including home care options (with associated visitor parking). This approach will also need to address care for people with specific needs such as those with dementia and the frail aged.

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

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

Source: NSW Department of Planning and Environment, 2016

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 39,500 people with a disability. Walkable places and homes of universal design are essential to provide opportunities for the participation of all people.

Universal design of places, homes and public transport is increasingly required as the population grows and demographics change. Planning for 30-minute cities will ensure children, young people, people with a disability and older people can easily access services.

Neighbourhoods, streets and transport also need to be safe and designed in accordance with the principles of Crime Prevention Through Environmental Design.
This focus on accessibility, inclusion and safety when designing and building neighbourhoods, public transport and transport interchanges, places and homes, will encourage a greater cross-section of people to lead physically active and socially connected lives. This is especially important for the health of people ageing in community and also benefits people with a disability and families.

**Joint and shared use**

Infrastructure can be adapted and shared for different uses – school and open space facilities can be used for community, sports, arts, screen, cultural and recreational use when they are not otherwise required. Creating opportunities for increased shared use, and more flexible use, of under-utilised facilities can support growth and respond to the different needs of local demographic groups. In new developments, providing multipurpose and intergenerational facilities can support better access to and use of infrastructure.

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

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

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

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

Each neighbourhood has facilities such as libraries, community centres, adult education, sport and recreation facilities that enhance and promote social connections and networks within the community. Schools are an important example of these social connectors. Where shared use of these facilities is achieved, its function as a community hub is significantly enhanced (refer to Planning Priority 4).

Joint and shared use agreements increase opportunities for the community to access facilities and programs 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.

Department of Education promotes joint or shared use of school and community facilities and is currently piloting joint use planning with some councils and organisations.

### Related government initiatives:

- NSW Government *Mapping the NSW Budget 2017-18*
- NSW Government *State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017*
- Livable Housing Australia 2017 *Livable Housing Design Guidelines*
- NSW Department of Education 2017 *School Assets Strategic Plan summary*
- Office of the Advocate for Children and Young People *NSW Strategic Plan for Children and Young People, 2016–2019*

### Actions and Responsibility

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<td>8. Deliver social infrastructure that reflects the needs of the community now and in the future.</td>
<td>Councils, other planning authorities and State agencies</td>
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<td>9. Optimise the use of available public land for social infrastructure.</td>
<td>Councils, other planning authorities, State agencies and State-owned corporations</td>
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Planning Priority S4
Fostering healthy, creative, culturally rich and socially connected communities

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

**Objective 7**
Communities are healthy, resilient and socially connected.

**Objective 8**
Greater Sydney’s communities are culturally rich with diverse neighbourhoods.

**Objective 9**
Greater Sydney celebrates the arts and supports creative industries and innovation.

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

**Healthy and active lifestyles**
Research identifies three key aspects of the built environment that support healthy lifestyles and improved health outcomes: strong social connections, physical activity and access to fresh food. This means the design and management of streets, places and neighbourhoods are essential to improve mental and physical health outcomes. These aspects of a healthy built environment are important preventative responses to the incidence of chronic lifestyle diseases like obesity and type 2 diabetes, especially as around 52 per cent of the adult population in the South District is overweight or obese.

Walkable streets that provide direct, accessible and safe pedestrian and cycling connections from homes to schools, daily needs and recreation facilities can encourage greater physical activity and social connections. Delivering fine grain urban form and local mixed-use places can provide better access to local retailers of fresh food, together with opportunities for people to participate in arts, recreation and cultural activities.

Connectivity of, and access to, diverse open spaces and opportunities for recreational physical activity are also essential to better mental and physical health outcomes.

Sport and active lifestyles provide many social, cultural and health benefits. The Office of Sport is working with partners, including councils, to develop a Sport and Recreation Participation Strategy and a Sport and Recreation Facility Plan for each district during 2018 and 2019. The plans will include local and regional sport facilities, that provide a strong foundation for participation in sport and active recreation.

**Diverse neighbourhoods**
Greater Sydney, like many global cities, has a diversity of people from differing socio-economic circumstances and a range of social, cultural, ethnic and linguistic backgrounds. This cultural richness brings a wide array of skills, languages, cultures and experiences. It gives identity and distinctive character to Greater Sydney’s neighbourhoods and centres.

As the South District grows and changes, supporting social connections, and cultural and creative expression will build resilience through understanding, trust and neighbourliness.

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

The South District is home to people from many cultural and social backgrounds. Thirty-five per cent of residents in the District are from 202 countries including China, Lebanon, Vietnam, England and Greece. As a result, 47 per cent of the District’s population speak over 100 languages other than English in their homes.

In Canterbury-Bankstown Local Government Area, 64 per cent of people speak 91 languages other than English. Arabic, Vietnamese and Greek are the most commonly spoken languages other than English in the local government area.

In the Georges River Local Government Area, 56 per cent of residents speak 76 languages other than English, with Cantonese and Mandarin being the most commonly spoken languages. In Sutherland Shire Local Government Area, 13 per cent of residents speak 71 languages other than English.

The South District is home to refugees from many parts of the world. Sutherland Shire, Georges River and Canterbury-Bankstown councils have declared their areas Refugee Welcome Zones, and have made a commitment in spirit to welcoming refugees into communities and celebrating their diversity of cultures.

A diversity of housing types provided through urban renewal, (such as missing middle), and new communities in land release areas supports the many household types and community needs.

Place-based planning in the District’s culturally diverse neighbourhoods will enhance the use of engagement that recognises the different ways people participate (refer to Planning Priority S6). 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 enhances inclusion and identifies culturally appropriate responses to local needs, to deliver improved health and wellbeing outcomes.
Aboriginal people

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

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

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

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

Supporting creative enterprise and cultural expression

Cultural expression and creative expression promote understanding of peoples experience. Place-based planning will build on the District’s artistic, heritage, cultural, volunteering and creative strengths.

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

Cultural diversity is celebrated by the communities of the South District and includes cultural events and celebrations such as NAIDOC Week, National Reconciliation Week, Haldon Street Festival, Lunar New Year Festival in the Hurstville and Kogarah, Campsie Festival and Bankstown Bites Festival.

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

• arts and cultural facilities, including the Bankstown Arts Centre and Hazelhurst Regional Art Gallery and workshops
• Kogarah Library, Sutherland Entertainment Centre and local public libraries
• open space and recreational facilities such as Endeavour Field (Shark Park), Jubilee Oval, Belmore Sports Ground, The Crest Sporting Complex, Bass Hill and local sports ovals.

Creative and cultural expression are also a hallmark of innovation, and innovation underpins the productivity of a 21st century city. Creative industries- a core elements of an innovative economy – have a growing role in the District’s productivity, with creativity, entrepreneurship, technical ability and collaboration being essential skills for the future workforce.

Support for a 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 commercial or declining high streets.

In particular, providing better and more opportunities for creative industries to collaborate with health and education can also facilitate innovation.

The NSW Cultural Infrastructure Program Management Office is working with Infrastructure NSW to develop a cultural infrastructure strategy, which will include strategies and actions for Greater Sydney. A place-based approach involving artists, cultural organisations and local councils are critical to this plan.

Local cultural and arts networks such as those that centre on facilities like the Bankstown Arts Centre and the Hazelhurst Regional Gallery and workshops recognise that place-based approaches can develop local artistic and creative culture. However, more facilities to support arts and culture are required.

The District’s cultural vibrancy is reinforced by night-time activities, from popular eat streets, clubs and small bars to cinemas, arts and cultural activities. Stimulating and diversifying the night-time economy in appropriate locations can support local economies and culture. This can generally occur in mixed-use centres with adequate noise control, locally appropriate operating hours and safe late-night travel options.
South District social connectors

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

Figure 5: South District social infrastructure

Harbour CBD

Shared places include community gardens, co-working spaces and car sharing.

Figure 6: South District shared places

Harbour CBD

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

Figure 7: South District learning

Harbour CBD

Street life and meeting places include live music venues, farmers’ markets, high streets and eat streets.

Figure 8: South District street life

Harbour CBD

Source: Greater Sydney Commission, 2017 adapted from Greater Sydney’s Social Capital Study (2017), Cred Consulting.
Greater use of the public realm for temporary uses, and vacant or underutilised commercial and industrial spaces for arts, events and creative uses can activate places and encourage participation. Investigations of options to reduce the regulatory burden for arts, creative and temporary uses as well as the night-time economy will better match regulations with the activity. This may require measures such as simplifying development approval processes or increasing the application of exempt and complying development provisions to these uses.

The provision of arts and creative spaces in areas experiencing significant urban renewal will further support local identity and innovation. In the South District the capacity for new creative industries may be explored as part of the Sydenham to Bankstown Urban Renewal Corridor.

**Supporting social connections**

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

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

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

Stronger concentrations of social connectors are indicated by larger dots. The maps illustrate examples of centres where place-based planning can enhance existing community connections and strengthen or add new social connectors. Focusing on building social connectors in tandem with universal design will help to improve individual and community health, inclusion and participation outcomes.

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

These social connectors are a major element of the characteristics on which the local identity, specialities and distinctive functions of centres are built. For example, street life is particularly evident in centres like Engadine, Riverwood, Menai, Oatley, Kareela, Cronulla, Lakemba and Bankstown.

In the South 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
- social infrastructure
- access to education and learning
- walkable town centres or eat streets
- a diverse housing mix (in terms of density, tenure and affordability).

Place-based planning to enhance social connections should focus these activities at the heart of neighbourhoods and in local centres.

**Related government initiatives:**

- NSW Department of Planning and Environment 2017 Aboriginal Community Lands and Infrastructure Program
- NSW Government 2018 Cultural Infrastructure in NSW
- NSW Office of Sport A New Way of Delivering Sport and Active Recreation in NSW
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| 10. Deliver healthy, safe and inclusive places for people of all ages and abilities that support active, resilient and socially connected communities by:  
  a. providing walkable places at a human scale with active street life  
  b. prioritising opportunities for people to walk, cycle and use public transport  
  c. co-locating schools, health, aged care, sporting, and cultural facilities  
  d. promoting local access to healthy fresh food and supporting local fresh food production. | Councils, other planning authorities, State agencies and State-owned corporations |
| 11. Incorporate cultural and linguistic diversity in strategic planning and engagement. | Councils, other planning authorities, State agencies and State-owned corporations |
| 12. Consider the local infrastructure implications of areas that accommodates large migrant and refugee populations. | Councils, other planning authorities, State agencies and State-owned corporations |
| 13. 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 |
| 14. Facilitate opportunities for creative and artistic expression and participation, wherever feasible with a minimum regulatory burden, including:  
  a. arts enterprises and facilities and creative industries  
  b. interim and temporary uses  
  c. appropriate development of the night-time economy. | Councils, other planning authorities, State agencies and State-owned corporations |
| 15. Strengthen social connections within and between communities through better understanding of the nature of social networks and supporting infrastructure in local places. | Councils, other planning authorities, State agencies and State-owned corporations |
Liveability
Planning Priority S5
Providing housing supply, choice and affordability, with access to jobs, services and public transport

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

**Objective 10**
Greater housing supply.

**Objective 11**
Housing is more diverse and affordable.

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

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

The NSW Department of Planning and Environment’s projections of population and household growth in the South District translate to a need for an additional 83,500 homes between 2016 and 2036.

**Housing diversity and choice**

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

Planning for housing needs to consider the type of dwellings required to respond to expected changes in household and age structures (refer to Figure 9). The number of single person households in the District, for example, is expected to increase by 46 per cent over the 20 years to 2036.

The number of single parent and couple only households are also expected to increase by 34 per cent and 32 per cent respectively. This requires more smaller homes, group homes, adaptable homes of universal design and aged care facilities.

**Figure 9: South 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.](image-url)
At the same time, households comprised of couples with children will remain the highest proportion of households. This requires housing that can meet the needs of families as well as flexible housing types that can accommodate multiple generations and family groups living together.

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

Housing preferences

Research into housing preferences in Greater Sydney has shown that people generally prefer to remain within their local area, with 82 per cent of residents moving into a new home within 15 kilometres of their former residence. In the South District, there are five housing market areas (refer to Figure 10):

- **Sutherland** – mostly aligned with the Sutherland Local Government Area
- **St George** – the Bayside Council local government area as well as the Riverwood and Roselands parts of Canterbury-Bankstown Local Government Area
- **Bankstown-Holsworthy** – containing the Punchbowl, Wiley Park and Lakemba Station precincts of the Sydenham to Bankstown Urban Renewal Corridor
- **Inner West-Burwood** – largely coinciding with the Belmore, Campsie, Canterbury and Hurstville Park precincts of the Sydenham to Bankstown Urban Renewal Corridor
- **Inner West-Marrickville** – containing the Earlwood and Kingsgrove parts of the Canterbury-Bankstown Local Government Area.

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

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

![South District Housing Market Areas](image)
Historic housing supply

Dwelling completions are at their highest levels in 16 years for Greater Sydney. In 2016–17 completions for the South District totalled 3,297 dwellings. In the five years from 2012–2013 to 2016–2017, 12,103 dwellings were completed. Over half the completions were in the Canterbury-Bankstown Local Government Area. Although more than three-quarters of completions in 2016–2017 were multi-unit dwellings, existing housing stock remains dominated by detached dwellings.

Multi-unit dwellings completions were concentrated near centres along rail lines. Since 2010–11, 55 per cent of these have been in the Canterbury-Bankstown Local Government Area, concentrated around Bankstown, Campsie and Canterbury. Only 11 per cent have been in the Sutherland Local Government Area, mainly concentrated around Sutherland. Completions in Georges River Local Government Area were concentrated around Hurstville and Kogarah. Multi-unit dwellings provide transitional housing for seniors, homes for small households and more affordable homes for young people and young families.

The remaining housing completions are medium density developments – comprising three to five units or new single or dual occupancy dwellings. These were distributed across the District, particularly in the Canterbury-Bankstown area south of the M5, for example Padstow, Revesby and Panania.

Over the past 10 years, the South District has had an annual average dwelling completions rate of 1,860. Forecast supply of housing growth in the South 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:

- the Sydenham to Bankstown Urban Renewal Corridor (Planned Precincts have been announced for Belmore and Lakemba, and Campsie and Canterbury)
- Riverwood Planned Precinct and Communities Plus – Riverwood Estate State Significant Precinct
- Bardwell Park Planned Precinct.

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

Local government strategies that identify opportunities to increase capacity for housing in the South District include:

- Bankstown Residential Development Study (2009)
- Canterbury Residential Strategy (2013)
- Hurstville City Centre Masterplan (2004)
- Sutherland Housing Strategy (2014) and Sutherland Local Environmental Plan (2015).

Georges River Council has prepared a draft Hurstville City Centre Urban Design Strategy that reviews and updates the existing development standards partly with the aim to identify opportunities for additional housing capacity within the Hurstville City Centre.

Riverwood

Riverwood is home to a strong and growing community, offering easy access to public transport and the airport. The Department of Planning and Environment is working closely with Councils and State Agencies to plan for the Riverwood Precinct and help fast track the jobs, infrastructure and services needed to support current and future communities.

Riverwood also includes the major urban renewal project by the NSW Land and Housing Corporation which currently accommodates around 1,000 social housing dwellings on over 30 hectares of government-owned land.

This is adjacent to the Greater Sydney Green Grid Priority Corridor Salt Pan Creek – known for its parks, semi-urban wetlands, native habitat and mangrove forests that will provide unique amenities for the local community.
More housing in the right locations

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

Urban renewal

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

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

Locational criteria for urban renewal investigation opportunities include:

- alignment with investment in regional and district infrastructure which acknowledges the catalytic impacts of infrastructure such as Sydney Metro Northwest and Sydney Metro City & Southwest, NorthConnex, WestConnex, CBD and South East Light Rail, Parramatta Light Rail, Northern Beaches Hospital
- other possible future investments such as Western Harbour Tunnel and Beaches Link and Sydney Metro West and opportunities created by enhancements to existing infrastructure such as upgrades to schools, open space including sporting facilities and transport
- accessibility to jobs, noting that over half of Greater Sydney’s jobs are generated in metropolitan and strategic centres
- accessibility to regional transport, noting that high-frequency transport services can create efficient connections to local transport services and expand the catchment area of people who can access regional transport
- catchment areas within walking distance (10 minutes) of centres with rail, light rail or regional bus transport
- areas of high social housing concentration where there is good access to services, transport and jobs
- distance from special land uses such as ports and airports.

Local infill development

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

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

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

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

New communities in land release areas

The Growth Area programs of the NSW Department of Planning and Environment guide the development of new communities in land release areas and provide significant capacity into the medium and longer term. These include the North West, South West, Wilton and parts of the Greater Macarthur Growth Areas.

The Western Sydney Airport Growth Area will include new communities at the same time as the development of the Western Economic Corridor around the Western Sydney Airport. An investigation area north and east of the Western Sydney Airport has also been identified – Greater Penrith and Eastern Creek. This will support and manage land release development and urban renewal in association with investment in transport infrastructure connecting the Western Economic Corridor.
Figure 11: South District future housing supply

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

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

- make provision for the anticipated growth associated with the 0–5 and 6–10 year housing targets (when agreed)
- align projected growth with existing and proposed local infrastructure and open space improvements (refer to Planning Priorities S1, S3 and S18)
- identify right locations for growth, including areas that are unsuitable for significant change in the short to medium term
- identify capacity to contribute to the District’s 20 year strategic housing target
- inform the Affordable Rental Housing Target Schemes for development precincts
- coordinate the planning and delivery of local and State infrastructure.

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

Housing targets

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

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

<table>
<thead>
<tr>
<th>LGA</th>
<th>0–5 year housing supply target: 2016–2021</th>
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<tbody>
<tr>
<td>Canterbury-Bankstown</td>
<td>13,250</td>
</tr>
<tr>
<td>Georges River</td>
<td>4,800</td>
</tr>
<tr>
<td>Sutherland</td>
<td>5,200</td>
</tr>
<tr>
<td>South District Total</td>
<td><strong>23,250</strong></td>
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</table>

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

Meeting housing demand over 20 years requires a longer term outlook. *A Metropolis of Three Cities* sets a District 20-year strategic housing target of 83,500 dwellings, equating to an average annual supply of 4,175 dwellings over 20 years, or approximately one in four of all new homes in Greater Sydney over the next 20 years. Each council will 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.
Principles for housing strategies

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

- **Housing need**: the projected housing need and demographic characteristics of the existing and growing community, including different cultural, socio-economic and age groups and the availability of a range of housing types, tenures and price points.

- **Diversity**: including a mix of dwelling types, a mix of sizes, universal design, seniors and aged care housing, student accommodation, group homes, and boarding houses.

- **Market preferences**: market demand considerations that drive the take-up of housing, including local housing preferences.

- **Alignment of infrastructure**: opportunities to optimise transport infrastructure enabling access to jobs, health, education and recreation facilities, that align with State and local government infrastructure priorities (refer to ‘More housing in the right locations’).

- **Displacement**: managing potential impacts of growth on existing communities such as displacement by understanding the location and volume of affordable rental housing stock.

- **Amenity**: opportunities that improve amenity including recreation, the public realm, and increased walkable and cycle-friendly connections to centres.

- **Engagement**: engaging the community on a range of options and neighbourhood priorities that can be integrated with new housing and benefit existing and future communities.

- **Efficiency**: opportunities for innovations in waste management, water and energy provision by determining the nature of growth, location and demand for utilities.

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

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

- **Viability**: the assessment of new areas and whether the capacity created is financially viable for a range of configurations (one, two, three or more bedrooms) and is consistent with market demand and planning controls.

- **Good design**: buildings that exhibit design excellence in neighbourhoods that are walkable, cycle friendly, connected to transport and services, and have a mix of land uses to support active healthy and socially-connected communities.

- **Environment**: green infrastructure including urban bushland and waterways, local features (such as topography, heritage and cultural elements, visual impacts, natural hazards such as flooding, special land uses and other environmental constraints) lot sizes, strata ownership and the transition between different built forms.

- **Mix**: a mix of housing types that allows people to relocate within their local area and stay connected to community services, friends and family.

- **Supply**: land zoned for residential development, served by adequate infrastructure and ready for development projects.

- **Affordable rental housing**: through housing diversity for those on moderate incomes and affordable rental housing for low and very low-income households.

- **Local character**: recognising the distinctive and valued combination of characteristics that contribute to local identity.

- **Social housing**: more and better access to supported and/or subsidised housing.

- **Delivery**: the staging of enabling infrastructure, upgrades or expansions of local infrastructure such as schools, open space including sportsgrounds and community facilities.

- **Monitoring**: homes completed and ready for occupation.

A place-based planning approach to the development of housing strategies will help facilitate high quality urban outcomes including the creation of walkable neighbourhoods which support active and healthy lifestyles, as well as the creation and renewal of great places.
Affordable Rental Housing Targets

Housing has a dual social and economic role across Greater Sydney. Communities require housing that meets changing demographic needs over time and that provides stability. At the same time housing has an economic productivity role by providing housing choice and affordability for a cross section of workers. Research and testing of needs through stakeholder and community consultation reaffirms the critical importance of providing a diversity of housing across the housing continuum in Greater Sydney.

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

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

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

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

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

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

Related government initiatives:

- NSW Department of Community Services
  Future Directions for Social Housing in NSW
- NSW Government 2017 A fair go for first home buyers
- Landcom Living Cities

### Actions

<table>
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<tr>
<th>Actions</th>
<th>Responsibility</th>
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| 16. Prepare local or district housing strategies that address the following: | Canterbury-Bankstown Council  
Georges River Council  
Sutherland Shire Council |
| a. the delivery of five–year housing supply targets for each local government area |  |
| b. the delivery of 6-10 year (when agreed) housing supply targets for each local government area |  |
| c. capacity to contribute to the longer term 20-year strategic housing targets for the District |  |
| d. the housing strategy requirements outlined in Objective 10 of A Metropolis of Three Cities that include: |  |
| v. creating capacity for more housing in the right locations |  |
| vi. supporting planning and delivery of growth areas and planned precincts as relevant to each local government area |  |
| vii. supporting investigation of opportunities for alignment with investment in regional and district infrastructure |  |
| viii. supporting the role of centres. |  |
| 17. Prepare Affordable Rental Housing Target Schemes following development of implementation arrangements. | Councils and other planning authorities |
Planning Priority S6
Creating and renewing great places and local centres, and respecting the District’s heritage

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

**Objective 12**
Great places that bring people together.

**Objective 13**
Environmental heritage is identified, conserved and enhanced.

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

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

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

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

The District’s great places include local and strategic centres such as Menai, Riverwood, Bankstown and Hurstville; beachside and riverside neighbourhoods like Cronulla and Lugarno; and major shopping precincts and distinctive dining and night-time precincts such as Campsie and Lakemba.

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

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

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

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

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

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

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

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

Leading a healthy and active life means substituting walking and cycling for short car journeys. More people can be encouraged to walk and cycle where there is a safe road environment and suitable pathways (refer to Greater Sydney Services and Infrastructure Plan, Customer Outcome 3). This requires better:

- **Accessibility:** pathways need to be suitable for use by people of all ages and abilities.

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**Figure 12: Movement and place framework**

Source: Future Transport 2056 and Greater Sydney Commission

Place for people, like Bankstown Mall, perform intense place functions with highly significant local pedestrian movements.

Vibrant streets like The Kingsway in Cronulla, Beamish Street in Campsie or Haldon Street in Lakemba are important places for street life and transport.

Movement corridors like King Georges Road and Canterbury Road provide safe, reliable and efficient movement between centres, neighbourhoods and places.
• **Connectivity:** direct routes to local destinations and services are required along streets that allocate sufficient road space to safe walking and cycling. A permeable and well-connected urban form that has human scale and attractive streetscapes is required. In local streets with low traffic volumes, safe cycling can be encouraged through design of the street environment for low vehicle speeds.

• **Amenity:** safe, direct and comfortable pedestrian pathways for all people are essential. Where footpaths, pedestrian crossings and wayfinding are of universal design, have appropriate lighting, shading, pram ramps, rest points and natural surveillance to maintain comfortable and safe conditions for pedestrians with mobility constraints, all of the community benefits and people are able to be more active and healthy.

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

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

**Local centres**

Local centres include many of the District’s great places. From the cluster of local shops, vibrant main streets such as those in Kogarah, Sutherland, Hurstville and Campsie provide culturally diverse eating and shopping experiences, to retail centres such as Bankstown. These centres are highly accessible and provide interchanges for bus and rail networks linking to strategic centres. Centres such as Hurstville also serve as community hubs.

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

*Future Transport 2056* identifies the importance of transport interchanges as places which will have a high level of accessibility which is enhanced as service frequencies and travel times are improved. There will be potential for interchanges to deliver mixed-use, walkable, cycle-friendly centres and neighbourhoods. As service frequencies and travel times are improved, there is a need for councils to consider local conditions through place-based planning that provides for centres around interchanges to grow and evolve over time.
Local centres also have an important role in providing local employment. Approximately 200 local centres include a supermarket with floorspace greater than 1000 square meters. These centres account for close to 18 per cent of all of Greater Sydney’s jobs (refer to Figure 13). The mapped local centres in Figure 13 are not exhaustive as there are many local centres without a supermarket that provide essential local functions for goods and services, social or community infrastructure or transport interchanges. Rural towns and villages also provide essential goods and services and are an important focus for the local community.

**Principles for local centres**

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

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

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

As part of the exhibition of the revised draft District Plans, a number of councils recommended changes to the list of local centres. Identification of all centres should be undertaken by councils as part of the preparation of local strategic planning statement. This place-based strategic planning addressing the principles for centres following, must acknowledge the need for additional housing close to centres recognising the centre’s primary role to support a community’s access to goods and services, and the need for the centre to grow and evolve over time.

An understanding of the identity, character, size, land use mix, function, catchment and potential of each local centre and the local centres hierarchy will inform housing strategies. Additional residential development within a 5-minute walk of a centre focussed on local transport, or within a 10-minute walk of a centre with city-shaping or city-serving public transport, will help to create walkable local centres. However, housing should not compromise a centre’s primary role to provide goods and services, and the opportunity for the centre’s employment function to grow and change over time.

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

- provide public realm and open space focus
- deliver transit-oriented development and co-locate facilities and social infrastructure
- provide, increase or improve local infrastructure and open space
- improve walking, cycling and public transport connections, including through the Greater Sydney Green Grid
- protect or expand retail and/or commercial floor space
- protect and expand employment opportunities
- integrate and support arts and creative enterprise and expression
- support the night-time economy
- augment or provide community facilities and services, arts and cultural facilities
- conserve and interpret heritage values
- accommodate local festivals, celebrations, temporary and interim uses.
- increase residential development in, or within a walkable distance of, the centre
- provide parking that is adaptable to future uses and takes account of access to public
- transport, walking and cycling connections.

A vibrant and safe night-time economy will enhance opportunities for social and recreational needs of communities across Greater Sydney. Planning for a night-time economy in centres includes supporting a range of small businesses such as retail, arts and cultural enterprises and events.
Figure 13: South District – centres

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

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

The District’s communities share heritage items and historic places such as Towra Point Nature Reserve, a declared Aboriginal Place; heritage conservation areas in Penshurst; historic places like Heathcote Hall, Thurlow House and Captain Cook’s first landing place at Kurnell, and recreational parks including Carrs Park and Como Pleasure Ground.

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

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

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

Understanding the significance and community values of heritage early in the planning process provides the greatest opportunity for conservation and management. Protection and management of heritage is undertaken by a broad range of stakeholders including Aboriginal people, State and local governments, businesses and communities.

Place-based planning

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

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

People involved in the process vary depending on the circumstances, nature and scale of the task and may include the community, local businesses, residents, State and local governments and other stakeholders. A shared vision for a place that resolves different perspectives and interests can then be created.

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

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

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

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<th>Actions</th>
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<tbody>
<tr>
<td>18. Using a place-based and collaborative approach throughout planning, design, development and management, deliver great places by:</td>
<td>Councils, other planning authorities, State agencies and State-owned corporations</td>
</tr>
<tr>
<td>a. prioritising a people-friendly public realm and open space as a central organising design principle</td>
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<tr>
<td>b. recognising and balancing the dual function of streets as places for people and movement</td>
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<tr>
<td>c. providing fine grain urban form, diverse land use mix, high amenity and walkability in and within a 10-minute walk of centres</td>
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<tr>
<td>d. integrating social infrastructure to support social connections and provide a community hub</td>
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<tr>
<td>e. recognising and celebrating the character of a place and its people.</td>
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<tr>
<td>19. In Collaboration Areas, Planned Precincts and planning for centres:</td>
<td>Councils, other planning authorities and State agencies</td>
</tr>
<tr>
<td>a. investigate opportunities for precinct-based provision of adaptable car parking and infrastructure in lieu of private provision of car parking</td>
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<tr>
<td>b. ensure parking availability takes into account the level of access by public transport</td>
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<td>c. consider the capacity for places to change and evolve, and accommodate diverse activities over time</td>
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<tr>
<td>d. incorporate facilities to encourage the use of car-sharing, electric and hybrid vehicles including car charging stations.</td>
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<tr>
<td>20. Identify, conserve and enhance environmental heritage by:</td>
<td>Councils, other planning authorities, State agencies and State-owned corporations</td>
</tr>
<tr>
<td>a. engaging with the community early in the planning process to understand heritage values and how they contribute to the significance of the place</td>
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<tr>
<td>b. applying adaptive re-use and interpreting of heritage to foster distinctive local places</td>
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<tr>
<td>c. managing and monitoring the cumulative impact of development on the heritage values and character of places.</td>
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<tr>
<td>21. Use place-based planning to support the role of centres as a focus for connected neighbourhoods.</td>
<td>Councils, other planning authorities and State agencies</td>
</tr>
<tr>
<td>22. Use flexible and innovative approaches to revitalise high streets in decline.</td>
<td>Councils, other planning authorities, and State agencies</td>
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Directions for productivity

Jobs and skills for the city

Planning Priority S7
Growing and investing in the ANSTO research and innovation precinct

Planning Priority S8
Growing and investing in health and education precincts and Bankstown Airport trade gateway as economic catalysts for the District

Planning Priority S9
Growing investment, business opportunities and jobs in strategic centres

Planning Priority S10
Retaining and managing industrial and urban services land

Planning Priority S11
Supporting growth of targeted industry sectors

A well-connected city

Planning Priority S12
Delivering integrated land use and transport planning and a 30-minute city
Productivity

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

The urban structure to support A Metropolis of Three Cities needs to ensure people have access to a large number and range of jobs and services delivering a well connected city – a 30-minute city.

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

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

The South District forms part of the Eastern Harbour City.

The Australian Nuclear Science and Technology Organisation (ANSTO) at Lucas Heights, the Kogarah health and education precinct and the health and education facilities at Sutherland, Hurstville and Bankstown are home to the District’s largest concentrations of knowledge-intensive jobs.

While recent jobs growth has been predominately in the health and education industry sector, population-serving industries like retail and construction are also key drivers of the South District’s economy, providing 36 per cent of jobs. Population-serving jobs are concentrated at Bankstown, Campsie, Hurstville, Miranda and Sutherland (refer to Figure 14 and Figure 15).

Increasing the number of jobs in health and education and population-serving industries is particularly important as the District’s historically strong industrial base is in decline. As industry transitions from manufacturing to professional, high-tech, scientific and creative industries, and ancillary distribution and warehousing, locations for local urban services must also be protected.

The District includes large tracts of industrial and urban services land in the Canterbury-Bankstown Local Government Area and at Kurnell. In addition, many smaller tracts of industrial and urban services provide cost-effective locations for industry and jobs.

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

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Source: Australian Bureau of Statistics, Census 2016
The trade gateway of Bankstown Airport has potential to further benefit the economies of the District and NSW.

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

Job targets for strategic centres will guide councils and State agencies to the potential scale of growth and inform land use and infrastructure planning. Twenty-one per cent of all jobs in the District are within the strategic centres of Bankstown, Campsie, Hurstville, Kogarah, Miranda and Sutherland (refer to Figure 15). Growth in strategic centres with efficient transport connections, and safe and convenient walking and cycling routes creates a 30-minute city.

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

S7. Growing and investing in the ANSTO research and innovation precinct.

S8. Growing and investing in health and education precincts and Bankstown Airport trade gateway as economic catalysts for the District.

S9. Growing investment, business opportunities and jobs in strategic centres.

S10. Retaining and managing industrial and urban services land.

S11. Supporting growth of industry sectors.

S12. Delivering integrated land use and transport planning and a 30-minute city.
Planning Priority S7
Growing and investing in the ANSTO research and innovation precinct

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

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

Innovation precincts are important contributors to economic productivity due to the agglomeration effects of co-locating scientific, research, health, education, technical and start-up businesses to achieve critical mass and international competitiveness.

The Australian Nuclear Science and Technology Organisation (ANSTO) is at the forefront of Australia’s nuclear science research and has the potential to secure Greater Sydney as a global leader in nuclear science research. The 100-hectare site at Lucas Heights includes the Open Pool Australian Lightwater (OPAL) reactor, one of the most advanced nuclear research reactors in the world. ANSTO’s 1,000-strong staff deliver world-class research and nuclear innovation, particularly in nuclear medicine.

ANSTO has plans for a research and innovation precinct containing a graduate institute, innovation incubator and technology park. The precinct would attract and co-locate scientific partners, small to medium size enterprises, high-tech industry and research graduates to create an innovation community.

A new nuclear processing plant is under construction, enabling ANSTO to supply up to 25 per cent of the global demand for molybdenum-99, the most commonly used nuclear medicine. ANSTO, through providing silicon irradiation services for manufacturers of silicon wafers, supplies almost 50 per cent of the global market for wafers. Silicon wafers are used in high-end electronic switching devices for applications such as power infrastructure, high-speed trains, electric cars and wind turbines.

ANSTO undertakes important research in three main streams: nuclear fuel cycle, the environment and human health. It has established partnerships with universities within Australia and internationally, as well as with numerous international research organisations.

ANSTO’s research and innovation precinct will include the world’s first nuclear science and technology incubator, and be a centre for knowledge exchange, commercialisation of research, innovation and business support for small to medium enterprises. ANSTO’s graduate institute program for postgraduate training and development for students links education, research and industry and focuses on technology development and innovation. Several universities in ANSTO’s existing collaborative network of 40 Australian and New Zealand universities have expressed interest in the ANSTO graduate institute.

Providing facilities and supporting amenities in a technology park will encourage business and technology development to co-locate on one campus, creating links between industry and research.

Improving access to ANSTO is a challenge due to the buffer around the nuclear facility which keeps it relatively isolated. An innovation precinct at Lucas Heights requires enhanced transport and infrastructure, including:

- improved key transport connections to link planned economic activity at ANSTO with trade gateways and health and education facilities across Greater Sydney, and to improve access for workers
- investigation into the need for investment in essential infrastructure including water, sewer, stormwater, electricity, gas and telecommunications.
ANSTO research partnerships

ANSTO has established partnerships with universities and research organisations within Australia and internationally. The agreements include information exchange, staff exchange, cooperative projects, access to large-scale facilities and overseas research programs. Joint activities strengthen research to advance science, technology and innovation.

Research partners

Australian Institute for Bioengineering & Nanotechnology
Australian Microscopy and Microanalysis Research Facility
Collaborating Research Centre for Polymers
Commonwealth Scientific and Industrial Research Organisation
Defence Science and Technology Organisation
National Imaging Facility
National Measurement Institute

University partners

Curtin University of Technology
University of Sydney
Flinders University
Macquarie University
Monash University
Royal Melbourne Institute of Technology
University of Auckland
University of Melbourne
University of New South Wales
University of Queensland
University of Tasmania
University of Technology, Sydney
Western Sydney University
University of Wollongong

International partners

Argonne National Laboratory (US)
Budapest Neutron Centre
Chinese Academy of Sciences
China Institute of Atomic Energy
Commissariat a l’Energie Atomique (France)
European Organisation of Nuclear Research – CERN
French Embassy
Helmholtz-Zentrum Berlin
Indonesian National Nuclear Energy Agency BATAN
Institut de la Radioprotection et Sûreté Nucléaire
Institute of Environmental Science and Research (New Zealand)
Institute for Energy and Transport (JRC-IET)
Institut Laue Langevin, Grenoble, France
Institute of Solid State Physics, University of Tokyo
International Atomic Energy Agency
J-PARC Japan Proton Accelerator Research Complex
Japan Atomic Energy Agency
Karlsruhe Institute of Technology, Germany
KEK High Energy Research organisation, Japan
Korea Atomic Energy Research Institute
Korean Nuclear International Cooperation Foundation
Lawrence Livermore National Laboratory
Los Alamos National Laboratory (US)
National Central University of Taiwan
National Institute for Materials Science in Japan
National Institute of Standards and Technology (US)
National Nuclear Laboratory (UK)
National Research Council of Canada
National Science Council, Taiwan
NMI3 – Integrated Infrastructure Initiative for Neutron Scattering and Muon Spectroscopy
Nuclear Energy Corporation of South Africa
Oak Ridge National Lab (US)
Office of the Chief Science & Technology Officer of Singapore
Paul Scherrer Institute (Switzerland)
Riken Spring-8 Centre (Japan)
Shanghai Institute of Applied Physics (China)
Universiti Teknologi Mara, Malaysia

The ANSTO innovation and research precinct requires a partnership between multiple tiers of government to realise its full potential as an economic catalyst in the District. For this reason, it is identified as a Collaboration Area (refer to Figure 16).

The Commission will facilitate collaboration between ANSTO; Sutherland Shire Council; NSW Department of Health; Transport for NSW; the NSW Department of Industry, Skills and Regional Development; the Australian Government; other institutions and agencies; and the community. This will develop and agree a shared vision, commitments and appropriate phasing and delivery of infrastructure to:

- enhance ANSTO’s economic and employment role
- retain the site for employment and complementary uses
- improve transport connections between the ANSTO facility, trade gateways and health and education facilities across Greater Sydney
- provide essential infrastructure to support the innovation precinct.

### Actions

<table>
<thead>
<tr>
<th>Actions</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>23. Facilitate an innovation precinct that:</td>
<td>ANSTO, councils, other planning authorities and State agencies</td>
</tr>
<tr>
<td>a. attracts associated businesses, industries and commercialisation</td>
<td></td>
</tr>
<tr>
<td>of research</td>
<td></td>
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<tr>
<td>b. delivers high levels of accessibility, walkability and amenity</td>
<td></td>
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<tr>
<td>c. includes housing opportunities for students and workers within 30</td>
<td></td>
</tr>
<tr>
<td>minutes of the precinct.</td>
<td></td>
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<tr>
<td>24. Deliver and implement an Infrastructure Plan for the ANSTO</td>
<td>ANSTO, Greater Sydney Commission, Sutherland Shire</td>
</tr>
<tr>
<td>innovation precinct.</td>
<td>Council and State agencies</td>
</tr>
</tbody>
</table>
Planning Priority S8
Growing and investing in health and education precincts and Bankstown Airport trade gateway as economic catalysts for the District

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

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

**Objective 24**
Economic sectors are targeted for success.

Health and education are significant contributors to Greater Sydney’s economy and were the highest growing job sectors over the 20 years from 1996 to 2016. In the South District, over the same time, health and education recorded a 73 per cent growth in jobs.

As outlined in the A Metropolis of Three Cities, the evolution of health and education precincts follow a Maturity Pathway (refer to Figure 17). 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.

The Kogarah health and education precinct and Bankstown-Lidcombe health and education precinct are at the Cluster stage and will therefore need a tailored response to progress along the Maturity Pathway based on what is already in place and what is required in the short, medium and long term. To be truly internationally competitive and achieve sufficient critical mass, it is not expected that all precincts should, or will, develop into an Innovation District.

Kogarah is a centre of medical expertise, with over 50 per cent of the centre’s jobs in the health care and social assistance sectors. Bankstown-Lidcombe is an emerging hub of medical expertise. Growth of the health and education sectors will boost the District’s skills base and economic contribution, and increase opportunities for access to high-wage local employment for residents.

**Figure 17: Maturity pathway for health and education precincts**
The Bankstown Airport trade gateway is supported by road and rail infrastructure. The nearby Milperra industrial area is the largest employment precinct in the South District, and includes businesses in strategic economic sectors such as advanced manufacturing. This base can be leveraged to grow internationally competitive sectors to increase productivity and local jobs in the District.

Kogarah health and education precinct

Kogarah health and education precinct crosses the boundary of the South and the Eastern City Districts. Health services at Kogarah are accessed by communities in the Bayside and Georges River local government areas as part of the South Eastern Sydney Local Health District.

St George Public Hospital, a major tertiary and teaching hospital, is the District’s leading hospital. It specialises in medical trauma services and contains the Medical Retrieval Service Coordination Centre for NSW. The NSW Government has committed $277 million between 2014–2019 to support the hospital’s expansion. Together with the nearby St George Private Hospital, this provides approximately 680 hospital beds in the precinct.

The St George & Sutherland Clinical School, which is part of UNSW Medicine at the University of NSW, provides clinical studies for students at St George Hospital. St George College TAFE, with an enrolment of 4,000 students, is nearby. Numerous allied health services including the research capacity at South Eastern Area Laboratory Services are also nearby.

Collaborative planning will encourage land uses that can grow health and ancillary services and provide opportunities for new allied health and education services. Providing housing and choice for moderate-income households, students and health visitors are important to support the growth of the precinct, as is improving accessibility to the precinct and connections from the public transport network.

The Commission has identified the Kogarah health and education precinct as a Collaboration Area. The Commission will facilitate collaboration between Georges River Council; Bayside Council; NSW Department of Health; TAFE NSW; St George Public and Private Hospitals; NSW Department of Education; Transport for NSW; NSW Department of Industry, Skills and Regional Development; other institutions and agencies; and the community. The Commission will facilitate the collaboration of key stakeholders to develop a shared vision, objectives, identify impediments and opportunities to:

- prioritise land uses to grow existing and new allied health and education services
- increase knowledge-based and population serving employment
- prioritise opportunities for affordable housing for students, moderate income households and health visitors
- investigate opportunities to improve connections within the precinct and east-west transport connections within the District.
Bankstown-Lidcombe an emerging health and education precinct

Western Sydney University will establish a world-class teaching and research campus in the Bankstown strategic centre. The University and Canterbury-Bankstown Council have identified a suitable site located between Council’s administration building and Bankstown Library and Knowledge Centre. The campus will potentially accommodate up to 7,000 students.

Bankstown-Lidcombe Hospital is located close to Bankstown strategic centre. A range of allied health care providers and services are already located at the centre, as is TAFE Bankstown College.

A health and education precinct will emerge from the co-location of health and education facilities in the centre, as well as improved transport connections from Sydney Metro City & Southwest.

Residents of the District will benefit from improved health care services, particularly in the western part of the District.

Collaborative planning will assist in identifying locations for the key facilities and create opportunities for allied health and education services to locate in the precinct. Providing housing and choice for moderate-income households, students and health visitors are important to support the growth of the precinct, as is improving accessibility and connections from the public transport network.

Bankstown Airport and Milperra industrial area

Bankstown Airport is a trade gateway, used largely for general aviation, parcel freight and recreational flying. It fulfils an important role for fixed-wing and helicopter flight training and as a base for emergency services.

The Airport’s future must be strategically planned in the context of the Western Sydney Airport and Badgerys Creek Aerotropolis, the need to manage airspace and the future distribution of regional and freight aviation services. The Bankstown Airport Masterplan 2014 anticipates aircraft movements at Bankstown Airport to increase to approximately 282,000 movements per year to 2036. The Airport is anticipated to have capacity for a further 450,000 movements per year over this time period.

The airport site occupies 313 hectares and adjoins the Milperra industrial area, one of the most important centres of economic activity in the South District. Approximately 15,700 people work in the Milperra industrial area, with a third of jobs in manufacturing, including advanced manufacturing operations. Sectors of specialisation include aviation/aerospace and electronics. Advanced manufacturing is identified in Jobs for the Future as a priority globally tradeable segment which offers strong prospects for high-value and accelerated jobs growth and to develop globally competitive capability in skills and technology.

The Bankstown Airport Masterplan 2014 sets aside 130 hectares of land adjacent to Milperra for future development for non-aviation uses, with the aim of developing an industrial economic and employment hub. Together with the established Milperra industrial area, this area is well located with access to air transport, the road and rail freight network; the proposed Moorebank intermodal terminal; Liverpool; Bankstown; and the Liverpool health and education precinct. Public transport for workers could improve with the potential expansion of the Sydney Metro City & Southwest from Bankstown to Liverpool.

Given the strategic opportunities associated with Bankstown Airport and Milperra industrial area, it has been identified as a Collaboration Area (refer to Figure 18). The Commission will work with Canterbury-Bankstown Council, the NSW Government, the Australian Government, Bankstown Airport Limited, industry and the community to develop a long-term economic strategy. This will:

- improve transport connections to the broader District
- integrate planning for the airport with planning of surrounding lands
- coordinate infrastructure delivery
- facilitate advanced manufacturing and innovation
- expand opportunities stemming from Western Sydney University Bankstown Campus and the University of NSW Aviation School.
25. 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. provide high levels of accessibility
   c. attract associated businesses, industries and commercialisation of research
   d. facilitate housing opportunities for students and workers within 30 minutes of the precinct.

26. Deliver and implement a Place Strategy and Infrastructure Plan for the Kogarah health and education precinct.

27. Deliver and implement a Place Strategy and Infrastructure Plan for the Bankstown Airport and Milperra Industrial Area Collaboration Area.
Planning Priority S9
Growing investment, business opportunities and jobs in strategic centres

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

Objective 22
Investment and business activity in centres.

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

The growth, innovation and evolution of centres is central to the economy of the South District. Centres continue to be a key organising element of the urban structure of Greater Sydney and provide access to jobs, goods and services.

Their vitality and viability are important to local economies and their character defines local areas. Well-planned centres help to stimulate economic activity and innovation through the co-location of activities, provide jobs closer to where people live and use infrastructure more efficiently.

This Plan builds on the existing strengths of each centre within a common framework to deliver on the wider productivity and liveability objectives to grow jobs across Greater Sydney and improve the community access to goods and services.

To manage the growth and change of the South District’s centres, a centres hierarchy has been established as:

- Strategic centres: Bankstown, Campsie, Kogarah, Hurstville, Miranda and Sutherland.
- Local centres (refer to Planning Priority S6).

All strategic centres will be the focus of public transport investments that seek to deliver the 30-minute city objective (refer to Planning Priority S12).

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

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

Creating the conditions for growth and making centres great places is a focus of Planning Priority S6.

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

A balance must be struck in providing adequate mixed-use or residential zoned land around the commercial core zone to ensure new residential developments can benefit from access and services in centres. Centres are not just for economic exchange. They are places where communities gather, and recreational, cultural and educational pursuits are found. They are important to how people participate in community life.

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

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

Opportunities for smart work hubs in strategic centres should be encouraged.
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 shift workers, families, children and communities.

Planning for a night-time economy in centres should support a diverse range of small businesses such as retail and cultural events and assets accompanied by a suitable regulatory environment.

Research has shown that the South District will need to accommodate more than 680,000 square metres of additional retail floor space over the next 20 years. In addition, there will be significant demand for additional office floor space. Creating the opportunities to attract retail and office development locally brings jobs closer to where people live. This requires growth in either existing or new centres. The principles for developing new centres are outlined in this Planning Priority on page 66. The Department of Planning and Environment will prepare a state wide retail planning policy.

With economic growth a core goal for centre planning, job targets, expressed as a range, have been identified 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.

<table>
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<th>Actions</th>
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<tbody>
<tr>
<td>28. Provide access to jobs, goods and services in centres by:</td>
<td>Councils, other planning authorities and State agencies</td>
</tr>
<tr>
<td>a. attracting significant investment and business activity in strategic centres to provide jobs growth</td>
<td></td>
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<tr>
<td>b. diversifying the range of activities in all centres</td>
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<tr>
<td>c. creating vibrant, safe places and a quality public realm</td>
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<tr>
<td>d. focusing on a human-scale public realm and locally accessible open space</td>
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<tr>
<td>e. balancing the efficient movement of people and goods with supporting the liveability of places on the road network</td>
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<tr>
<td>f. improving the walkability within and to centres</td>
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<tr>
<td>g. completing and improving a safe and connected cycling network to and within the centres</td>
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<tr>
<td>h. improving public transport services to all strategic centres</td>
<td></td>
</tr>
<tr>
<td>i. conserving and interpreting heritage significance</td>
<td></td>
</tr>
<tr>
<td>j. designing parking that can be adapted for future uses</td>
<td></td>
</tr>
<tr>
<td>k. providing for a diverse and vibrant night-time economy in a way that responds to potential negative impacts</td>
<td></td>
</tr>
<tr>
<td>l. creating the conditions for residential development within strategic centres and within walking distance up to (10 minutes), but not at the expense of the attraction and growth of jobs, retailing and services; where appropriate, strategic centres should define commercial cores informed by an assessment of their need.</td>
<td></td>
</tr>
<tr>
<td>29. Create new centres in accordance with the principles for Greater Sydney’s centres.</td>
<td>Councils and other planning authorities</td>
</tr>
<tr>
<td>30. Prioritise strategic land use and infrastructure plans for growing centres, particularly those with capacity for additional retail floor space.</td>
<td>Councils and other planning authorities</td>
</tr>
<tr>
<td>31. Use flexible and innovative approaches to revitalise high streets in decline.</td>
<td>Councils and other planning authorities</td>
</tr>
<tr>
<td>32. Review the current planning controls and create capacity to achieve the job targets for each of the District’s strategic centres.</td>
<td>Councils and other planning authorities</td>
</tr>
</tbody>
</table>
Principles for Greater Sydney's centres

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

- **Existing centres:** Expansion options will need to consider building heights and outward growth. In some cases, directly adjacent industrial land may be appropriate for centre expansions to accommodate businesses. Quality design and adequate infrastructure provision is critical to enable expansions. This approach needs to be informed by local government industrial strategies.

- **New centres:** These will be required across the whole of Greater Sydney.
  - In established areas, innovative approaches to creating new centres are likely to be part of urban renewal and mixed-use developments.
  - All new centres are to have good public transport commensurate with the scale of the centre.

- **Business parks:** Not all centres will start as retail centres. Creating jobs and providing services to local communities can be initiated within business parks. However, the built form of these business parks is critical – that is they need to be developed from the outset, as urban places which can transition into higher amenity and vibrant places while maintaining their main role as an employment precinct. Councils’ retail and employment strategies should provide guidance on the transition of business parks into mixed employment precincts including, where appropriate, ancillary residential developments to support the business park.

- **New health and tertiary education facilities** such as hospitals and community health centres. These should be located within or directly adjacent to centres, and ideally co-located with supporting transport infrastructure. In some cases, health and education facilities may be the anchor of a new centre. Built form is critical to facilitate the transition of centres with health and education uses into more mature innovation precincts. A mix of retail and other services including hotel-type accommodation adjacent to the precinct should be supported (refer to Objective 21).

- **Clusters of large format retail** should be treated as part of the retail network, and planning for new clusters of large format retail should be done in the same way new centres are planned. This includes ensuring centres are places that can grow and evolve over time, and have adequate access to transport services and quality public domains.

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

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

In such cases, the centre should be:

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

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

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

Bankstown is a large centre with a range of retail, healthcare, community and civic services. It is an important transport interchange with an extensive bus and rail catchment. Sydney Metro City & Southwest will create significant opportunity for the future of Bankstown, its urban form and public realm. Investment in the Bankstown Library and Knowledge Centre and improvements to its streetscape also demonstrate ongoing change, in Bankstown centre.

The improved frequency and reduced travel time on public transport to the Harbour CBD and beyond to Chatswood and Macquarie Park will strengthen the economic links between Bankstown and the Eastern Economic Corridor. This has potential to stimulate economic opportunities to attract jobs to Bankstown. New jobs and housing developments are also planned for the Bankstown Planned Precinct as part of the Sydenham to Bankstown Urban Renewal Corridor.

The opening of a Western Sydney University campus, together with the existing TAFE, will introduce a new vibrancy to the centre. This will have an economic flow-on effect, creating opportunities for more local jobs, including knowledge-intensive jobs.

Over time, investments in the centre have the potential for it to emerge as a health and education precinct.

Bankstown CBD has been identified as a potential Collaboration Area for planning for a highly productive, economically vibrant and liveable centre, leveraging the initiatives already underway, especially with the potential of a health and education precinct. Investment in, and redevelopment of, strategic sites also provide a unique opportunity for these to be examples of innovative forms of sustainable development.

Bankstown Jobs

<table>
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<tr>
<th>Year</th>
<th>Jobs</th>
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<tr>
<td>2016 estimate</td>
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<tr>
<td>2036 baseline target</td>
<td>17,000</td>
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<tr>
<td>2036 higher target</td>
<td>25,000</td>
</tr>
</tbody>
</table>

Data sources: Public open space – Sydney Open Space Audit (DPE 2016), aerial photo – Nearmap 2018
33. Strengthen Bankstown through approaches that:

- support links between Bankstown-Lidcombe Hospital, allied health services and links to tertiary education and research facilities to grow the emerging health and education precinct
- encourage new lifestyle and entertainment uses to activate streets and grow the night-time economy
- facilitate the attraction of office and commercial floor space and provide opportunities to allow commercial and retail activities to innovate
- encourage activation of secondary streets
- enhance the quality of Paul Keating Park
- improve and integrate the transport interchange and city centre.

**Responsibility**

Canterbury-Bankstown Council, other planning authorities and State agencies
Campsie

Campsie is a thriving commercial centre with a range of medical services nearby. It is identified as a Planned Precinct by the NSW Department of Planning and Environment. The centre has a high level of amenity. It is an important transport hub for rail, local and cross-regional bus routes. Accessibility will be further enhanced by the Sydney Metro City & Southwest which will provide faster and more reliable services to other economic centres such as the Harbour CBD and Bankstown. Improving traffic flows through the centre will enhance the pedestrian experience. Other opportunities include increasing local jobs, enhancing the public domain and providing housing in the right locations.

**Campsie Jobs**

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<tbody>
<tr>
<td>2016 estimate</td>
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<td>2036 baseline target</td>
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<tr>
<td>2036 higher target</td>
<td>7,500</td>
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</tbody>
</table>

**Actions**

34. Strengthen Campsie through approaches that:
   a. strengthen Beamish Street’s role as an eat street to grow the night-time economy
   b. encourage activation of secondary streets
   c. strengthen links to Canterbury Hospital and surrounding allied health services
   d. manage traffic and parking to reduce impacts on pedestrian amenity, especially on Beamish Street
   e. improve the appearance of the existing rail (freight) corridor.

**Responsibility**

Canterbury-Bankstown Council, other planning authorities and State agencies

Data sources: Public open space – Sydney Open Space Audit (DPE 2016), aerial photo – Nearmap 2018
Hurstville is an important retail destination for the South District, with its high street and large shopping centres. It is a commercial precinct for residents and has a growing health services sector. Its cultural diversity presents tourism and night-time economy opportunities. These activities are supported by good access to the centre by rail and bus services. Improvements to Hurstville’s public spaces and better integration of these with the shopping centres will help activate streets and attract visitors to the centre, creating opportunities for local employment and new economic activity.

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<th>Hurstville</th>
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<tr>
<td>2036 higher target</td>
<td>20,000</td>
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</tbody>
</table>

35. Strengthen Hurstville through approaches that:
   a. encourage and support shopping centre improvements to better integrate with the surrounding public spaces
   b. create a strong sense of place by celebrating Hurstville’s cultural diversity
   c. support the expansion of the hospitals in the centre and the growth of allied health services
   d. encourage new lifestyle and entertainment uses to activate streets and grow the night-time economy
   e. build on the centre’s administrative and civic role
   f. retain and manage existing commercial lands for future employment opportunities
   g. facilitate the attraction of office and commercial floor space and provide opportunities to allow commercial and retail activities to innovate
   h. recognise and support the role of Forest Road as a movement corridor and as an eat street
   i. encourage activation of secondary streets.

**Responsibility**
Georges River Council, other planning authorities and State agencies

Data sources: Public open space – Sydney Open Space Audit (DPE 2016), aerial photo – Nearmap 2018
Kogarah contains a concentration of medical facilities and a mix of retail and commercial activities, focused on the finance and insurance industry. The centre also caters for some nightlife that could be expanded with better services. Ongoing investment in the centre will support the health and education precinct focused around St George Hospital, and encourage opportunities for local jobs and economic activities to achieve the jobs target.

**Kogarah**

<table>
<thead>
<tr>
<th>Jobs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016 estimate</td>
</tr>
<tr>
<td>2036 baseline target</td>
</tr>
<tr>
<td>2036 higher target</td>
</tr>
</tbody>
</table>

**Actions**

36. Strengthen Kogarah through approaches that:
   a. Support growth of the health and education precinct
   b. Encourage new lifestyle and entertainment uses to activate streets and grow the night-time economy
   c. Facilitate the attraction of office and commercial floor space and provide opportunities to allow commercial and retail activities to innovate
   d. Retain and manage surrounding employment, industrial and urban services
   e. Encourage activation of secondary streets.

**Responsibility**

Georges River Council, other planning authorities and State agencies

Data sources: Public open space – Sydney Open Space Audit (DPE 2016), aerial photo – Nearmap 2018
Miranda is an important retail destination with a vibrant high street, large shopping centre and a mix of retail and local services, particularly health services. It is highly accessible by rail, local and cross-regional bus services. There are opportunities to enhance public spaces and activate secondary streets to make it a more attractive retail and commercial centre. The centre also caters for some night life that could be expanded with better services.

<table>
<thead>
<tr>
<th>Miranda</th>
<th>Jobs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016 estimate</td>
<td>7,000</td>
</tr>
<tr>
<td>2036 baseline target</td>
<td>8,000</td>
</tr>
<tr>
<td>2036 higher target</td>
<td>11,500</td>
</tr>
</tbody>
</table>

### Actions

37. Strengthen Miranda through approaches that:
   a. enhance public spaces to make a more attractive shopping destination
   b. build on the success of existing retail to grow the centre
   c. facilitate the attraction of office and commercial floor space and provide opportunities to allow commercial and retail activities to innovate
   d. encourage activation of secondary streets.

### Responsibility

Sutherland Shire Council, other planning authorities and State agencies
Sutherland presents a diversity of retail, entertainment, commercial and community services, and has a civic role as the location of a District Court. A University of Wollongong satellite campus and Sutherland College Sydney TAFE are located nearby. Building on these strengths and activating streets will provide opportunities to grow local jobs and the night-time economy.

<table>
<thead>
<tr>
<th>Sutherland</th>
<th>Jobs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016 estimate</td>
<td>5,700</td>
</tr>
<tr>
<td>2036 baseline estimate</td>
<td>8,000</td>
</tr>
<tr>
<td>2036 higher estimate</td>
<td>9,000</td>
</tr>
</tbody>
</table>

38. Strengthen Sutherland through approaches that:
    a. build on the centre’s administrative and civic role
    b. facilitate the attraction of office and commercial floor space and provide opportunities to allow commercial and retail activities to innovate
    c. encourage new lifestyle and entertainment uses to activate streets and grow the night-time economy
    d. encourage activation of secondary streets.
Planning Priority S10
Retaining and managing industrial and urban services land

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

**Objective 23**
Industrial and urban services land is planned, retained and managed.

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

Urban services include activities such as motor vehicle services, printing, waste management, courier services and concrete batching plants. These activities serve local communities and businesses and require adequate access to industrial land across the District. Demand for this land will increase 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 South District has 1,666 hectares of industrial and urban services land, spread over 40 precincts (refer to Figure 19). This represents approximately 12 per cent of Greater Sydney’s total stock of industrial and urban services land. About eight per cent (146 hectares) is undeveloped, indicating strong demand for industrial and urban services land in the District.

This land provided for approximately 51,800 jobs (37 per cent of jobs) in the District. Historically, the District has had a strong industrial base, but industrial employment declined by nearly 17 per cent between 1996 and 2016.

The largest industrial and urban services precincts in the South District are listed in Table 3. Manufacturing dominates the South District’s industrial and urban services land, particularly in the larger precincts.

<table>
<thead>
<tr>
<th>LGA</th>
<th>Precinct</th>
<th>Undeveloped Land (ha)</th>
<th>Developed Land (ha)</th>
<th>Total (ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canterbury-Bankstown</td>
<td>Chullora</td>
<td>21</td>
<td>191</td>
<td>212</td>
</tr>
<tr>
<td></td>
<td>Leightonfield Station</td>
<td>0</td>
<td>160</td>
<td>160</td>
</tr>
<tr>
<td></td>
<td>Milperra</td>
<td>1</td>
<td>101</td>
<td>102</td>
</tr>
<tr>
<td></td>
<td>Padstow North</td>
<td>&lt;1</td>
<td>94</td>
<td>95</td>
</tr>
<tr>
<td></td>
<td>Padstow South</td>
<td>2</td>
<td>44</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td>Revesby</td>
<td>&lt;1</td>
<td>132</td>
<td>133</td>
</tr>
<tr>
<td>Georges River</td>
<td>Peakhurst, Boundary Road</td>
<td>&lt;1</td>
<td>56</td>
<td>56</td>
</tr>
<tr>
<td>Sutherland</td>
<td>Caringbah/Taren Point</td>
<td>&lt;1</td>
<td>142</td>
<td>143</td>
</tr>
<tr>
<td></td>
<td>Kirrawee</td>
<td>0</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>Kurnell</td>
<td>43</td>
<td>217</td>
<td>260</td>
</tr>
</tbody>
</table>


N.B. Figures are rounded to the nearest whole number.
Figure 19: South District industrial and urban services land and freight access
These larger precincts are located near the Harbour CBD, Port Botany, Sydney Airport and the motorway and rail freight networks.

The Kurnell Peninsula historically accommodated petrochemical and heavy industries and the construction sector. However, Continental Carbon, Australia's carbon black manufacturing, has closed, Caltex Terminal has converted to a fuel storage centre and sand mining is almost depleted. The Caltex Terminal also caters for fuel imports and is a distribution terminal. The site contains a wharf and berth to receive imported refined fuel by ship and is connected by pipeline to the Caltex Banksmeadow Terminal.

Kurnell now accommodates more advanced manufacturing such as the water desalination plant and creative industries such as cloud-based computing, although construction remains the main industrial sector.

A significant freight and logistics task will remain in the South District due to the competitive advantages and efficiencies afforded by proximity to Villawood and Chullora freight intermodal terminals.

The predominant industrial sectors in Chullora, which is primarily focussed on interstate freight movements rather than port-shuttle movements, are transport, postal and warehousing and food product manufacturing. These industries and movements, represent about 20 per cent of employment in the precinct. Utilities, creative industries and wholesale and retail trade are other important activities in the precinct, which is an important location for urban services. Chullora focuses more heavily on interstate rail freight than port shuttles.

The District's employment lands are supported by Villawood (steel only) and Chullora intermodal terminals. Chullora has a direct connection to Port Botany, Australia's second largest container port, handling about a third of the nation's maritime container trade.

Even though larger-scale freight and logistics firms may choose to locate in the Western City District, a significant freight and logistics task will remain in the South District due to the competitive advantages and efficiencies afforded by proximity to Villawood and Chullora freight intermodal terminals. Critical to servicing these operations will be the retention of sites large enough to meet their needs – generally, two hectares or more.

Activities in Leightonfield Station precinct are diverse, including transport, postal and warehousing, manufacturing (focused on basic chemical and chemical products), wholesale trade and urban services.

The 12 smallest precincts in the District (between one to five hectares) provide local jobs and services, with between 30 and 50 per cent of jobs in each precinct being urban services jobs.

Almost 58 per cent of the District's industrial and urban services land is in the Canterbury-Bankstown Local Government Area. Manufacturing is the largest employment sector, dominated by food product, furniture, machinery and equipment and polymer product and rubber product manufacturing. Other activities include freight and logistics (transport, postal and warehousing), construction and wholesale trade.

Predominant activities at the Bankstown Airport trade gateway are freight activities and advanced manufacturing, in the form of transport equipment manufacturing. These two industry sectors provide two-thirds of the employment at the trade gateway.

There are 10 industrial and urban services precincts in the Sutherland Shire Local Government Area. Half of all jobs in these precincts are in construction, retail trade, health care and social assistance, accommodation and food services and education and training. Construction is the largest sector by employment, providing 14 per cent of all industrial jobs.

Industrial and urban services land in the Georges River Local Government Area is spread over eight precincts; six are smaller than 10 hectares and primarily accommodate light industrial uses and urban services.
Managing industrial and urban services land

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

There is limited undeveloped industrial and urban services land in the District. The Kurnell Peninsula has capacity to accommodate new and evolving industrial and urban services activities on large and undeveloped sites. Some of these sites are subject to environmental and other constraints, including the operational requirements and impacts of Sydney Airport.

As industries transition, proposals to convert some industrial and urban services land to higher-order uses including residential or large format retail have not been supported. Industrial and urban services land have been largely retained, with only approximately 27 hectares rezoned for other uses since 2011\(^\text{19}\).

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

Research has identified a benchmark of three square metres of urban services land per person. In the South District, the per person amount was below the benchmark in 2016, and the per capita amount is anticipated to reduce between 2016 and 2036\(^\text{20}\).

Principles for managing industrial and urban services land

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

For the South District the approach to managing industrial land is that it be retained and managed.

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

Specifically, these industrial lands are required for economic and employment purposes. Therefore, the number of jobs should not be the primary objective – rather, it should be a mix of economic outcomes that support the city and population.

The management of these lands should accommodate evolving business practices and changes in needs for urban services from the surrounding community and businesses.

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

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

As Greater Sydney grows over the next 20 years, there will be a need for the efficient and timely delivery of new office precincts. Stakeholder feedback emphasised the need to grow and diversify local employment opportunities.

In the South District there are no standalone office precincts, increasing the need for residents to travel longer distances to access a variety of jobs. A Metropolis of Three Cities supports councils to consider offices as a permissible use in an industrial precinct to grow the local office market and support local jobs growth and mix of employment opportunities. However, this should not compromise the operation of existing and planned industrial activities nor be seen as a first step in transitioning an industrial area into, for example, a business park. Nor is it about allowing retail to support office activity.

Considerations should include:

- the context of industrial, commercial and centres strategies for the local government area and/or the District
- proximity to established business parks or office precincts, with the transition to accommodate new offices or uses only supported in precincts not close to existing business parks or office precincts
- where access to the industrial precinct is constrained, transition to accommodate new uses or offices should be supported only where it will not compromise industrial activities in the precinct or the operation of trade gateways.

The Commission will work with the NSW Department of Planning and Environment and local councils to facilitate offices in industrial precincts, where this is identified by councils as appropriate.

<table>
<thead>
<tr>
<th>Actions</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>39. Retain and manage industrial and urban services land, in line with the Principles for managing industrial and urban services land, in the South District by safeguarding all industrial zoned land from conversion to residential development, including conversion to mixed-use zones. In updating local environmental plans, councils are to conduct a strategic review of industrial lands.</td>
<td>Canterbury-Bankstown Council, Georges River Council, Sutherland Shire Council and other planning authorities</td>
</tr>
<tr>
<td>40. Consider office development in industrial zones where it does not compromise industrial or urban services activities.</td>
<td>Councils</td>
</tr>
<tr>
<td>41. Prohibit new residential development on the Kurnell Peninsula where there is potential to interfere with the operation of Sydney Airport or where the ANEF contours and prescribed airspace requirements exclude residential development.</td>
<td>Councils and other planning authorities</td>
</tr>
<tr>
<td>42. Facilitate the contemporary adaptation of industrial and warehouse buildings through increased floor to ceiling heights.</td>
<td>Councils and other planning authorities</td>
</tr>
</tbody>
</table>
Planning Priority S11
Supporting growth of targeted industry sectors

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

Objective 24
Economic sectors are targeted for success.

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

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.

A Metropolis of Three Cities outlines the strategies to support industry sectors. They cover the areas of:
- industry skills and capacity building
- investment attraction
- export growth and facilitation
- industry showcasing and promotion
- opportunities through government procurement
- government and industry partnerships.

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

This Planning Priority reinforces the need to:
- support the growth of internationally competitive industry sectors
- respond to changing technologies
- plan for tourism and visitation.

Tourism
The South District attracts tourists who visit the Royal National Park, the long stretch of beach from Boat Harbour to North Cronulla or the surf beaches of Cronulla and Wanda.

In 2015–16, approximately 715,000 visitors stayed overnight in the District, 90 per cent of whom were domestic visitors. Visitor spending in the District was almost $950 million in the same period21. In the Sutherland Shire, of the 1 million day-trip visitors each year, less than 400,000 people stay overnight22.

Visitors’ experiences are shaped by major attractions and events, the places they visit, the facilities available and how their needs are met. Tourism provides widespread economic benefits, which can be enhanced by providing a better experience and facilities.

The Royal National Park is the District’s major attraction, with visitor precincts at Audley, Wattamolla, Bonnie Vale and Garie. Wattamolla Beach is the most visited precinct in any national park in NSW23. Businesses such as ANSTO attract domestic and international corporate travellers to the District, many staying in the District during their visit.

The District has Aboriginal, European and natural heritage and could capture tourist interest associated with education, medical and business activities and international sports events.

Other tourism assets include:
- Cronulla’s surf beaches and foreshore walks
- the Georges and Port Hacking rivers
- Kamay Botany Bay National Park, the Georges River National Park, Heathcote National Park and the Garawarra State Conservation Area
- whale watching at Cape Solander
- the wetlands along the Georges River, particularly the Ramsar-listed wetlands at Towra Point and the wetlands around Salt Pan Creek
- cycleways from Botany Bay to Kurnell and Cronulla and along the Cooks River
• the site of Captain Cook’s first landing in Australia
• major sporting facilities such as Endeavour Field (Shark Park) and Jubilee Oval (Kogarah Park)
• a diverse range of centres with restaurants and eat streets, night-life and shopping.

While Greater Sydney welcomes 30 million visitors a year, the South District is not heavily promoted as a tourist destination. In addition, supporting tourist infrastructure, particularly hotel and overnight accommodation, is limited.

The NSW Government committed $9.3 million to the Wattamolla Visitor Precinct and improvements to the Royal Coast Track in the 2017–18 Budget. Strategic planning can grow the tourism offer and increase overnight stays through more facilities for overnight and short-stay visitors, recreational tourists, business and education-related tourists and health visitors. Planning and place-making initiatives for destinations and tourist hubs will also improve visitor experiences and public transport connections.
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. Businesses and governments must continually engage with industry, assess regulatory barriers and manage data to update governance and policies to capitalise on changes.

<table>
<thead>
<tr>
<th>Actions</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>43. Consider the barriers to the growth of internationally competitive trade sectors, including engaging with industry and assessing regulatory barriers.</td>
<td>Councils and other planning authorities</td>
</tr>
<tr>
<td>44. Provide a regulatory environment that enables the economic opportunities created by changing technologies.</td>
<td>Councils, other planning authorities and State agencies</td>
</tr>
<tr>
<td>45. 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 and township 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.</td>
<td>Councils and other planning authorities</td>
</tr>
<tr>
<td>46. Consider opportunities to implement place-based initiatives to attract more visitors, improve visitor experiences and ensure connections to transport at key tourist attractions.</td>
<td>Councils and other planning authorities</td>
</tr>
<tr>
<td>47. Consider opportunities to enhance the tourist and visitor economy in the District, including a coordinated approach to tourism activities, events and accommodation.</td>
<td>Councils, other planning authorities and State agencies</td>
</tr>
<tr>
<td>48. Create capacity for tourist accommodation in appropriate locations through local environmental plans.</td>
<td>Councils and other planning authorities</td>
</tr>
<tr>
<td>49. Protect mineral resources (in particular construction material) by preventing inappropriately dispersed urban activities in rural areas.</td>
<td>Councils and other planning authorities</td>
</tr>
</tbody>
</table>
Planning Priority S12
Delivering integrated land use and transport planning and a 30-minute city

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

**Objective 14**
*A Metropolis of Three Cities* – integrated land use and transport creates walkable and 30-minute cities.

**Objective 16**
Freight and logistics network is competitive and efficient.

**Objective 17**
Regional connectivity is enhanced.

**Enhancing regional connections**

By 2056 the combined population of Greater Sydney, Newcastle and Wollongong will be approximately 10 million. Greater Sydney’s regional connections to Wollongong and the Illawarra Region are provided by the South Coast Rail Line and the Princes Highway/M1 which traverse the South District.

Improving north-south connections between the five cities will allow greater opportunities for residents of all cities to access a wider range of jobs opportunities and enhance their productivity.

Sydney Airport, Port Botany and Port Kembla are important trade gateways. Enhanced new road and rail connections connecting Port Kembla to Port Botany, Sydney Airport and the strategic freight networks of Greater Sydney will cross the South District.

The NSW Government is investing in or has committed to a number of initiatives to expand the strategic freight network. WestConnex and Sydney Gateway in the Eastern City District will effectively boost capacity on the M5 corridor in the South District, better connecting Port Botany and the freight precincts in Western Sydney. Planning is underway for the F6 Extension linking the M5 near Sydney Airport and the Princes Highway at Loftus. Although the northern parts of this connection are in the Eastern City District, this connection will provide better access for people and goods travelling between southern Sydney, the Illawarra and other parts of Greater Sydney and ease congestion on the local road network.

Improving north-south connections between Greater Sydney and Wollongong will allow residents to access wider job opportunities and enhance business to business links. Equally, improved connections will provide greater choices for where people can choose to live and, in the long term, increase growth management choices.

Efficient and reliable journeys are supported by the separation of freight and passenger movements wherever possible, particularly on public transport corridors.

Plans to improve the Southern Sydney Freight Line, which runs through the District’s north west, will increase capacity to accommodate freight movements between Port Botany and Port Kembla, intermodal terminals at Chullora and Villawood, and customers across Greater Sydney.

Improvements outside the District to the Maldon-Dombarton freight rail link will free capacity on the South Coast Rail Line between the Illawarra and Greater Sydney.

As the South District grows, the need for freight movements, particularly delivery vehicles, will rise. Freight movements can have negative impacts such as noise and additional congestion on roads, particularly during the morning peak. Freight movements outside the peak 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.

Much of the Kurnell Peninsula is under Sydney Airport’s main southern flight path, which takes 55 per cent of all the Airport’s flights and is the only flight path with no night curfew. This freight corridor must be protected. A state-wide approach to implementing the National Airports Safeguarding Framework is being developed by the NSW Department of Environment and Planning.
Delivering a 30-minute city and improving connections between strategic centres

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. *Future Transport 2056* and *A Metropolis of Three Cities* propose a well-connected city, based on the concept of a 30-minute city, where most people can travel to their nearest metropolitan and strategic centre by public transport within 30 minutes.

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.

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

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

Improved connections between strategic centres in the South District, and to connect South District with strategic centres in Greater Sydney, are important for business to business interactions and access to jobs. These will be supported by enhanced access to public transport at centres.

The Sydney Metro City & Southwest will upgrade and convert the T3 Bankstown Line from Sydenham to Bankstown to metro standards by 2024. The section of the proposed metro between Hurstville, Kogarah and Parramatta with initial focus on higher capacity bus services and in the medium term potential for a mass transit train link via Bankstown

- investigation into a higher-capacity city-shaping transport corridor between Hurstville, Kogarah and Parramatta with initial focus on higher capacity bus services and in the medium term potential for a mass transit train link via Bankstown
- investigation into train improvements on the T4 and T8 lines to improve capacity and reliability
- improving service frequencies especially for access to strategic centres
- strategic freight network improvements in other districts that will benefit the South District, including the duplication of the Port Botany Freight Rail (in the Eastern City District) and the completion of the Maldon-Dombarton train link (in the Western City District)
- travel behaviour change programs to help manage demand on the transport network
- on-demand bus services on selected local bus routes, currently being trialled in Bankstown and the Sutherland Shire, to improve the efficiency of the transport network and provide more choices for first and last mile access to the train network
- Heathcote Road improvements to reduce traffic congestion, improve safety and to meet future traffic volumes
- investment in Smart Roads, which will support the financial sustainability of the transport system by better using existing road infrastructure, and enable future forms of mobility such as connected and automated vehicles.

*Future Transport 2056* and *A Metropolis of Three Cities* identify short to medium-term initiatives, including city-serving and centre-serving transport initiatives, to provide people in the South District with better transport connections between districts and strategic centres and improve journey times. These include:

- investigation into train improvements on the T4 and T8 lines to improve capacity and reliability
- improving service frequencies especially for access to strategic centres
- strategic freight network improvements in other districts that will benefit the South District
- investment in Smart Roads, which will support the financial sustainability of the transport system by better using existing road infrastructure, and enable future forms of mobility such as connected and automated vehicles.
The city-serving network will provide high-frequency services within approximately 10 kilometres of the metropolitan centres and metropolitan cluster. This will support public transport access within some of the highest density residential areas in Greater Sydney where demand for travel is most concentrated. As these inner urban areas in the three cities develop further, the NSW Government will investigate increasing the reliability and frequency of these public transport services.

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

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

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

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

By 2036, the areas surrounding the Western Sydney Airport and Badgerys Creek Aerotropolis will be more urbanised than today. Residents within these areas will require reliable, fast and frequent public transport to access jobs and services. The NSW Government is committed to meeting the transport needs of residents and will investigate how emerging technology and on-demand services will help meet the needs of Western Parkland City residents.
The A3 (King Georges Road) and A6 (New Illawarra Road, Alfords Point Road, Davies Road and Stacey Street) provide important business-to-business connections across the District, connecting Sutherland and Kogarah, Sutherland and Bankstown, and beyond to Parramatta. These are important for connecting residents to centres where they can access public transport, jobs and services. Future improvements to the strategic road network and key intersections as well as better use of existing infrastructure – including reallocation of road space prioritisation of productive vehicles and creation of better places on and around transport networks – can improve movement through the District and access to strategic centres.

Current WestConnex works will duplicate the existing M5 by providing twin underground motorway tunnels from Kingsgrove to a new St Peters Interchange, improving east-west motorway access and freight movements for Greater Sydney and the District to Sydney Airport, Port Botany and the south west. Upgrades to the M5 Belmore Road ramps will improve access to the M5.

Into the future, opportunities to improve connections across Greater Sydney from the South District may include:

- extension of the Sydney Metro City & Southwest from Bankstown to Liverpool
- new train/mass transit linking the eastern suburbs with Miranda via Kogarah
- potential train/mass transit link from Hurstville/Kogarah to Macquarie Park via Burwood and Rhodes
- Central City strategic road corridor linking the F6 to Greater Parramatta and NorthConnex.

Walking, cycling and local connections

Most people in South District use their car to travel, demonstrated by 78 per cent of journey to work trips being by car. Walking accounts for 22 per cent of trips less than five kilometres, and of the trips over 10 kilometres, 18 per cent of trips are by rail. Residents drive from low density neighbourhoods to transport interchanges, centres and places of employment. Parking is becoming constrained near rail stations, transport interchanges, centres and places of employment.

This District Plan supports the introduction of other forms of transport to access centres and the transport network. For example, around centres, in Planned Precincts, and in urban renewal precincts and corridors, improved walking and safe cycling links, improvements to the public domain and an increased tree canopy will encourage people to walk or cycle for the first or final legs of their journeys to and from stations and public transport interchanges. Direct, safe and accessible routes to local destinations and services should be priorities within a 10-minute walk of centres.

More convenient interchanges will encourage public transport use. This includes making interchanges more attractive and providing more services such as shops. Upgrades to Heathcote, Jannali, Oatley, Panania and Narwee rail stations have improved or are improving station accessibility.

In the eastern parts of the District, there is good cycling access to centres, and some neighbourhoods have access to more than one strategic centre within a 30-minute journey.

Cycling can be encouraged as a preferred transport mode for shorter journeys through on-and off-road cycleways linking to centres and local destinations such as schools or parks. The proposed Sutherland to Cronulla ActiveTransport link, a shared two-way pedestrian and bicycle path between Sutherland and Cronulla, aims to address the current heavy reliance on motor vehicle transport for short trips in the Shire by improving walking and cycling opportunities. The proposed route will provide a practical connection to residential and commercial areas, as well as hospitals, schools and transport links.

Safeguarding the next phase of growth

Public transport initiatives must minimise the impact of future corridors on communities. Where possible, the proactive and early reservation of corridors to protect longer term linear infrastructure opportunities should be undertaken to provide greater clarity and certainty for landowners, communities and businesses. The early preservation of corridors also reduces the potential for conflict in the future to manage growth.
Transport for NSW is establishing a bicycle network hierarchy in collaboration with councils. The Principal Bicycle Network will establish high quality, high-priority routes within the Greater Sydney Green Grid to facilitate safe, connected direct north, south, east and west connections to centres. Several Greater Sydney Green Grid Priority Projects (refer to Planning Priority S15) include cycling connections to Kogarah, Hurstville and Sutherland, and from Campsie to Bankstown.

Regional routes 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 local and regional routes to provide door-to-door access for cycling.

Cycleways should be supported by facilities such as bike racks or bike lockers at shopping centres, workplaces and transport interchanges. An example is the bike facilities near Caringbah Station. Increased provision of end-of-trip facilities such as lockers, showers/change rooms at workplaces also support cycling.

For neighbourhoods that are further afield, or where the topography does not support walking or cycling, locally appropriate public transport links such as smaller buses will reduce car use for the first and final legs of the commute, encouraging an overall shift towards public transport.

**Freight movements**

Changes are occurring in the freight and logistics sector, in part driven by technology changes and related changes to some retail business models. While significant long-term growth in the freight and logistics sector is in the Western Parkland City, the nature of different supplies such as local produce, will require opportunities in the Central River City and Eastern Harbour City to be retained.

Planning decisions should also support the growing demand for parcel deliveries and on-demand freight, noting that the Sydney Airport curfew and the consequent timing of parcel deliveries and collections often coincides with the morning and evening peaks, intensifying peak traffic congestion.
### Actions

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<tbody>
<tr>
<td><strong>50.</strong> Prioritise:</td>
<td>Responsibility</td>
</tr>
<tr>
<td>a. public transport projects to the Harbour CBD to improve business-to-business connections and support the 30-minute city</td>
<td>Councils, other planning authorities and State agencies</td>
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<tr>
<td>b. infrastructure investments, particularly those focused on access to the transport network, which enhance walkability within two kilometres of metropolitan or strategic centres or 10 minutes walking distance of a local centre</td>
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<tr>
<td>c. infrastructure investments, particularly those focused on access to the transport network, which enhance cycling connectivity within five kilometres of strategic centres or 10 kilometres of the Harbour CBD.</td>
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<tr>
<td><strong>51.</strong> Integrate land use and transport plans to deliver the 30-minute city.</td>
<td>Councils, other planning authorities and State agencies</td>
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<td><strong>52.</strong> Investigate, plan and protect future transport and infrastructure corridors.</td>
<td>Councils, other planning authorities and State agencies</td>
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<td><strong>53.</strong> Prioritise transport investments that enhance access to the economic corridors and between centres within the corridors.</td>
<td>Councils, other planning authorities and State agencies</td>
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<td><strong>54.</strong> Support innovative approaches to the operation of business, educational and institutional establishments to improve the performance of the transport network.</td>
<td>Councils, other planning authorities and State agencies</td>
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<td><strong>55.</strong> Manage the interfaces of industrial areas, trade gateways and intermodal facilities by: <strong>Land use activities</strong></td>
<td>Councils, other planning authorities, State agencies and State-owned corporations</td>
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<tr>
<td>a. providing buffer areas to nearby activities, such as residential uses that are sensitive to emissions from 24-hour port and freight functions</td>
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<tr>
<td>b. retaining industrial lands for port, intermodal and logistics uses as well as the landside transport network from the encroachment of commercial, residential and other non-compatible uses which would adversely affect industry viability to facilitate ongoing operation and long-term growth</td>
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<td>c. requiring sensitive developments within the influence of port and airport operations to implement measures that reduce amenity impacts</td>
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<tr>
<td>d. improving communication of current and future noise conditions around Port Botany, airports, surrounding road and rail networks, intermodal terminals and supporting private lands</td>
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<tr>
<td>e. improving the capacity of existing stakeholders to implement existing planning noise standards for incoming sensitive developments</td>
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<tr>
<td>f. protecting prescribed airspace from inappropriate development, for example height of building controls that would allow buildings to penetrate prescribed airspace and reduce the capacity of existing airport operations</td>
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<td>g. preventing inappropriate development within the high-noise corridor on the Kurnell Peninsula</td>
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<tr>
<td>h. identifying and preserving land for future port and airport, intermodal and rail infrastructure</td>
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<tr>
<td>i. ensuring adequate land is available for transit uses for example bus layovers.</td>
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<tr>
<td><strong>Transport operations</strong></td>
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<td>j. providing the required commercial and passenger vehicle, and freight and passenger rail access.</td>
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<td>Actions</td>
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<tr>
<td>56. Optimise the efficiency and effectiveness of the freight handling and logistics network by:</td>
<td>State-owned corporations</td>
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<tr>
<td>a. protecting current and future freight corridors</td>
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<td>b. balancing the need to minimise negative impacts of freight movements on urban amenity with the need to support efficient freight movements and deliveries</td>
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<tr>
<td>c. identifying and protecting key freight routes</td>
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<tr>
<td>d. limiting incompatible uses in areas expected to have intense freight activity</td>
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<tr>
<td>e. recognising and giving effect to the National Airports Safeguarding Framework incorporating noise, turbulence and wildlife safety measures.</td>
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<tr>
<td>57. Investigate and plan for the land use implications of potential long-term regional transport connections.</td>
<td>Councils and other planning authorities, State agencies and State-owned corporations</td>
</tr>
<tr>
<td>58. Plan for urban development, new centres, better places and employment uses that are integrated with, and optimise opportunities of, the public value and use of Sydney Metro and other city-shaping projects.</td>
<td>Councils, other planning authorities and State agencies</td>
</tr>
<tr>
<td>59. Protect transport corridors as appropriate, including the F6 extension.</td>
<td>Councils, other planning authorities and State agencies</td>
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Directions for sustainability

A city in its landscape

Planning Priority S13
Protecting and improving the health and enjoyment of the District's waterways

Planning Priority S14
Protecting and enhancing bushland, biodiversity and scenic and cultural landscapes and better managing rural areas

Planning Priority S15
Increasing urban tree canopy cover and delivering Green Grid connections

Planning Priority S16
Delivering high quality open space

An efficient city

Planning Priority S17
Reducing carbon emissions and managing energy, water and waste efficiently

A resilient city

Planning Priority S18
Adapting to the impacts of urban and natural hazards and climate change
5 Sustainability

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

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

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

The South District has a vast diversity of landscapes, from bushland, national parks and reserves, coastal headlands and escarpments, coastal sand dunes, ocean beaches, estuaries, wetlands and waterways. The Royal National Park, proclaimed in 1879, is the second oldest national park in the world. Urban neighbourhoods are nestled between rivers and valleys, on the sandstone Woronora Plateau and on areas of the low-lying Cumberland Plain.

Improving the health of the South District’s coast and waterways will provide habitat for aquatic ecosystems and help cool the urban environment. The Cooks River, Georges River, Botany Bay, Port Hacking and the coastline form the District’s eastern edge and help define its identity. They are important for swimming, boating and other forms of recreation.

The Greater Sydney Green Grid – the regional network of high quality green spaces and tree-lined streets that support walking, cycling and community access to open spaces – will provide cool, green links throughout the District. Expansion of the urban tree canopy will complement the Green Grid and support the cooling of neighbourhoods. The planning and design of new communities create opportunities to enhance the District’s urban tree canopy.

The District’s rural areas include mineral resources that supply construction materials as well as bushland that provides habitat for local wildlife and offset sites for biodiversity.

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

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

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

S13. Protecting and improving the health and enjoyment of the District’s waterways

S14. Protecting and enhancing bushland, biodiversity and scenic and cultural landscapes and better managing rural areas

S15. Increasing urban tree canopy cover and delivering Green Grid connections

S16. Delivering high quality open space

S17. Reducing carbon emissions and managing energy, water and waste efficiently

S18. Adapting to the impacts of urban and natural hazards and climate change.

Green infrastructure and greener places

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

The policy is based on a green infrastructure framework that has three key components:

- Bushland and Waterways – delivering green infrastructure for habitat and ecological health
- The Urban Tree Canopy – delivering green infrastructure for climate change adaptation and resilience
- Parks and Open Space – delivering green infrastructure for people.
Planning Priority S13
Protecting and improving the health and enjoyment of the District’s waterways

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

Objective 25
The coast and waterways are protected and healthier.

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

The waterways and rivers of the South District are part of an overall natural system and contribute to the green infrastructure that cools and greens the District. The District’s waterways support coastal, marine and groundwater-dependent ecosystems, which benefit from continuing protection and management. They support threatened ecological communities and accommodate the disposal of stormwater and wastewater. The District’s catchments and waterways are shown on Figure 20.

The District’s coastline includes popular beaches, some of which are protected within national parks. Its aquatic reserves at Boat Harbour, Towra Point and Shiprock have been created to protect fish, aquatic animals and marine vegetation. The Ramsar-listed Towra Point Nature Reserve is critical for migratory shorebirds, and is protected by international migratory bird conservation agreements. It provides roosting habitat and feeding grounds to replenish reserves before the birds migrate to the northern hemisphere.

The District’s waterways and coastline also offer great views, access to peace and quiet, open space and wildlife as well as opportunities for boating, swimming, walking and cycling. They tell the story of Aboriginal and European history, and are used for the arts, family visits and sports. They have an economic value in tourism and maritime-related industry.

Botany Bay, Port Hacking, the Georges River, the Woronora River and the Cooks River form part of the Greater Sydney Green Grid. Waterway corridors such as the Cooks River and Salt Pan Creek provide local parks and native vegetation close to urban areas in the District’s north.

The Cooks River runs through some of the most urbanised suburbs in Australia. Many parts of the river and its foreshores offer beautiful riverside walkways and cycle paths, wonderful parks and facilities and habitat for native plants and animals.

A legacy of historical land uses, contaminated land and groundwater, aged infrastructure and the pattern of urban development has impacted some of the District’s waterways. Other waterways, such as the Georges River at Oatley Bay Baths, are healthier and accessible while providing habitat.

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

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

Enhancing community access to the coast and waterways within the District should be prioritised. This includes access for pedestrians as well as boats.
Figure 20: South District catchments and waterways
and other watercraft. The delivery of the Greater Sydney Green Grid (refer to Planning Priority S15) will enhance connections to the Georges River and other waterways.

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

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

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

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

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

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

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

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

Collaboration and coordination across levels of government and with the community is needed to deliver the green space, urban cooling and integrated water management outcomes needed to support the South District. This is particularly important for the Cooks River, which passes through both the South and Eastern City districts.

Future work will apply the lessons from previous management of the District’s rivers, notably the Georges River Combined Councils’ Committee, which coordinates the management of the Georges River, and the Cooks River Alliance.

Catchment-scale management and coordination can:

- solve multiple problems – for example, catchment condition and water scarcity, or water quality impacts on aquifers, estuaries and the marine estate
- set objectives for the District’s waterways and enable them to be achieved in innovative and cost-effective ways
- 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
- promote integrated water cycle management and investment in sustainable water, wastewater and stormwater infrastructure.

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

Botany Bay is recognised for its significant economic, environmental and cultural assets. Kamay Botany Bay National Park, Towra Point Nature Reserve and Cape Banks Aquatic Reserve have been established in recognition of Botany Bay’s environmental and cultural significance, while other waterway and foreshore areas also contain valuable biodiversity and scenic coastal landscapes.

The land adjacent to Botany Bay was settled for thousands of years by the Eora and Tharawal people. Aboriginal people continue to have strong association with Botany Bay. Botany Bay was the scene of the first European landfall on the east coast of Australia in 1770 and Captain Cook’s landing at Kurnell place has become a popular tourist attraction.

As home to Sydney Airport and Port Botany, Botany Bay is Greater Sydney’s main international passenger and trade gateway. The waters around La Perouse are renowned for snorkelling and scuba diving, while the beaches and extensive foreshore parklands along the Grand Parade provide attractive settings for recreation.

Councils of both the Eastern City and South districts are working together to improve water quality in the Georges River and the Cooks River, which both flow into Botany Bay. Managing water quality and waterway health continues to be a significant challenge, given the highly urbanised nature of the catchments, the changes to the shoreline of the Bay following reclamations for infrastructure, and the legacy of groundwater contamination from historical industrial activity.

The Cooks River Alliance, a partnership of councils from Bayside, Canterbury-Bankstown, Inner West, and Strathfield, has been in place since 1997. The Alliance works with communities for a healthy Cooks River catchment. The Alliance with funding from the NSW Government, will develop a scoping study for a Cooks River Catchment Coastal Management Plan. It will be developed under the NSW coastal management framework with priorities actions for the Cooks River.

Georges River

The Georges River flows north through the Western City District, before it turns south east at Chipping Norton towards Botany Bay. Its catchment flows through a varied landscape from the steep heavily wooded upper reaches near Appin to the urban areas of the lower reaches in the South District. Woronora Dam, on the upper reaches of the Woronora River, a tributary of the Georges River, is located in the Sutherland Council area.

Woronora Dam is within the Georges River catchment and is part of Greater Sydney’s drinking water supply network.

Related government initiatives:
• NSW Office of Environment and Heritage and the Environment Protection Authority
  Risk-based Framework for Considering Waterway health Outcomes in Strategic Land-use Planning Decisions

### Actions

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<tr>
<td>60. Protect environmentally sensitive areas of waterways and the coastal environment area.</td>
<td>Councils, other planning authorities, State agencies and State-owned corporations</td>
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<tr>
<td>61. Enhance sustainability and liveability by improving and managing access to waterways, foreshores and the coast for recreation, tourism, cultural events and water-based transport.</td>
<td>Councils, other planning authorities, State agencies and State-owned corporations</td>
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<tr>
<td>62. Improve the health of catchments and waterways through a risk-based approach to managing the cumulative impacts of development including coordinated monitoring of outcomes.</td>
<td>Councils, other planning authorities, State agencies and State-owned corporations</td>
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<td>63. Work towards reinstating more natural conditions in highly modified urban waterways.</td>
<td>Councils, other planning authorities, State agencies and State-owned corporations</td>
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Planning Priority S14
Protecting and enhancing bushland, biodiversity and scenic and cultural landscapes and better managing rural areas

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

**Objective 27**
Biodiversity is protected, urban bushland and remnant vegetation is enhanced.

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

**Objective 29**
Environmental, social and economic values in rural areas are protected and enhanced.

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

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

The scenic and cultural landscapes of the South 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.

The South District’s rural areas contribute to habitat and biodiversity, provide mineral and energy resources, and sustain local rural villages. They are part of the larger Metropolitan Rural Area.

**Bushland and biodiversity**

Bushland covers around 37 per cent of the South District. Much of the District’s bushland is recognised for its environmental value and located within the Protected Natural Area. The major landscape areas in the southern parts of the District include the Royal National Park, Heathcote National Park and Holsworthy Defence Lands. Large areas of urban bushland follow the creek system and steep sandstone valleys, providing a bushland network close to homes in areas such as Illawong, Bangor and Woronora Heights. Figure 21 shows the extent of the District’s Protected Natural Area.

The District is part of one of the most species-diverse bioregions in Australia. It contains at least 21 threatened ecological communities and several endangered vegetation communities, many of which are located in bushland areas.

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

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

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

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. A range of tools available to protect biodiversity on private land include biodiversity stewardship agreements, conservation agreements and wildlife refuge agreements.

**Scenic and cultural landscapes**

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

The coastline and waterways are significant elements of the District’s scenic and cultural landscapes (refer to Planning Priority S13). Bushland is also an important part of the District’s scenic landscape.

Bushland creates places that provide a sense of identity and culture, and creates opportunities for tourism and recreation. The bushland ridgelines are highly valued elements of the scenic and cultural landscape of the South District. The scenic qualities of the ridgelines, as well as views to these landscape elements should be protected and maintained. For the South District, strategic planning should focus on opportunities to identify and protect important bushland vistas, scenic views, hills, ridgelines and valleys.

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

**Rural areas**

The South District’s rural areas are framed by national parks within the Protected Natural Area and include the Gandangara Aboriginal Land Council land at West Menai, which is predominately bushland, and the villages of Bundeena, Maianbar and Waterfall, which adjoin national parks. Figure 22 shows the extent of the District’s rural areas.

The District’s rural areas provide opportunities for people to live in a more secluded bushland setting. Most of the Districts’ rural area is zoned E3 Environmental Management, with the zoning of some areas at West Menai deferred from the Sutherland LEP 2015.

Extraction of construction materials in areas at Kurnell and Sandy Point Quarry continue to supply resources that support the growth and development of Greater Sydney. Sourcing construction materials locally minimises transport requirements, and reduces the cost, environmental footprint and social impact of construction.

The co-location of sandstone extraction and recycling of building materials at Sandy Point Quarry is an example of a multiple use of land by compatible activities. Stone resources from Sandy Point supply Chipping Norton Lakes Scheme and NSW State government restoration projects. Sand extraction at Kurnell is expected to continue for at least 5–10 years, after which the site is expected to be rehabilitated for light industrial development.

Urban development is not consistent with the values of the Metropolitan Rural Area. A Metropolis of Three Cities takes a strategic approach to delivering Greater Sydney’s future housing needs within the current boundary of the Urban Area, including existing growth areas. Urban development in the Metropolitan Rural Area will be considered only in the urban investigation areas identified in A Metropolis of Three Cities. Urban investigation areas have been identified as part of a structured approach to managing the long-term growth of Greater Sydney in a deliberate and carefully planned way, where land use is integrated with major transport corridors. There are no urban investigation areas in the South District.
Figure 21: South District Protected Natural Area and Metropolitan Rural Area
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.

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

The rural villages of Bundeena, Maianba and Waterfall are located within Sutherland Shire Local Government Area. With Bundeena and Maianba are located on the shores of Port Hacking and Waterfall on the southern border. They include a small permanent resident population with many visitors from Sydney. On the southern boundary of the South District, the village of Waterfall borders the Princes Highway and the Royal National Park.

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

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

### Related government initiatives:

- NSW Office of Environment and Heritage
  - Cumberland subregion Biodiversity Investment Opportunities Map (BIO Map)
Planning Priority S15
Increasing urban tree canopy cover and delivering Green Grid connections

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

Objective 30
Urban tree canopy cover is increased.

Objective 32
The Green Grid links parks, open spaces, bushland and walking and cycling paths.

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

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

The urban tree canopy
The South District benefits from bushland and national parks, and trees in parks and public spaces, along streets, and in the front and backyards of privately-owned land, creating a distinct tree canopy. These native and exotic trees provide an average of 26 per cent tree canopy cover in the Urban Area. Some areas in the south of the District such as Loftus and Padstow Heights have more than 50 per cent cover. Figure 21 shows tree canopy cover in the Urban Area in 2011.

Sutherland Shire Council has initiated a Green Streets program of street tree planting, with more than 5,000 trees planted since 2013, along with native grasses in road reserves and on other public land. The NSW Government has set a target to increase the tree canopy cover across Greater Sydney to 40 per cent.

Along many busy roads, where there is limited space to plant 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.

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

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

Extending the urban tree canopy should be balanced with the need to allow sunlight into homes and onto roofs for solar power.
The District’s councils generally provide guidance on enhancing tree canopy and tree cover in the urban environment, and information on street trees. Some encourage permeable surfaces to allow rainwater to soak into the ground and reduce stormwater run-off, which supports the growth of canopy trees and vegetation, and reduces pollution, flooding and urban heat. Where trees are lost as a result of development, some councils have developed programs to plant replacement trees in the public realm.

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

**Connecting the Greater Sydney Green Grid**

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

The long-term vision for the Greater Sydney Green Grid in the South District is shown on Figure 23.

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 4 lists Green Grid Priority Projects for the District.

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

State, regional and district parklands and reserves form a principal element of the Greater Sydney Green Grid for both biodiversity and 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 the delivery of regional open space using special infrastructure contributions.

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

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

<table>
<thead>
<tr>
<th>Related government initiatives:</th>
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<tbody>
<tr>
<td>• NSW Office of Environment and Heritage 2015 Urban Green Cover in NSW Technical Guidelines</td>
</tr>
<tr>
<td>Actions</td>
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<tr>
<td>------------------------------------------------------------------------</td>
</tr>
<tr>
<td>69. Expand urban tree canopy in the public realm.</td>
</tr>
<tr>
<td>70. Progressively refine the detailed design and delivery of:</td>
</tr>
<tr>
<td>a. Greater Sydney Green Grid priority corridors and projects important</td>
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<tr>
<td>to the District</td>
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<tr>
<td>b. opportunities for connections that form the long-term vision of</td>
</tr>
<tr>
<td>the network</td>
</tr>
<tr>
<td>c. walking and cycling links for transport as well as leisure and</td>
</tr>
<tr>
<td>recreational trips.</td>
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</tbody>
</table>
### Table 4: South District Green Grid Priorities

<table>
<thead>
<tr>
<th>Priority corridors</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cooks River Open Space Corridor</strong></td>
<td>This regionally significant parkland corridor in the South and Eastern City districts will improve water quality and link high quality open spaces between Strathfield, Sydney Olympic Park, Campsie, Canterbury, Dulwich Hill, Marrickville and Wolli Creek. This is a Priority Project for both the South and Eastern City districts, and forms part of the Principal Bicycle Network.</td>
</tr>
<tr>
<td><strong>Wolli Creek Regional Park and Bardwell Valley Parkland</strong></td>
<td>This project on the boundary of the South and Eastern City districts will provide open space for recreation, walking and cycling trails, connect areas of ecologically significant vegetation and improve water quality and stormwater management. It will connect to other Greater Sydney Green Grid projects, forms part of the Principal Bicycle Network and is a Priority Project for both districts.</td>
</tr>
<tr>
<td><strong>Salt Pan Creek Open Space Corridor</strong></td>
<td>The corridor contains important ecological communities, mangroves, wetlands, recreational facilities and walking and cycling trails on both sides of the creek, which form part of the Principal Bicycle Network. The project will strengthen the connection between Bankstown and Salt Pan Creek, improve trails and recreational opportunities, and improve bridge crossings and connections to Bankstown, Punchbowl, Riverwood, Padstow, Peakhurst and Lugarno. The Stage 1 Detailed Design works for Salt Pan Creek Reserve II received $171,500 under the 2016–17 Metropolitan Greenspace Program. The design works will deliver a reserve as a regional park, with recreation activities including a new shared pathway system to connect the reserve to the existing Salt Pan Creek trails network.</td>
</tr>
<tr>
<td><strong>Bankstown to Sydenham Open Space Corridor</strong></td>
<td>This project will transform surplus rail easement land and wide local streets that run parallel to the rail line into an active walking, cycling and open space corridor connecting Cooks River, Wolli Creek Regional Park, The Greenway and Salt Pan Creek Open Space Corridor as well as the wider open space network. The cycle path will form part of the Principal Bicycle Network.</td>
</tr>
<tr>
<td><strong>The Coastal Walk: Botany Bay Foreshores</strong></td>
<td>This will link Taren Point Bridge and Shell Point to an open space corridor across Taren Point Bridge and onward to the eastern and northern shores of Botany Bay. The cycle path will form part of the Principal Bicycle Network.</td>
</tr>
<tr>
<td><strong>Illawarra Rail Line Corridor: Kogarah to Sutherland</strong></td>
<td>The corridor will integrate walking and cycling paths with open spaces, green urban areas and stormwater treatment along the surplus rail easement lands, and parallel local streets and centres along the rail line including Kogarah, Hurstville and Sutherland. This project is part of the Principal Bicycle Network.</td>
</tr>
<tr>
<td><strong>The Coastal Walk: Kurnell to the Royal National Park</strong></td>
<td>This includes a cluster of projects to connect Kamay Botany Bay National Park and Bonna Point Reserve to Cronulla. The Boat Harbour site and the beach to the south west are important missing links in the coastal walk from Kurnell to Cronulla.</td>
</tr>
<tr>
<td><strong>Georges River Parklands</strong></td>
<td>The project will connect parklands along the Georges River to protect and enhance threatened ecological communities, improve water quality and stormwater treatment, improve access to the river and parklands and create a continuous walking and cycling trail. The Gannon’s Park Water Quality Improvement and Renaturalisation Stage 2 received $562,000 under the 2016–17 Metropolitan Greenspace Program to reinstate the natural line of Upper Boggywell Creek in Gannon’s Park, with wetlands, bioretention systems and storage ponds, and a new 138-metre boardwalk to improve public access.</td>
</tr>
<tr>
<td><strong>The Great Kia’Mia Way River Foreshores Walk</strong></td>
<td>This will create linked foreshore access from Menai and Woronora to the Georges River along Still Creek, Woronora River and Mill Creek and form part of the Principal Bicycle Network.</td>
</tr>
<tr>
<td><strong>Duck River Open Space Corridor</strong></td>
<td>The project will establish the Duck River Open Space Corridor as a regional open space with improved recreational space, habitat for ecological communities and better treatment of stormwater. It will create a continuous walking and cycling link north-south between Parramatta, Camellia, Granville, Auburn, Regents Park and south to Bankstown, forming part of the Principal Bicycle Network. The corridor will complement the Salt Pan Creek Corridor to form a combined connection from the Georges River to Parramatta River. This is a Priority Project for the Central City District.</td>
</tr>
</tbody>
</table>
**Figure 22: South District Green Grid Priorities**

Planning Priority S16
Delivering high quality open space

Public open space is a form of green infrastructure that enhances the character of the South 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 activities, as well as establishing physical links that support social networks and create a sense of community, will become increasingly important. Delivering connected walking and cycling trails will maximise their use.

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

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

Urban renewal also creates opportunities to increase the quantity of open space. Planning for urban renewal needs to consider opportunities to deliver open space including space for active sport and recreation. High density development (over 60 dwellings per hectare) should be located within 200 metres of quality open space and all dwellings should be within 400 metres of open space.

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

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

While 42 per cent of the South District is open space, most of this (87 per cent) is protected in national parks and reserves and large areas of urban bushland. Local parks, open spaces and pockets of native vegetation comprise the remaining 13 per cent and provide local access to the Greater Sydney Green Grid. The District’s beaches, estuaries and waterways are part of the District’s open space.

Existing open space within the District is shown in Figure 23.

Nature-based recreation also helps connect communities to the natural landscape. Demand for nature-based recreation will need to be managed to minimise impacts on biodiversity.
Figure 23: South District access to open space
Almost 98 per cent of the District’s residents live within 400 metres of open space (refer to Figure 23). For people living in high density areas, access to local open space within the recommended 200 metres is poor along Canterbury Road and the T3 Bankstown Line, particularly between Campsie and Wiley Park.

Open space for organised outdoor sport makes up only four per cent of the local open space in the District. The District is characterised by high levels of participation in organised sports, which results in considerable wear and tear on playing fields and places demands on councils to maintain these facilities for year-round use. A trend towards greater participation in sport by women and people over 35, as well as a trend towards indoor sports and sports requiring less space such as futsal, is changing patterns of demand for sports fields and facilities.

Open space within school grounds is a potential asset that could be shared by the wider community outside of school hours. Additional open space areas and sports and recreation facilities, as well as innovative use of existing areas and facilities will be required, especially in areas where residential density is increasing and there is limited scope to provide additional capacity. This includes the Sydenham to Bankstown Urban Renewal Corridor and along Canterbury Road.

Urban renewal and infrastructure programs should result in a net increase in 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 Government Architect NSW is developing an open space toolkit, a resource for councils to use for open space planning.

<table>
<thead>
<tr>
<th>Actions</th>
<th>Responsibility</th>
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<tbody>
<tr>
<td>71. Maximise the use of existing open space and protect, enhance and expand public open space by:</td>
<td>Councils, other planning authorities, State agencies and State-owned corporations</td>
</tr>
<tr>
<td>a. providing opportunities to expand a network of diverse, accessible, high quality open spaces that respond to the needs and values of communities as populations grow</td>
<td></td>
</tr>
<tr>
<td>b. investigating opportunities to provide new open space so that all residential areas are within 400 metres of open space and all high density residential areas (over 60 dwellings per hectare) are within 200 metres of open space</td>
<td></td>
</tr>
<tr>
<td>c. requiring large urban renewal initiatives to demonstrate how the quantity of, or access to, high quality and diverse local open space is maintained or improved</td>
<td></td>
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<tr>
<td>d. planning new neighbourhoods with a sufficient quantity and quality of new open space</td>
<td></td>
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<tr>
<td>e. delivering shared and co-located sports and recreational facilities including shared school grounds and repurposed golf courses</td>
<td></td>
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<tr>
<td>f. delivering on or complementing the Greater Sydney Green Grid</td>
<td></td>
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<tr>
<td>g. providing walking and cycling links for transport as well as leisure and recreational trips.</td>
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</tbody>
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Planning Priority S17
Reducing carbon emissions and managing energy, water and waste efficiently

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

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

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

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

The significant growth and development planned for the South 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 areas, urban renewal areas, 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, waste management, car parking, amenities, open space, urban green cover and public spaces.

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

Urban renewal projects provide opportunities to improve the energy and water efficiency of new and existing buildings; incorporate building and precinct-scale renewables; and manage waste more efficiently to reduce greenhouse gas emissions and costs in a way that appeals to building owners and tenants.

Urban renewal also enables the opportunity to upgrade ageing, water, stormwater, sewer and waste infrastructure at the precinct-scale.

**A low-carbon District**

More efficient use of energy and water in the District will reduce impacts on the environment and the District’s greenhouse gas emissions.

The Greater Sydney Commission has been seeking to better understand greenhouse gas emissions for each District across Greater Sydney and will continue to explore opportunities for planning initiatives to support the NSW Government’s goal of achieving a pathway towards net-zero emissions by 2050.

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

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

The way Greater Sydney’s urban structure and built form develop in the future can support NSW’s transition towards net-zero emissions. Better integrating land use with transport planning will help slow emissions growth by locating new homes near public transport and high quality walkways and cycle paths.
Building on existing public transport connections with electric vehicle transport hubs, shared autonomous vehicles and other innovative transport technologies can further reduce greenhouse emissions, and reduce levels of noise and air pollution. Prioritising parking spaces for car sharing and carpooling can support more efficient use of road space and help reduce emissions. Emerging transport technologies will reduce the need for parking spaces and help reduce congestion.

Designing high-efficiency buildings and incorporating renewable energy generation will reduce emissions and reduce costs over time. This means improving the energy and water efficiency of buildings, and reducing waste in urban renewal projects and infrastructure projects.

Recycling local water and harvesting stormwater creates opportunities to green public open spaces including parks, ovals and school playgrounds. Recycling water diversifies the sources of water to meet demand for drinking, irrigating open spaces, keeping waterways clean and contributing to Greater Sydney’s water quality objectives.

Recycling and reducing waste

There is diminishing capacity in existing landfill sites in Greater Sydney, with more waste being sent to landfill outside the region. This increases costs to the community. Additional sites for waste management in Greater Sydney are required.

Waste is managed through a number of facilities in the South District. Lucas Heights Resource Recovery Park is the largest waste-receiving facility in the District. Organic waste is diverted through the Garden Organics Processing Facility, producing compost and mulch products for landscaping and horticultural use. The Lucas Heights smart cell facility breaks down organic waste to produce electricity. The Resource Recovery Centre and Waste Collection Point is a separate collection point for recyclable materials, scrap metals, hazardous items, old clothing and household rubble.

There is a waste and recycling centre at Taren Point for recyclable and non-recyclable items. Chullora Resource Recovery Park is a transfer station for general household waste as well as processing garden organics before transfer to other facilities.
for composting. Some waste disposed in the South District is trucked to landfills outside the District, including interstate.

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 management of waste.

Treating separated organic waste and then processing it through an energy-from-waste facility, will reduce waste sent to landfill and can help to reduce greenhouse gas emissions.

In higher density neighbourhoods, innovative precinct-based waste collection, re-use and recycling would improve efficiency, reduce truck movements and boost the recycling economy. Where possible, additional land should be identified for waste management, reprocessing, re-use and recycling.

### Related government initiatives:
- NSW Environment Protection Authority
- NSW Environment Protection Authority
  - Resources for local council waste and recycling operations
- NSW Environment Protection Authority

### Actions and Responsibility

<table>
<thead>
<tr>
<th>Number</th>
<th>Action</th>
<th>Responsibility</th>
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<tbody>
<tr>
<td>72.</td>
<td>Support initiatives that contribute to the aspirational objective of achieving net-zero emissions by 2050, especially through the establishment of low-carbon precincts in Planned Precincts, Collaboration Areas and Urban Transformation projects.</td>
<td>Councils, other planning authorities, State agencies and State-owned corporations</td>
</tr>
<tr>
<td>73.</td>
<td>Support precinct-based initiatives to increase renewable energy generation, and energy and water efficiency, especially in Planned Precincts, Collaboration Areas and Urban Transformation projects.</td>
<td>Councils, other planning authorities, State agencies and State-owned corporations</td>
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<tr>
<td>74.</td>
<td>Protect existing and identify new locations for waste recycling and management.</td>
<td>Councils, other planning authorities and State agencies</td>
</tr>
<tr>
<td>75.</td>
<td>Support innovative solutions to reduce the volume of waste and reduce waste transport requirements.</td>
<td>Councils, other planning authorities and State agencies</td>
</tr>
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<td>76.</td>
<td>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 floor area greater than 100,000 square metres is proposed in any contiguous area of 10 or more hectares.</td>
<td>Councils, other planning authorities, State agencies and State-owned corporations</td>
</tr>
<tr>
<td>77.</td>
<td>Investigate potential regulatory mechanisms such as a Protection of the Environment Policy (PEP) that sets low carbon, high efficiency targets to be met through increased energy efficiency, water recycling and waste avoidance, reduction or re-use. This could include a framework for the monitoring and verification of performance for precincts in Planned Precincts, Collaboration Areas, urban renewal precincts and housing growth areas that are planned to have an increase in floor area greater than 100,000 square metres.</td>
<td>Environment Protection Authority</td>
</tr>
</tbody>
</table>
Planning Priority S18
Adapting to the impacts of urban and natural hazards and climate change

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

**Objective 36**  
People and places adapt to climate change and future shocks and stresses.

**Objective 37**  
Exposure to natural and urban hazards is reduced.

**Objective 38**  
Heatwaves and extreme heat are managed.

The District’s climate and natural landscape can create natural hazards such as heatwaves, bushfire, flooding, storms, coastal inundation and erosion. Climate change will exacerbate these natural hazards. While planning for resilience has traditionally focused on responses to natural hazards and climate change, it is increasingly being used to consider a wider range of social and economic shocks and stresses.

Effective planning can reduce the exposure to natural and urban hazards and build resilience to shocks and stresses. Planning for population growth and change needs to consider exposure at a local level, as well as the cumulative impacts at district and regional levels.

State agencies and councils use a range of policies and tools to reduce risks from natural and urban hazards. Centralised and coordinated collection of data on hazards, particularly on how infrastructure is exposed to hazards, will help embed resilience in land use planning and infrastructure planning.

### Natural and urban hazards

The climate, vegetation, topography and pattern of development in the District mean that bushfire and flooding will continue to be hazards. Placing developments in hazardous areas or increasing the density of development in areas with limited evacuation options increases risk to people and property.

Parts of the District such as at Taren Point and Kingsgrove are exposed to flooding, whether from major rivers or from local overland flow. This can impact travel and community assets like open space and directly affect people and property. The NSW Government has developed the *Floodplain Development Manual 2005*. It provides councils with policy directions and tools for managing exposure to flooding.

Some coastal areas of the District, such as Kurnell, and areas along the Georges River, Port Hacking and Cooks River are at risk of coastal inundation and erosion. Potential sea level rise associated with climate change could also lead to saltwater intrusion into freshwater ecosystems and damage coastal open space and infrastructure. It will be important to manage community assets and infrastructure at risk, such as Wills Ground in Earlwood, to support sustainable and resilient communities.

Past and present urban development and activities can also create urban hazards such as noise and air pollution and soil contamination. Compared to many cities around the world, Greater Sydney enjoys excellent air quality, which enhances its reputation as a sustainable and liveable city. However, the combined effect of air circulation patterns in the Sydney Basin, local topography, and proximity to different sources of air pollution such as wood-fire smoke, can lead to localised air quality issues.

Transport movements along major roads and rail corridors generate noise and are a source of air pollution. The degree of noise or air pollution can be related to the volume of traffic and the level of truck and bus movements. The design of new buildings and public open space can help reduce exposure to noise and air pollution along busy road and rail corridors. Public transport, walking and cycling, as well as hybrid and electric cars provide opportunities to reduce air pollution. The NSW Government has recently strengthened regulation of ventilation outlets in motorway tunnels, which will also help reduce air pollution.
Soil and groundwater contamination is another urban hazard which will require careful management as the District grows and land uses change. This is particularly important when planning for more sensitive land uses such as schools, open space and low density residential neighbourhoods in areas with the potential for pre-existing contamination. 

State Environmental Planning Policy No. 55 – Remediation of Land and its associated guidelines manage the rezoning and development of contaminated land.

Greater Sydney, particularly its rural land, is at risk from biosecurity hazards such as pests and diseases that could threaten agriculture, the environment and community safety. Biodiversity hazards are being managed by the NSW Government through the Greater Sydney Peri Urban Biosecurity Program.

In planning for future growth, consideration of natural hazards and their cumulative impacts includes avoiding growth and development in areas exposed to natural hazards and limiting growth in existing communities that are exposed and vulnerable to natural hazards. In exceptional circumstances, there may be a need to reduce the number of people and amount of property that are vulnerable to natural hazards, through managed retreat of development.

The impact of extreme heat on communities and infrastructure networks can also be significant. More highly developed parts of the District can be exposed to extreme heat as a result of the urban heat island effect. Increasing tree canopy cover is important to help reduce those impacts. The State Heatwave Sub Plan, which is within the NSW State Emergency Management Plan, details the control and coordination arrangements across State and local governments for the preparation for, response to, and immediate recovery from a heatwave.

Current guidelines and planning controls also aim to minimise hazards and pollution by:

- using buffers to limit exposure to hazardous and offensive industries, noise and odour
- designing neighbourhoods and buildings that minimise exposure to noise and air pollution in the vicinity of busy rail lines and roads, including freight networks
- cooling the landscape by retaining water and protecting, enhancing and extending the urban tree canopy to mitigate the urban heat island effect.

Minimising interfaces with hazardous areas can reduce risks. Clearing vegetation around developments on bushfire-prone land can help reduce risks from bushfire, but must be balanced with protecting bushland and its ecological processes and systems. Planning on bushfire-prone land should consider risks and include hazard protection measures within the developable area. The Rural Fire Service requires new developments to comply with the provisions of Planning for Bush Fire Protection 2006.
Figure 24: Vulnerability to heatwaves


Figure 25: Land surface temperature during a heatwave

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

Figure 26: Tree canopy cover at 2011

Source: SPOT5 Woody Extent and Foliage Projective Cover (FPW) 5-10m, 2011, NSW Office of Environment and Heritage. Averaged to SA1 (2016)
Adapting to climate change

The most significant natural hazards and acute shocks that affect the South District include bushfire, severe storms and coastal erosion and inundation. These natural phenomena will be exacerbated by climate change.

The Coastal Management Manual 2017 sets out approaches to address sea level rise and the resilience of coastal assets, while CoastAdapt collates tools to support adaptation to coastal climate change and sea-level rise.

Air temperatures in Greater Sydney are expected to increase due to climate change and increasing urbanisation. With projected increases in heatwaves and the number of extreme temperature days, taking action to cool the city, in conjunction with supporting the community to adapt to a changing climate, is increasingly important.

Figure 24 shows different levels of vulnerability to heatwaves. Areas are ranked by their combined level of socioeconomic disadvantage and exposure to heat during a heatwave. Figure 25 shows land surface temperatures during heatwave conditions. Figure 26 shows tree canopy cover as at 2011.

The way neighbourhoods and buildings are planned and designed can help communities adapt and be more resilient to extreme heat. Increased tree canopy and green ground cover will help minimise these effects. Building design and building materials can also mitigate the urban heat island effect. Cooler building materials, including lighter-coloured roofs, lighter-coloured paving and more permeable paving can be highly effective.

Retaining more water in the landscape and integrating waterways in the design of new communities will help create a greener and cool city. Water-play features and connections with water will become essential elements of urban areas, while green walls, green roofs and initiatives such as rain gardens will help cool urban environments.

Building design and building materials can also mitigate the urban heat island effect. Cooler building materials, including lighter-coloured roofs, lighter-coloured paving and more permeable paving can be highly effective.

Shocks and stresses

Councils across the South 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.

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<tr>
<th>Actions</th>
<th>Responsibility</th>
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<tbody>
<tr>
<td>78. Support initiatives that respond to the impacts of climate change.</td>
<td>Councils, other planning authorities and State agencies</td>
</tr>
<tr>
<td>79. Avoid locating new urban development in areas exposed to natural and urban hazards and consider options to limit the intensification of development in existing urban areas most exposed to hazards.</td>
<td>Councils, other planning authorities and State agencies</td>
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<tr>
<td>80. Mitigate the urban heat island effect and reduce vulnerability to extreme heat.</td>
<td>Councils, other planning authorities and State agencies</td>
</tr>
</tbody>
</table>

Useful link: 100 Resilient Cities

Related government initiatives:
- NSW Office of Environment and Heritage Floodplain Development Manual 2005
- NSW Rural Fire Service Planning for bush fire protection 2006
- NSW Justice Office of Emergency Management 2011 State Heatwave Sub Plan
- NSW Office of Environment and Heritage AdaptNSW
- Australian Government Australia’s Strategy for Protecting Crowded Places from Terrorism
Successful implementation of the district plans requires:

- councils to prepare and implement local strategic planning statements as part of their strategic planning framework
- councils to update local environmental plans through the development of their local strategic planning statements and other relevant plans and policies
- collaboration across government and with local government and the private sector where each have clear roles and responsibilities (refer to Figure 27)
- private sector investment in line with the expectations and targets for housing, and jobs including commercial, retail and industrial developments
- infrastructure delivery which is responsive to the District Plan’s priorities and growth patterns across each District
- ongoing engagement to inform implementation
- annual monitoring of the performance of the District Plan and the status of delivering actions.

**Role of district and local plans**

Region and district plans inform the preparation and endorsement of local strategic planning statements and the preparation and assessment of planning proposals. Councils are to complete the update of their local environmental plan within three years of the district plans being finalised. This involves councils:

- reviewing their strategic planning framework, including a review of the existing local environmental plans against the relevant District Plan
- undertaking necessary studies and strategies and preparing a local strategic planning statement which will guide the update of the local environmental plans.

To accelerate the local planning process, the Housing Affordability Package announced by the NSW Government in June 2017 requires the Greater Sydney Commission, as part of a suite of policy measures, to nominate 10 Priority Councils in Greater Sydney, which will each receive up to $2.5 million to assist with updating their local environmental plans to give effect to the district plans, within two years of the Commission releasing final district plans.
Figure 27: Roles of planning authorities in Greater Sydney

Planning hierarchy

**State**
- Prepared by: NSW Department of Planning and Environment
- Approved by: Governor

**Regional**
- Prepared by: Greater Sydney Commission
- Approved by: NSW Government

**District**
- Prepared by: Greater Sydney Commission
- Approved by: Greater Sydney Commission

**Local**
- Local strategic planning statements and local strategies (housing, economic, etc)
- Planning Proposals (Council or proponent initiated)
- Local Environmental Plans
  - Zones
  - FSR
  - Height

**State Environmental Planning Policies**
- Vision and Directions
- Objectives
- Strategies and Actions

**Region Plan**
- Planning Priorities and Actions

**District Plans**

**Development Applications**

NSW Department of Planning and Environment
Greater Sydney Commission
Councils

Greater Sydney Commission | South District Plan
The role of the local strategic planning statement is to provide an alignment between regional and district strategic plans and local strategic planning and delivery. To assist the alignment of regional – district and local planning, protocols are required that formalise cooperation between State and local governments in that many of the opportunities and challenges in local planning are inter-related with government programs, particularly infrastructure investment.

Therefore a level of consistency in strategic planning approaches is needed to provide:

- alignment in interpretation of the region and district plans that supports the development of local strategic planning statements
- coordinated inputs by State agencies, particularly where State agency programs cross council and district boundaries – such as investment in major rail corridors, or the need for a new high school
- the ongoing review of the region and district plans that is informed by local inputs.

The first step towards this is developing, in consultation with councils, a level of consistency in the approach to the council review of their local environmental plans.

Local planning is also informed by councils’ community strategic plans. These community focused plans provide the strategic framework for the planning and delivery of services over a 10-year period for each local government area and are part of the broader Integrated Planning and Reporting Framework under the Local Government Act 1993. These plans can provide an important source of economic, social and environmental context for local strategic planning as well as a greater context to councils’ delivery programs and operational plans.

The community engagement strategy that supports the preparation of a community strategic plan may also inform a council’s community participation plan.

As such a council, in the review of their local environmental plan can provide local economic, social and environmental context that will help identify the priorities for investigation needed to inform the local strategic planning statement.

In undertaking strategic planning processes, and/or preparing or considering planning proposals, planning authorities must give effect to the District Plan, specifically the Planning Priorities and Actions. This also includes, as set out in the NSW Department of Planning and Environment’s A guide to preparing planning proposals, consistency with other plans and policies that form part of the strategic planning framework for Greater Sydney, such as:

- State environmental planning policies – the NSW Department of Planning and Environment is currently reviewing state environmental planning policies as part of initiatives to simplify the NSW planning system and reduce complexity. This review process will modernise, simplify and improve the effectiveness and usability of the policies.
- Ministerial Directions under Section 9.1 of the Environmental Planning and Assessment Act 1979, which require consideration for local plan making that cover issues such as employment, environment and heritage, housing, infrastructure and urban development.

Information Note 6 outlines the status of the district plans in regard to planning matters.
Planning Priority S19
Preparing local strategic planning statements informed by local strategic planning

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

**Objective 39**
A collaborative approach to city planning.

A role of strategic planning is to provide a basis for planning decisions. Critically, strategic planning provides the community with transparency to the planning process. The Community Participation Plan and mandatory exhibition of draft local strategic planning statements reinforce the importance of community participation in shaping the plans that will guide future decision-making in their local area.

The local strategic planning required to inform the preparation of local strategic planning statements will support State local government partnerships where State agencies have a critical role in supporting councils in managing growth and change. Councils’ identification of the scope and priorities for local strategic planning will be a streamlined process supported by the Greater Sydney Commission and the NSW Department of Planning and Environment and follows a similar approach to the Greater Sydney Commission’s review of *A Plan for Growing Sydney*. This approach highlights the importance of understanding the context at the same time as an assessment of the planning framework to deliver the plan.

As the first step in the implementation of the district plans it is therefore important to set up a strong foundation for local strategic planning in partnership with the community and State agencies. This will commence with a review of existing local environmental plans which is to include:

- an assessment of local environmental plans against the relevant district plan which can establish an understanding of the areas that would need to be addressed to give effect to the district plan’s Planning Priorities and Actions

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Royal National Park
The Greater Sydney Commission will require a local environmental plan review to include:

- an assessment of the local environment plan against the district plan Planning Priorities and Actions
- local context analysis
- a overview and program for the local strategic planning required to inform the preparation of a local strategic planning statement that will inform updates to the local environmental plan

It is intended that the output of this review will clearly identify each council’s priorities in giving effect to the district plans and where the strategic planning includes key inputs for state agencies.

The Commission and the NSW Department of Planning and Environment will support councils in the preparation of these reviews through a series of technical workshops which will incorporate the input of councils on the implementation of local strategic planning statements and other plans and policies. This will also include guidance on the housing demand that will inform the development of 6–10 year housing targets.

### Actions

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<tr>
<th>Actions</th>
<th>Responsibility</th>
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<tbody>
<tr>
<td>81. The Greater Sydney Commission will require a local environmental plan review to include:</td>
<td>Councils</td>
</tr>
<tr>
<td>a. an assessment of the local environment plan against the district plan Planning Priorities and Actions</td>
<td></td>
</tr>
<tr>
<td>b. local context analysis</td>
<td></td>
</tr>
<tr>
<td>c. a overview and program for the local strategic planning required to inform the preparation of a local strategic planning statement that will inform updates to the local environmental plan</td>
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</table>
Planning Priority S20
Monitoring and reporting on the delivery of the plan

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

**Objective 40**
Plans are refined by monitoring and reporting.

Monitoring and reporting will provide transparency to the community and other stakeholders. Action 13 in *A Metropolis of Three Cities* proposes that performance indicators be developed in consultation with State agencies and councils based around the 10 Directions that provide an integrated framework for both region and district plans. Performance indicators will also be used to monitor the performance of each district plan. This means the line of sight between the region and district plans will be underpinned by coordinated monitoring and it presents the opportunity for coordination with local planning.

It is intended that this common set of indicators enables a regional, district, and local understanding of the performance of the plans. In this way evidence-based data can assist in the coordination of State and local planning decisions, a major issue raised in submissions to the draft region and district plans.

Developing indicators in consultation with agencies and councils would provide an opportunity to identify indicators that can also assist councils in their monitoring and reporting requirements of local strategic planning statements. Councils may also tailor monitoring and reporting appropriate to their local planning context.

As part of reporting on the implementation of the district plans, the Commission will also provide an annual report to the NSW Government on the status of the Actions in each district plan.

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<tr>
<td>82. Development performance indicators in consultation with state agencies and councils that ensure the 10 Directions to inform inter-agency, State and local government decision-making.</td>
<td>Greater Sydney Commission, State agencies and councils</td>
</tr>
</tbody>
</table>
1. A city supported by infrastructure

As Greater Sydney grows and becomes more complex there is a need to design better ways of supporting growth and delivering appropriate infrastructure in the right places.

A city supported by infrastructure will be measured against the outcomes achieved by city-shaping infrastructure that facilitates the three cities and city-serving infrastructure that is sequenced and aligned with forecast growth.

**Potential indicator:** Increased 30-minute access to a metropolitan centre/cluster.

2. A collaborative city

Collaboration between government, industry and local communities will result in the best use of resources such as public spaces, school ovals and community facilities.

A collaborative city will be measured against the outcomes achieved by all levels of government, industry and the community working together.

**Potential indicator:** Increased use of public resources such as open space and community facilities.

### Liveability

3. A city for people

Improved quality of life can be achieved by co-locating schools, recreation, transport, community and health facilities, social infrastructure and local services in walkable mixed-use places.

A city for people will be measured against the outcomes achieved by improved access to local health, education, transport, recreation, social facilities and services.

**Potential indicator:** Increased walkable access to local centres.

4. Housing the city

Providing ongoing housing supply and a range of housing types in the right locations will create more liveable neighbourhoods and support Greater Sydney’s growing population. Housing affordability is also a challenge that can affect job and lifestyle choices.

Housing the city will be measured against the outcomes achieved by increasing housing supply and choice, and housing affordability.

**Potential indicators:** Increased housing completions (by type); Number of councils that implement Affordable Rental Housing Target Schemes.

5. A city of great places

The creation and renewal of great places for people, together with better local accessibility through walking and cycling, will achieve local liveability that attracts and retains residents and workers. Great places exhibit design excellence and start with a focus on open spaces and a people-friendly realm.

A city of great places will be measured against the outcomes achieved by improved local accessibility and connections, and design excellence.

**Potential indicator:** Increased access to open space.
### 10 Directions

#### Basis for monitoring performance

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<th><strong>Productivity</strong></th>
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<tr>
<td><strong>6. A well-connected city</strong></td>
<td>A Metropolis of Three Cities requires a well-connected Greater Sydney with new jobs, shops and services in well-located centres with efficient transport connections and safe and convenient walking and cycling routes. This creates a 30-minute city. A well-connected city will be measured against the outcomes achieved by improved access to metropolitan, strategic and local centres. <strong>Potential indicators:</strong> Percentage of dwellings located within 30 minutes by public transport of a metropolitan centre/cluster; Percentage of dwellings located within 30 minutes by public transport of a strategic centre.</td>
</tr>
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</table>

| **7. Jobs and skills for the city** | Greater Sydney’s population growth needs to be supported by economic growth that enhances its productivity, export sectors and global competitiveness. Jobs and skills for the city will be measured against the outcomes achieved by increased business growth and investment, improved transport connections, economic agglomerations and target sectors. **Potential indicator:** Increased jobs in metropolitan and strategic centres. |

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<th><strong>Sustainability</strong></th>
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<td><strong>8. A city in its landscape</strong></td>
<td>A healthy natural environment will be important to improve liveability, create healthy places, and mitigate the effects of climate change. A city in its landscape will be measured against the outcomes achieved by protected, restored and enhanced landscapes, waterways, coastline, natural areas, tree canopy and open spaces. <strong>Potential indicators:</strong> Increased urban tree canopy; Expanded Greater Sydney Green Grid.</td>
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| **9. An efficient city** | In Greater Sydney, the sectors that contribute most to greenhouse gas emissions are energy (electricity and gas) used in buildings, transport and waste. An efficient city will be measured against the outcomes achieved by innovative management of water, energy, resources and waste in planning new development and infrastructure. **Potential indicators:** Reduced transport-related greenhouse gas emissions; Reduced energy use per capita. |

| **10. A resilient city** | Adapting to climate change is critical to Greater Sydney’s future resilience, together with responding to its natural and urban hazards. To be resilient, communities need social cohesion and access to economic resources. A resilient city will be measured against the outcomes achieved by managing the impacts of natural hazards on communities, and adapting communities to cope with more very hot days. **Potential indicator:** Number of councils with standardised statewide natural hazard information. |
Note: The source of population, dwellings and household data in this 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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