

# Draft West District Plan

Co-creating a Greater Sydney

November 2016



# How to be involved

This draft District Plan sets out aspirations and proposals for Greater Sydney's West District, which includes the Blue Mountains, Penrith and Hawkesbury local government areas. It has been developed by the Greater Sydney Commission.

This draft District Plan is on formal public exhibition until the end of March 2017, and will be finalised towards the end of 2017 to allow as many people as possible to provide input.

You can read the entire draft District Plan at [www.greater.sydney](http://www.greater.sydney) and send feedback:

- via [www.greater.sydney](http://www.greater.sydney)
- **by email:**  
[engagement@gsc.nsw.gov.au](mailto:engagement@gsc.nsw.gov.au)
- **by post:**  
Greater Sydney Commission  
Draft West District Plan  
PO Box 257,  
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For more information visit [www.greater.sydney](http://www.greater.sydney) call us on 1800 617 681

or email: [engagement@gsc.nsw.gov.au](mailto:engagement@gsc.nsw.gov.au)

This document was updated on 21 December 2016 to address typographical errors and production faults. A detailed list of the errata can be found at [www.greater.sydney/content/publications](http://www.greater.sydney/content/publications)

## Draft West District Plan Exhibition



You can view these supporting components, as well as *Our vision – Towards our Greater Sydney 2056*, our proposed 40-year vision for Greater Sydney, at [www.greater.sydney](http://www.greater.sydney).

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## Chief Commissioner's Foreword

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On behalf of the Commissioners and staff of the Greater Sydney Commission, I acknowledge the traditional owners of the lands that include the West District.

We acknowledge the living culture of the traditional custodians of these lands, recognise that they have occupied and cared for this country over countless generations, and celebrate their continuing contribution to the life of Greater Sydney.

This draft District Plan sets a vision for growth and development in the West District. It will form the overarching strategy for all future planning in the area.

The draft District Plan recognises what we have heard to date – particularly that the District's natural landscape is a great asset and a great attractor, sustaining and supporting a unique, bushland city. We know that over the next 20 years, changes in our social make-up – such as the expected increase in people in the over 65 and especially the over 85 age brackets – will require specific planning in terms of housing and social infrastructure.

We also know that the investment in the Western Sydney Airport will have a transformational effect on the District, including employment opportunities. Now we want to know how we can build on the District's assets, and major infrastructure investment, as the District's population grows and how we can deal with the difficult questions and conflicts that may arise.

Everyone benefits when there is more clarity on our city's approach and better guidance on what we should be prioritising. In getting this right, we recognise that collaboration will be key. There is a diversity of opportunities and

challenges in the District, with many different people, places and organisations involved. The Greater Sydney Commission has been established to bring together all the various parties with an interest in the District's future and channel the collective energy into improved planning outcomes.

The Commission will take a leadership role to make sure that public resources and expertise are brought together to create a more productive, liveable and sustainable city.

This draft District Plan is an important step in setting a vision for growth and development in the West District and Greater Sydney. I thank everyone from the community, industry, councils, government and other stakeholder groups who have contributed so far in developing this draft District Plan for public comment.

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**I encourage all stakeholders with an interest in the West District to now take the time to review and provide feedback on the draft District Plan. Your suggestions, comments and opinions will be crucial in making this Plan a living and working document to guide the West District's future.**

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**Lucy Hughes Turnbull AO**  
Chief Commissioner





## District Commissioner's Foreword

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The West District is Greater Sydney's bushland city, a place surrounded by World Heritage-listed landscapes, with a sprinkling of towns and centres that combine village charm and heritage character.

This iconic landscape is more than a backdrop – it is the West District's underlying asset. People travel from around the world to experience this landscape – mountains, escarpments, rural hinterland and rivers. The landscape is the foundation for how we think and plan for the District – it resonates in our places and informs the District's design and structure.

With expected population growth, the planned investment of the Western Sydney Airport, the economic potential of Greater Penrith and increasing tourism numbers and experiences, we want to work across government to realise the potential of this District.

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**The development of Australia's first 21st Century international airport at Badgerys Creek within the next 10 years will drive population growth, improve transport links and create new jobs and economic opportunities for Greater Penrith. This is a unique chance to grow new markets in international and domestic tourism, advanced logistics, aerospace industries freight, transport, health, education and the knowledge economy. The Western Sydney City Deal between the Australian and NSW Governments, with local government will drive this growth.**

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With this transformative change, we will work to protect and enhance the character and feel of our places and make it easier for residents to

get around and access day to day services and facilities within the District. With more jobs on our doorstep, we can see more people working locally and experiencing reasonable commutes. To support this, we will need a greater diversity of homes in the District, so that people who want to live here can afford to do so, and choose the type of home that better suits their lifestyle.

This draft District Plan is part of a concerted conversation between all of us who live and work here about how we can come together to create the kind of West District we aspire to.

I'm eager for as many people as possible to get involved. This conversation will continue throughout the coming months as we finalise this draft District Plan and it's an important first formal step in helping to shape the decisions that will drive the District's future.

**Sean O'Toole OAM**

West District Commissioner





# Our vision – West District 2036

20-year vision, priorities and actions for the West District

**The West District's unique and rich tapestry of urban, rural and natural environments, combined with access to jobs, quality health care, education, recreation, cultural and natural experiences creates a great quality of life for its communities.**

In 2036, the West District will continue to be a place where its people are its strength. All backgrounds and cultures will be respected and valued, with people sharing a determination to realise the District's potential while cherishing its unique environment and heritage.

The dynamic city of Greater Penrith – an economic and service hub for the District and the gateway to the Blue Mountains and the Central West region of NSW – will build on its renowned health and education super precinct. The vibrant centres of Katoomba, Richmond-Windsor and St Marys will complement Greater Penrith, providing a mix of services and workplaces.

The District's web of towns and villages will provide livelihoods and be destinations in their own right, acting as stopping points along the Great Western Highway, the Western Rail Line and Bells Line of Road.

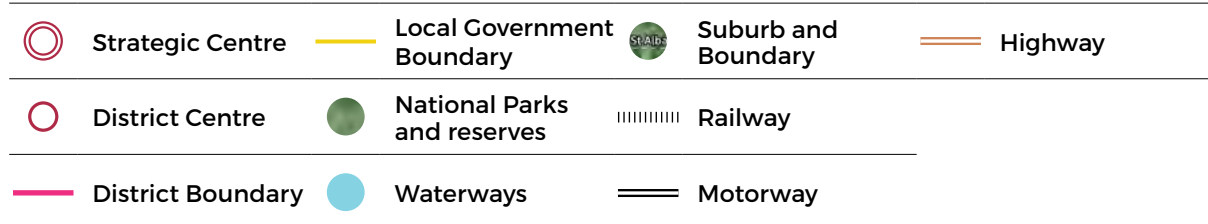
With the Greater Blue Mountains World Heritage Area, the Hawkesbury's rural and agricultural landscapes and the iconic Hawkesbury-Nepean River as a green backdrop, the District will enjoy even better recreation and tourism opportunities. Development will balance the need for more diverse housing that respects the District's distinctive town character and environment with an appreciation of the risks of bushfires, flooding and heatwaves in a changing climate.

The District will leverage investment in the proposed Western Sydney Airport, connecting the region to the rest of the world and planned in a way that protects our world-class landscapes. The Western City around the Airport will deliver local jobs and business activity to the area.

The District's resilient economy will also draw on new opportunities and innovations, providing jobs and services for more than one million people who will live in the catchment between the North West and South West Priority Growth Areas.

This growing economic base will draw from new jobs in tourism, the creative industries, agribusiness, advanced manufacturing and engineering, lifestyle health, research and technology, education, defence and aviation. It will be supported by a comprehensive and high quality transport network with north-south and east-west rail and road connections and strong digital connections.







## West District: Priorities and actions

This draft District Plan identifies priorities and actions to realise the vision for the District. This section lists the overarching priorities that will inform strategic planning and summarises the actions outlined in each chapter.

Action tables in this section identify outcomes, lead agencies and partner agencies (partners). Further detail on the priorities is included throughout this draft District Plan in terms of implementation and monitoring priorities (Chapter 1) and productivity, liveability and sustainability priorities (Chapters 3, 4 and 5 respectively).

### Implementation and monitoring actions (Chapter 1)

Action	Outcome	Lead agency	Partners
IM1: Align land use planning and infrastructure planning	Inform the NSW Government's infrastructure decision-making	GSC	INSW, TfNSW, NSW Health
IM2: Develop a framework to monitor growth and change in Greater Sydney	Inform the ongoing actions and infrastructure investments of Government required to deliver <i>A Plan for Growing Sydney</i> and the District Plans	GSC	-
IM3: Develop an interactive information hub - the Greater Sydney Dashboard	Enhance the community's understanding of the performance and characteristics of Greater Sydney	GSC	-
IM4: Report on local planning	Improve the understanding of the effectiveness of District Plans in delivering on the stated priorities and actions	GSC	Councils

**Key:**

AA	Aboriginal Affairs
CCNSW	Cemeteries and Crematoria NSW
CHPs	Community Housing Providers
DoE	Department of Education
Dol	Department of Industry
DPE	Department of Planning and Environment
EPA	Environment Protection Authority
INSW	Infrastructure NSW
GSC	Greater Sydney Commission
OEH	Office of Environment and Heritage
OGA	Office of Government Architect
TfNSW	Transport for NSW

## Productivity priorities and actions (Chapter 3)

The proposed priorities and actions for the West District aim to accommodate more jobs in the District, particularly in Greater Penrith in the short to medium term, and boost its international tourism industry. They address the low share of knowledge-intensive jobs in the West District – which will be enabled in the long term by the investment in Western Sydney Airport – and focus more immediately on health and education precincts. Better transport connections will provide better access to a greater choice of jobs closer to where people live. The overarching priorities are:

- Creating a framework to deliver the Western City
- Building international tourism
- Planning for job target ranges for strategic and district centres
- Planning for Greater Penrith as Sydney's Western Gateway
- Increasing, strengthening and diversifying the skill base
- Accessing a greater number of metropolitan jobs and centres within 30 minutes
- Accessing local jobs, goods and services within 30 minutes
- Managing freight activities
- Managing employment and urban services land.

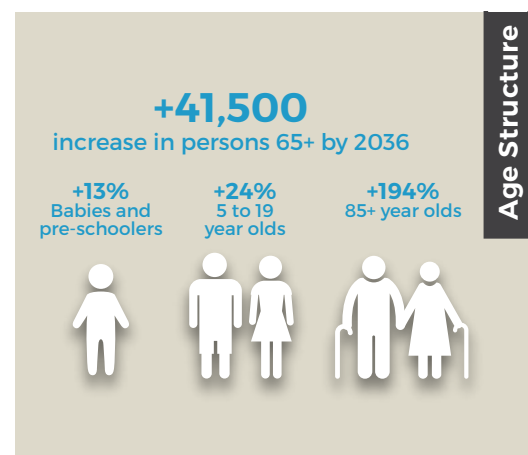
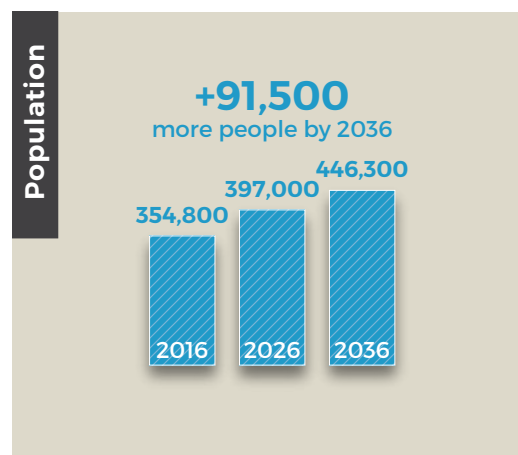
### Productivity Actions

Action	Outcome	Lead agency	Partners
P1: Establish the Western Sydney City Deal	Increase in total jobs	Australian and NSW Governments	Councils
P2: Develop and implement an Economic Development Strategy for the Western City	Increase total jobs and proportion of health and education and knowledge and professional services jobs	DoI	GSC, Jobs for NSW, AA
P3: Develop infrastructure to support the growth of the visitor economy	Increased visitation	Councils	GSC
P4: Develop and implement a centres framework for the District	Increased investment, increase in total jobs and reduced retail escape expenditure	GSC	Councils
P5: Coordinate activities to grow jobs in Greater Penrith	Increase in total jobs, and increase in the total health and education and knowledge and professional services jobs	GSC, Council	NSW Health, Councils, State agencies
P6: Develop the Greater Penrith gateway corridor as a major tourism, cultural, recreational and entertainment hub	Increased investment, jobs and visitation	GSC, Council	-
P7: Enhance public transport access to Penrith City Centre	Increased patronage	TfNSW	-
P8: Support skills development as Western Sydney Airport is constructed	Reduced inflow of workers from outside the District	DoI	-
P9: Encourage opportunities for new smart work hubs	Retention of skilled knowledge and professional jobs	Councils, DoI	GSC
P10: Identify and plan for efficient movement of freight to, from and within the District, with least impact on residents' amenity	Improved freight transport connectivity	TfNSW	-
P11: Develop better understanding of the value and operation of employment and urban services land	Increase in total jobs	GSC	Councils

## Liveability priorities and actions (Chapter 4)

The proposed priorities and actions for the West District are based on the District's unique way of life as a bushland city with access to global opportunities throughout Greater Sydney. The District's many places – from unique towns and villages to the growing Greater Penrith area and the opportunities that will come from the investment in Western Sydney Airport – provide a strong foundation to improve quality of life for residents. The overarching priorities are:

- Improving housing choice
- Improving housing diversity and affordability
- Coordinating and monitoring housing outcomes and demographic trends
- Creating great places
- Fostering cohesive communities
- Responding to people's need for services





### Liveability Actions

Action	Outcome	Lead agency	Partners
L1: Prepare local housing strategies	Increase in diversity of housing choice	Councils	-
L2: Identify the opportunities to create the capacity to deliver 20-year strategic housing supply targets	Creation of housing capacity	GSC	Councils, DPE
L3: Councils to increase housing capacity across the District	Creation of housing capacity and increase in diversity of housing choice	Councils	-
L4: Encourage housing diversity	Increase in diversity of housing choice	DPE	-
L5: Independently assess need and viability	Increase in affordable rental housing	GSC	Industry, CHPs, DPE
L6: Support councils to achieve additional affordable housing	Increase in affordable housing	GSC	Councils, DPE
L7: Provide guidance on Affordable Rental Housing Targets	Increase in affordable rental housing	GSC	DPE, Councils, State agencies, CHPs
L8: Undertake broad approaches to facilitate affordable housing	Increase in affordable housing	GSC	Councils, CHPs
L9: Coordinate infrastructure planning and delivery for growing communities	Change in industry perceptions (surveyed)	GSC	DPE
L10: Provide data and projections on population and dwellings for local government areas across Greater Sydney	Contribute to more informed infrastructure investment decisions, strategic planning and plan making	DPE	-
L11: Provide design-led planning to support high quality urban design	Contribute to improved sustainability, productivity and liveability outcomes	OGA	GSC
L12: Develop guidelines for safe and healthy built environments	Contribute to improved health outcomes and increased walking and cycling	GSC	DPE
L13: Conserve and enhance environmental heritage including Aboriginal, European and natural	Identification and protection of heritage elements	OEH, DPE, AA	GSC, Councils
L14: Develop a West District sport and recreation participation strategy and sport and recreation facility plan	Contribute to informed decision making for sport and recreation infrastructure and increased participation	Office of Sport	Councils
L15: Support planning for shared spaces	Increase in the provision of community facilities, including open space	GSC, DEC	State agencies, organisations, providers
L16: Support planning for school facilities	Improved education infrastructure decision making	DPE	NSW Property, DEC
L17: Support the provision of culturally appropriate services	Improved decision making with the Aboriginal community	GSC, AA	-
L18: Support planning for emergency services	Contribute to improved decision making for emergency services operators	DPE	-
L19: Support planning for cemeteries and crematoria	Improved decision making for new cemeteries	CCNSW	-

## Sustainability priorities and actions (Chapter 5)

The proposed priorities and actions for a sustainable West District focus on the District's expansive bushland, waterways and biodiversity, which attract people from around the world and provide a unique way of life for its residents. As the District grows, these assets will be enhanced, and the District's efficiency and resilience boosted. The overarching priorities are:

- Enhancing the West District in its landscape
- Protecting the District's waterways
- Protecting and enhancing biodiversity
- Delivering Sydney's Green Grid
- Managing the Metropolitan Rural Area
- Creating an efficient West District
- Planning for a resilient West District
- Managing flood hazards in the Hawkesbury-Nepean Valley.

### Households

**+14,000**  
more single person  
households by 2036

**+51%**  
more single  
person households



**+18%**  
Couples with  
children households



### Dwellings

**+8,400**  
more dwellings by 2021



### Sustainability Actions

Action	Outcome	Lead agency	Partners
S1: Review criteria for monitoring water quality and waterway health	Improved water quality and waterway health	OEH	GSC
S2: Protect the South Creek environment and use development approaches to achieve excellent environment performance	Improved water quality and waterway health, and integration of South Creek into land use planning	GSC	EPA
S3: Improve the management of waterways in Priority Growth Areas	Improved management of riparian corridors	DPE	-
S4: Develop a Strategic Conservation Plan for Western Sydney	Protection and management of areas of high environmental value	OEH, DPE	GSC
S5: Update information on areas of high environmental value	Protection and management of areas of high environmental value	OEH, DPE	Councils
S6: Use funding programs to deliver the West District Green Grid priorities	Delivery of the Green Grid priorities	GSC, TfNSW, OEH	Councils
S7: Develop support tools and methodologies for local open space planning	Improved utilisation of open space and increased provision of open space	GSC	-
S8: Update the Urban Green Cover in NSW Technical Guidelines to respond to solar access to roofs	Protection of solar access to roofs	OEH, DPE	-
S9: Identify land for future waste reuse and recycling	Identification of land for waste management	EPA, DPE	Councils
S10: Embed the NSW Climate Change Policy Framework into local planning decisions	Contribute to energy efficiency, reduced emissions and improve environmental performance	GSC	Councils, OEH
S11: Support the development of initiatives for a sustainable low carbon future	Contribute to energy efficiency, reduced emissions and improve environmental performance	GSC, Councils, DPE	-
S12: Support the development of environmental performance targets and benchmarks	Contribute to improved environmental performance	GSC	NSW Climate Council, Australian Government, utility providers
S13: Incorporate the mitigation of the urban heat island effect into planning for urban renewal projects and Priority Growth Areas	Contribute to reductions in ambient temperatures	DPE	-
S14: Review the guidelines for air quality and noise measures for development near rail corridors and busy roads	Improved land use and transport decision making	EPA, DPE	-
S15: Identify and map potential high impact areas for noise and air pollution	Improved land use and transport decision making	EPA	DPE, Councils
S16: Address flood risk issues in the Hawkesbury-Nepean Valley	Protection of life and property	DPE, INSW	GSC, Councils







# 1 Introduction

**This draft District Plan proposes a 20-year vision for the West District, which includes the Penrith, Blue Mountains and Hawkesbury local government areas. It has been developed by the Greater Sydney Commission in consultation with State agencies and the community, with technical input from councils.**

The West District offers an enviable lifestyle – the best of both worlds. With world-heritage listed bushland and escarpments framing a landscape of lovely towns and villages, and access via rail directly to the growing centre of Greater Penrith and through to Greater Parramatta and Sydney City, people can have the benefits of a bushland city and access to good jobs.

The planned Western Sydney Airport will provide even greater opportunities for people to strike this unique lifestyle balance.

Our work on this draft District Plan builds on the District's characteristics, while drawing on a robust body of technical material that looks into Greater Sydney's changing demographics, economy, housing, open spaces and many other characteristics. It also incorporates feedback garnered through our #GreaterSydney engagement during 2016.

We see this draft District Plan as a first step in the planning for the West District. We want as many people as possible to continue to engage with us as we work to develop the draft District Plan further towards finalisation at the end of 2017.

We intend to achieve this by building collaboration and listening into everything we do.



## **#GreaterSydney: Insights from the community**

Our conversations with the community through our #GreaterSydney engagement have provided valuable insights into what the community values about the District and what people want to see changed. We have sought to encapsulate these inputs into this draft District Plan.

People in the West District highlighted transport as the key to unlocking the District's potential. There was strong support for more public transport options and better roads to connect to jobs, services and leisure activities both within the District and across Greater Sydney.

People want to retain the District's character, which is defined by its open space and natural heritage, particularly the Greater Blue Mountains World Heritage Area. At the same time, they are looking for infrastructure and development that will support more local jobs, housing choices, and entertainment and cultural activities.

## 1.1 The role of district planning

Planning in Greater Sydney has traditionally happened at two levels. The NSW Government developed overarching plans that considered Greater Sydney's growing population, where people will live and what kind of jobs and transport they will need; while local government developed local environmental plans to identify how land can be used, including for housing, businesses and parks.

What has been missing is the district-level planning that connects local planning with the longer-term metropolitan planning for Greater Sydney. To facilitate this connection, Greater Sydney is designated into six Districts that represent neighbouring groups of council areas with similar features and common communities of interest. You can see a map of the six Districts at our website [www.greater.sydney](http://www.greater.sydney).

*The Environmental Planning and Assessment Act 1979 (EP&A Act)* requires each District Plan to:

- provide the basis for strategic planning in the District, having regard to economic, social and environmental matters
- establish planning priorities that are consistent with the objectives, strategies and actions of *A Plan for Growing Sydney*
- identify actions required to achieve those planning priorities.

This draft District Plan meets these requirements by:

- progressing the directions of *A Plan for Growing Sydney*
- identifying planning priorities for the District and the actions to achieve them.

This draft District Plan translates and tailors metropolitan planning priorities for each District by giving effect to the four goals of *A Plan for Growing Sydney*:

- Goal 1: A competitive economy with world-class services and transport
- Goal 2: A city of housing choice, with homes that meet our needs and lifestyles
- Goal 3: A great place to live with communities that are strong, healthy and well connected
- Goal 4: A sustainable and resilient city that protects the natural environment and has a balanced approach to the use of land and resources.

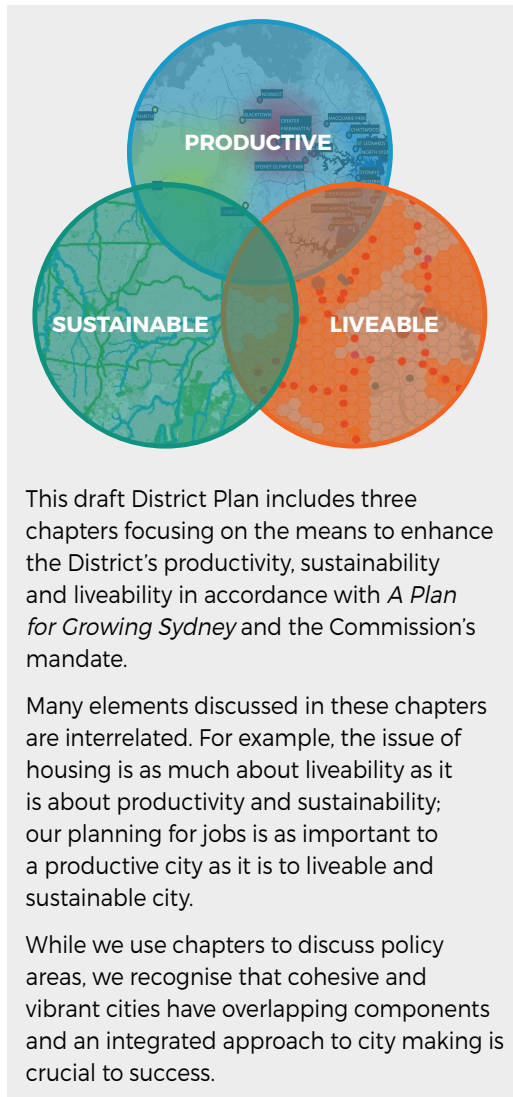
To do this, this draft District Plan interweaves these goals by describing proposed priorities and actions for the District in terms of:

- A productive city (Goal 1)
- A liveable city (Goals 2 and 3)
- A sustainable city (Goals 3 and 4).

This draft District Plan is accompanied by a draft amendment to *A Plan for Growing Sydney*, as noted in Section 1.1.1 and detailed in Chapter 2.

City planning is dynamic. In preparing this draft District Plan during 2016, we have been mindful of the changing technologies and evolving thinking that will impact Greater Sydney to 2036.

The city-making implications of issues such as driverless cars, emerging business trends, climate change and housing affordability will require further research and testing. For these reasons, this draft District Plan represents a moment in time but will, with your feedback and our commitment to ongoing research, be a living document to better navigate the issues influencing Greater Sydney to 2036.



As noted on the previous page, legislation requires district planning to give consideration to the Greater Sydney Region Plan, currently *A Plan for Growing Sydney*. District planning must also consider priorities identified by the Minister for Planning and other relevant plans, strategies and NSW Government policies including:

- the Premier's and State Priorities (September 2015) that seek to create jobs, encourage business investment and increase housing supply
- the Ministerial Statement of Priorities (January 2016) that includes strategic planning for Parramatta, Penrith, Liverpool and Campbelltown
- updates to the State Infrastructure Plans for 2015/16 and 2016/17
- the Western Sydney City Deal (Memorandum of Understanding signed October 2016)
- the initiatives of Jobs for NSW.

These matters, which give greater clarity to Greater Sydney's strategic planning framework, combined with the evolving nature of Greater Sydney, emerging technologies and the complexity and dynamism of city planning, have generated new thinking in strategic planning for Greater Sydney.

*'It is not a vaguely idealistic plan. It has been based on proven facts, and if its authors have looked upward to the stars they have kept their feet upon the ground. We feel that it is a commonsense scheme, practical in its economics and finance.'*

*It recognises that, next to our people, the land is our greatest asset. Realisation of the Plan in measured stages will unlock the land for its best community use, so that present and future citizens may be able to meet the challenge of advances in technology, economics, social sciences and culture, and secure their benefits for all.'*

*County of Cumberland Plan, 1948*

### 1.1.1 Draft amendment to *A Plan for Growing Sydney*

To allow our planning for Greater Sydney to relate to our best understanding of the future, this draft District Plan introduces a longer-term, transformational focus on the patterns of development needed for Greater Sydney to be a productive, liveable and sustainable Global Sydney. This ambitious 40-year vision for Greater Sydney as a metropolis of three cities is detailed in Chapter 2.

This 40-year vision is a draft amendment to *A Plan for Growing Sydney*. It is on exhibition alongside this draft District Plan so that feedback around the concept of Greater Sydney as a metropolis of three cities can inform the review of *A Plan for Growing Sydney*. You can download a standalone version of the draft amendment, titled *Towards our Greater Sydney 2056* by visiting [www.greater.sydney](http://www.greater.sydney).

In this context, this draft District Plan foreshadows how the proposed amendment could influence planning for the District's productivity, liveability and sustainability while also giving effect to *A Plan for Growing Sydney*.

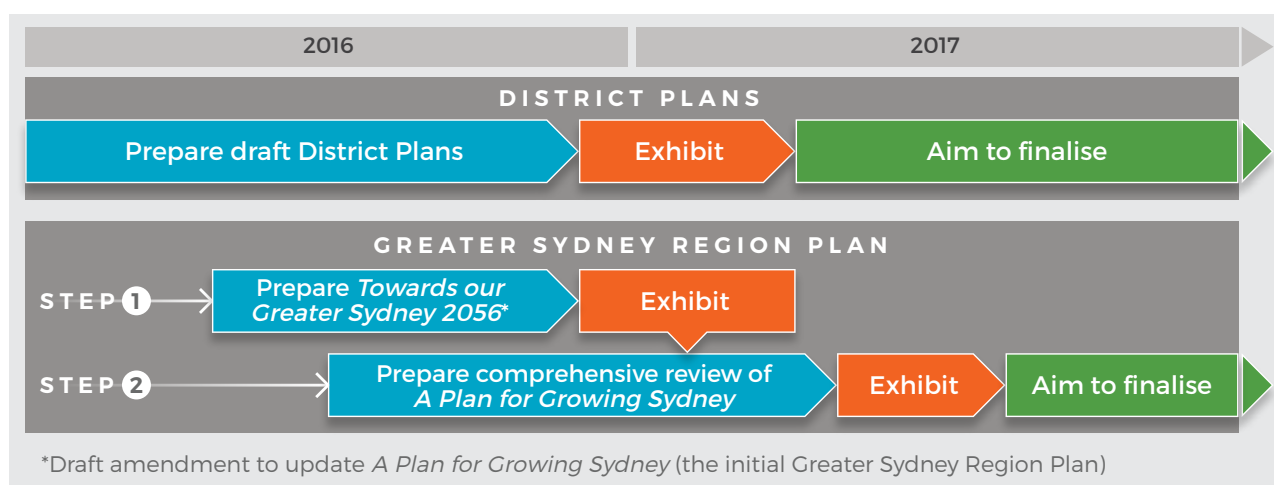
Concurrent with the review of *A Plan for Growing Sydney* in 2017, Transport for NSW will develop the Future Transport Strategy and Infrastructure NSW will review the *State Infrastructure Strategy*.

Given the important interconnected nature of these and other NSW Government strategies, the Commission, Transport for NSW and Infrastructure NSW will align work programs to the end of 2017 to include:

- inputs, assumptions and scenario analysis to inform the development of the plans and strategies
- events for community and stakeholder engagement
- timeframes for key milestones.

This approach will not only allow for a better and more integrated outcome for Greater Sydney but a more transparent approach for stakeholders.

Figure 1-1: The regional and district planning process (2016/2017)





### 1.1.2 What this draft District Plan means for local planning

As a document for discussion, this draft District Plan proposes actions that could influence how different levels of government plan for the District, and how public and private investment decisions are made – directly influencing growth and change.

For local government, this draft District Plan will:

- inform the preparation of local environmental plans
- inform planning proposals
- guide strategic land use, transport and infrastructure planning across local government areas
- inform infrastructure planning.

Section 75A1 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) requires local environment plans to be updated to give effect to each District Plan as soon as practicable after a District Plan is made.

This process may require a comprehensive review or be staged to reflect the local government area priorities identified in each District Plan, and to allow for more targeted engagement on these priority areas. This approach will also help councils to manage resources.

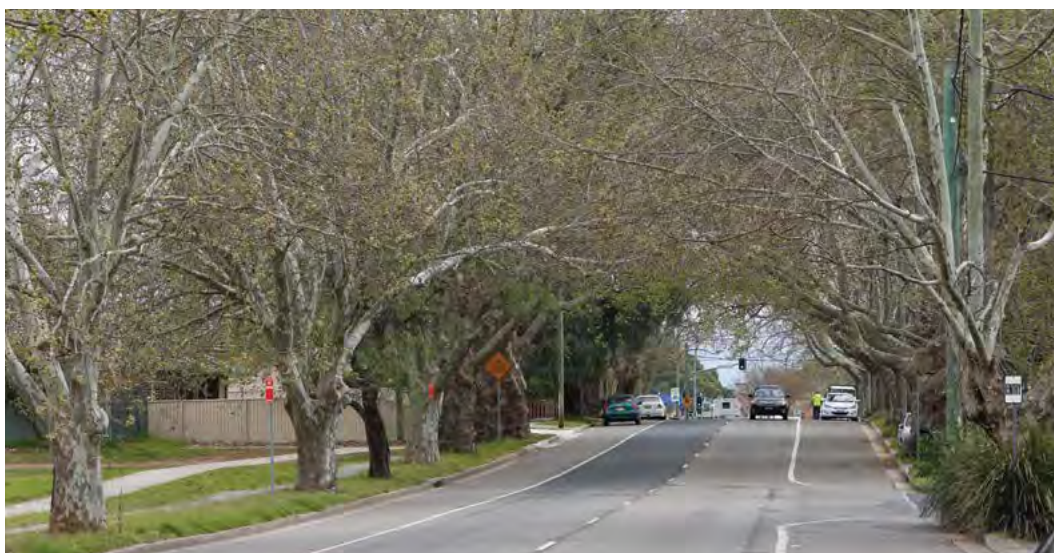
### 1.1.3 Status of the draft District Plan

While councils are required to give effect to District Plans as soon as practicable after a District Plan is made, draft District Plans will guide the preparation of planning proposals under Part 3 of the Act. This is established by the Department of Planning and Environment's *Guide to Preparing Planning Proposals* (August 2016).

The Guide lists assessment criteria for a planning proposal, which include but are not limited to consideration of the strategic merit of the proposal, the site-specific merit of the proposal and consistency with strategic plans, including draft District Plans, State environmental planning policies and Ministerial directions.

Local environmental plans will continue to determine whether development is permitted or prohibited on land. While a draft District Plan or District Plan is not a mandatory matter for consideration in the determination of a development application, a consent authority may decide to consider a draft District Plan or District Plan to the extent it relates to the objects of the EP&A Act.

The inclusion of *Our vision – Towards our Greater Sydney 2056* in Chapter 2 of this draft District Plan foreshadows our research and the evolution of our thinking that will inform the review of *A Plan for Growing Sydney* during 2017. It does not replace the legal status of *A Plan for Growing Sydney* as the current Greater Sydney Region Plan.



### Planning principles

*A Plan for Growing Sydney* identified three planning principles that remain current and underpin many of the priorities of this draft District Plan.

#### **Principle 1: Increasing housing choice around all centres through urban renewal in established areas**

Increasing housing close to centres and stations makes it easier to walk or cycle to shops or services, and to travel to work or other centres; reduces traffic congestion; and makes our neighbourhoods more community oriented.

Increasing the variety of housing available makes it easier for people to find a home that suits their lifestyle, household size and their budget.

Locating new housing in centres delivers a range of economic, environmental and social benefits to the community. Research by the Organisation for Economic Cooperation and Development (OECD) has similarly found that productivity benefits arise from a more compact city.

#### **Principle 2: Stronger economic development in strategic centres and transport gateways**

Locating jobs in around 30 to 40 large centres across Greater Sydney provides the greatest benefits to the city's overall productivity. Greater Sydney's largest and most important hubs for business and employment are 'strategic centres' and 'transport gateways'.

These locations will be an important focus for future growth because of their size, diversity of activities, their connections (mainly to the rail network), and the presence of major institutional activities such as health and education facilities or Greater Sydney's major airports and port.

#### **Principle 3: Connecting centres with a networked transport system**

The public transport network connects people to centres. In doing this, it connects people to jobs, education facilities, health centres and hospitals, and sporting, cultural and entertainment facilities.

Centres rely on efficient transport to serve their customers, support their growing business and freight functions, and to connect to the global economy.

Efficient links within centres improves convenience for customers, and efficient links into centres and between centres helps people to get to jobs, schools, universities, shops and leisure activities.

Making it easy to get to centres and offering a range of services at centres makes them a focal point for the community and increases prospects for economic growth and job creation.

## 1.2 Implementation

The final District Plan will be formally reviewed every five years, but as a living document, we plan to update it more regularly in response to new government infrastructure, policies, emerging trends or other factors influencing its currency.

### 1.2.1 Managing implementation

This draft District Plan identifies a number of implementation mechanisms.

	Existing government policies and actions that may be improved through stronger collaboration or the clarity provided from district-level planning.
	New actions that will be the Commission's responsibility to lead and deliver.
	New collaborations that the Commission will lead and deliver in partnership with local government and/or State agencies.
	New actions that are the responsibility of State agencies, with the relevant agency identified.
	Priorities designed to provide guidance for strategic planning or plan-making by the relevant planning authority.
	Specific parts of Greater Sydney identified as Collaboration Areas, where significant productivity, liveability or sustainability outcomes are achieved through the collaboration of different levels of government and in some cases the private sector or landowners.

As the Commission is an independent agency, some actions and priorities included within this draft District Plan may not be NSW Government policy and may be subject to a business plan.

### 1.2.2 Planning for land use and infrastructure

As Greater Sydney grows, we need to more efficiently and effectively align land use planning and infrastructure investment. This is one of our key objectives. It forms the basis of the work we have commenced with State and local government to identify the infrastructure required to deliver this draft District Plan and prioritise it by place and time.

Our insights, as described within this draft District Plan, are drawn from our knowledge of:

- existing NSW Government infrastructure commitments and existing investigation areas for new housing
- forecasts in terms of population increases and locations where growth is anticipated, including jobs in centres
- annual monitoring of changes in development activities across Greater Sydney, with a primary focus on housing.

With these insights, we can provide greater clarity around the future location of new land uses in Greater Sydney. This feeds into the planning for infrastructure, from city-shaping infrastructure such as new rail lines that are usually planned by the NSW Government, to local infrastructure such as local roads or parks and community facilities that are usually planned by councils.

For NSW Government infrastructure planning, we will utilise our cross-agency Infrastructure Delivery Committee to facilitate collaboration on infrastructure issues across districts and Greater Sydney. We will also develop an Annual Infrastructure Priority List for the NSW Government to inform decision-making on infrastructure provision at a State, district and local level.

For local government infrastructure planning, our insights into expected and actual growth in housing can present an opportunity for councils to align their capital programs and infrastructure scheduling, and collaborate across council or district boundaries as required. This will assist the timely delivery of infrastructure, make the best use public resources, and could ultimately lead to stronger coordination between State and local planning for infrastructure and land uses.



**Action IM1: Align land use planning and infrastructure planning**

To support the efficient and effective alignment of land use planning and infrastructure:

- the Commission will prepare an Annual Infrastructure Priority List in conjunction with Infrastructure NSW to support the productivity, liveability and sustainability of the District as it grows, consistent with Action 1.11.6 of *A Plan for Growing Sydney*.

### 1.2.3 Infrastructure funding and delivery

Infrastructure is presently funded through a range of mechanisms:

- The NSW Government Budget including:
  - agency programs for education, health and transport
  - funding programs such as the Housing Acceleration Fund, Metropolitan Greenspace Program and Environmental Trust
- Australian Government funding
- State infrastructure contributions
- local infrastructure investment
- local development contributions and associated programs
- voluntary planning agreements.

In addition to these mechanisms is the concept of value capture or 'sharing'. Value sharing uses part of the economic uplift that new infrastructure and planning generates to help fund that infrastructure. New transport infrastructure, for example, can unlock a number of 'benefit streams', including direct transport benefits such as reduced travel times, and wider benefits such as reduced congestion and lower fuel consumption.

When new or upgraded infrastructure is provided in an area, many of these benefits are effectively monetised because local land values increase, reflecting the market's willingness to pay for these benefits. Value sharing enables the funder of the infrastructure – for example, the NSW Government or a local council – to participate in the market uplift and offset some of its costs.

If properly executed, value sharing can:

- unlock new funding to make economically beneficial infrastructure more affordable
- spread the costs of new infrastructure more equitably among its beneficiaries
- improve projects by providing incentives for governments to plan and design infrastructure with wider land use benefits in mind.

We recognise that, like all regulation and interventions in the market, value sharing mechanisms need to be equitable while also being efficient in terms of their operation and compliance. Value sharing mechanisms also need to be effective in terms of meeting objectives in a timely manner.

Value sharing mechanisms will only succeed with clarity around the planned infrastructure and how this will be funded – whether partially or wholly by the value sharing mechanism – or what elements or areas will be funded in response to the development (for example, whether the shared funding will go towards open space and public areas, community infrastructure, roads or upgrades to utilities).

It also requires an understanding of the total amount, duration and rate of value sharing (such as dollars per square metre) that can be set while maintaining the financial feasibility of development. In some areas, this could mean that rezoning may be delayed until development is feasible, given the amount of supporting infrastructure required.

A number of NSW Government-led urban renewal areas, priority precincts and priority growth areas are addressing this through the use of infrastructure schedules.

We will continue to work across government on the amount, mechanisms and purpose of value sharing to create a more consistent approach to capturing value for public benefit, complementary with other existing mechanisms.

### 1.2.4 Monitoring

#### The Greater Sydney Dashboard

The Greater Sydney Dashboard will be an interactive web-based tool that will provide access to indicators for cross-District issues such as jobs and housing targets to assist decision-making. It will be used to gain insights from our collaborations and build on evidence already commissioned by various State agencies and councils. The Dashboard will also include a data store to assist decision-making and strategic planning.

Monitoring the growth and change of Greater Sydney is critical to inform planning. *A Plan for Growing Sydney* requires us to establish a monitoring and reporting process to check on progress against the actions identified in our strategic planning documents.

Our Greater Sydney Dashboard will include indicators that outline how Greater Sydney and the District are performing against this draft District Plan's aspirations. In line with the requirement of *A Plan for Growing Sydney*, we are investigating metrics in terms of Greater Sydney's productivity, liveability and sustainability. We will include specific environmental reporting on:

- carbon emissions across Greater Sydney, in accordance with the C40 (Carbon Disclosure Protocol) requirements
- potable water consumption, water recycling and wastewater production across Greater Sydney
- air quality across Greater Sydney.



#### Action IM2: Develop a framework to monitor growth and change in Greater Sydney

As the District Plan is finalised alongside the review of *A Plan for Growing Sydney* and other strategic planning documents, we will have a stronger understanding of the metrics to measure Greater Sydney's economic, social and environmental performance.

To do this we will:

- develop a framework for the monitoring and reporting of the final Regional and District Plans that will consider the issues and outcomes from actions and priorities.



#### Action IM3: Develop an interactive information hub – the Greater Sydney Dashboard

To provide access to the latest data across a range of metrics, we will:

- develop the Greater Sydney Dashboard to include data and measures across a range of city-making areas, from population figures to environmental outputs.



#### Action IM4: Report on local planning

The Greater Sydney Dashboard will also monitor the implementation of each District Plan's actions and priorities. In the first instance, this will involve each council reporting to the Commission under section 75AI of the EP&A Act on:

- its review of relevant local environmental plans to give effect to the District Plan as made
- the preparation of planning proposals under section 55 of the EP&A Act to give effect to the draft and final District Plans.

### 1.3 Next steps

This draft District Plan and the supporting *Our vision - Towards our Greater Sydney 2056* are on formal public exhibition until the end of March 2017.

Public exhibition is an opportunity for people to contribute to the future of the West District by providing direct feedback on the proposed priorities and actions in this draft District Plan. The draft District Plan will not be finalised until at least the end of 2017 to allow it to be aligned with the review of *A Plan for Growing Sydney* in 2017.

We need the community to tell us if our plans create the right places for them. We need business to tell us if they think they will be competitive and can offer new jobs within these proposed settings. We need strategic planning practitioners to tell us if the plans can be implemented. We need industry to tell us if they'll be willing to invest in the required housing and workplaces and to do so to world-class standards. We need State agencies to confirm that the proposed priorities and actions align with their portfolio's longer-term planning.

A range of engagement activities will help the public to get involved in the future of the West District – visit the dedicated engagement portal at [www.greater.sydney](http://www.greater.sydney) to find out more.

**This is an opportunity to participate in the story of Our Sydney, your home.**

*By far the greatest and most admirable form of wisdom is that needed to plan and beautify cities and human communities.*

*Socrates*



### Key Concepts and Terms at a Glance

For more terms see the glossary at the end of this document or at [www.greater.sydney](http://www.greater.sydney).

**Greater Sydney** is defined as the 33 local government areas of Bayside, Blacktown, Blue Mountains, Burwood, Camden, Campbelltown, Canada Bay, Canterbury-Bankstown, Cumberland, Fairfield, Georges River, Hawkesbury, Hornsby, Hunters Hill, Inner West, Ku-ring-gai, Lane Cove, Liverpool, Mosman, Northern Beaches, North Sydney, Parramatta, Penrith, Randwick, Ryde, Strathfield, Sutherland, The City of Sydney, The Hills, Waverley, Willoughby, Wollondilly and Woollahra.

**Eastern City:** The metropolis of three cities includes the established Eastern City, which spans the North, Central and South Districts and the strategic centres of Northern Beaches Hospital, Macquarie Park (also associated with Central City), Chatswood, St Leonards, North Sydney, Sydney City, Randwick Health and Education, Green Square-Mascot, Sydney Airport, Port Botany and Kogarah.

**Central City:** The metropolis of three cities includes the developing Central City, which is anchored by Greater Parramatta and the Olympic Peninsula (GPOP) in the West Central District and the strategic centres of Blacktown (also associated with Western City), Norwest, Macquarie Park (also associated with Eastern City) and Rhodes.

**Western City:** The metropolis of three cities includes the emerging Western City focused on the proposed Western Sydney Airport. The Western City will encompass the West and South West Districts and includes the strategic centres of Penrith, Liverpool, Campbelltown-Macarthur and Blacktown (also associated with Central City).

**Global Sydney** is the combination of the Western, Central and Eastern Cities.

**Sydney City** includes the contiguous areas of Sydney CBD, Barangaroo, Darling Harbour, Pyrmont, The Bays Precinct, Camperdown-Ultimo Health and Education, Central to Eveleigh, Surry Hills and Sydney East.

**Greater Parramatta** includes Parramatta City, and the precincts of Westmead, Parramatta North, Rydalmere and Camellia.

**Parramatta City** covers the central business district of Parramatta.

**Strategic centres** have one or more of the following characteristics:

- a higher proportion of knowledge-economy jobs, principally relating to the presence of major hospitals, tertiary education institutions, stand alone office development or a combination of these
- the presence of existing or proposed major transport gateways
- a major role in supporting the increased economic activity of the Eastern, Central or Western cities.

Strategic centres also tend to have over 20,000 jobs.

**District centres** play a significant district role due to the presence of one or more of the following characteristics:

- the scale of retail activity, generally over 50,000 square metres of floor space
- the presence of health and education facilities that serve the district and the local community
- the level of transport services.

District centres also generally have between 5,000 to 10,000 jobs.







# 2 Our vision Towards our Greater Sydney 2056

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Our 40-year vision to enable a more productive, liveable and sustainable Greater Sydney

This chapter outlines a draft amendment to *A Plan for Growing Sydney* that aligns with the vision established by this draft District Plan. It is the first step in the comprehensive work that will take place next year to review *A Plan for Growing Sydney*.

This amendment reconceptualises Greater Sydney as a metropolis of three cities, and is presented with this draft District Plan to reflect the most contemporary thinking about Greater Sydney's future. As a draft amendment for consideration, this allows the community and stakeholders to provide feedback to the draft District Plan while understanding the context of an emerging Greater Sydney, which will inform our review during 2017.

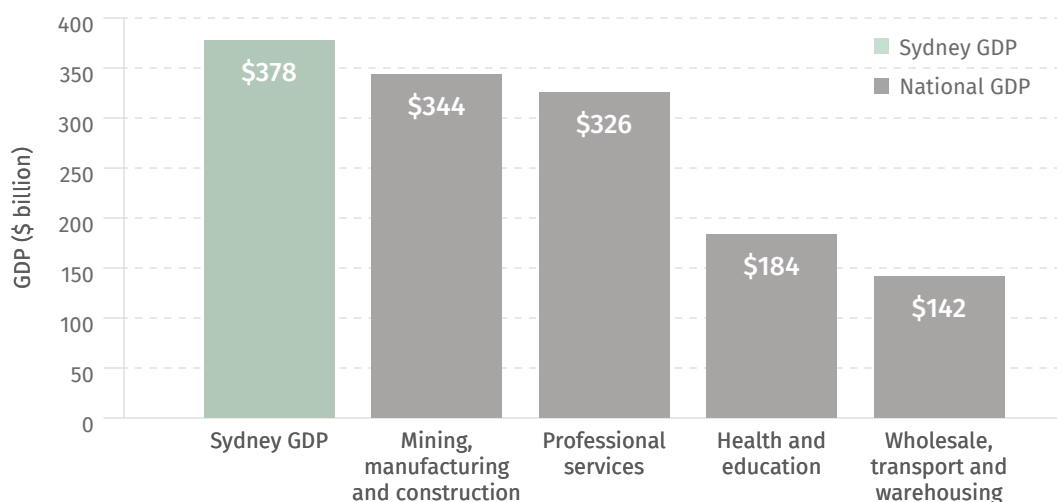
You can read a standalone version of this chapter by visiting [www.greater.sydney](http://www.greater.sydney).

## A changing, growing Greater Sydney

Think about Greater Sydney as you know it today. Not only has it completely transformed in its structure and role from when it first flourished in the 19th Century, it has already surpassed the ambitious city on the Harbour that spread its reach and created its new suburbs throughout the 20th Century.

Today, Greater Sydney is an economic powerhouse, generating nearly a quarter of Australia's Gross Domestic Product (GDP). Its economy – at \$378 billion per year – is bigger than the combined value of Australia's manufacturing, mining and construction industries (Figure 2-1). Its financial strengths make it a great place for business.

Figure 2-1: Greater Sydney GDP compared to national industries (2015)



Source: Australian Bureau of Statistics, Catalogue 5204.0 Australian System of National Accounts.

Greater Sydney is home to nearly 4.7 million people, which includes 2.4 million workers. Sydney City, traditionally known as Sydney CBD, is the epicentre of Australia's financial sector and home to key national institutions such as the Reserve Bank of Australia and Australian Securities Exchange (ASX). Other world-renowned institutions – such as the Sydney Opera House, Art Gallery of NSW, Museum of Contemporary Art and National Institute of Dramatic Art (NIDA) – highlight Greater Sydney's cultural and artistic credentials.

It also offers many local places that provide a diversity of lifestyle choices, from beachside to bushland settings, to busy main streets and ever-changing suburbs across its districts.

Greater Sydney's current structure – with economic activity and the transport network centred on Sydney City – has served it well, yet a singular focus on one city centre cannot continue as Greater Sydney grows, particularly when the city centre sits at the geographic edge, rather than at its geographic heart.

In a city-based economy like Australia's we need to get Greater Sydney's structure and spatial layout right.

Looking to comparable global cities, we know that few are orientated around a single large central business district like Greater Sydney. Instead, leading global cities develop alternatives in terms of where economic activity is located, how it is distributed and how different areas of economic activity are organised.

We associate these structures not only with improved productivity, but also with environmental and social benefits, as they allow for more connected and sustainable communities that provide greater opportunities without the need to travel long distances.

Compare this with Greater Sydney. Already, the location of the majority of Greater Sydney's jobs in the east, combined with an increasing number of people living in the west, has created capacity constraints such as higher levels of congestion, lower rates of housing affordability and uneven access to employment choices.

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**Greater Sydney is that rare place: a city that is globally competitive while also sharing the lifestyle assets of smaller, highly liveable centres. Thanks to strong economic and population growth, a strong pipeline of planned investments and the need to respond to the fundamental challenges of Greater Sydney's geographic structure, now is the right moment to shape its positive transformation.**

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These moments are rare in Greater Sydney's history and the ability to grab them is even rarer. Think about the significance of the Sydney Harbour Bridge, the Sydney Opera House and the 2000 Sydney Olympic Games.

The building of the Harbour Bridge was more than just a connection between north and south: it signalled Greater Sydney's maturity and its confidence in the future. The Opera House was not just developed as a place to see a show – instead, it put Greater Sydney on the global stage, attracting visitors from across the world and establishing rich cultural offerings. The Olympic Games were more than a sporting event – they regenerated Greater Sydney's geographic heart and transformed thinking about an area that had been neglected.



## The once-in-a-generation opportunity

We are at a transformational point. We have an opportunity to shift Greater Sydney's spatial structure in a way that benefits all existing and future citizens.

If there is a single change – one moment in time – that motivates this approach, it is the planned investment in the Western Sydney Airport. This is a game changer for Greater Sydney and will provide, in around 40 years, tens of thousands of jobs.

Given the magnitude of this change, together with the scale of growth expected in Western Sydney, we need to plan now for a sustainable supporting transport network. As the new economic activity around the Western Sydney Airport starts to emerge and as the success of the Sydney City in the east continues, the Greater Parramatta and the Olympic Peninsula (referred to as GPOP) will develop its role as Greater Sydney's second city region.

**Put simply, now is the time to conceive and plan for Greater Sydney maturing into a metropolis of three cities: a metropolis that will collectively create Global Sydney.**

*'Greater Sydney has the potential to develop its global economic brand from its current professional and corporate services Eastern City focus towards a broader story that also embraces education, innovation, technology, and advanced production industries. The development of the Central City and the emergence of the Western City, catalysed by Western Sydney Airport, gives Greater Sydney a real opportunity to be a diverse and differentiated global economic powerhouse.'*

*Greg Clark, urbanist and global advisor on cities and investment*

This means a shift away from thinking of Greater Sydney as a place anchored by an economically strong single central business district – a monocentric approach – and instead looking at the outstanding assets in three cities and the many local places and connections between these cities – a genuine polycentric approach, as shown in Figure 2-2.

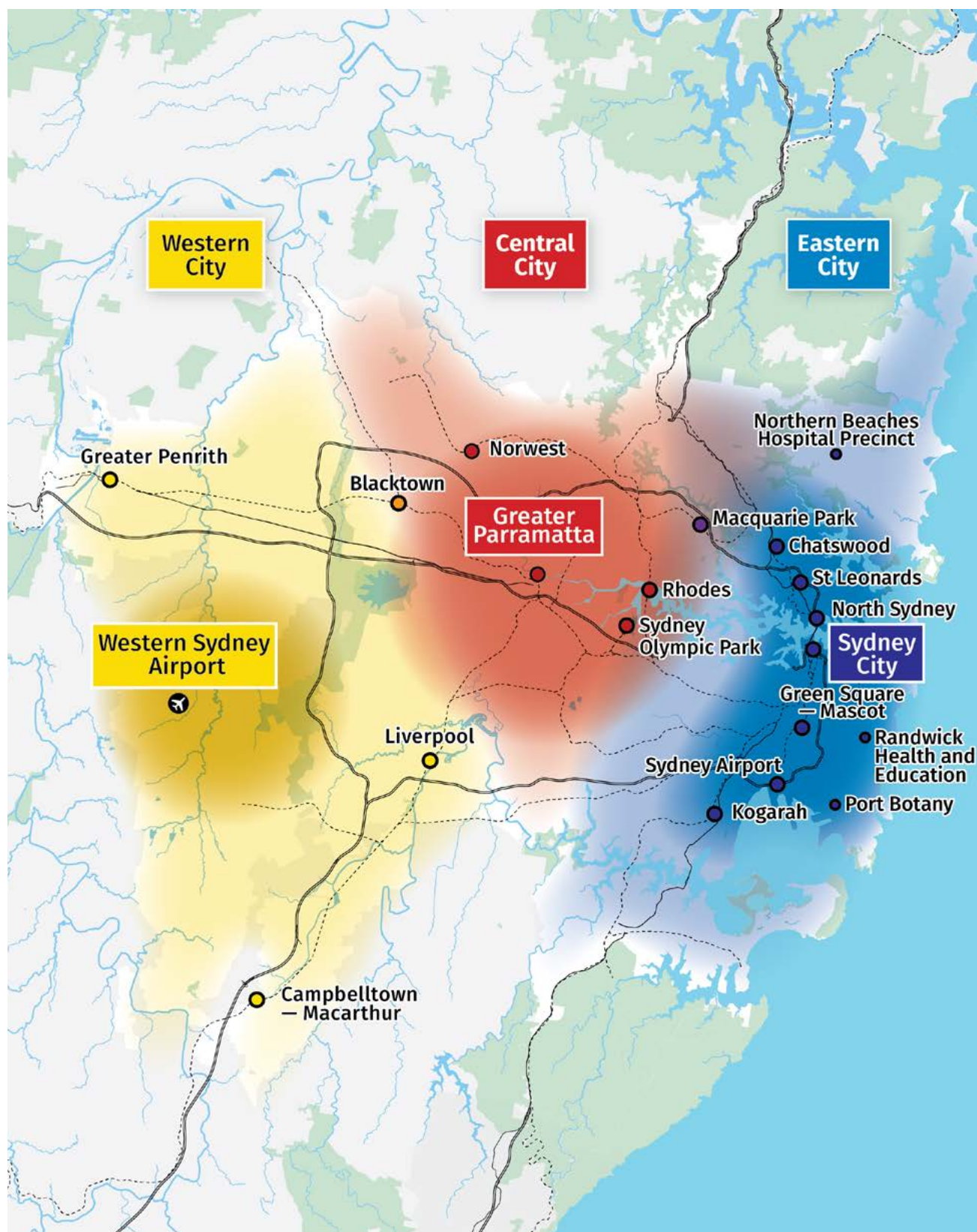
### Western Sydney City Deal

The Australian and NSW Governments have agreed to work with local government on the development of a Western Sydney City Deal, a generational deal to deliver almost 100,000 jobs, more housing and better transport for outer Western Sydney in what is the nation's largest ever planning and investment partnership. The Western Sydney City Deal is intended to drive a new economy in the emerging aerotropolis that incorporates the areas immediately around the Western Sydney Airport, and the broader region.

The Western Sydney City Deal pledges to:

- target additional infrastructure investment to increase public transport and reduce traffic congestion, so people can spend more time with their families
- deliver more jobs closer to homes and services, with a focus on youth and Aboriginal training and skills development
- increase housing through better planning and density done well, and streamlining approvals across all three levels of government
- support clean air, green spaces, vibrant arts and cultural initiatives.

Figure 2-2: A metropolis of three cities: Global Sydney



Source: Greater Sydney Commission, 2016

The metropolis of three cities acts as a central organising strategy in the planning for Greater Sydney as an eight million-strong metropolis by 2056. It will guide future decision-making and the priorities of government and industry to move to a more productive, sustainable and equitable city.

The **established Eastern City** is the currently established Sydney City and economic corridors to its north through to Macquarie Park and south through Sydney Airport and Port Botany to Kogarah.

It is an economic engine – especially in the financial, business and professional services and innovation start-up sectors – with a beautiful harbour, sought-after suburbs and a large proportion of knowledge-intensive jobs.

There are many opportunities to enhance the Eastern City, such as the renewal of government-owned land near Sydney City and tackling congestion. Our planning must support and enable the continued growth of the Eastern City's global industries and branding.

The established city contains significant heritage precincts such as The Rocks, Millers Point, Macquarie Street and the Royal Botanic Gardens and the Domain. The Harbour foreshores include significant evidence of Aboriginal occupation and interaction with the landscape.

Of the three cities, the **developing Central City** with GPOP at its heart is anticipated to experience the most significant urban transformation over the next 10 to 15 years. Aboriginal occupation of this area dates back 30,000 years. Historically, Parramatta was an early colonial settlement and significant heritage is a key aspect of its identity. Its central metropolitan location will be one of its greatest advantages. By 2036, it will be one of Greater Sydney's administrative and business centres, and the Westmead health and education super precinct will continue to grow and lead best practice in medical and education-related industries.

It will be an important area for advanced manufacturing and innovation-driven enterprises. It will offer more opportunities for 21st Century smart jobs, will build its own global brand and, with planned transport investments, will be an easier place to get to and move around in. It is critical that the Central City has strong transport connections and transport capacity to the established Eastern City and the emerging Western City.

By 2056, the Western Sydney Airport will be the focus of the **emerging Western City**. For the first time in over 100 years, this major catalyst will provide the opportunity to change the shape and structure of an extensive area of Greater Sydney.

The emerging Western City will also offer the strategic advantage of creating a greater diversity of jobs and greater social opportunities for the thousands of citizens in the centres of Penrith, Blacktown, Liverpool and Campbelltown-Macarthur.

The economic growth generated by the Western Sydney Airport will offer the opportunity to furnish the emerging Western City with affordable and diverse housing, transport and social infrastructure and jobs needed to create a place people will want to call home.

This new central organising strategy of Greater Sydney as a metropolis of three cities has led to a reconsideration of the approach to centres in *A Plan for Growing Sydney*. A new hierarchy of centres is proposed, which defines three types of centres: strategic, district and local.



These centres vary in terms of scale and contribution to Greater Sydney’s job growth and productivity as well as service provision to local communities. In brief:

- strategic centres, including transport gateways, have the scale, industries and location needed to specifically support a city with smart jobs and the success of the Eastern, Central and Western Cities
- district centres have jobs, facilities and services that support district populations
- local centres have a range of local jobs and services for local catchments.

Our vision for Greater Sydney to 2056 represents the economic, social and environmental integration of a metropolis of three cities. It acknowledges that Greater Sydney is more likely to develop in a sustainable manner when it has a strong, productive economy underpinning a fair and liveable lifestyle and allowing a focus on Greater Sydney’s natural environment, resilience and efficiency.

This vision can be delivered through a number of metropolitan priorities, summarised in the table below.

A Productive Sydney	A Liveable Sydney	A Sustainable Sydney
A growing city A city with smart jobs A 30-minute city	An equitable, polycentric city A city of housing choice and diversity A collaborative city	A city in its landscape An efficient city A resilient city













# 3 A Productive City

*“Successful cities grow. Cities that attract jobs, investment, institutions, tourists, will also attract population, both from within their countries and from abroad. Population growth is a hallmark of city success but it brings with it critical choices and challenges that must be addressed.”*

*– Greg Clark, urbanist and global advisor on cities and investment*

The recently announced City Deal between the Australian and NSW Governments and in collaboration with local government has the potential to set the foundation for transformation of the West District as a major driver of Greater Sydney's emerging Western City. The economic opportunity created by the Western Sydney Airport, together with the District's growing visitor economy driven by the World Heritage Area of Blue Mountains, will allow the West District to shift from a place to accommodate homes for Greater Sydney's housing market to an attractor of major economic activity.

Greater Penrith will grow as a strategic centre with a health and education super precinct, smart jobs, housing diversity and attractive destinations for visitors. The centre will support and service the new and established communities. Investment in transport infrastructure will strengthen and grow the diversity of employment choice.

## **The West District Productivity Profile**

The West District Productivity Profile describes the District's economy in terms of employment growth, types and locations, economic output and other data. This informs the way we plan for the District's economy and the type of jobs that the District will need to accommodate in the future.

You can view the full Productivity Profile by visiting [www.greater.sydney](http://www.greater.sydney). A summary is provided in Section 3.1.

This draft District Plan outlines the proposed priorities and actions to drive the West District's productive economy. It draws on *A Plan for Growing Sydney's* Goal 1, which seeks to grow a competitive economy with world-class services and transport, as well as the priorities from *Our vision – Towards our Greater Sydney 2056*.



### 3.1 The West District's economy

The West District's economy is intrinsically linked to its natural landscape, which drives economic activity in terms of tourism and the area's global brand. Apart from tourism the District's economy is also driven by employment in health and education, retail and hospitality and industrial activity.

At present, the District is home to 8% of Greater Sydney's population and accommodates 5% of its jobs.

Employment across the West District has grown from 89,600 jobs in 1996 to 133,100 jobs in 2016. This represented a faster rate than the average annual growth rate across Sydney (2.0% growth in the West District compared to 1.8% across Greater Sydney). However, the overall economy in the West District is relatively small compared to other Districts across Greater Sydney. It has also been growing more slowly; between 2011 and 2015 the West District's economy grew by about 9%, compared to 13% for Greater Sydney.

The District's jobs are categorised as knowledge-intensive and professional jobs, health and education jobs, population-serving jobs and industrial jobs. This categorisation helps us to understand why different types of industries locate in different parts of Greater Sydney.

When compared to the average across Greater Sydney, the West District currently accommodates a higher proportion of population-serving (38% compared to 30%) and health and education (24% compared to 19%) jobs. This is illustrated in Figure 3-1. There is a similar proportion of jobs within the industrial sector in the West District compared to Greater Sydney and a lower proportion of knowledge and professional services jobs (19% compared to 32%).

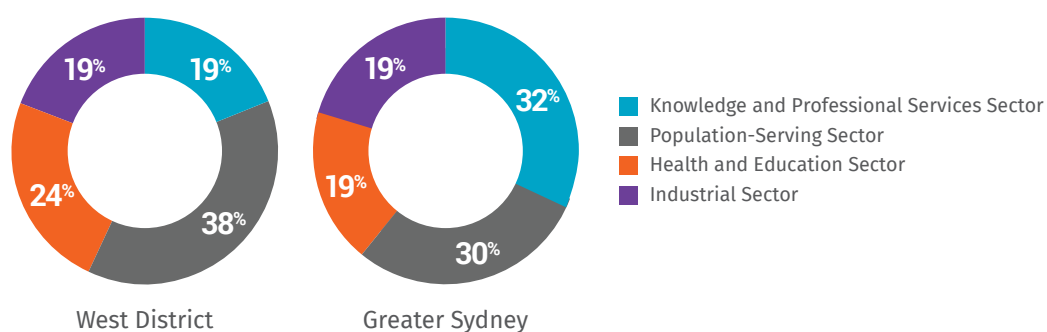
This reflects the economic structure of the District, which is driven by population growth as well as the tourism industry; many hospitality and other tourism facilities serve both visitors and the local population.

Table 3-1: West District: Historical population and employment growth (1996-2016)

	Population			Employment		
	1996	2016 projection	1996-2016 % Growth	1996	2016 projection	1996-2016 % Growth
<b>West District</b>	299,950	354,800	18%	89,600	133,100	49%
<b>Greater Sydney</b>	3,553,100	4,682,000	32%	1,722,700	2,439,800	42%

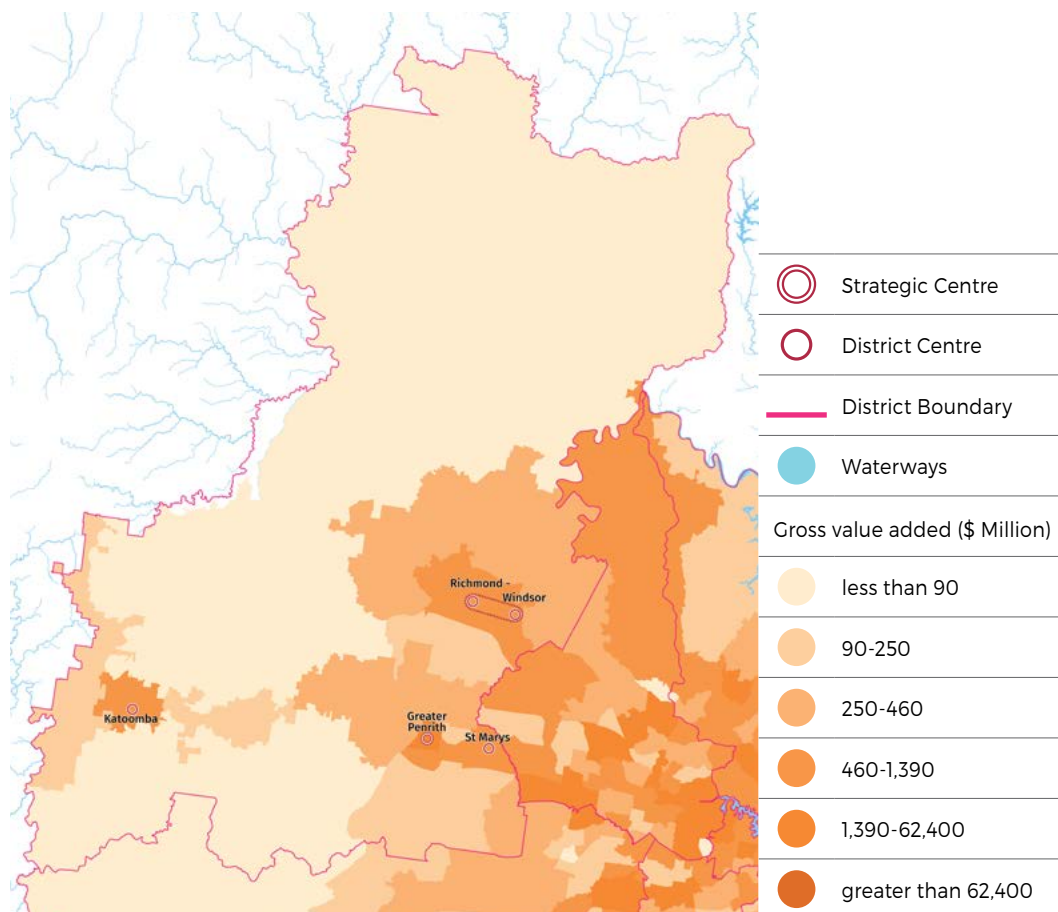
Source: (Population) Department of Planning & Environment, 2016 New South Wales State and Local Government Area Population and Household Projections and Implied Dwelling Requirements 2016 to 2036, NSW Government, Sydney; (Jobs) Transport Performance & Analytics (TPA) (formerly known as Bureau of Transport Statistics), Transport for NSW, Greater Sydney Employment Forecasts, 2011 to 2041 (2016 Release), NSW Government, Sydney.

Figure 3-1: Employment profile by sector in West District vs Greater Sydney (2016)



Source: Transport Performance & Analytics (TPA) (formerly known as Bureau of Transport Statistics), Transport for NSW, Greater Sydney Employment Forecasts, 2011 to 2041 (2016 Release), NSW Government, Sydney.

Figure 3-2: West District's Gross Value Added (2015)



Source: Unpublished data derived from Australian Cities Accounts 2014-15

We analyse recent trends in each of these job types for an understanding of how employment patterns might change in the future.

Between 1996 and 2016, the most significant proportional growth occurred in health and education (70%), followed by knowledge and professional services (61%), population-serving (43%) and industrial (27%). In terms of absolute employment, the greatest increase in jobs was in the population-serving sector (15,000 new jobs).

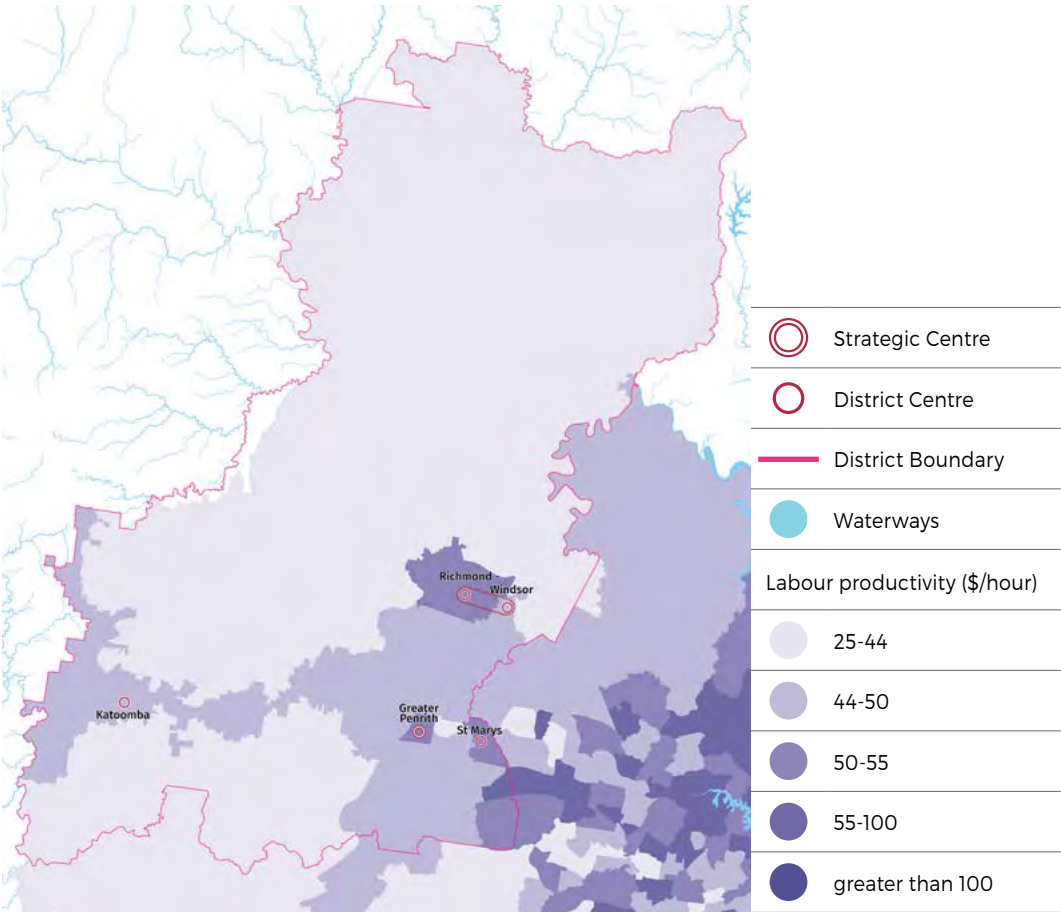
These trends reflect the importance of both the population serving and health and education sectors for future economic and employment growth in the District. A key challenge for the West District over the next 20 years will be to identify opportunities to diversify the economy as it grows.

The economic contribution of the District's assets is illustrated in Figure 3-2, which shows the spatial distribution of economic activity

across Greater Sydney, measured by Gross Value Add. Gross Value Add measures the value of goods and services in a particular area. The main focus for economic activity in the West District is the corridor between Greater Penrith and St Marys, including the health and education super precinct, and Richmond-Windsor and Katoomba.

These significant concentrations of economic activity across the District are also areas of high labour productivity (illustrated in Figure 3-3). Productivity is a measure of the efficient use of resources. Areas with high labour productivity generate higher economic value per hour worked. The spatial distribution of productivity can help build an understanding of important economic places as well as the profile of economic activity in a particular area. Greater Penrith and Richmond-Windsor are centres with high labour productivity. These centres serve an important economic role within the District and will continue to drive the District's productivity.

Figure 3-3: West District's labour productivity (2015)



Source: Unpublished data derived from Australian Cities Accounts 2014-15

One of the West District's major economic assets is its significant concentration of employment and urban services land. It currently accommodates 13% of Greater Sydney's zoned industrial land, with around 700 hectares as part of the Western Sydney Employment Area (365 hectares in Erskine Park and 337 hectares in the south of the Sydney Water Pipeline Precinct). A further 4,145 hectares of employment land is under investigation as part of a new Land Use and Infrastructure Strategy for the Western Sydney Priority Growth Area (this is proposed employment land within the Western Sydney Employment Area Extension).

Employment and urban services areas will be crucial for employment and economic activity as the District's economy, and that of Western Sydney, grows and evolves.

As well as employment and urban services areas, the West District's strategic centre and district centres play a crucial role in the Greater Sydney context, and have distinct employment profiles:

- Greater Penrith strategic centre is the gateway to Greater Sydney and provides regional transport connections into Greater Sydney. The centre comprises Western Sydney University Werrington Campus, Western Sydney TAFE, Nepean Hospital and major retail activity. Significant growth potential is associated with the concentration of health and education within this centre.

- St Marys, Richmond-Windsor and Katoomba district centres are largely retail-based centres, serving the District's growing population.
  - St Marys contains a mix of job types due to the centre covering both employment and urban services land and a town centre with a population-serving focus.
  - Katoomba is a significant tourist destination within the Blue Mountains.
  - Richmond-Windsor is located on the urban fringe of Greater Sydney and its role and function has traditionally been agribusiness activity.

### 3.1.1 Access to jobs

People living in the West District have access to a smaller proportion of Greater Sydney's jobs within 30 minutes than the average for Greater Sydney (as shown in Figure 3-4). Our research shows that during the morning peak, approximately 3% of Greater Sydney's jobs are accessible to West District residents within 30 minutes by public transport or private vehicle. Compared to the 16% average across Greater Sydney, the West District's residents have less choice about the location and type of jobs they wish to work in.

From an economic perspective, having access to a larger number of jobs means greater potential for jobs and skill matching, enhanced opportunities for skill and knowledge development, and ultimately better outcomes for households and the overall economy.

Limited public transport options in the District means the majority of journeys to work are made by car (refer to Figure 3-5).

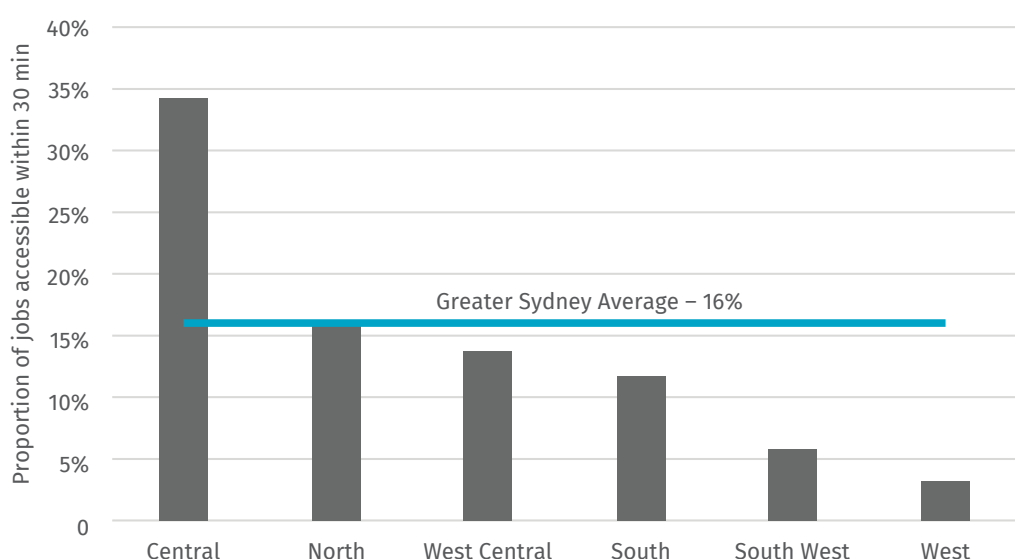
### 3.1.2 Economic opportunities

The West District is well placed to leverage the opportunities presented by anchor institutions such as:

- Greater Penrith including the Penrith health and education super precinct
- Western Sydney Employment Area
- tourism assets particularly in the Blue Mountains.

While these assets present significant opportunities as drivers of economic activity and diversity in the District, there are a number of challenges such as pressure on employment and urban services land, as well as connectivity and amenity constraints that will need to be addressed to ensure the District realises its potential.

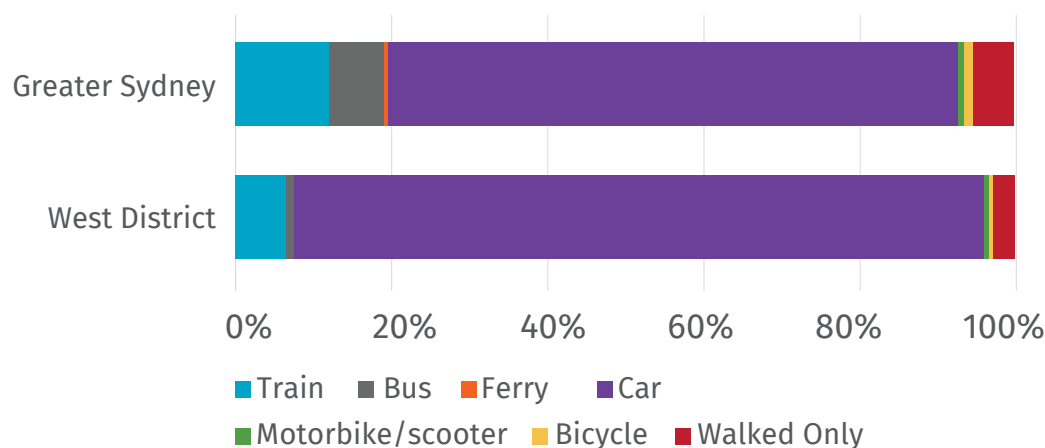
Figure 3-4: West District residents' access to jobs during the AM peak (2016)



Source: Transport Performance & Analytics (TPA) (formerly known as Bureau of Transport Statistics), Transport for NSW, Strategic Travel Model (STM) outputs, 2016, NSW Government, Sydney.



Figure 3-5: Journey to work by mode (2011) West District and Greater Sydney (2011)



Source: Australian Bureau of Statistics, 2011 Census of Population & Housing

### 3.1.3 District priorities

This chapter outlines the productivity priorities and actions for the West District.

The priorities are presented in two ways. Firstly, each heading outlines a priority area, and we provide context and detail to expand on the outcomes sought. Some headings cover factual issues only; these are not included in the list below.

Secondly, within the broad priority areas there are, in many cases, more detailed priorities. We identify the specific purpose of these priorities in each case by detailing how they relate to strategic planning and planning proposals.

The priorities should be considered in strategic planning activities and planning proposals as appropriate.

The full list of productivity priorities covered in this section are outlined below.

- Creating a framework to deliver the Western City
  - The Western Sydney City Deal – governance
  - Elements of the Western City
  - Identify alignments and preserve regionally significant north-south and east-west rail and road corridors for the Western City
  - Identify economic development priorities for the Western City
  - Plan for a 21st Century aerotropolis with 21st Century amenity
- Create high quality urban amenity across the Western City
- Building international tourism
  - Support the visitor economy
- Planning for job target ranges for strategic and district centres
  - Plan for the growth of centres
- Planning for Greater Penrith as Sydney's Western Gateway
  - Manage growth and change in strategic and district centres, and, as relevant, local centres
- Increasing, strengthening and diversifying the skill base
- Accessing a greater number of metropolitan jobs and centres within 30 minutes
- Accessing local jobs, goods and services within 30 minutes
  - Retail floor space provision and demand in the West District
    - Prioritise the provision of retail floor space in centres
  - Planning for district centres
  - Transport connections to district and local centres
- Managing freight activities
- Managing employment and urban services land
  - Protect and support employment and urban services land.

### 3.2 Creating a framework to deliver the Western City

*Our vision – Towards our Greater Sydney 2056* introduces the emerging Western City focused on the proposed Western Sydney Airport. The Western City will sit across the West, South West and West Central Districts and include the strategic centres of Penrith, Liverpool, Campbelltown-Macarthur and Blacktown. This recognises the importance of Western Sydney Airport as a central catalyst that can transform the area over the next 40 years and enhances Sydney's gateway capacity in line with Direction 1.5 of *A Plan for Growing Sydney*.

Our vision is that by 2056, the Western City will be transformed into:

- a trade, logistics, advanced manufacturing and science hub
- a city with well-designed, highly functioning, and vibrant centres and local places
- a protected and valued parkland city.

To deliver on this vision, we will need coordination across three tiers of government and engagement with the community, and will need to provide clear direction for the private sector, which will, in the main, develop and invest in the area.

This collaborative approach will need to recognise and capitalise on the transformative opportunities that can collectively drive the delivery of the Western City.

#### 3.2.1 The Western Sydney City Deal – governance

In October 2016, the Australian and NSW Governments agreed to work together with local government to deliver an agreed Western Sydney City Deal by mid-2017. City Deals will improve the lives of people through better transport, improved housing supply and affordability, better access to jobs and improved environmental outcomes.

Australia's growth as a knowledge-based economy, and the prosperity this offers, goes hand in hand with the growth of cities and

the regions surrounding them. To achieve success in the 21st Century, Western Sydney and other regions across Australia need to be productive and accessible, as well as liveable and sustainable, with a clear focus on meeting the needs of people.

City Deals will formalise the partnership across the three levels of government and define priorities, actions, timeframes and accountabilities for achieving joint goals. City Deals will improve collaboration between all levels of government by coordinating governance, strategic planning, investment and reform. The establishment of City Deals will require all levels of government to bring reforms, planning or asset contributions, and investments to support improved outcomes in cities.

The Western Sydney City Deal will bring the Australian, NSW and local governments together with a common purpose: to have a measurable impact on the productivity, liveability and sustainability of the area.

The City Deal will complement our planning decisions to 2036 and influence our vision to 2056 to:

- improve connectivity in the Western City and with other areas of Greater Sydney through investment in road and rail infrastructure
- attract investment to stimulate the growth of knowledge-intensive jobs and jobs in industries such as freight, logistics and tourism, and to drive better social and economic outcomes for communities, particularly vulnerable groups
- help to ensure the supply and types of housing meet demand and are affordable
- maintain or improve environmental outcomes through biodiversity conservation.

The City Deal will include clear roles for each level of government to provide funding, undertake policy and regulatory reforms, contribute land, make land use planning changes and provide other support to achieve the desired economic, social and environmental objectives. The City Deal will also include clear ongoing governance arrangements.

We know that by 2036, the population of the emerging Western City west of the M7 Motorway will be more than one million, growing to 1.5 million by 2056. The City Deal is a once-in-a-generation deal with a commitment to deliver almost 100,000 jobs and better transport for outer Western Sydney – the nation's largest ever planning and investment partnership.

If we can broaden Greater Sydney's global economic footprint, particularly from Parramatta to the west, and leverage the investment in the Western Sydney Airport, we can help to facilitate a strong and diverse base of new jobs in the area, connected to a 30-minute workforce.

It is for this reason that we view the Western Sydney Airport as an intergenerational game changer for Greater Sydney and particularly Western Sydney. It could, by the middle of the century, provide a globally significant agglomeration of knowledge-intensive jobs in a transformed Airport City, or aerotropolis, and transform the centres of Penrith, Blacktown, Liverpool and Campbelltown-Macarthur.



### Action P1: Establish the Western Sydney City Deal

The Australian and NSW Governments will work with Blue Mountains, Camden, Campbelltown, Fairfield, Hawkesbury, Liverpool, Penrith and Wollondilly Councils to deliver the Western Sydney City Deal. The City Deal agreement will be in place by mid-2017.

### 3.2.2 Elements of the Western City

The Western City encompasses a number of elements:

- Western Sydney Airport land (1,780 hectares)
- the core of the Western Sydney Airport Aerotropolis, which is included in the land defined by the Western Sydney Priority Growth Area
- the strategic centres of Penrith, Blacktown, Liverpool and Campbelltown-Macarthur
- the urban areas within the Penrith, Camden, Fairfield, Liverpool, Campbelltown and Blacktown Local Government Areas.

Table 3-2: Comparative data for five aerotropoli

2015	Incheon (Seoul)	Dallas Fort Worth	Amsterdam	Tokyo Haneda	Tokyo Narita International
Traffic (million passengers/year)	49	64	62	75	37
Traffic movements	300,200	682,261	450,679	379,670	232,182
Cargo (tonnes/annum)	2,600,000	770,000	1,620,000	900,000	2,000,000
Airport area (hectares)	5,116	7,200	2,787	1250	1,400
Added value (per annum, USD)	\$10bn	\$17bn	\$12bn	\$18.5bn	
Airport jobs	60,000	55,000	60,000	38,000	74,000
Related jobs	200,000	157,000	120,000	158,000	81,000

Source: Extract from NACO Aviation/Urban Planners draft report (October 2016) for NSW Government.



Figure 3-6: Western Sydney Airport aerotropolis and the string of pearls



Source: Greater Sydney Commission, 2016.

### Western Sydney Airport

The Australian Government forecast that about five million people will use the Airport in its first year of operation in the mid-2020s, with annual passengers projected to increase to about 37 million by 2050. This is about the same number of annual passengers using Sydney's Kingsford Smith Airport today. Ultimately, a Western Sydney Airport has the capacity to cater to more than 80 million passengers per year.

The Airport and its surrounds will be a substantial source of economic and employment activity, particularly for the West District and South West District. We expect to see a range of employment types, including a variety of professional services and high-tech industries such as logistics, trade, aerospace and defence industries, advanced manufacturing and tourism, make up the Airport's workforce and associated business parks.

The Australian Government's Environmental Impact Assessment for the Airport shows that construction and operation of the Airport are expected to generate significant economic and employment effects which will grow as passenger demand increases.

Construction of Stage 1 development is forecast to create:

- about 3,180 full-time equivalent jobs during the peak construction activity of which approximately 84% would be in Western Sydney
- \$2.3 billion in value add across Greater Sydney during the construction period with approximately \$1.9 billion or 83% of the value add being created in Western Sydney.

During operation of the Stage 1 development the airport is expected to continue its role as a substantial source of economic and employment opportunities in the region.

Operation of the Stage 1 development in 2031, for example, is expected to:

- create about 8,730 full-time direct on-site jobs
- potentially create a further 4,440 full-time on-site jobs within business parks on the site
- generate about \$77 million in value add for Western Sydney
- generate about \$145 million in value add for the rest of Greater Sydney
- drive growth in business profits, productivity and household income.

The Airport will also drive employment in tourism and related industries and support the growth of tourism, accommodation and services in Greater Penrith as the gateway to Greater Blue Mountains World Heritage Area.

#### The core Western Sydney Airport Aerotropolis

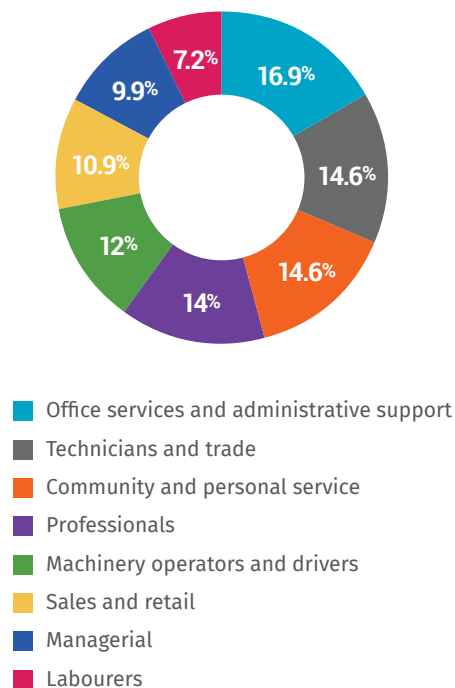
The land surrounding the Western Sydney Airport, defined as the Western Sydney Priority Growth Area, is the core of the Western Sydney Airport Aerotropolis. It will be focused on agglomerating knowledge-intensive airport-related industries.

Aerotropolis developments around the world have transformed regions like Western Sydney by bringing together high quality jobs and opportunities while also achieving industry leading environmental outcomes.

Three recent global exemplars of aerotropolis developments show the size of assets and benefits (see Table 3-2).

Key learnings from these global exemplars as well as work undertaken by the Department of Planning and Environment, Liverpool City Council and Penrith City Council will inform the deliberations of the Western Sydney City Deal, including land use and infrastructure planning for the area that will guide new infrastructure investment, locations for new homes and jobs close to transport, and the coordination of services in the area.

Figure 3-7: Typical mix of job types created by an airport



Source: Western Sydney Airport EIS fact sheet

#### The strategic centres

Four established strategic centres - Penrith, Blacktown, Liverpool and Campbelltown-Macarthur - will provide the Western City's foundational urban centres. These centres will support urban infrastructure and jobs to enable the Western City's growth. They will also be the places where people can access services and lifestyle.

#### 3.2.3 Identify alignments and preserve regionally significant north-south and east-west rail and road corridors for the Western City

The successful delivery of the Western City will require improved north-south and east-west transport connections and the foundation of land use planning for the Western Sydney Priority Growth Area, as identified in *A Plan for Growing Sydney*.

The Australian and NSW Governments are funding a 10-year road investment program known as the Western Sydney Infrastructure Plan to support integrated transport in Western Sydney and capitalise on the Western Sydney Airport. The Plan includes:

- an upgrade for The Northern Road to a minimum of four lanes from Narellan to Jamison Road, Penrith
- a new east-west motorway to the Airport between the M7 Motorway and The Northern Road (known as the M12 Motorway)
- an upgrade for Bringelly Road to a minimum of four lanes between The Northern Road and Camden Valley Way
- the Werrington Arterial Road, which will be built by upgrading Kent Road and Gipps Street to four lanes between the Greater Western Highway and the M4 Motorway and providing ramps to the M4
- an upgrade of the intersection of Ross Street and the Great Western Highway
- a \$200 million package for local road upgrades, to be delivered over 10 years.

As identified in *A Plan for Growing Sydney*, Transport for NSW has also preserved, or is working to preserve, corridors in the area:

- The South West Rail Link extension – a north-south connection through the South West Priority Growth Area and the Western Sydney Employment Area, including the Western Sydney Airport. The corridor connects Leppington Station to Bringelly and then heads north to the T1 Western Line near St Marys and south to Narellan. The NSW Government is also considering the possibility of extending the corridor south to the existing T2 Inner West and Southern Highlands Line.
- The NSW Government is working to identify a preferred corridor for the Outer Sydney Orbital, which will provide a north-south connection for a future motorway and freight rail line and provide better connections within Greater Sydney and to regional NSW, Newcastle, Wollongong and Canberra.
- The Western Sydney Freight Line and Intermodal Terminal, identified in the *NSW Freight and Ports Strategy*, is a critical freight link facilitating movements and logistics within Greater Sydney and to regional markets.

In addition, recognising the important role of rail transport in supporting both the growth of Western Sydney and the Western Sydney Airport, the Australian and NSW Governments

are developing a *Western Sydney Rail Needs Scoping Study* that will examine the passenger rail transport needs of Western Sydney and the proposed Airport. A Discussion Paper released in September 2016:

- acknowledges the level of population and employment growth forecast for Western Sydney and associated transport challenges
- provides an overview of the transport projects underway in Western Sydney
- examines the rail demand in Western Sydney
- provides an overview of the initial set of rail options identified to service Western Sydney and the Western Sydney Airport.

The *Western Sydney Rail Needs Scoping Study* will inform the final West District Plan, the development of the Future Transport Strategy and the review of the *A Plan for Growing Sydney*.

### 3.2.4 Identify economic development priorities for the Western City

With the emergence of Greater Sydney as a metropolis of three cities, the Department of Industry in collaboration with the Commission, councils, the investment community and other relevant stakeholders will prepare and implement economic development strategies for each of the three cities.

This is a new approach for Greater Sydney – it leverages the skills of government to lead the agglomeration of jobs and industry. The economic development strategies will give us a framework to collaborate across public and private organisations to achieve the ambitions of *Our vision – Towards our Greater Sydney 2056* and the aspirations of this draft District Plan.

The three economic development strategies will be complementary and will reflect our aspirations for the Western, Central and Eastern Cities. They will consider, where relevant:

- planning strategies to support the growth of health and education super precincts
- the goals of *Growing the First Economy of NSW* – a framework for Aboriginal economic prosperity, developed in conjunction with Aboriginal Affairs
- manufacturing and advanced manufacturing clusters



- tourism and services economy
- aerospace and defence industries
- other specific industries as required.

The economic development strategies will also draw on the Government's 2016 report *Jobs for the Future: Adding 1 million rewarding jobs in NSW by 2036*. This report, prepared by Jobs for NSW, outlines the Government's aspirations for future employment growth in NSW and how private and public sectors can contribute to achieving it.

#### **Jobs for NSW**

Jobs for NSW is a private sector-led NSW Government-backed initiative which was established by the NSW Premier and NSW Minister for Industry in 2015 to drive investment and facilitate jobs growth across NSW.

The body has been tasked with overseeing the \$190 million Jobs for NSW Fund and assisting the NSW Government in delivering on its commitment to create 150,000 new jobs across NSW by March 2019.

Jobs for NSW is focused on driving growth in industries and sectors where NSW has or could have a global competitive advantage, including start-ups and fast-growth small-to-medium enterprises in target industries such as tourism, goods exports and advanced manufacturing, with the overall aim of growing the NSW economy. Jobs for NSW is also providing grants and partnerships to guide emerging businesses.

#### **3.2.5 Plan for a 21st Century aerotropolis with 21st Century amenity**

Design excellence will be a critical requirement for the Western Sydney Priority Growth Area and a focus of much of the investment for the aerotropolis. Design excellence will require:

- taking advantage of the natural attributes of the area including utilising South Creek as a central organising design element
- considering how the edges of major transport infrastructure are treated, specifically allowing for tree planting and options for activity to address road corridors
- creating 'urban' places with a focus on people.



#### **Productivity Priority 1: Create high quality urban amenity across the Western City**

The economic prosperity of the District will be influenced by the quality of the public realm, and urban design of centres, commercial areas and infrastructure. To create a strong sense of place, the relevant planning authorities must establish an urban design framework for the development of centres, commercial areas and transport infrastructure.



#### **Action P2: Develop and implement an Economic Development Strategy for the Western City**

The Department of Industry, in collaboration with the Commission, Jobs for NSW, Aboriginal Affairs and other State agencies and local councils as relevant, will develop an economic development strategy for the Western City. For the West District, this will specifically address the Penrith health and education super precinct together with other key economic assets.

### 3.3 Building international tourism

The West District is a popular destination for tourists, and we expect to see current visitation levels – 5.5 million visitors in 2016 – rising to 8.4 million visits a year by 2025. The industry accounts for 5% of the District's jobs and about 4% of economic output. Smart planning can capitalise on the significant economic growth associated with tourism, particularly by increasing overnight stays.

Recognised by Tourism Australia as one of 16 National Landscapes, the Greater Blue Mountains World Heritage Area is the main focus for growing the West District's tourist economy. It is complemented by the historic towns and villages of the Blue Mountains and the Hawkesbury and many recreational, cultural heritage attractions and assets such as the Sydney International Regatta Centre, Scenic World, Blue Mountains World Heritage Cultural Centre in Katoomba, adventure tourism opportunities and arts and cultural facilities such as Joan Sutherland Performing Arts Centre. The development of the Western Sydney Airport will enhance opportunities to build the District's position as a tourism gateway.

The District needs supporting infrastructure to accommodate additional international and domestic tourists. In addition to better facilities and amenities at tourist destinations, and improvements to the towns and villages that host visitors, our planning should also consider new destinations and experiences for visitors.

We see Greater Penrith as a gateway to the Blue Mountains and other tourist assets for all of Greater Sydney and regional NSW. In addition, the new Western Sydney Airport will provide the impetus to attract international tourists into the District, and build on Greater Penrith's role as a location for overnight stays. This will require investment to ease congestion and improve accessibility, improve the centre's visual amenity, and better connect its many areas.



#### **Action P3:** **Develop infrastructure** **to support the growth of the** **visitor economy**

The West District councils use a joint approach to increase tourism and improve and diversify experiences visitors can enjoy in the District. They have identified a need for nature-based priorities for tourism and visitor infrastructure investment. Such investment includes tourism activities in the Eastern Escarpment, links into Penrith, the Southern Scenic Escarpment and a five-villages tourist trail in the upper Blue Mountains to encourage overnight stays.

We will support efforts to:

- protect assets that currently make the District attractive for visitors
- invest in new and improved tourist infrastructure, including consideration of user-pays options
- establish the necessary governance arrangements to develop a coordinated destination management plan for the District
- diversify tourism opportunities by building on current experiences such as local food produce, heritage (including the five-villages tourist trail) and farm stays.



#### **Productivity Priority 2:** **Support the visitor economy**

In preparing local environmental plans, councils should allow for a variety of tourism opportunities associated with the District's environmental, arts and cultural, heritage and agricultural assets.

### 3.4 Planning for job target ranges for strategic and district centres

As Greater Sydney transforms into a city of over six million people by 2036 and eight million people by 2056, we need to plan to attract and best distribute employment and economic growth.

Recent projections of future employment consider projected population growth and age profiles, broad economic conditions and trends, sector and industry specific outlooks and Greater Sydney's planned investments.

These updated projections have revised the forecast demand for jobs across Greater Sydney from 689,000 by 2036 to 817,000 additional jobs.

This is a significant growth opportunity for Greater Sydney as a global city, representing business confidence and economic growth.

We do, however, need to plan for how Greater Sydney attracts and accommodates these jobs in the right locations – the kind of places that we know are supported by land use and infrastructure investment and are attractive from a commercial perspective.

#### 3.4.1 Plan for the growth of centres

*A Plan for Growing Sydney* identified 28 strategic centres, and four transport gateways, as places to provide more jobs close to homes.

In developing *Our vision – Towards our Greater Sydney 2056*, the Commission's research found that some centres make a substantially greater contribution to the economy of Greater Sydney. On this basis, we have redefined the approach to consider a hierarchy of centres ranging from strategic to district and local. We define strategic centres as having one or more of the following characteristics:

- a higher proportion of knowledge-intensive jobs, principally relating to the presence of major hospitals, tertiary education institutions, stand alone office development or a combination of these
- the presence of existing or proposed major transport gateways
- a major role in supporting the increased economic activity of the Eastern, Central or Western cities
- generally generate over 20,000 jobs.

The work to support *Our vision – Towards our Greater Sydney 2056* also identified that a range of centres (some of which had been classified as strategic centres in *A Plan for Growing Sydney*) in fact play a significant district role due to the presence of one or more of the following characteristics:

- the scale of retail activity, generally over 50,000 square metres of floor space
- the presence of health and education facilities that serve the district and the local community
- the level of transport services
- generally generate between 5,000 to 10,000 jobs.

These centres have been identified as district centres.

It is the presence and scale of the health and education facilities, transport gateway infrastructure and knowledge-intensive jobs that is the key differentiator between strategic and district centres. Here, the NSW Government has greater potential to leverage economic activity from existing infrastructure which can enhance the global competitiveness of Greater Sydney.

The differentiation does not intend to impact on the ability for either a strategic or a district centre to attract retail or commercial activity (including office development) of any scale, subject to the normal local planning and development assessment process.

Local centres vary in size from a few shops on a corner to a vibrant main street. They are on a smaller scale than district centres and generally serve the local population.

We have nominated job targets for the District's strategic and district centres to provide guidance to councils and State agencies as to the likely and potential scale of employment growth and to inform land use and infrastructure planning. Our experience emphasises the value of providing targets as a range to account for varying economic conditions, investment opportunities and local aspirations.

The lower end of the range of these job targets reflect the baseline of projected jobs growth that is anticipated in the centre, while the upper end is an aspirational higher growth



scenario to reflect outcomes in the case of further investment and land use planning in centres.

On this basis, we will review the list of strategic and district centres as part of the review of *A Plan for Growing Sydney* in 2017.

The targets assume that the Western Sydney Airport will be operational by the mid-2020s, and that significant employment growth will occur post 2036. The targets also reflect the crucial influence that transport has on making areas more attractive for businesses and more accessible to workers.



#### **Action P4: Develop and implement a centres framework for the District**

To accommodate the retail and commercial needs of the Western Sydney and South West Priority Growth Areas, the Commission together with local councils, will develop a centres framework which covers the two Priority Growth Areas. It will consider:

- retail supply demand, into the long term
- providing opportunities for commercial activities into the long term
- tertiary education and health needs
- public transport and major road corridors
- the potential to create centres that interact with natural features such as South Creek
- 'corridors of opportunity' through the location of multiple centres along major transport corridors, to enhance the community's accessibility to goods, services and jobs
- the staging of centres.

### **3.5 Planning for Greater Penrith as Sydney's Western Gateway**

Greater Penrith includes assets and places that will be a focus for jobs growth and the diversification of job opportunities.

**Penrith City Centre** has the District's largest concentration of commercial uses. It has the potential to expand its commercial activities and knowledge-intensive jobs and services. We define Penrith City Centre and the **Penrith health and education super precinct** as Greater Penrith.

The Penrith health and education super precinct is based around the Western Sydney University Werrington Campus, Nepean College of TAFE Allied Health Facility and Nepean Hospital. It is undergoing change, with the development of a business park at Werrington and new homes. It benefits from good access to open space and public transport. It accommodated 6,000 jobs in 2011, representing almost 300% growth from 2001. Maximising economic activity and the level of services that the health and education sectors can deliver will enable these uses to grow and attract complementary activities.

Table 3-3: West District job target ranges for strategic and district centres (2016-2036)

Centre	Centre Type	2016 Estimate	2036 Baseline Target	2036 Higher Target
<b>Greater Penrith</b>	Strategic	33,400	44,000	45,000
<b>St Marys</b>	District	8,300	10,000	11,500
<b>Richmond-Windsor</b>	District	10,300	12,000	16,500
<b>Katoomba</b>	District	2,700	3,000	5,500

Source: Transport Performance and Analytics (TPA) (formerly Bureau of Transport Statistics) Transport for NSW, Greater Sydney Employment Forecasts, 2011 to 2041 (2016 release).

### Health and education super precincts

Across Greater Sydney there are a number of locations where the proximity of health and education assets creates significant opportunity to drive economic activity and the prosperity of NSW. We have identified these as health and education super precincts.

Health and education super precincts are important locations for knowledge-intensive jobs, innovation and service delivery. It is anticipated that by 2036, 21% of all Greater Sydney jobs will be in the health and education sector.

Our health and education super precincts mirror closely the list of significant metropolitan health and education precinct identified in *A Plan for Growing Sydney*. The only exceptions are Rhodes - where there is no major education presence - and Rydalmere - where there is no major health presence.

Our approach to health and education super precincts will be refined further and confirmed in our review of *A Plan for Growing Sydney* in 2017.

Greater Penrith is the West District's only health and education super precinct.

As Greater Sydney's population grows, health and education infrastructure needs to keep pace with population growth. We need to be certain that demographic changes such as the high growth in the proportion of children and the frail aged are monitored and measured, and infrastructure necessary to support these groups is planned for and provided.

We support and encourage the growth of health and other ancillary activities in health and education super precincts and recognise the need to:

- plan for the expansion of these precincts
- protect surrounding employment areas for health and education related land use
- consider the flexibility of zones to accommodate uses such as health and medical research activities; private hospitals; allied health; ancillary retail; and visitor, carer and aged accommodation in the right locations
- plan for increased access and enhanced urban amenity within and around health and education super precincts.

Growing jobs in the health and education sectors delivers on Direction 1.10 of *A Plan for Growing Sydney*, specifically Actions 1.10.2 and 1.10.3



### Western Sydney University

Western Sydney University is a critical agent for the West District's continued growth and development. The University's Kingswood and Werrington campuses are situated about four kilometres to the east of the Penrith City Centre. These campuses – Kingswood in the main – comprise over 8,660 of the University's more than 44,000 students.

Computing, engineering, mathematics, digital media, education, psychology and health are the dominant disciplines at the University's Penrith campuses. Importantly, given the scale and complexity of the region's infrastructure projects, one of Western Sydney University's world-leading research entities, the Institute for Infrastructure Technology, is also based at Penrith.

The University is a central component of the Penrith health and education super precinct, with over 350 of its nursing and midwifery students placed at Nepean Hospital. The vast majority of them, like the University's medical students, choose to stay and work in Western Sydney after graduating.

Western Sydney University's Werrington South campus is home to LaunchPad, the region's only start-up incubator and small and medium enterprises technology accelerator. It provides intensive research, technology and business mentoring support to over 25 early stage entrepreneurs. The incubator draws on an amplification principle, working to identify, develop, link and grow the region's existing and emerging commercial ventures with a view to creating an innovation ecosystem. It is a distinctively Western Sydney approach.

In recognition of the region's growing demand for world's best infrastructure and design technology, Western Sydney University is also exploring options to develop a technology focused facility in the Penrith City Centre.

We have identified a gateway tourism corridor that could build on a number of cultural, recreational and entertainment assets along a north-south corridor including Castlereagh/Mulgoa Roads:

- Sydney International Regatta Centre
- Joan Sutherland Performing Arts Centre
- Penrith Stadium
- Panthers World of Entertainment
- Nepean River
- adventure tourism facilities such as white water rafting, Ifly and Cables Wake Park.

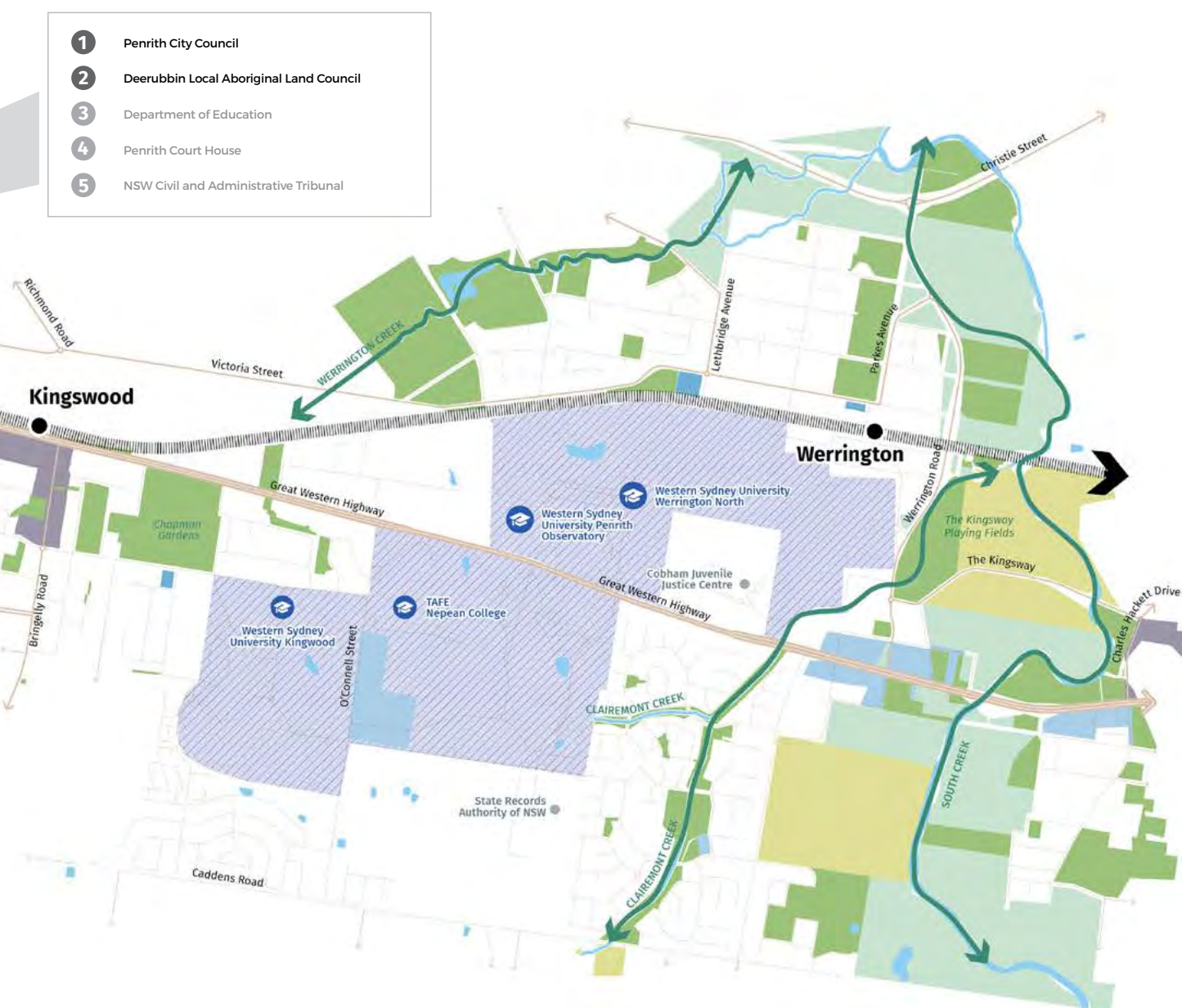
Penrith Lakes also offers potential – it is a major recreational destination with a unique blend of lakes, parkland, wildlife habitat, cultural and historical attributes. It accommodates the Sydney International Regatta Centre, Western Sydney's premier destination for rowing, sailing and swimming.





Figure 3-8: Greater Penrith existing activities

<b>Existing activities:</b>	● Local Government Office	● Mixed Use Zone	● Waterways
⛶ Hospital	● State Government Office	● Industrial Zones	===== Railway
⛶ University/TAFE	● Our River Project	● Regional Public Open Space	●●●●● Railway Station
🛒 Retail hub	➡ Green Grid Opportunities	● District Public Open Space	== Highway
✳ Cultural Centre	● Business Zones	● Local Public Open Space	— Local Road





### Productivity Priority 3: Manage growth and change in strategic and district centres, and, as relevant, local centres

When undertaking planning for strategic, district and local centres, the relevant planning authority should consider:

- opportunities for existing centres to grow and new centres to be planned to meet forecast demand across a range of retail types
- the need to reinforce the suitability of centres for retail and commercial uses while encouraging a competitive market
- the commercial requirements of retailers and commercial operators such as servicing, location, visibility and accessibility
- the use of the B3 Commercial Core Zones in strategic centres and where appropriate in district centres to reinforce and support the operation and viability of non-residential uses including local office markets.

When preparing strategic plans the relevant planning authority needs to demonstrate how its planning for centres has considered strategies to:

- deliver on the strategic and district centre's job targets
- meet the retail and service needs of the community
- facilitate the reinforcement and / or expansion of allied health and research activities
- promote the use of walking, cycling and integrated public transport solutions
- provide urban spaces such as meeting places and playgrounds
- respond to the centre's heritage and history
- promote community, arts and cultural activities
- reflect crime prevention through environmental design (CPTED) principles such as safety and management
- manage the transition between higher intensity activity in and around a centre and lower intensity activity that frames the centre.

How these matters are taken into account is to be demonstrated in any relevant planning proposal.



### Action P5: Coordinate activities to grow jobs in Greater Penrith

For Greater Penrith to grow into Greater Sydney's western gateway, we need to plan for an increase in jobs and job types, a higher share of knowledge-intensive jobs, and an increase in tourism and visitation rates.

Penrith City Council and the Penrith Business Alliance have initiated the *Penrith Progression Plan* to transform the city centre and deliver jobs for the future. This collaboration identifies new economic, social and environmental drivers, addresses barriers to investment and identifies catalyst projects to revitalise the centre. The initiative aims to meet a 2031 target of at least 45,000 new jobs in the centre.

To build on this work, and in recognition of Greater Penrith's scale and complexity, including consideration of the centre's location within the Hawkesbury-Nepean floodplain, we have designated Greater Penrith as a Collaboration Area. Subject to the availability of resources, we will facilitate the efforts of the many agencies, stakeholders and interest groups that are planning for Greater Penrith's future.

**A Collaboration Area** is a place where a significant productivity, liveability or sustainability outcome is better achieved through the collaboration of different levels of government and in some cases the private sector or landowners.



This collaboration will focus on:

- an integrated land use and transport vision that addresses constrained access to the Penrith City Centre, specifically along Mulgoa Road and The Northern Road
- a landscape vision that will improve public spaces and gateway roads to improve the centre's ambiance and sense of place
- a prioritised infrastructure plan
- high quality urban design principles
- ecologically sustainable development (ESD) outcomes.

We will also partner with NSW Health, councils and State agencies as relevant to look at specific opportunities for the health and education super precinct, such as:

- presenting as a health gateway to NSW's west

- increasing production and export of medical innovation, and facilitating this by promoting the development of a research institute
- improving the urban amenity around Kingswood Station
- improving walking and cycling connections between Penrith City Centre, Nepean Hospital, Kingswood Station and Western Sydney University, and to nearby open spaces
- investigating opportunities to consolidate fragmented parcels of land so that development is more viable
- maximising the benefits of the connections to Western Sydney Airport
- identifying the required land and infrastructure to support the health sector around Nepean Hospital and education sectors around Western Sydney University.





**Action P6:**  
**Develop the Greater Penrith gateway corridor as a major tourism, cultural, recreational and entertainment hub**

Mulgoa/Castlereagh Road is one of the main roads into Greater Penrith with an emerging cluster of cultural, recreational and entertainment facilities, adjacent to the Nepean River along the north-south corridor.

This area could complement the established cultural and heritage attractions and tourism in the District and help to activate and improve Greater Penrith for tourist accommodation and services. Penrith City Council has already identified a site for a potential cultural and entertainment precinct as part of its *Penrith Progression Plan*.

An important element in attracting tourism and entertainment is the amenity of the roadsides that lead into Greater Penrith, particularly coming from the Airport via The Northern Road. With an operational Western Sydney Airport a decade away, there is an opportunity to make such improvements.

We will work with Penrith City Council to explore this opportunity as part of the Greater Penrith collaboration.



**Action P7:**  
**Enhance public transport access to Penrith City Centre**

For Greater Penrith to grow into Greater Sydney's western gateway, it will need more efficient, faster and better bus services to Penrith City Centre. A modern and customer focused bus system with a more direct, faster bus network that gets people where they want to go and connects seamlessly with other buses and trains will support the development of Greater Penrith. Transport for NSW will consider opportunities to improve connections and access to Penrith City Centre as part of the development of the *The Future Transport Strategy* in 2017.

### 3.6 Increasing, strengthening and diversifying the skill base

*Our vision – Towards our Greater Sydney 2056* identifies a metropolitan priority to grow the share of smart jobs in Greater Sydney. To achieve this ambition, we need better access between smart jobs and a skilled workforce.

The West District has a lower proportion of population with higher qualifications compared to the Greater Sydney average. Only 11% of the West District's population has a Bachelors or Postgraduate Degree, compared to the 20% average across Greater Sydney.

This illustrates a need to increase the District's skilled workforce in order to grow the proportion of smart jobs in the District. Our planning needs to improve access to higher education facilities and training programs. We can begin by building on recent NSW Government commitments, including:

- changes to the vocational education and training (VET) funding eligibility and fees to improve take up, including 25,000 science, technology, engineering and mathematics (STEM) scholarships
- the Infrastructure Skills Legacy Program
- the Smart, Skilled and Hired Program which focuses on training Western Sydney's young people for employment.



#### **Action P8: Support skills development as Western Sydney Airport is constructed**

More than 11,000 jobs are expected to be created with the construction, engineering and professional services industries during the construction of the Western Sydney Airport.

The Department of Industry will work with construction companies to establish a Skills Exchange Program at the Western Sydney Airport site to provide on-site training for the workforce which will deliver a lasting skills legacy in the District.



#### **Action P9: Encourage opportunities for new Smart Work Hubs**

A Smart Work Hub is a facility or space funded by an employer which offers employees an alternative to working in their normal place of work or working from home. With journey to work data showing West District's residents travel long distances to access higher-skilled jobs, Smart Work Hubs could improve work-life balance and potentially help to retain skilled workers in the District.

The NSW Government's Smart Work Hub Pilot Program encourages the growth of knowledge-intensive industries, supports flexible work practices and offers employees a place to work closer to home. This Program has supported the establishment and operation of a Smart Work Hub in Penrith.

The next iteration of this initiative could be a government smart work hub. This would not only have substantial benefits for NSW Government workers who face long commutes, but would also boost the Penrith city centre, ease road and public transport congestion and in the long term possibly reduce government rental expenditure. A first step to examine the viability of such a facility would be a survey to determine the number of West District residents who could potentially benefit from the initiative.

Table 3-4: Higher qualification attainment, West District vs Greater Sydney (2011)

Qualification	West District Residents	Greater Sydney
	%	%
Postgraduate Degree Level	3%	7%
Graduate Diploma or Graduate Certificate Level	35%	28%
Bachelor Degree Level	11%	20%

Source: Australian Bureau of Statistics 2011 Census of Population and Housing.



The Department of Industry is reviewing the Smart Work Hub initiative, noting that each of the District's Smart Hubs are now operating as an independent business, fulfilling an important objective of the initiative.

West District residents who work for the NSW Government but face long commutes could take advantage of a sponsored place in a Smart Work Hub. We are already seeing this at the Oran Park Smart Work Hub in south west Sydney, which has been established by UrbanGrowth NSW.

We will encourage councils and industry to consider initiatives to support Smart Work Hubs at Katoomba and Richmond.

#### **Sydney Metro West**

The NSW Government has announced a new underground metro railway line will be built between Parramatta City and Sydney City to help cater for Sydney's growth.

Sydney Metro West will provide a direct connection between Parramatta City and Sydney City, linking communities not previously serviced by rail as well as supporting growth between the two major centres.

The Sydney Metro West project will focus on a corridor between the Parramatta River and existing T1 Western Line, because of the greater potential to transform communities, create new ones and link them using a new state-of the art public transport system.

Beyond this corridor, opportunities to extend the line east and west will also be considered.

### **3.7 Accessing a greater number of metropolitan jobs and centres within 30 minutes**

Increasing the range of jobs and other opportunities that people can access within 30 minutes requires better transport connections and stronger economic and employment centres. As Greater Sydney evolves to a metropolis of three cities, people will enjoy better access to hubs of major economic activity, with new housing focused on transport corridors and around employment centres to increase the proportion of people who have easy access to jobs and services.

Opportunities to improve connections and access within the West District include:

- planning and delivery of the Western Sydney Infrastructure Plan
- investigating and preserving suitable corridors for the Outer Sydney Orbital and Bells Line of Road-Castlereagh Corridor
- continuing planning for the upgrade and widening of Mulgoa Road/Castlereagh Road to support current and future traffic demands and expected growth
- investigating the Western Sydney Freight Line and Intermodal Terminal
- investigating the need for a Pinch Point Program to ease congestion
- investigating options for new rapid, suburban bus services, including a possible rapid bus route from Penrith to Liverpool via Western Sydney Airport, to capitalise on the upgrade of The Northern Road
- working with the future Western Sydney Airport operator on a comprehensive airport ground transportation strategy
- developing a comprehensive walking and cycling network.

These opportunities will be considered by Transport for NSW as part of the development of the Future Transport Strategy in 2017.

### 3.8 Accessing local jobs, goods and services within 30 minutes

As the population grows, so too will demand for retail, business and personal services and jobs. These population-serving jobs should be close to where people live. Likewise, local schools and health services should be planned and built to enable easy and safe access on foot or by bicycle to reduce car use.

District and local centres and their surrounding areas could potentially accommodate a major proportion of population growth and would be suitable for population serving jobs. The West District contains district centres at St Marys and Katoomba that provide access to a range of goods, services and jobs, and, collectively, Richmond and Windsor, which fulfil a district centre role in the Hawkesbury.

#### 3.8.1 Planning for retail floor space provision and demand in the West District

Our retail demand and supply research forms part of our background material. The research estimates that in 2015 there was approximately 10.87 million square metres of retail floor space across Greater Sydney, equating to 2.4 square metres per person.

Looking forward, using the medium population growth scenario, demand will be generated for over five million square metres of retail floor space across Greater Sydney by 2036. As more than two thirds of this growth is forecast to occur within established areas, which may constrain retail supply, further research is a priority.

As of 2015, the West District provided approximately 744,600 square metres of retail floor space (2.1 square metres per person), which is lower than the Greater Sydney average (2.4 square metres per person). It is expected that by 2036 there will be demand for approximately 438,000 square metres of additional retail floor space across the West District to service the forecast growth in population.

More broadly Greater Sydney has a long history of focusing its retail offer within centres. This has reinforced the polycentric character of Greater Sydney that has provided convenient access to a range of goods and services for many communities, visitors and workers. It has also allowed centres such as Parramatta, Chatswood, Bondi Junction, Liverpool, Hurstville and Greater Penrith to have high concentrations of retail, housing and jobs co-located on the major transport corridors. This has also allowed for the efficient and effective use of both privately and publicly funded infrastructure.



#### Productivity Priority 4: Prioritise the provision of retail floor space in centres

When preparing retail and commercial strategies to inform local planning, the following matters should be considered:

- existing and future supply and demand for retail floor space within the District based on the Department of Planning and Environment's medium population growth scenario
- the accessibility of different types of retail and commercial floor space to communities
- opportunities to allow retail and commercial activities to innovate within centres
- the impacts of new retail and commercial proposals to the viability and vitality of existing and planned centres
- the need for new retail development to reinforce/enhance the public domain
- the net social, economic and environmental benefits of new supply within different locations.

How these matters are taken into account is to be demonstrated in any relevant planning proposal.

In this context, our planning should reinforce Greater Sydney's strong focus on centres and support the expansion of existing centres to accommodate increased demand for retail and associated services. We should also investigate opportunities for new centres to be formed in locations that are supported by transport and other important forms of infrastructure.

Our retail dataset, available as part of our background material, is a useful strategic planning tool that indicates current supply and where demand is likely to require increased retail development at a district and local government area level.

### 3.8.2 Planning for district centres

Encouraging the growth of district and local centres will reduce the need for people to travel long distances to access jobs and local services.

Productivity Priority 3 applies to the growth of district centres, and we will work across State agencies and in collaboration with local government and communities to agree on priorities for each centre.

### 3.8.3 Transport connections to district and local centres

Improving the way people and goods move around the West District will minimise the environmental, social and economic impacts. A 30-minute city requires an integrated understanding of the relationships between land uses, socio-economic factors, travel behaviour and considers a broad range of factors including trip purposes, travel times, mobility differences as well as the form and function of place.

The NSW Government is investing in the planning and delivery of transport infrastructure and services that will strengthen the connections to district and local centres. These investments include:

- delivery of:
  - Growth Services Program that since 2011 has provided an additional 390 weekly bus services for the Penrith area to

support demand in new suburbs

- Richmond Intersection Improvements to reduce congestion on approaches to Richmond Bridge
- Windsor Bridge replacement to help improve traffic flow and provide a reliable and safe crossing of the Hawkesbury River
- Jane Street and Mulgoa Road Infrastructure Upgrade to reduce congestion and delays at the intersections during peak times and improve access to public transport and provide safe and effective pedestrian and cycling infrastructure
- M4 Motorway upgrade to Greater Sydney's first 'smart motorway' reducing travel times by up to 15 minutes from Lapstone to Parramatta by 2020
- planning for:
  - new suburban bus routes between Penrith and Rouse Hill via Marsden Park and between Penrith and Mount Druitt
  - upgrade and widening of Mulgoa Road/Castlereagh Road to support current and future traffic demand and expected growth in the area

In addition to these investments Transport for NSW will investigate:













- priority transport connections:
  - along corridor between Penrith and Parramatta
  - from Penrith to Marsden Park
  - public transport between Hawkesbury and Penrith
  - improved train services on the Western corridor to and from the Blue Mountains
- potential areas to reduce congestion:
  - Yeaman's Bridge entry to Katoomba and the southern entry to Springwood from the Great Western Highway
  - Richmond Bridge upgrade.

These opportunities will be considered by Transport for NSW as part of the development of the Future Transport Strategy in 2017.





Figure 3-9: Strategic, district and local centres

	Strategic Centre		District Boundary		Waterways		Railway Station
	District Centre		Metropolitan Urban Area		National Parks and Reserves		Motorway
	Local Centre		Metropolitan Rural Area		Railway		Highway

### 3.9 Managing freight activities

Freight and logistics activities are an economic facilitator in any city. This statement is true for every class of freight – from air to rail and container freight, to the local delivery of parcels in vans. Our land use planning must therefore recognise, support and mitigate impacts of freight delivery. Maintaining the productivity of the District's freight network is an important consideration in this draft District Plan.

The West District includes NSW's primary freight links over the Great Dividing Range, providing freight access to and from the western region of NSW. The M4 Motorway and Great Western Highway form part of the National Land Transport Network (a national network of important road and rail infrastructure links as defined by the Australian Government) and carry interstate freight to and from Adelaide and Perth as well as local and regional freight. The Main Western Rail Line is a major link for mineral and agricultural exports from regional NSW to ports.

The District will have strong connections to Newcastle, the Central Coast and Wollongong. Together with Greater Sydney, these cities are projected to have a population of between 10 and 11 million people by the middle of the century.

The Outer Sydney Orbital Corridor will also accommodate freight rail. Combined with the proposed Western Sydney Freight Line, this will connect the Western City to Port Botany, and ultimately to Port Kembla and the Port of Newcastle. This will make the Western City one of the most connected freight and logistics locations in Australia.

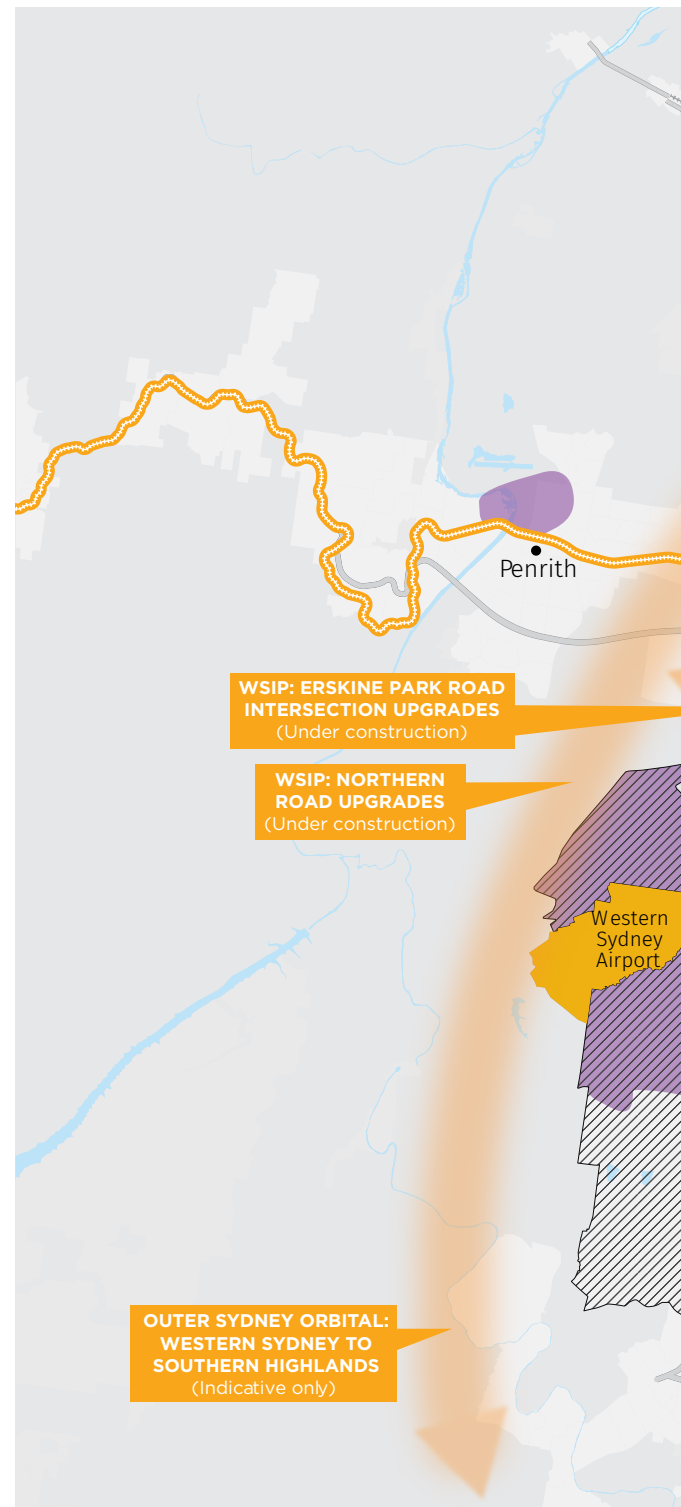
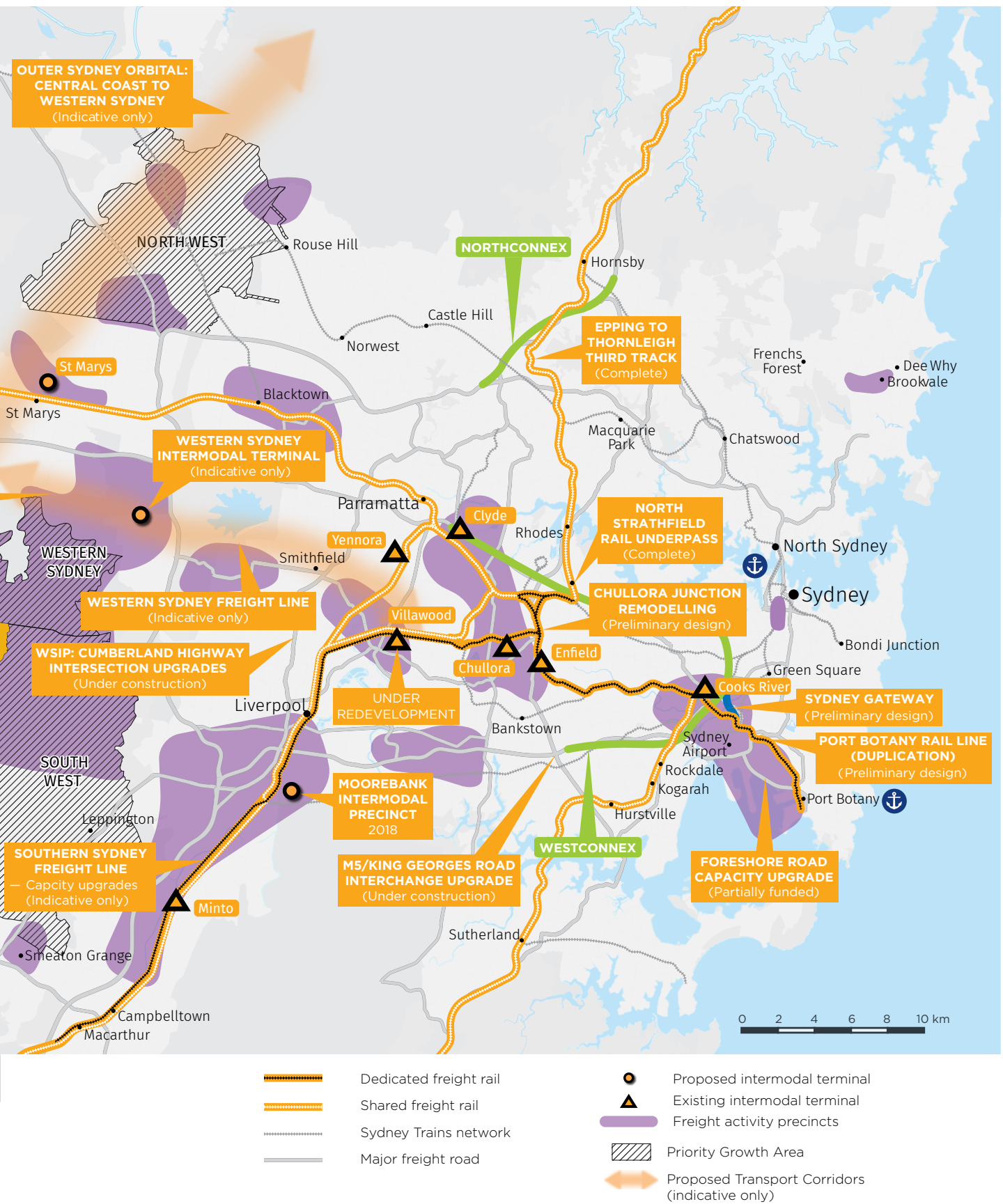


Figure 3-10: Greater Sydney freight assets

Source: Transport for NSW (2016)







**Action P10: Identify and plan for efficient movement of freight to, from and within the District, with least impact on residents' amenity**

As the Western City develops and grows, the opportunity to identify a viable freight corridor, including for a fuel pipeline to Western Sydney and terminal site, will diminish. Without an intermodal terminal and supporting freight rail connections, the District will depend on road transport.

Transport for NSW will:

- continue investigations to identify suitable land that can be preserved as freight corridors, including for a fuel pipeline for Western Sydney and intermodal terminals
- continue to plan for a suitable corridor for the future Outer Sydney Orbital

### 3.10 Managing employment and urban services land

#### Employment and urban services land

In 2006, the Employment Lands Taskforce defined employment land as “*zoned for industrial or similar purposes in planning instruments [and] generally lower density employment areas containing concentrations of businesses involved in manufacturing; transport and warehousing; service and repair trades and industries; integrated enterprises with a mix of administration, production, warehousing, research and development; and urban services and utilities*”.

From 2008, employment lands were categorised into precincts. With the implementation of the Standard Instrument Local Environmental Plan, these precincts can now include other business zones that permit a number of industrial uses.

In this draft District Plan, we have replaced the term ‘employment land’ with ‘employment and urban services land’. While this still describes the same type of land, the terminology reflects the evolving nature of employment areas, the jobs and economic activity they generate, and the way they support urban areas and industries (for example, by providing land for data centres, utilities and distribution centres) as well as local residents (for example, by providing land for panel beaters, council depots, vehicle repairs and household trades).

Employment and urban services land supports activities that are critical to Greater Sydney's productivity, sustainability and liveability. In this context Greater Sydney's existing industrial, manufacturing, warehousing and distribution industries contribute to Greater Sydney's role as Australia's manufacturing capital. Furthermore, good access to urban services locally reduces the need to travel to other areas, minimising congestion. We therefore need to ensure that our employment lands are efficiently managed and protected across Greater Sydney and within the West District.

In 2015, 1,786 hectares of the West District was zoned for employment and urban services land. This land is spread across 27 separate precincts representing 13% of Greater Sydney's total stock of employment and urban services land. Of this, 40% (721.5 hectares) was undeveloped in 2015.

Table 3-5 lists large areas of employment and urban services land (more than 30 hectares) in the West District by local government area, based on the Department of Planning and Environment's *Employment Lands Development Program 2015*. In addition to the larger precincts identified in Table 3-5, the District also contains smaller parcels of employment land that are important to the District's economy.

Employment and urban services land in the Blue Mountains and Hawkesbury Local Government Areas generally consists of established precincts with predominantly small lots and low density development accommodating light industry, light manufacturing and urban services with local markets.

Employment and urban services land in the Penrith Local Government Area includes a range of established and largely developed precincts at Emu Plains, Jamisontown, North Penrith and St Marys, accommodating major industry and heavy manufacturing with local, district and metropolitan markets.

The West District also includes part of the Western Sydney Employment Area, 1,960 hectares of industrial-zoned land south west of the intersection of the M4 and M7 Motorways. In January 2015, approximately 60% of this land was undeveloped. There is a further 4,500 hectares of land under investigation for employment uses as part of a new Land Use and Infrastructure Strategy for the Western Sydney Priority Growth Area.

Table 3-5: Major (larger than 30 hectares) employment and urban services precincts in West District (January 2015)

LCA	Precinct	Undeveloped land (hectares)	Developed land (hectares)	Total (hectares)
Blue Mountains	Katoomba	13.9	32.5	46.4
	Lawson	17.3	14.1	31.4
Hawkesbury	Mulgrave / Vineyard	3.8	58.4	62.2
	Windsor / South Windsor	19.1	79.3	98.4
Penrith	Emu Plains	45.7	83.8	129.4
	Erskine Park	123.2	242.3	365.5
	Jamisontown	4.3	77.4	81.7
	North Penrith	90.7	166.3	257.1
	South of Sydney Water Pipeline	337.2	0	337.2
	St Marys	50.2	174.4	224.7
	St Marys North	1.7	55.2	56.9

Source: Department of Planning and Environment, *Employment Lands Development Program (2015)*

The Western Sydney Employment Area benefits from unparalleled opportunities including large lots, and good access to Sydney's major road network. The development of Western Sydney Airport, the provision of the Outer Sydney Orbital and the proposed Western Sydney Freight Line and Intermodal Terminal will give this area a significantly increased level of accessibility to metropolitan, state, national and international markets.

The nature of industrial land is changing, with a greater diversity of activities. While some industrial precincts accommodate traditional industrial activities such as light manufacturing, new models are emerging for businesses locating in industrial precincts that require different planning and infrastructure responses.

This transition is occurring as a number of industrial sites face pressure to convert to residential uses, particularly in the eastern parts of Greater Sydney. This is less pronounced in the West District, but is anticipated to increase as the population of the District grows.

Action 1.9.2 of *A Plan for Growing Sydney* emphasises the importance of employment and urban services land to Greater Sydney's productivity. Our research has reaffirmed their value, underpinned by the economic contributions they make and strong demand for this comparatively scarce resource.

Additional work is needed in collaboration with councils to explore and where appropriate verify this precautionary approach and to step away from the industrial lands checklist suggested by *A Plan for Growing Sydney* during our review in 2017.



#### **Productivity Priority 5: Protect and support employment and urban services land**

Employment and urban services land plays a critical role in the efficient and effective function of the District. Owing to the comparative scarcity of this resource, a holistic and precautionary approach to its planning should be undertaken.

Accordingly, relevant planning authorities should take a precautionary approach to rezoning employment and urban services lands or adding additional permissible uses that would hinder their role and function. An exception is when there is a clear direction in the Regional Plan (currently *A Plan for Growing Sydney*), the District Plan or an alternative strategy endorsed by the relevant planning authority. Any such alternative strategy should be based on a net community benefit assessment (an analysis of the economic, environmental and social implications) of the proposed exception, taking into account a District-wide perspective in accordance with Action P11.

How these matters are taken into account is to be demonstrated in any relevant planning proposal.



#### **Action P11: Develop better understanding of the value and operation of employment and urban services land**

In order to better understand the contribution of employment and urban services land to the District's productivity, liveability and sustainability we will work with councils to further develop our research and understanding of how the District's employment and urban services land operate, the range of uses they support including their industry and supply chains, their interdependencies, key constraints, and opportunities to be improved. In doing this, the particular characteristics and value add of these locations will be identified to inform the preparation of appropriate planning controls to protect, support and enhance the economic functions of these areas.











## 4 A Liveable City

*'City areas with flourishing diversity sprout strange and unpredictable uses and peculiar scenes. But this is not a drawback of diversity. This is the point of it.'*

Jane Jacobs

The West District is home to natural icons such as the Blue Mountains. It comprises semi-rural living in hamlets, villages and towns and provides access to Greater Penrith and Sydney City and all that these major centres have to offer.

In our community consultation in 2015 the residents of the West District valued the area's community spirit.

Participants spoke of the population in the area being small enough for people know each other. This has created a strong community spirit where people are mostly friendly, welcoming and non-judgmental.

Our aim is to conserve and enhance quality of life and local identity. We want to collaborate with communities and stakeholders to make the most of public investment in the District's infrastructure and urban places and address the issues that people tell us are important to them.

This requires a focus on the type of housing that the District needs as it grows – not just in numbers, but the diversity that offers different price points and can help improve affordability.

As the District grows, we need to plan upfront to support new residents with the right mix of schools, health services, community facilities, walking and cycling connections. This needs to be achieved in a way that creates safe, engaging places for everyone.

This draft District Plan looks at how we can implement the priorities from *Our vision – Towards our Greater Sydney 2056* and the goals of *A Plan for Growing Sydney* that seek to develop a city of housing choice, with homes that meet our needs and lifestyles in a great place to live (Goal 2), with communities that are strong, healthy and well connected (Goal 3).

Our planning for Greater Sydney aspires to maintain and improve residents' quality of life by providing more housing and employment opportunities and the infrastructure that makes these opportunities accessible. We can help to create healthy and connected communities if we collaborate across the private and public sector and with communities, and base our decisions on quality evidence.

### The West District Liveability Profile

Our West District Liveability Profile describes the District's population in terms of its existing characteristics, age, gender, country of birth, family type and how we expect these characteristics to change over time. This informs the way we plan for each group's unique needs.

You can view the Liveability Profile by visiting [www.greater.sydney](http://www.greater.sydney). We will continue to increase and build the profile so as to improve the quality and range of social data that forms the basis of smart strategic planning.



### The Liveability Framework

Greater Sydney's Liveability Framework forms a foundation for planning and infrastructure delivery to be driven by consideration of people's needs at all stages of life. Use of the Framework to inform strategic plans would allow governments, planning authorities and services providers to work together across a common framework to plan for and enhance the District's liveability as our population grows.

The Liveability Framework places our physical and mental health and wellbeing at the forefront as Greater Sydney transitions from suburban to more urban places. It relies on strong partnerships between State agencies, local government, non-government organisations, private providers and communities.

Nine liveability outcomes have been derived from international best practice and refined through consultation with councils, interest groups and the community to form the Framework. Healthy liveable places demonstrate:

- housing choice by supporting affordable and appropriate housing for all
- urban design excellence by delivering high quality design that supports community safety, health and wellbeing, and enhances community assets and character
- connected communities by supporting walking, cycling and public transport movement between destinations
- a sense of belonging and local identity by creating great places that are socially inclusive and promote respect and feelings of belonging
- social infrastructure provision by promoting an integrated approach to social infrastructure that includes health care, education, fresh food access, public open spaces and other community/cultural facilities
- community engagement delivered across all liveability outcomes by promoting community empowerment and ownership in shaping resilient cities
- culture and innovation by celebrating and promoting creative arts, digital technology, culture and innovation
- diversity of job opportunities by providing access to a range of jobs and learning/skills development
- environmental quality by managing the quality of and access to the natural environment.

This draft District Plan addresses the need for good access to education, health, community and emergency services for people through every stage of their life. It takes a design-led planning approach that focuses on people in order to create great places to meet, work, exercise and socialise.

We want people to be able to access public spaces, shops, parks, sports and cultural facilities by foot or bicycle.

We want to plan for these places in a way that respects the District's natural and cultural heritage and recognises the continuing traditional Aboriginal culture in the West District.

#### 4.1 The West District's people

Many factors make the West District a great place to live. Existing residents have unrivalled access to the Blue Mountains, with bushland, rivers and panoramic views across Greater Sydney. The District also provides areas for semi-rural living – to many people, it holds the best of both worlds, with good access to the three Cities, Greater Penrith and local services and schools.

The District has important areas of Aboriginal cultural heritage, many of which are protected. There are also many significant historic and natural landscape sites and features throughout the District such as the Three Sisters, the Jenolan Caves and the Katoomba Railway.

Overwhelmingly, residents of the West District value proximity to natural features and the vast, rugged beauty of the area. They talked about the need to protect it for the benefit of current and future generations and tourists, and to provide important wildlife habitat, especially in the context of the local population increasing. There is a great sense of pride in the World Heritage listing of the Blue Mountains and the fact that such a natural treasure is so close to the city.

Our community consultation in 2015 revealed that 59% of residents in the West District consider the liveability of their area to be either 'excellent' or 'very good'. This is similar to the average for Greater Sydney (66%).

When residents were asked to rate the performance of their area on a number of aspects of liveability, West District residents gave the highest ratings to:

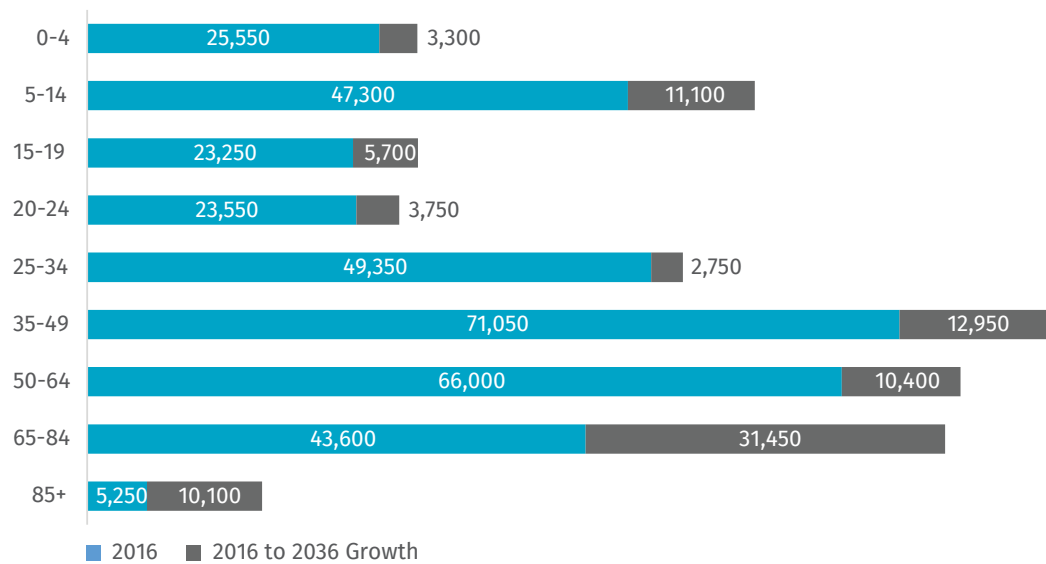
- access to supermarkets and retail (with 63% rating this as 'excellent' or 'very good')
- the availability of good schools and educational facilities (51%) and
- access to natural environments (47%).

By 2036, the District's population is projected to grow by an estimated 91,500 people, to around 446,300. A 1.2% average growth rate is expected for the West District to 2036. This is a slower rate than the Greater Sydney average projected growth rate of 1.6%.

To accommodate these new residents, we need to plan for new housing and new employment opportunities. As the District grows, we need to use this as an opportunity to renew and enhance our centres and places, and provide better access to health and education services, community infrastructure and parks and playgrounds.

It was clear in our consultation that people want our planning to support the District's cultural diversity. Improving liveability in the West District means sharing equitably amongst existing communities the many jobs, housing, amenity and infrastructure benefits that will result from the growth expected in the District over the coming 20 years.

Figure 4-1: West District projected population growth by age group (2016 – 2036)



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

Table 4-1: West District projected aggregate and proportional growth (2016 – 2036) by local government area by key age group

	Aggregate growth 2016-2036							Proportional growth 2016-2036					
	<1	1-4	5-19	20-64	65-84	85+	Total	<1	1-4	5-19	20-64	65-84	85+
Blue Mountains	-20	-80	950	-1,450	6,700	2,350	8,450	-2%	-2%	6%	-3%	50%	138%
Hawkesbury	140	560	3,050	5,500	6,100	2,000	17,350	15%	15%	22%	14%	73%	190%
Penrith	540	2,160	12,800	25,800	18,650	5,750	65,700	17%	17%	31%	21%	85%	235%
West District	660	2,640	16,800	29,850	31,450	10,100	91,500	13%	13%	24%	14%	72%	194%
Greater Sydney	17,080	68,320	333,450	824,100	386,800	110,650	1,740,400	26%	26%	40%	29%	71%	124%

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



#### 4.1.1 West District age profile

We look at the District's changing age profile to understand where we need to plan for people at different stages of their life.

In the West District, projected changes in the distribution of population growth by age group varies from that expected for Greater Sydney. The average projected growth rate for children under four is 13% in the West District compared with 26% for Greater Sydney. Similarly, the number of people aged 20 – 64 will grow by just 14% compared with a 29% increase in Greater Sydney.

Comparably fast growth is expected in the West District for people over 65 and 85 years old. The greatest proportional growth will be in those aged 85 and over, with an expected increase of 194% on today's numbers. (Across Greater Sydney the number people over 85 will grow by 124%.) The number of people aged between 65 and 84 years will increase by 72% over the next 20 years to 2036, on par with the average projected growth in this age group for Greater Sydney.

These changes require us to work with planning authorities and service providers to strengthen the diversity of housing, provide opportunities for people to stay in their local area as they get older and plan for health network services.

Growth in aged care requirements will vary across the District. Penrith Local Government Area is projected to have the largest projected aggregate growth in the 65 to 84 and 85+ age groups, with a combined growth of 24,400, representing 59% of the District's growth.

At the other end of the age spectrum, the 24% growth in school-aged children will create demand for school places and necessitate planning for new and more innovative use of existing schools.

The projected growth in school-aged children varies across the District, with the largest increases expected in the Penrith and Hawkesbury Local Government Areas. By contrast, there will be comparatively small aggregate and proportional growth in school-aged children in the Blue Mountains Local Government Area.



4.1.2 West District population characteristics

There is a significantly higher proportion of the West District’s working population holding vocational qualifications (including Certificate III and Certificate IV) than the Greater Sydney average. Conversely the proportion of residents with a university qualification (Bachelor Degree and Postgraduate Degree) is lower than the Greater Sydney averages.

While Aboriginal and Torres Strait Islander people comprise a relatively small proportion of the overall population of the District at 2.6%, there is a higher proportion than across Greater Sydney (1.1%) with most living in the Penrith Local Government Area.

Up to 11% of households speak a language other than English at home which is considerably fewer than the 37% across Greater Sydney, with most people living in the Penrith Local Government Area.

In 2011, more than 13,500 people with a disability lived in the West District. It is expected that this number will increase significantly in the next 20 years as the population ages. The 2015 Population Health Survey by the NSW Ministry of Health indicates that around 59% of the adult population in the West District was overweight or obese. Obesity is a chronic medical condition which is associated with a range of debilitating and life threatening conditions.

4.1.3 West District dwelling and household characteristics

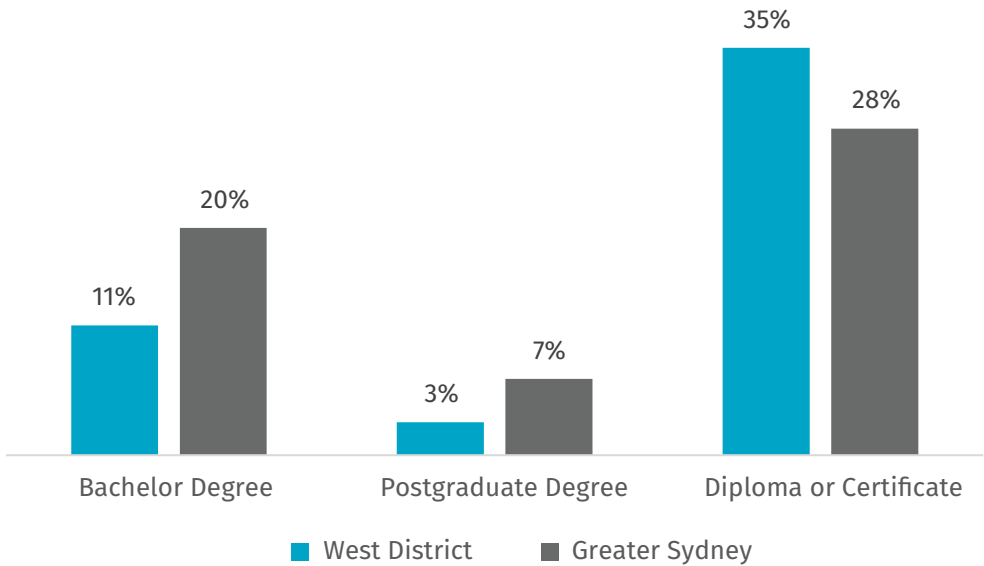
Eighty six per cent of people in the West District live in a detached house. Nine per cent live in medium density type homes, such as semi-detached, terrace and row housing, and 5% live in apartments. Most detached dwellings (81%) are either owned outright or being purchased, and 60% of the medium density dwellings and apartments are rented.

Residents interviewed in our 2015 consultation gave lower performance ratings for access to jobs, affordable housing, cost of living and traffic congestion than the averages for Greater Sydney.

Housing affordability is identified as a significant concern for many residents. A common measure of affordability is that housing costs require no more than 30% of the household budget. Underscoring this point, a recent examination of dwelling sales showed that over the 2005 to 2015 period, there was a significant reduction in the availability of dwellings that were ‘affordable’ for households on moderate incomes.

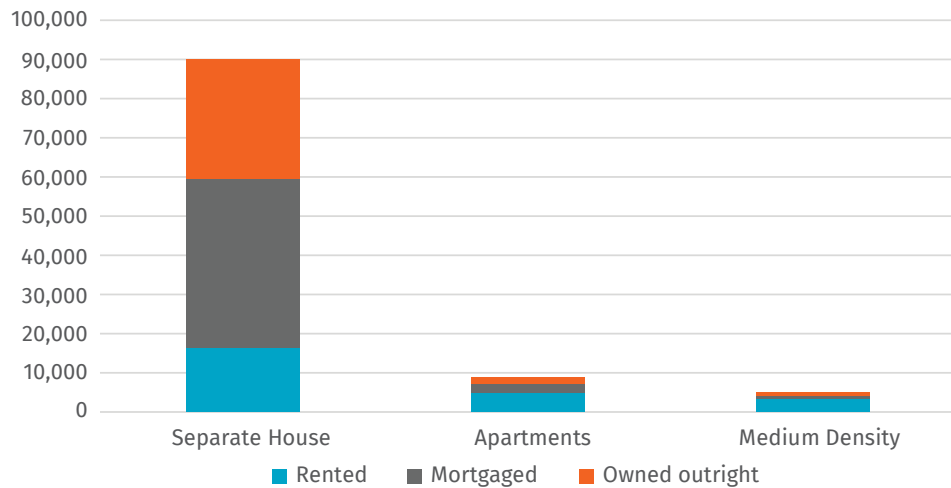
The ageing profile of the population across the West District is reflected in the mix of current and projected household types. For example, single person households are projected to increase by 14,000 households, and couple only households by 8,400 by 2036.

Figure 4-2: West District Higher Education Qualification, West District (2011)



Source: Australian Bureau of Statistics, 2011 Census of Population and Housing.

Figure 4-3: West District Dwelling Structure by Tenure Type (2011)



Source: Australian Bureau of Statistics, Census of Population and Housing.

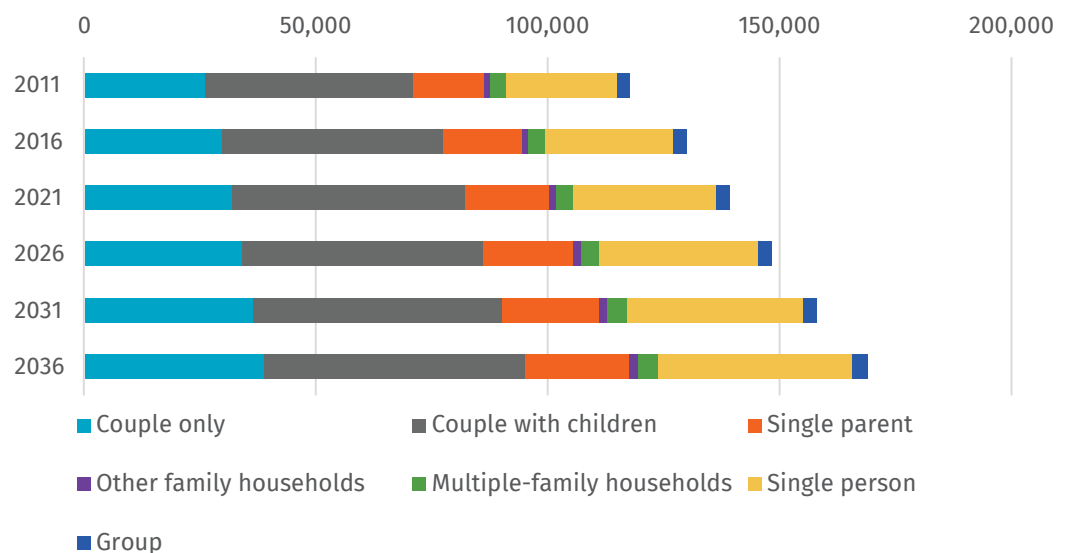
Couples with children will continue as the dominant household type in the West District, yet owing to the growth in single person households, the proportion will decrease from 37% in 2016, to 33% of all households in 2036. The Penrith local government area is expected to record a significant 64% growth in single person households. This compares to more moderate increases in the Hawkesbury and Blue Mountains local government areas (51% and 31% respectively).

While there is an increased need for all housing types in the West District, housing that can accommodate smaller households is in the greatest demand. This needs to include more

terrace, row and courtyard housing in addition to apartment buildings, all of which will provide for more affordable price points than detached dwellings.

We will also need to enable development of flexible housing types including more large homes that can accommodate several family groups or generations living together, as well as more accessible and adaptable housing. Our planning must ensure that there is capacity for new housing that responds to local needs and housing market characteristics and provide proximity to public transport, health, education, infrastructure and services.

Figure 4-4: West District Projected Household Structure 2011 – 2036



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



## 4.2 Liveability priorities

This chapter outlines the liveability priorities and actions for the West District.

The priorities are presented in two ways. Firstly, each heading outlines a priority area, and we provide context and detail to expand on the outcomes sought. Some headings cover factual issues only; these are not included in the list below.

Secondly, within the broad priority areas there are, in many cases, more detailed priorities. We identify the specific purpose of these priorities in each case by detailing how they relate to strategic planning and planning proposals.

The priorities should be considered in strategic planning activities and planning proposals as appropriate.

The full list of liveability priorities covered in this chapter are outlined below.

### Improve housing choice

- Prepare local housing strategies
- Understand the Greater Sydney housing market and demand
- Deliver West District's five-year housing supply target
  - Deliver West District's five-year housing targets
- Establish West District's 20-year strategic targets
- Create housing capacity in the West District.

### Improve housing diversity and affordability

- Plan for housing diversity
  - Delivery of housing diversity
- Support planning for adaptable housing and aged care
- Deliver affordable rental housing
  - Implement the Affordable Rental Housing Target
- Support social housing
  - Increase social housing provision
- Facilitate integrated infrastructure planning.

### Coordinate and monitor housing outcomes and demographic change

### Create great places

- Provide design-led planning
- Plan for safe and healthy places
  - Facilitate the delivery of safe and healthy places
- Enhance walking and cycling connections
  - Facilitate enhanced walking and cycling connections.

### Foster cohesive communities

- Conserve and enhance environmental heritage including Aboriginal, European and natural
  - Conserve heritage and unique local characteristics
- Support the creative arts and culture
  - Foster the creative arts and culture
- Create opportunities for more recreation and community facilities
- Support planning for shared spaces
- Share resources and spaces.

### Respond to people's need for services

- Plan to meet the demand for school facilities
  - Support innovative school planning and delivery
- Plan for the provision of early education services and child care facilities
- Support the provision of youth services
- Support the Aboriginal community
  - Provide socially and culturally appropriate infrastructure and services
- Support planning for health networks
- Plan for health facilities and services
  - Support planning for health infrastructure
- Plan for emergency services
  - Support planning for emergency services
- Plan for cemeteries and crematoria
  - Support planning for cemeteries and crematoria.

### 4.3 Improve housing choice

All successful and growing global cities face the challenge of providing greater housing supply and choice. With Greater Sydney's robust economy, unprecedented levels of population growth and strong investment interest, demand for housing across Greater Sydney is rapidly increasing. Notable demographic change means that significant new and different forms of housing will be required in Sydney to 2036. We are committed to achieving this outcome in a way that also builds a more inclusive city (particularly for the elderly and women) and a more equitable city (particularly for those entering the housing market for the first time). To achieve this the Commission will leverage existing and new infrastructure projects to enhance housing opportunities.

Key to planning for this growth is recognising that the nature of this demand varies by location, by community and by household. To meet the needs of different cultural, socio-economic and age groups a variety of housing choices must be delivered across Greater Sydney as well as the West District. This supply must be achieved through a range of housing types, tenures and price points. We refer to the range of housing choices in this draft District Plan as the housing continuum (Figure 4-5).

More specifically the housing continuum refers to all types of housing including detached dwellings, apartments, terraces and villas. It refers to different tenures including dwellings that are owned outright, mortgaged or rented. It also refers to homes occupied by single people, families, groups as well as households living in housing stress, through to people on high incomes.

#### Our approach to the housing continuum

To improve capacity across the full housing continuum, our approach aims to support and enhance:

- **Delivery:** creating conditions to support the supply of housing in well-planned locations served by sufficient local and regional infrastructure
- **Capacity:** so that existing planning controls and new investigation areas are creating sufficient opportunity for housing supply targets by 2036
- **Diversity and adaptability:** the diversity of housing types including small lot housing, terraces and apartments in a variety of configurations (one, two and three+ bedrooms) and more adaptable and accessible forms of housing for older people, people with disabilities and families
- **Affordability:** building on the direction in *A Plan for Growing Sydney* by setting a target for the provision of affordable rental housing in new urban renewal and land release areas for the low and very low income households that are the most vulnerable. This also relates to supporting a supply of diverse housing types in the private market that are more affordable to key workers and moderate income households
- **Social housing:** the provision of social housing to meet the needs of the growing number of households requiring social housing (presently the waiting list has 37,660 households in Greater Sydney) and to reduce homelessness.

Figure 4-5: The housing continuum



Source: adapted from City of Sydney.

### NSW Government initiatives

Local government and State agencies are implementing policies and measures to support the delivery of housing across the continuum.

Currently the Department of Planning and Environment is:

- implementing the *State Environmental Planning Policy (Affordable Rental Housing) 2009*, which allows for the development of new generation boarding houses in various locations with floor space incentives subject to environmental and design standards.

The Department of Family and Community Services is implementing:

- *Future Directions for Social Housing in NSW*, which aims to increase the number of households that transition out of social housing, using affordable rental housing as a stepping stone to the private rental market
- the Communities Plus Program, which improves diversity through mixed use renewal of existing areas of concentrated social housing
- the Social and Affordable Housing Fund, which will fund 3,000 additional social and affordable houses in its first tranche through innovative partnerships between community housing providers, non-government organisations and the private sector.

In September 2016, the NSW Government released the discussion paper *Foundations for Change – Homelessness in NSW*, which aims to engage organisations and individuals to strengthen collective action to reduce homelessness. It focuses on the prevention of homelessness, rather than simply trying to manage it.

The private sector and agencies such as UrbanGrowth NSW and Land and Housing Corporation also work with councils in the West District to improve housing choice, diversity and affordability. NSW Government-led projects in these areas seek to improve the quality of housing while providing a better mix of social and private housing to instil a greater sense of community.

Another important NSW Government partner in the housing continuum is the community housing sector. This sector has grown

considerably in the last five to 10 years and plays an important intermediary role in providing housing choice. Support for this sector will bolster opportunities for people to move out of social housing and provides greater support for the most vulnerable households living in housing stress.

Our planning needs to complement and support these initiatives and projects. It is our role to work collectively across government, the not-for-profit and private sectors to find innovative solutions that can address housing affordability and diversity. This includes the provision of greater housing choice for people with a disability, and the provision of larger homes for intergenerational or group households, seniors housing and aged care options.

Figure 4-6 shows how the Greater Sydney Commission's proposed initiatives align with current NSW Government initiatives.

### 4.3.1 Prepare local housing strategies

To provide a comprehensive understanding of how a district or local government area responds to housing need each Council will need to prepare local housing strategy. Alternatively Councils may agree to collaborate and prepare a district housing strategy. These strategies are to be underpinned by the housing continuum. The requirements are set out below and detailed in the following sections.

#### Action L1: Prepare local housing strategies



Councils will prepare local housing strategies and will need to consider:

- the planning principles and directions in *A Plan for Growing Sydney*
- capacity to support the five-year housing target
- capacity to support the strategic housing target for the next 20 years
- local demographic and socio-economic characteristics
- the local housing market including the feasibility of development for different housing types
- development staging and market take-up rates and how this aligns with demand



- challenges and opportunities relating to infrastructure provision
- urban form and place making
- accessibility of housing to employment opportunities
- ways to address housing diversity that are relevant to the needs of the existing and future local housing market including opportunities for, and blockages to, housing diversity and adaptability
- opportunities to improve housing affordability
- the prospective displacement of affordable housing
- opportunities for additional capacity around strategic and district centres and other areas with good transport connectivity and service provision
- specific local market complexities including addressing ways to incentivise for the provision of larger group homes, smaller homes for singles and couples only, intergenerational homes and medium density housing required by the local community
- ways to provide adaptable housing in accordance with the design guidelines by Livable Housing Australia.

#### 4.3.2 Understand the Greater Sydney housing market and demand

To better understand how we can support the supply of new housing across the continuum in the West District we need to first understand the factors influencing Greater Sydney's housing market together with the characteristics of more local housing markets operating within the District. A consideration of these factors should form the starting point for any local housing strategy. The Housing Market Area map (Figure 4-10) and accompanying discussion later in this section identify the West District's housing markets.

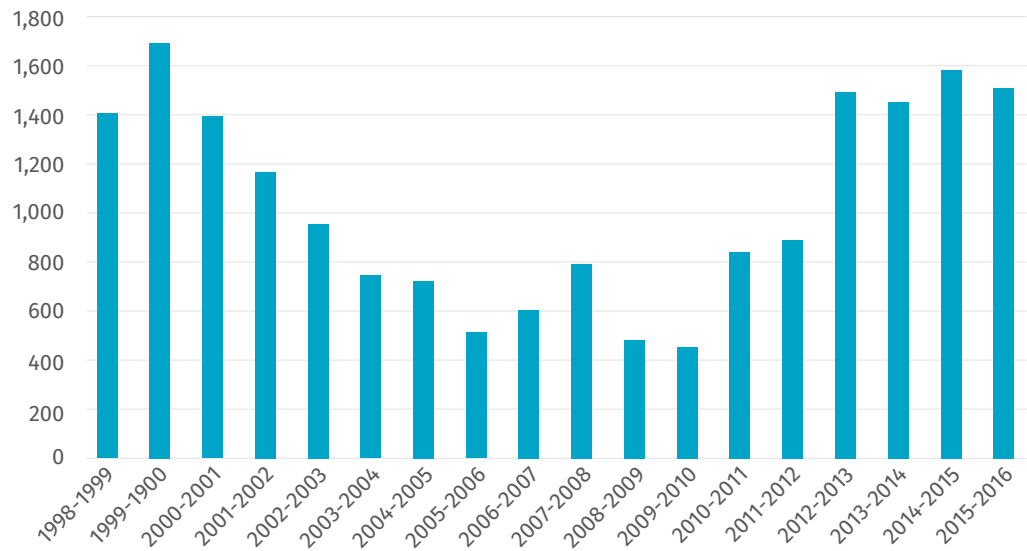
Greater Sydney is experiencing a strong housing market with record levels of housing approvals fuelled by low interest rates, sustained population growth and a strong investor interest. Research provided by the Department of Planning and Environment tells us that housing approvals and completions are currently at their highest levels in 16 years for Greater Sydney and the West District is experiencing high levels of completions after a period of decline and low production.

Figure 4-6: NSW Government and Greater Sydney Commission housing initiatives

	Homelessness	Social Housing	Affordable Rental Housing	Own Rent
<b>NSW Government Initiatives</b>	<ul style="list-style-type: none"> <li>• Discussion Paper: Foundation for Change - Homelessness in NSW</li> </ul>	<ul style="list-style-type: none"> <li>• Department of Family and Community Services</li> <li>• Future Directions for Social Housing in NSW</li> <li>• Communities Plus</li> <li>• Social and Affordable Housing Fund</li> <li>• Integrated housing developments</li> <li>• Private, non-government and community housing sector</li> </ul>	<ul style="list-style-type: none"> <li>• State Environmental Planning Policy No.70 Affordable Housing (Revised Schemes)</li> </ul>	<ul style="list-style-type: none"> <li>• Land Release Priority Growth Areas and Priority Precincts</li> <li>• Greenfield</li> <li>• Urban renewal</li> <li>• Transformational corridors</li> <li>• Housing Acceleration Fund</li> <li>• Council facilitated rezonings</li> <li>• State Environmental Planning Policy (Housing for Seniors or people with a Disability) 2004</li> <li>• State Environmental Planning Policy (Affordable Rental housing) 2009</li> <li>• Design guide for apartments</li> <li>• Design guide for medium density housing</li> </ul>
<b>Greater Sydney Commission Proposed Initiatives</b>		<ul style="list-style-type: none"> <li>✦ Align planning with Communities Plus program</li> </ul>	<ul style="list-style-type: none"> <li>✦ Affordable Rental Housing targets for urban renewal and land release areas</li> </ul>	<ul style="list-style-type: none"> <li>✦ Local Housing Strategies</li> <li>✦ Housing Diversity</li> <li>✦ Housing Adaptability</li> </ul>

Source: Greater Sydney Commission 2016.

Figure 4-7: West District Housing Completions 1998-99 to 2015-16



Source: Department of Planning and Environment, 2016 Metropolitan Housing Monitor Greater Sydney Region

Figure 4-7 shows historic dwelling completions and Figure 4-8 shows additional dwellings across the District in the last five years and highlights development in the vicinity of St Marys and Penrith and along the Great Western Highway.

Significant efforts in recent years by local and State government have provided substantial improvements in capacity to deliver a pipeline of development across many parts of Greater Sydney.





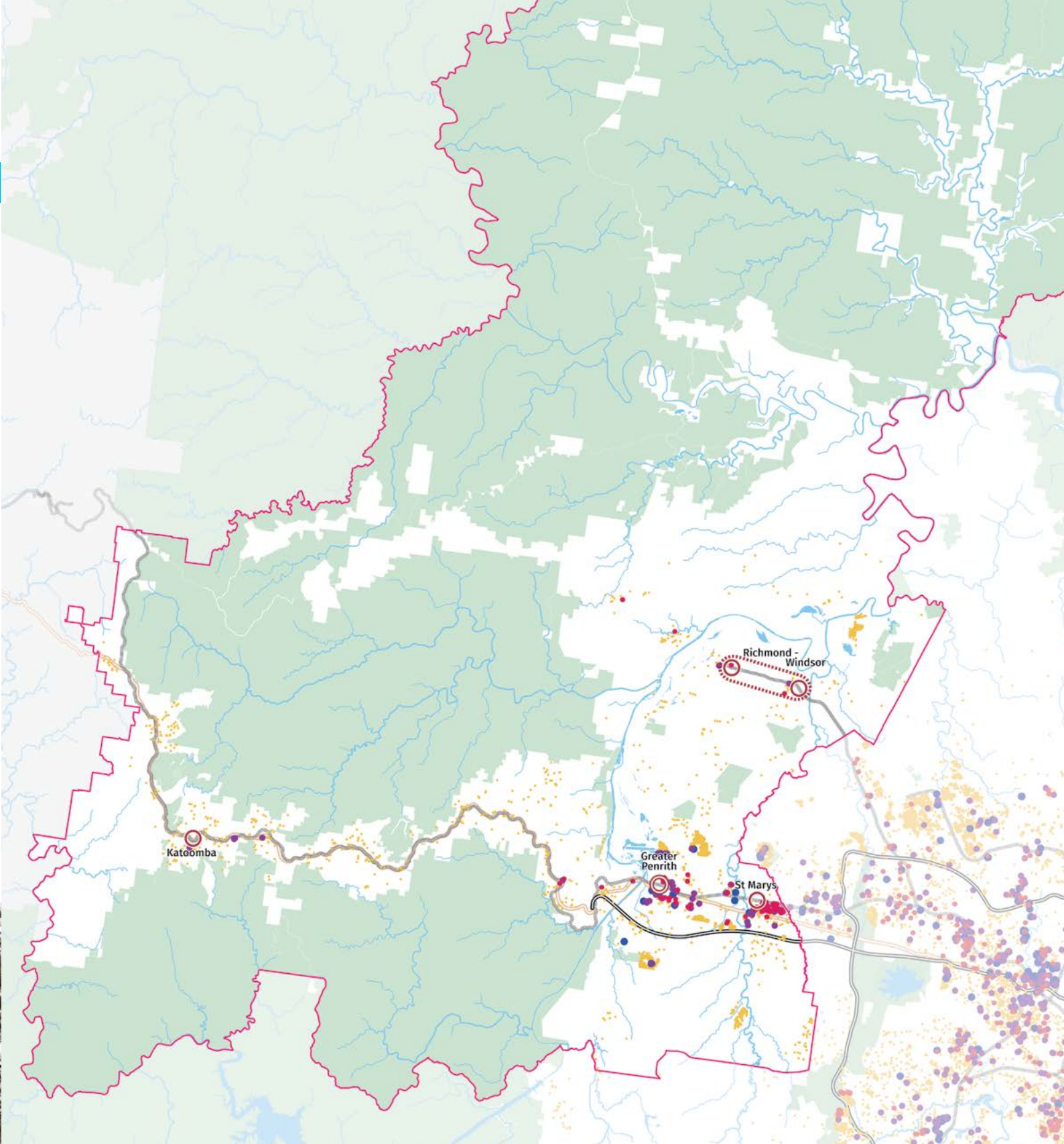


Figure 4-8: West District Housing Completions 2010-11 to 2015-16

	Strategic Centre		1-2 Dwellings		National Parks and Reserves		Railway
	District Centre		3-5 Dwellings		Waterway		Railway Station
	District Boundary		6-20 Dwellings		Motorway		
	Metropolitan Urban Area		21+ Dwellings		Highway		

Source: Department of Planning and Environment, 2016 Metropolitan Housing Monitor Greater Sydney Region



As a consequence, the 30,200 dwellings (excluding granny flats) completed across Greater Sydney in the 2015-16 financial year is now closer to the estimated number of new dwellings we need each year to meet demand (36,250 dwellings per annum) than at any point in the past decade.

On this basis the Department of Planning and Environment estimates that Greater Sydney needs 725,000 additional dwellings over the next 20 years and 41,500 additional dwellings in the West District.

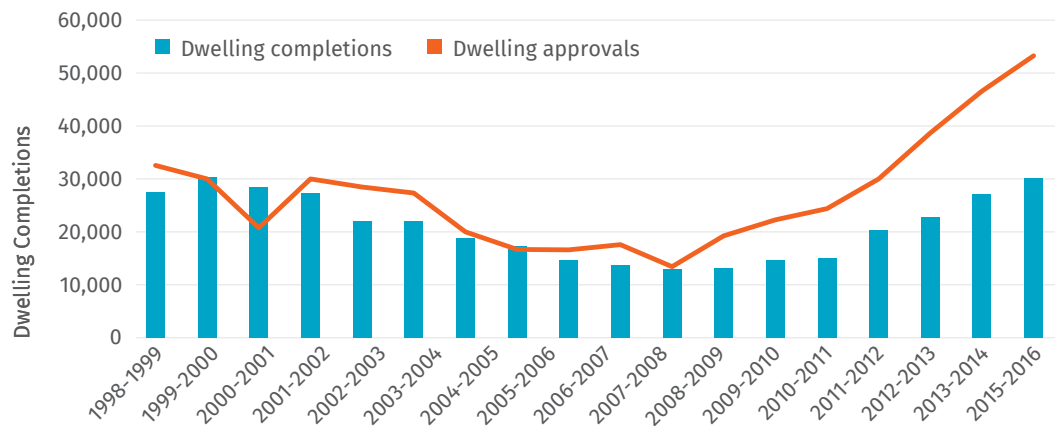
We consider this projection a minimum requirement for three reasons:

- It is based on the medium population growth scenario and if current trends continue, a higher growth could lead to greater housing demand over the 20-year period of this draft District Plan.
- Due to past undersupply in Greater Sydney's housing market there is 'pent up' demand at particular price points adding to demand for additional housing.
- There is the case for a 'contingency' to be added to the demand estimates to address the two prior reasons along with any other unforeseen changes over the next 20-year period such as potential blockages to achieving supply.

Housing completions for Greater Sydney in 2016-17 are anticipated to exceed the average annual demand figure of 36,250. This exceptional rate of supply, owing to the strong development pipeline, is anticipated to continue for the next few years under current market conditions. In fact, the rate of annual completions over the next few years is likely to reach the highest levels achieved since 1999/2000 across Greater Sydney.

A peak of 37,800 completions per annum is possible under current market conditions. Even with this exceptional supply, this only modestly exceeds the average annual level of demand and in turn only marginally counters the undersupply of housing that occurred over the past decade. Furthermore given the timeframes associated with bringing new capacity online and in turn delivering supply to the market, our research indicates that the planning system will need to continue to identify areas to create additional capacity to sustain these outcomes going forward. Given the scale of the challenge to maintain this over the next 20 years we will start the planning process to increase housing capacity opportunities in partnership with councils now.

Figure 4-9 Greater Sydney Historic Dwelling Completions and Approvals (1998-99 to 2015-16)



On this basis, we propose a number of approaches to guide the process:

1. a five-year supply target by local government area (in accordance with Action 2.1.1 of *A Plan for Growing Sydney*)
2. a 20-year strategic housing target by local government area that allows for the planning for sustained capacity over the period of this draft District Plan
3. the identification of new areas for housing to achieve these targets.

Each of these initiatives and how they relate to the West District is explored in the next section.

#### **Greater Sydney Housing Market Areas**

Research indicates that people living in Greater Sydney generally prefer to remain within their local area when they move, with 82% of residents moving to a new home within 15 kilometres of their former residence. For this reason we have investigated what this means for the West District so that people can enjoy greater housing choice within their District.

The assessment of these preferences showed that Greater Sydney contains 18 housing market areas. The implication of these distinct housing market areas is that providing supply in one market demand area may not satisfy demand in another. Understanding need and capacity by individual housing markets will better provide for people's preferred housing choices.

#### **West District Housing Market Areas**

In the West these areas are:

- the Penrith-Blue Mountains, which includes Greater Penrith and the villages of the Blue Mountains
- the North West, which includes St Marys, Vineyard and towns and villages of the Hawkesbury, as well as the eastern part of the Penrith Health and Education Precinct where there is a focus on supporting urban renewal at Werrington.

A small part of Penrith Local Government Area falls in the Liverpool housing market area in the South West District.

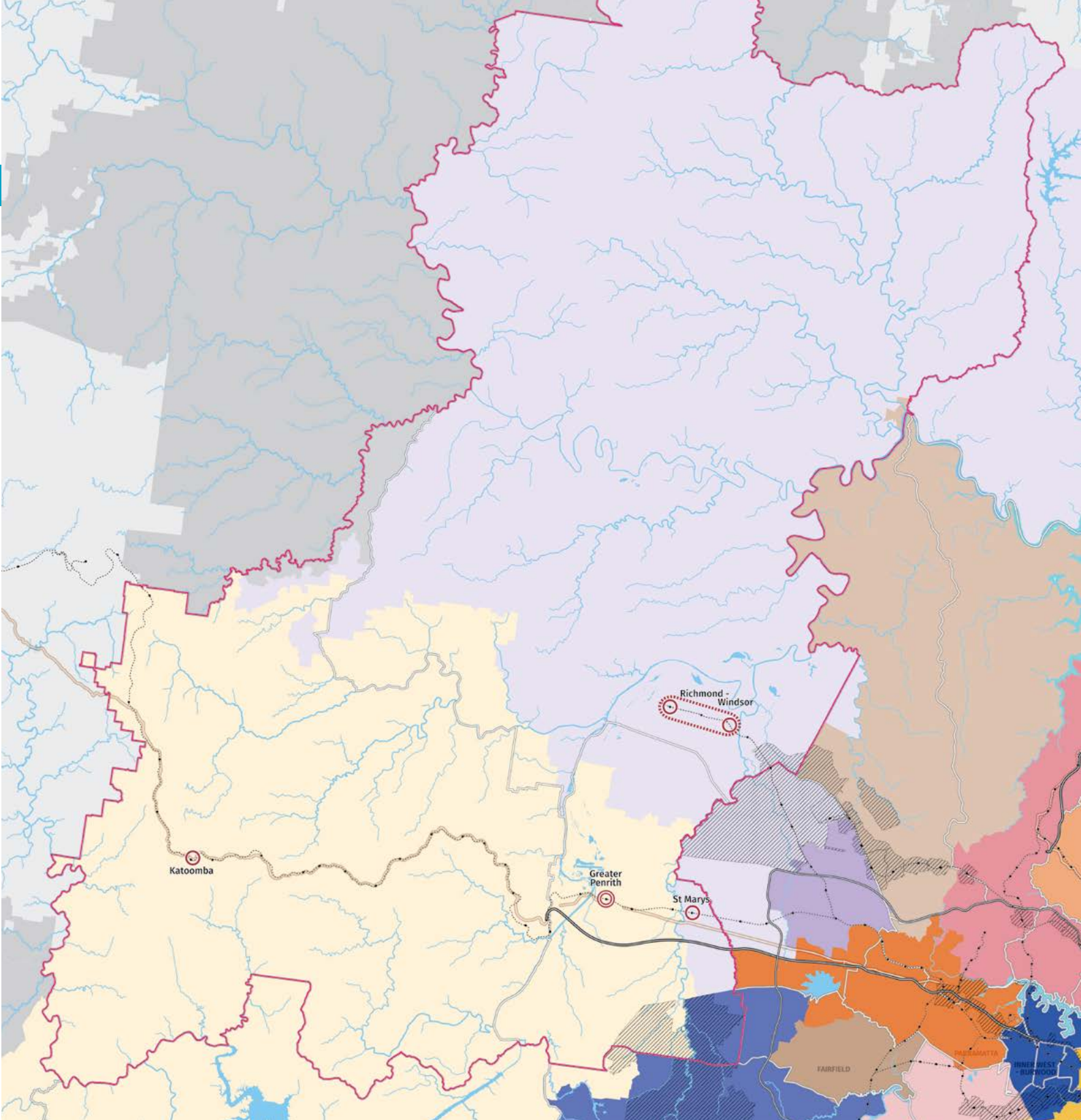
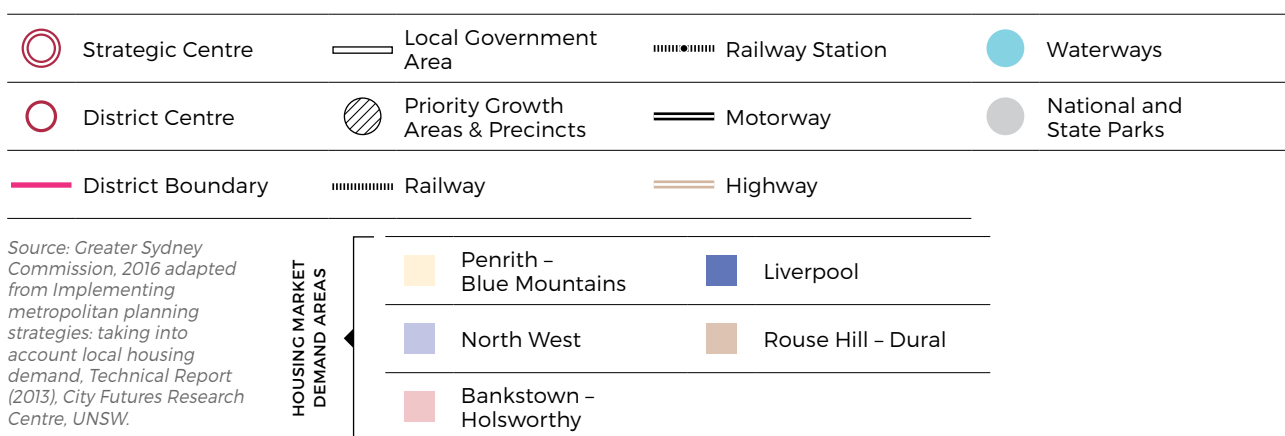


Figure 4-10: West District Housing Market Areas





### 4.3.3 Deliver West District's five-year housing supply target

The Department of Planning and Environment's projections of population and household growth in West District for the next five years translates to a dwelling need of 9,850 dwellings.

Owing to the current strong housing market, our testing using the Urban Feasibility Model - the Department of Planning and Environment's tool to understand housing capacity and the economic feasibility of residential development - confirms there are limited opportunities in West District to deliver beyond this minimum dwelling need in the short term. It is noted that significant capacity for supply exists in Greater Penrith, however the realisation of this capacity into dwellings is challenged by issues such as feasibility and land fragmentation. Consideration of these issues, and the balance of urban renewal and land release development are to form part of the preparation of Penrith City Council's local housing strategy.

We have identified a five-year housing target based on both the District's dwelling need and the opportunity to deliver supply. The five-year target relates to housing including traditional detached and attached houses, apartments and granny flats.

The realisation of the housing targets relies on actions by the relevant planning authorities (from enabling planning controls through to development assessment), infrastructure provision and the continuation of current market conditions and industry's critical role in delivery.

**Table 4-2 West District 2016-2021 five-year housing target**

Local Government Area	2016-2021 Housing Target
Blue Mountains	650
Hawkesbury	1,150
Penrith	6,600
<b>West District Total</b>	<b>8,400</b>

Source: Greater Sydney Commission, 2016

These targets are supported by NSW Government programs that increase capacity and supply including priority precincts, UrbanGrowth NSW and Communities Plus projects.

Projects that are currently contributing to supply in the West District include:

- Thornton North, Penrith
- Jordan Springs
- Ropes Crossing
- Glossodia
- Red Bank
- North West Priority Growth Area planning for Vineyard Stage 1.

Monitoring the realisation of these new homes in the West District will help inform the preparation of the Commission's Annual Infrastructure Priority List and subsequent advice to the NSW Government.



#### **Liveability Priority 1: Deliver West District's five-year housing targets**

It is a priority of the draft District Plans for Councils to deliver these five-year housing targets. Councils need to:

- plan to provide sufficient capacity and monitor delivery of the five-year housing targets
- liaise with the Commission to identify barriers to delivering additional housing in accordance with the targets.

How these matters have been taken into account need to be demonstrated in any relevant planning proposal.

#### 4.3.4 Establish West District's 20-year strategic targets

Notwithstanding the existing strength of Greater Sydney's housing market, planning has a central role in ensuring sufficient capacity is created to support the delivery of a minimum of 725,000 additional new dwellings over the next 20 years across Greater Sydney.

This significant challenge requires sustained efforts by all councils and given the timescales associated with development, a longer-term outlook and capacity-based approach is needed.

A capacity-based approach creates the opportunity to address a range of factors including:

- opportunities to address pent-up demand across Greater Sydney consistent with the estimates of the NSW Intergenerational Report that there is unmet demand for a further 100,000 dwellings across NSW above the projection of dwelling need by the Department of Planning and Environment
- the prospect of the higher population projections for Greater Sydney being realised (the estimated demand for 725,000 additional dwellings by 2036 is based on the medium population projection scenario)
- the need to improve housing choice together with opportunities for people to live locally
- the productivity benefits of additional housing supply, consistent with the calculations provided by *NSW Intergenerational Report*
- the need for a contingency to support steady supply across each of Greater Sydney's districts in the case of unforeseen blockages
- that not all capacity built into the planning system is realised as development, nor are all approvals commenced or completed.

Councils should therefore start considering now, through the preparation of local housing strategies, how additional capacity can be created from which the private and not for profit sector can deliver supply and housing choice. These housing strategies are to meet the District's 20-year housing target as a minimum.

Table 4-3: West District Minimum 20-Year Housing Targets 2016-2036

	Minimum 20 Year Housing Target 2016-2036
West District	41,500
<b>Greater Sydney</b>	<b>725,000</b>

*Source: Department of Planning and Environment, 2016 New South Wales State and Local Government Area Population and Household Projections.*

To ensure that new housing capacity opportunities leverage current and future infrastructure provision while improving Greater Sydney's equity and liveability, we will work with local government and State agencies, as well as communities and industry, to identify new and expanded opportunities for housing capacity in proximity to existing and planned infrastructure.

Once identified these areas can be incorporated as investigation areas within the final West District Plan and review of *A Plan for Growing Sydney* in 2017. This process will also help us to establish a new and specific 20-year strategic target to 2036 for each local government area in 2017 and continue to inform our Annual Infrastructure Priority List and advice to the NSW Government.

The testing and progression of these areas through more detailed planning should then be undertaken via the preparation of council local housing strategies and incorporate the Department of Planning and Environment's priority precinct program and other programs such as UrbanGrowth NSW and Communities Plus.

A framework to guide this process follows. Section 4.3.6 provides preliminary analysis of these areas based on our initial research and investigations, while Action L3 provides further guidance on where to focus these investigation areas.

## Strategic guidance for new housing capacity

*A Plan for Growing Sydney* Goal 2 is for a city of housing choice, with homes that meet our needs and lifestyles. The Directions included:

- accelerate housing supply across Greater Sydney
- accelerate urban renewal across Greater Sydney – providing homes close to jobs
- improve housing choice to suit different needs and lifestyles
- deliver timely well planned land release precincts and housing.

Since the release of *A Plan for Growing Sydney* the projections for growth have been revised upwards. The projections include multiple scenarios with the middle scenario of 725,000 additional dwellings over 2016-2036. This is an increase of 9% from *A Plan for Growing Sydney* owing to revised population projections. The projections for a high growth scenario require an additional 830,000 dwellings.

There is a need to accelerate housing supply across Greater Sydney to accommodate new housing growth while also responding to housing affordability. While the planning system cannot directly build new homes, we have a key role to play in creating opportunities for new housing in the right locations. We refer to this as 'capacity'.

To do this, we need clear criteria as to where additional capacity needs to be located. Our vision for accommodating homes for the next generation is intrinsically linked to planning for, and integration with, new infrastructure and services. We identify the opportunities to do this in three ways.

### Urban renewal

Urban renewal provides opportunities to focus new housing in existing and new centres with frequent public transport that can carry large numbers of passengers – meaning that more people can live in areas that provide access to jobs and services.

*A Plan for Growing Sydney* identifies possible urban renewal corridors. These opportunities need to be investigated further now to

determine their ability to provide capacity for new housing in the medium (five to 20 years) and longer (20+ years) term. The need for this additional capacity is greatest in the North and Central Districts.

In addition to the general guidance in *A Plan for Growing Sydney*, we propose the following criteria for investigating urban renewal corridors:

- Alignment with investment in regional and district infrastructure. This acknowledges the catalytic impacts of infrastructure such as Sydney Metro Northwest and Sydney Metro City & Southwest, NorthConnex, WestConnex, Sydney CBD and South East Light Rail, Parramatta Light Rail and Northern Beaches Hospital and any other future projects committed to by the NSW Government. It also acknowledges the opportunities created by enhancements to existing infrastructure.
- Accessibility to jobs, noting almost half of Greater Sydney's jobs are in strategic and district 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 within a decent travel time.
- The catchment area that is within walking distance of centres with regional transport.
- The feasibility of development, including financial viability across a range of housing configurations (one, two and three+ bedrooms) and consistency with market demand.
- Proximity to services including schools and health facilities.
- Consideration of heritage and cultural elements, visual impacts, natural elements such as flooding, special land uses and other environmental constraints.
- Consideration of local features such as topography, lot sizes, strata ownership and the transition between the different built forms.



- Delivery considerations such as staging, enabling infrastructure, upgrades or expansions of social infrastructure such as local schools, open space and community facilities.

#### **Medium density infill development**

Medium density development within existing areas can provide a greater variety of housing sizes to suit individual household needs, preferences and budgets.

Many parts of suburban Greater Sydney that are not within walking distance of regional transport (rail, light rail and regional bus routes) contain older housing stock. These areas present local opportunities to renew older housing with medium density housing.

The Department of Planning and Environment's *Draft Medium Density Design Guide* shows how this local scale renewal can promote good design outcomes. The planning regulations that support delivery are set out in the Department's proposed *Medium Density Housing Code*.

Councils are in the best position to investigate opportunities for medium density in these areas, which we refer to as the 'missing middle'. Medium density housing is ideally located in transition areas between urban renewal precincts and existing suburbs,

particularly around local centres and within the one to five-kilometre catchment of regional transport where links for walking and cycling help promote a healthy lifestyle.

#### **New communities in land release areas**

Greater Sydney's north west, west and south west contain land for new communities. The emerging shape of these new communities has shifted in recent years to take advantage of investment in infrastructure such as Sydney Metro Northwest or the rail line to Leppington.

Opportunities for more intense development around centres has seen a greater variety of housing types including apartments and terraces. A greater variety of housing choice is supported by housing diversity amendments to the *State Environmental Planning Policy (Sydney Region Growth Centres) 2006*. In the last decade there has been a major shift towards smaller lots which has resulted in a significantly higher dwelling yield.

Land release areas offer significant medium and long-term capacity in Greater Sydney's north west and south west. Further capacity in the West District (Penrith Local Government Area) is needed in the medium and longer term in balance with infill and urban renewal.





**Action L2: Identify the opportunities to create the capacity to deliver 20-year strategic housing supply targets**

The Commission will:

- prepare 20-year strategic housing targets and include these in the final District Plan and the review of *A Plan for Growing Sydney*
- work with councils and the Department of Planning and Environment to identify investigation areas for additional housing capacity to form part of a local housing strategy.

**4.3.5 Create housing capacity in the West District**

Over the last 10 years, a range of local government studies has investigated opportunities to increase capacity for housing supply in the West District including:

- Blue Mountains Residential Development Strategy and Addendum (2010)
- Hawkesbury Residential Land Strategy (2011)
- Penrith City Strategy (2013).

In addition to the projects for accelerated housing supply mentioned earlier, opportunities are also being investigated in the Western Sydney Priority Growth Area at Sydney Science Park.

The potential for residential development has also been part of investigations into the future rehabilitation of the former quarry at Penrith Lakes. As Penrith Lakes is in the Hawkesbury-Nepean Valley floodplain, planning for any future residential development will need to carefully consider risk to people and property informed by the work of the Hawkesbury-Nepean Flood Risk Management Taskforce.



**Action L3: Councils to increase housing capacity across the District**

In order to increase housing supply and choice, councils are required to implement the following actions and where appropriate incorporate into local housing strategies:

**Blue Mountains Local Government Area**

Council will:

- monitor and support the delivery of Blue Mountain's five-year housing target of 650 dwellings, recognising the significant proportion of growth from infill development under existing planning controls
- investigate local opportunities to address demand and diversity in the short to medium term with a particular focus on master planning of six towns and villages in the Blue Mountains.

**Hawkesbury Local Government Area**

Council will:

- monitor and support the delivery of Hawkesbury's five-year housing target of 1,150 dwellings recognising the growth from greenfield development areas
- when planning for any future residential development will need to carefully consider risk to people and property informed by the work of the Hawkesbury-Nepean Flood Risk Task Force.

**Penrith Local Government Area**

Council will:

- monitor and support the delivery of Penrith's five-year housing target of 6,600 dwellings recognising significant growth land release areas
- investigate opportunities for future land release development, particularly opportunities in rural areas contiguous with exiting urban areas and proximate to existing major transport infrastructure
- investigate opportunities to address demand and diversity in around local centres and infill areas particularly in proximity to the Greater Penrith and St Marys centres
- when planning for any future residential development will need to carefully consider risk to people and property informed by the work of the Hawkesbury-Nepean Flood Risk Task Force.

## 4.4 Improve housing diversity and affordability

Quality of life relies on how connected people feel within society and how cohesive and safe their community is. Many people want to stay in the area where they have always lived, regardless of their stage of life. This keeps them connected to friends and family, GPs, services, community facilities and local clubs. Our planning can help to facilitate this, by providing a mix of all the different types of housing people need. This is known as housing diversity.

### 4.4.1 Plan for housing diversity

Dwelling completions data shows that both apartments and detached homes have been built in the West District over the past five years. Significant development of apartments and medium density housing has occurred north of the Penrith city centre. There can be, however, a mismatch between supply and housing need.

Where dwelling stock is mostly detached and the ageing population is expected to grow, there will be significant growth in demand for smaller homes. The West District's increasing proportion of older people and people with a disability will require the delivery of additional smaller homes, group homes, adaptable homes and aged care facilities. More medium density row, terrace and villa homes are also required to provide greater diversity.

Planning for a diversity of housing needs to first consider the nature of existing housing stock (dwelling type or bedroom mix) and current and future needs. It then needs to consider the commercial feasibility of different housing types – for example, the financial viability of different housing types such as studios compared to three-bedroom apartments – as these can vary greatly in different areas.

We need innovative responses to feasibility barriers, particularly in areas where demand for smaller homes is combined with low floor space ratios and/or mostly detached dwellings, creating a barrier to building medium density housing. Some planning controls inhibit the development of larger intergenerational or group homes.

The projected growth in people aged 65 and over in the West District means that there must be more emphasis on planning for housing diversity particularly seniors housing and aged care options that allow people to age in place. It will also result in a proportional increase in demand for health and community services together with cultural activities that facilitate continued social inclusion. The ability to age in place, and in community, is fundamental to liveability, as it allows people to maintain established connections with neighbours, friends and family, and importantly, with health and community services.

A recent review of the Department of Planning and Environment's *Apartment Design Guidelines* provides consistent planning and design standards for apartments across NSW. The Department of Planning and Environment has prepared similar guidance for medium density housing.

Updated data on housing completions and types, housing market areas and demographic change will drive more appropriate planning responses.

Councils should consider the needs of the local population base in their local housing strategy and how to align local planning controls and good design outcomes for different types of housing.



### Action L4: Encourage housing diversity

To encourage housing diversity the Department of Planning and Environment will:

- develop a toolkit to support the preparation of local housing strategies
- provide housing data to the development sector, councils and financiers to help them to understand the existing housing mix provision and provide the appropriate housing mix.





#### **Liveability Priority 2 Deliver housing diversity**

Relevant planning authorities should consider the needs of the local population in their local housing strategy and how to align local planning controls that:

- address housing diversity that is relevant to the needs of the existing and future local housing market
- deliver quality design outcomes for both buildings and places.

How these matters have been taken into account need to be demonstrated in any relevant planning proposal.

#### **4.4.2 Support planning for adaptable housing and aged care**

Our planning should support adaptable housing that can be easily modified to become accessible to accommodate people who are ageing or living with a disability. Adaptable housing can better accommodate these needs where it conforms with guidelines published by Livable Housing Australia. These guidelines relate to good housing design and adaptability and set out features that create long-term homes for the whole community, regardless of age, ability or changing life circumstances.

The best way to provide seniors housing and aged care is to co-locate them in places that have a mix of different uses and services, with good quality footpaths and pedestrian connections that make it easy for people to meet their day to day needs, or visit health services and community and cultural facilities. These places also need adequate parking for in-home care visitation services.

#### **4.4.3 The Affordable Housing Challenge**

##### **The difference between housing affordability and Affordable Rental Housing**

This draft District Plan uses two different but interrelated terms. Housing affordability is a broad term that we use to describe the challenges people across a range of income groups experience in finding affordable accommodation to rent or own.

If a household is spending more than 30% of their income on housing costs it is likely to impact their ability to afford other living costs such as food, clothing, transport and utilities. Because of this, these households are described as being in 'housing stress' and in need of affordable housing options.

In contrast Affordable Rental Housing is a specific term that we use to describe our approach to addressing the gap in housing provision for those on low and very low incomes.

The Greater Sydney housing market is recognised as one of the least affordable in the world. In the last decade alone, the ratio of house prices to incomes has continued to grow while median rents have increased in real terms. Our stakeholder engagement identified housing affordability as a key challenge for the West District and more broadly for Greater Sydney.

This challenge is particularly acute in established areas undergoing urban renewal and gentrification, but is also evident in development. Development provides additional housing but can also reduce the affordability of housing and displace low income households.

More broadly, our research shows that the provision of affordable housing across a range of tenures, types and price points is more than a liveability priority. Internationally, the provision of more affordable forms of housing is recognised to have notable productivity benefits. One London-based study found that over £1 billion a year would be lost in potential extra economic output if London failed to meet the affordable housing needs of its residents.

For this reason, this draft District Plan identifies a range of measures to improve affordability across the housing continuum. We want to encourage the supply of housing with a focus on the type of housing that the District needs as it grows. However, housing supply and diversity are only part of the solution, and an Affordable Rental Housing target complements these approaches to the affordable housing challenge.

A target also complements other government initiatives to address affordability across the housing continuum that includes the Department of Family and Community Services Social and Affordable Housing Fund and Communities Plus initiatives.

In addition, implementation of the Affordable Rental Housing target outlined here does not impede the operation of other existing planning controls that address affordable housing such as *State Environmental Planning Policy 70 – Affordable Housing (Revised Schemes)* and *State Environmental Planning Policy (Affordable Rental Housing) 2009*. This target does not preclude councils from negotiating additional affordable housing for moderate income households, nor does it affect existing planning mechanisms that secure affordable housing across the full income range, such as those in the City of Sydney or Willoughby.

#### **Affordable Rental Housing Targets**

This draft District Plan proposes an Affordable Rental Housing Target that builds on Action 2.3.3 of *A Plan for Growing Sydney*. It requires State and local governments to create affordable housing within government-led urban renewal projects. Our approach seeks to give greater clarity to councils and the development industry with regards to implementing Action 2.3.3.

While Affordable Rental Housing Targets are not new to Greater Sydney, to date the approach in significant developments such as Sydney Olympic Park, Rouse Hill, Redfern and Green Square has not been consistent. Our approach will be transparent, and tailored to the urban economics of the area in question so as not to hinder housing supply outcomes, and to meet the needs of Greater Sydney's most vulnerable.

#### **4.4.4 Deliver Affordable Rental Housing**

The implementation of an Affordable Rental Housing target complements other approaches to the housing affordability challenge, such as increasing the supply of homes across Greater Sydney (as set out in the previous section of this plan) and assisting households that require government support via social housing.

Low and very low income households need the greatest help in securing affordable housing options. Recent research by the Australian Housing and Urban Research Institute found that the group of households most likely to be in long-term housing stress are couples with children (particularly those aged between 35 and 54) and households with a family member with a disability. Recent research estimates that Greater Sydney requires at least 4,000 to 8,000 additional affordable dwellings per annum to meet the needs of this income group.

Our approach to affordable rental housing has therefore been designed to meet the needs of Sydney's most vulnerable to:

- provide additional rental opportunities (in urban renewal and greenfield areas) in light of declining rental affordability across Greater Sydney
- support residents transitioning out of social housing
- provide housing opportunities closer to employment centres that will, in turn, reduce pressure on transport infrastructure.

### Who is eligible for housing provided through this Affordable Rental Housing Target?

Affordable housing is defined under the EP&A Act as housing for very low income households, low income households or moderate income households.

Low and very low income households are the most vulnerable to housing stress because proportionally, they have less money for living costs once they have paid their housing costs.

This draft District Plan identifies the most vulnerable households as eligible for housing secured by Affordable Rental Housing Targets and defined by the income groups in the table below.

Household income	% of median Sydney income	2016/17 income range
Very low	< 50%	< \$42,300 per annum or \$813 per week
Low	50% - 80%	up to \$67,600 per annum or \$1,300 per week

People on moderate incomes also experience housing stress and often work in key service areas such as health and education. We will support housing affordability for these groups more generally by providing greater housing choice - a mix of types and price points as discussed in Section 4.3.1.

The Affordable Rental Housing Target therefore aims to:

- be directed to eligible households on low and very low incomes whose housing needs are not met by the market
- support a mix of household types within communities
- support the transition out of social housing
- support development of the community housing sector.



### Liveability Priority 3: Implement the Affordable Rental Housing Target

Building on Action 2.3.3 of *A Plan for Growing Sydney*, when preparing planning proposals or strategic plans for new urban renewal or greenfield areas, the relevant planning authority will include an Affordable Rental Housing Target as a form of inclusionary zoning.

A target of 5% to 10% of new floorspace will be applied at the rezoning stage so that it can factored into the development equation:

- within areas that have been shown, via a local housing strategy, or another form of appropriate research, to have current or future need for affordable rental housing
- to applicable land within new urban renewal or greenfield areas (government and private) subject to development feasibility assessed at a precinct scale
- to all new floor space (above the existing permissible floor space)
- in addition to local and State development contributions and cognisant of any public or private subsidy for affordable rental housing provision
- to provide a range of dwelling types including one, two and three+ bedroom homes
- in accordance with any relevant guidance developed by the Commission and Department of Planning and Environment.

The Affordable Rental Housing dwellings will be secured by the relevant planning authority and passed onto a registered Community Housing Provider to manage, further developing this emerging sector of the economy.

In this regard, we encourage the NSW Government to bring forward its own land to maximise affordable housing and Affordable Rental Housing.





#### **Action L5: Independently assess need and viability**

We will work with industry, community housing providers and the Department of Planning and Environment to enable clear and consistent implementation of the target that is cognisant of housing supply implications.

Where required, we will act independently to verify the development feasibility of a nominated target. We will also provide advice to government and determine where exceptions may be granted - for example, where the provision of affordable housing would financially hinder the delivery of a critical or major component of city-making infrastructure.

We will undertake a strategic needs assessment for Affordable Rental Housing across Greater Sydney to support the work of relevant planning authorities in preparing their local housing strategies.



#### **Action L6: Support councils to achieve additional affordable housing**

In relevant areas, we will support councils and the Department of Planning and Environment in amending *SEPP 70 - Affordable Housing (Revised Schemes)*. The application of the target identified in this draft District Plan should not prejudice negotiations to secure affordable housing in locations where this target is not applicable.



#### **Action L7: Provide guidance on Affordable Rental Housing Targets**

We will prepare a guidance note on Affordable Rental Housing Targets in collaboration with the Department of Planning and Environment, local government, State agencies, community housing providers, the private sector and the community.



#### **Action L8: Undertake broad approaches to facilitate affordable housing**

To address housing affordability more broadly, we will work with councils, industry, financial institutions and relevant State agencies (including community housing providers) to investigate or advocate for new opportunities, such as:

- planning approaches to support the community housing sector to better leverage housing affordability supply outcomes
- broader financing and taxation changes such as changes to asset classes for superannuation funds
- amendments to existing tenancy legislation to allow longer term rental leases to improve security of tenure
- more cost effective and innovative building approaches, including pre-fabricated and modular housing, collective housing, maximum car parking rates and more compact housing forms of suitable design quality.

#### **4.4.5 Support social housing**

In the West District, over 4,900 households live in social housing, representing 3.7% of all households across the District. Social housing is distributed throughout the District, with some clusters of social housing located in North St Marys, Cranebrook and Windsor.

There is considerable demand for social housing and this is expected to increase. Furthermore, in previous years there has been a net loss of supply. To reverse this trend, the Department of Family and Community Services commenced Communities Plus. This program is a self-funded, accelerated development program designed to create integrated communities containing affordable housing, replacement and new social housing, as well as private homes.

This draft District Plan recognises and supports the Communities Plus ambition to provide a mix of housing on existing sites to create well-designed, socially cohesive communities.

### Communities Plus

Communities Plus will deliver up to 23,000 new and replacement social housing dwellings, 500 affordable housing dwellings and up to 40,000 private dwellings across Greater Sydney.

Communities Plus is based on an asset management framework that leverages the value of the existing portfolio to accelerate supply.

Communities Plus will redevelop existing social housing estates by engaging private sector developers and Community Housing Providers to design, fund and build affordable, social and private housing. As each development is completed, new social housing properties are handed back to the Department of Family and Community Services as payment for the land, making the program entirely self-funded.

Community Housing Providers will manage the social housing properties and own and manage the affordable housing component, further developing this emerging sector of our economy.

Currently, many social housing sites are subject to planning controls based on historical land use, rather than reflecting the local environmental capacity for density and height uplift. The Commission and the Department of Planning and Environment are working with Land and Housing Corporation, councils, Transport for NSW and other State agencies to adapt planning controls to maximise outcomes for the Communities Plus projects and thereby the residents of Greater Sydney.

The West District will continue to require social housing and much of this provision will come through Communities Plus.



### Liveability Priority 4: Increase social housing provision

Relevant planning authorities and the Department of Family and Community Services (and the Land and Housing Corporation) should collaborate to optimise housing and community diversity outcomes on sites of social housing concentration.

Subject to appropriate consultation, feasibility considerations and environmental assessment, relevant planning authorities should translate optimal outcomes for social housing sites into land use controls.

How these matters have been taken into account need to be demonstrated in any relevant planning proposal.

### 4.4.6 Facilitate integrated infrastructure planning

Action 3.1.1 of *A Plan for Growing Sydney* requires support for urban renewal by directing local infrastructure to centres where there is growth. A major challenge in creating capacity for additional housing, particularly in greenfield and major urban renewal areas, is the coordination of infrastructure and land use planning so that infrastructure is delivered in the right place at the right time, in line with actual growth. This requires a detailed understanding of forecast growth and infrastructure investment programs across a range providers and locations.

A more targeted and coordinated approach to planning and delivering regional, district and local infrastructure would achieve this while also expediting investment and development, and potentially boosting the delivery of new housing.

This approach to coordinated infrastructure planning could involve:

- working with the private sector to advance designs for infrastructure to achieve greater certainty of delivery costs and constraints
- reviewing development forecasts annually to create more accurate information about timing and location of development
- staging development to get the most efficient use of existing infrastructure capacity
- staging infrastructure delivery using interim solutions including packaged wastewater treatment systems and temporary intersection improvements
- involving the community in decision making about infrastructure investment to ensure that it meets local needs.

This approach will help inform the update and review of funding arrangements for State infrastructure through Special Infrastructure Contributions, as well as inform the Commission's Annual Infrastructure Priority List.



**Action L9: Coordinate infrastructure planning and delivery for growing communities**

The Commission will work with the Department of Planning and Environment to better coordinate land use and infrastructure strategies at a State, district and local level to deliver infrastructure to growing communities as needed.

#### 4.5 Coordinate and monitor housing outcomes and demographic trends

Through the housing continuum approach, we will draw together all the actions and programs across State and local government as well as the not-for-profit and private sectors to improve our understanding of where new homes are needed and the type of dwellings required. This, in turn, determines planning needs for education, transport, utilities and other infrastructure.

The construction of new homes is a major economic activity and requires a supply of skilled workers, access to capital and availability of materials. To support the construction of new homes all stakeholders need up to date information on housing supply to coordinate supply capacity, infrastructure and delivery.

The Department of Planning and Environment publishes annual housing completions, which will be improved by the inclusion of more detailed data describing all types of housing. Supply forecasts and completions data needs to consider all housing types so that the mismatch of supply and demand can be closely monitored and used to inform activities across the sector.

The Department of Planning and Environment also prepares demographic projections and provides advice on demographic trends. Population projections that accurately describe projected changes in population characteristics like age and household type also inform the planning for education, emergency services, utilities and transport.





**Action L10: Provide data and projections on population and dwellings for local government areas across Greater Sydney**

The Department of Planning and Environment will:

- regularly prepare updates to 20-year population and dwelling projections for NSW by local government area
- prepare a housing needs assessment that will assist the preparation of local housing strategies
- continue to release 20-year projections of population growth, including:
  - projections for age profiles (including student population age cohorts)
  - households types
  - implied dwellings
- publish annual 10-year housing supply forecasts that:
  - include forecast supply by local government area
  - enhance the existing forecasts to include details of housing types
  - include housing completions across Greater Sydney, including those in new growth areas, to allow comparison of projections and completions.

## 4.6 Create great places in the West District

*Culture and climate differ all over the world, but people are the same. They'll gather in public if you give them a good place to do it.*

*Jan Gehl, Danish architect and urban designer*

Improving liveability means putting people at the heart of planning for public places. This means recognising and building on the valued characteristics of individual neighbourhoods while maximising the improvements to amenities that come with growth and change.

For our planning to enhance the West District's great places, we need to focus on these characteristics, and manage growth to create healthy, well designed, safe and inclusive places that encourage economic and social activity, vibrancy and community spirit.

In our community consultation in 2015, people in the West District gave the highest performance ratings on access to supermarkets and shops, access to natural environments, availability of good health care services and the availability of good schools and education. This level of access and performance needs to be maintained to support the District as it grows.

This draft District Plan looks at how we can work across government to provide the kind of places and facilities that help to build a more cohesive community.

#### 4.6.1 Provide design-led planning

Design-led planning aims to produce good quality integrated urban land use and transport as key elements of a people-centred, sustainable and liveable environment. It involves working with communities to identify the key strengths of a place - what makes it special - and ways to enhance this in the future. Clear, shared goals can then be used to shape future initiatives, decision-making, development proposals and funding.

The NSW Government's draft architecture and urban design policy, *Better Placed* (October 2016), seeks to deliver design excellence and a safe, equitable and sustainable built environment. It outlines the importance of successful design for cities and towns noting that:

- Cities and centres are linked through **economic factors**: they support industry and commerce, employment and services. Accommodating an agglomeration of people and activity is key to a city or centre's productivity.
- Collectively, urban development is responsible for significant **environmental** and greenhouse impacts, energy use and displacement of ecological and agricultural land.
- Cities and towns welcome and house people and **communities**. The coming together of people in urban places plays an essential social function in accommodating relationships.

The draft policy advocates design-led planning and notes that '*the role of urban design and architecture is essential to all three of these factors and is a key determinant of successful urban places*'.

The draft policy supports productivity, environmental management and liveability by fostering quality processes and outcomes in the delivery of housing, employment, infrastructure, open space and public areas.

#### Draft Policy on Urban Design and Architecture – Better Placed: Seven Principles

**Principle 1:** Contextual, local and of its place. The urban environment is where most of us live, work and recreate.

Places should be designed to be integral with local people and cultures and connected to their landscape and setting. In this way, a place will be 'of its location' – distinctive, resonant and engaging.

**Principle 2:** Sustainable, efficient and durable. Cities, towns and the infrastructure they require have both a positive and negative impact on environmental quality and climate change.

An urban area should be designed to be accessible and compact; to minimise consumption of energy, water and natural resources; and to avoid detrimental impacts on natural systems. It should be designed to respond and adapt to changes over time.

**Principle 3:** Equitable, inclusive and diverse. The city represents the coming together of the full spectrum of society in a mutually beneficial arrangement.

Cities and towns must accommodate and provide access to opportunities for all. Urban design should provide equitable access to housing, employment, public transport, public space and social opportunities.

**Principle 4:** Enjoyable, safe and comfortable. How people experience cities has a daily impact on people's lives, and investment in development and infrastructure can have an impact for decades and generations.

Urban design should be people focused, providing environments that are user-friendly, enjoyable, accessible and dignified.

**Principle 5:** Functional, responsive and fit for purpose. As the setting for our daily lives, the urban environment must work well for a wide range of purposes.

Urban design can influence the functionality and workability of urban areas permanently, and so design quality at the outset is essential.

**Principle 6:** Value-creating and cost effective. Substantial investment goes into the urban environment and infrastructure from a range of sources.

Well-designed urban places have the potential to be highly cost effective over the long term, creating ongoing and increasing value for all.

**Principle 7:** Distinctive, visually interesting and appealing. For most people the urban environment is where we live our daily lives.

The design of the city or precinct is fundamental to how it looks, feels and works for people. Poor design has a lasting, negative impact, while good design provides ongoing benefits for all.

Accordingly, this draft District Plan seeks to deliver several specific design-led planning outcomes, including:

- considerations for planning strategic and district centres (Section 3.4)
- design guidelines for medium density housing (Section 4.3)
- design guidelines for safe and healthy built environments (Section 4.6)
- urban agriculture, community and roof gardens for productive food systems (Section 4.6)
- integration of arts and cultural strategies, investment and actions into urban development (Section 4.7)
- support for enhanced sharing of community resources and spaces (Section 4.7)
- Aboriginal, cultural and natural heritage considerations (Section 4.8)

These areas identified above emphasise the broad range of outcomes that need to be balanced when planning for an area. Design-led planning and the design principles inform the process for considering how to balance competing objectives while delivering on the core needs of the community such as sufficient housing, affordable housing, economic activity - thus jobs. This is particularly important in the context of the three guiding principles that underpin the planning for how Greater Sydney grows as outlined in *A Plan for Growing Sydney*.



#### **Action L11: Provide design-led planning to support high quality urban design**

To provide high quality urban design, we will support the NSW Government Architect in the development and implementation of design-led planning approaches, specifically for collaboration areas and planning for centres and precincts.

#### **4.6.2 Plan for safe and healthy places**

As documented by the Heart Foundation, healthy built environments help prevent physical and mental health problems. This is achieved through the provision of functional well connected streets and public spaces, in neighbourhoods that fulfil the services and social needs of residents. Building on Action 3.3.1 of *A Plan for Growing Sydney* guidelines for the planning, design and development of a healthy safe built environment can be more effective if they are incorporated into broader liveability considerations outlined in the Liveability Framework and the Draft Policy on Urban Design and Architecture.

Design-led planning of the public realm - footpaths, squares, open spaces, parks and nature strips - should result in places and streets that are safe and functional that can support people to walk or cycle rather than drive. Walkable, well-lit places and paths can provide a sense of safety for women, young children and older people, all of whom are often the first to sense that a neighbourhood is not safe - especially after dark.

Functional streets must also provide easy connections to day to day needs, transport options. Co-located schools, transport and services in mixed use areas capable of growth will improve the sustainability of these centres and their communities and enhance accessibility with the potential to reduce congestion.

Healthy built environments can also facilitate access to fresh seasonal food. Design-led planning for productive roof gardens, community gardens and other forms of urban agriculture can facilitate better health outcomes and greater community cohesion.

These characteristics of healthy safe environments can encourage more active lifestyles helping to reduce obesity and the rate of chronic illnesses such as diabetes and cardiovascular disease. This is especially important for the long-term health of West District residents.



### **Action L12: Develop guidelines for safe and healthy built environments**

The Commission will work with the Department of Planning and Environment to prepare designed planning guidelines for developing a healthy and safe built environment.



### **Liveability Priority 5: Facilitate the delivery of safe and healthy places**

Relevant planning authorities should:

- facilitate the development of healthy and safe built environments
- consider the inclusion of planning mechanisms such as floor space bonuses to incentivise the provision of:
  - walkable neighbourhoods with good walking and cycling connections particularly to schools
  - social infrastructure such as public libraries or child care
  - urban agriculture, community and roof gardens for productive food systems.

How these matters have been taken into account need to be demonstrated in any relevant planning proposal.

### **4.6.3 Enhance walking and cycling connections**

We see better walking and cycling connections and end of trip facilities, such as lockers and showers at a workplace, as way to increase activity levels and improve health and wellbeing. This requires thoughtful planning to enable well designed footpaths and cycling facilities that link to services and transport options.

Co-location of complementary land uses such as shops, schools, child care, community and recreation facilities helps people to interact and improves the viability of public transport, walking and cycling, while also increasing activity levels and helping to reduce congestion.

Cars are the dominant mode for all trips to, from and within the District. For short trips under five kilometres, 70% of trips are made by car, with just 26% taken on foot. The car is used for more than 90% of trips over five kilometres with only 5% of trips between five and 10 kilometres taken by bus and 8% of trips over 10 kilometres taken by train. Councils in the West District have told us that improving walking and cycling connections to strategic and district centres is a major transport challenge.

A number of initiatives across Greater Sydney will feed into ongoing planning for walking and cycling in the West District.

Transport for NSW is developing a Walkability Tool that will help to identify areas where improvements to the walking environment can be made. The tool assesses how easy it is to access services and destinations by foot, the relative comfort of walkways along adjacent roads and how easy it is for walkers to access public transport.

Transport for NSW's *Sydney's Walking Future* and *Sydney's Cycling Future* reflects the NSW Government's commitment to working with councils to make walking and cycling more convenient, safer and enjoyable. Funded through the Walking Communities program, improvements to the walking network will help to reduce the amount of time people spend at intersections, enhance facilities for pedestrians, and encourage more people to travel on foot.



The Principal Bicycle Network routes connecting the West District are:

- Richmond to Rouse Hill
- Richmond to Penrith
- Penrith to Warrimoo
- Penrith to Western Sydney Airport Precinct
- Penrith to Blacktown: Connecting to Nepean Private Hospital and Mount Druitt.

Other walking and cycling projects in the West District will continue to be delivered by both Roads and Maritime Services and local councils, and will be funded under the NSW Government's Walking and Cycling programs.

Transport for NSW and Roads and Maritime Services will continue to provide guidance to councils when making land use decisions that affect accessibility in and around centres.



#### **Liveability Priority 6: Facilitate enhanced walking and cycling connections**

Relevant planning authorities should facilitate enhanced walking and cycling outcomes by giving due consideration to the delivery of district and regional connections and walkable neighbourhoods.

How these matters have been taken into account need to be demonstrated in any relevant planning proposal.

## **4.7 Foster cohesive communities in the West District**

Overwhelmingly, residents of the West District value proximity to natural features and the vast, rugged beauty of the area. They talked about the need to protect it for the benefit of current and future generations and tourists. Residents of the West District value the area's community spirit.

Through design-led planning, we will work with communities to identify the key strengths of unique places within the District, and ways to enhance these in the future. We can enhance social cohesion and achieve this by protecting the heritage and local identity of the many unique neighbourhoods across the District.

By collaborating across the creative arts, business and communities, we can foster cultural development and expression across the District. By protecting and enhancing existing access to natural landscapes, parks, sportsgrounds and recreation facilities we can encourage more active lifestyles. We will enhance liveability outcomes by greater sharing of sports and community facilities across the District.

Each of these elements of cohesive communities is discussed in more detail below.

### **4.7.1 Conserve and enhance the District's environmental heritage, including Aboriginal, European and natural**

The West District's rich Aboriginal, cultural and natural heritage reinforces our sense of place and identity. This includes items listed on the State Heritage Register, such as the significant Aboriginal place listings, rock art sites and middens, conservation areas as well as Windsor, Richmond, Pitt Town, Wilberforce and Kurrajong.

The District has a long history of Aboriginal occupation and cultural heritage which is an important component of a shared cultural fabric. We must appropriately recognise, protect and manage these assets in collaboration with relevant custodians and State agencies, as the District grows, and work with the Aboriginal community to identify and map the significant stories and cultural places in the District.

Places and items of heritage significance are protected by the *Heritage Act 1977*, the *National Parks & Wildlife Act 1974* and listed in local environmental plans for conservation. This protection can be further enhanced by the implementation of the best practice guidelines contained in the ICOMOS Burra Charter and the *NSW Heritage Manual*.

Also important to the District's values is its biodiversity including parks and landscapes that form significant parts of the Green Grid including the Hawkesbury-Nepean River. The community is strongly aware of its fragile ecology, its influence on the environmental economic and social development and its role in history. Protecting and enhancing these diverse landscapes including the Greater Blue Mountains World Heritage Area, water catchments and ridgelines will help ensure the West District remains a great place to live.

This draft District Plan recognises that development must be more than sympathetic to the District's heritage – it must enhance it. Our heritage offers a point of difference that fosters connected communities and local identity. Opportunities to adaptively re-use character and heritage buildings through the development process should be used to protect and enhance places, spaces and qualities valued by the local community.



**Action L13: Conserve and enhance environmental heritage including Aboriginal, European and natural**

To support high quality urban design and healthy places, the Office of Environment and Heritage, Department of Planning and Environment, and Aboriginal Affairs will collaborate to map Aboriginal-owned lands, places of significance, local community organisations and public art and place making projects and events celebrating Aboriginal history.

Relevant planning authorities need to identify, assess, manage and protect the heritage which underpins the community's pride of place.

The Commission will work with the Office of Environment and Heritage and councils to identify and share best practice in restoration, alterations, additions and adaptation of heritage items.



**Liveability Priority 7: Conserve heritage and unique local characteristics**

Relevant planning authorities should:

- require the adaptive re-use of historic and heritage listed buildings and structures in a way that enhances and respects heritage values
- protect Aboriginal, cultural and natural heritage and places, spaces and qualities.

How these matters have been taken into account need to be demonstrated in any relevant planning proposal.

#### 4.7.2 Support the creative arts and culture

The West District's cultural facilities include the Joan Sutherland Performing Arts Centre, Penrith Regional Gallery, Norman Lindsay Gallery and Museum, Blue Mountains Cultural Centre, Hawkesbury Regional Gallery and the Hawkesbury Artists and Artisans Trail, together with smaller galleries, exhibition areas and public art which are located throughout the District.

Opportunities to participate in arts and cultural activities are essential to social inclusion, and can foster local identity and sense of place. Recent research demonstrates that art in Western Sydney 'continues to break new ground, sets new standards, and rivals in excellence art created elsewhere in Australia, and overseas'.

The events and activities that operate through these and many other local arts and cultural facilities help the West District's residents to connect, celebrate and identify with one another.

The public domain is an important place for cultural exchange through public art, cultural programs and festivals. Many of these are organised locally and are enhanced by collaboration and partnerships across the District. Neighbourhood street fairs, festivals, fetes, indoor and outdoor exhibitions, workshops and community markets provide important opportunities for people of all ages and walks of life to experience and participate in arts and culture. Examples include Penrith River Festival, and the Blue Mountains Winter Magic and Music Festivals. The work of local volunteers and support organisations across the District is further evidence of a strong community spirit.

In the District, arts and culture promote local identity and provide for the needs of different groups in the community. Nurturing a culture of art in every day local spaces through designed planning can facilitate community cohesion and important liveability outcomes. Arts and cultural policy, investment and actions should be well integrated into urban development. This can be achieved through planning proposals for urban renewal areas and priority precincts that enhance access to the arts in all communities and nurture a culture of art in everyday local spaces.

During the review of *A Plan for Growing Sydney* and the finalisation of the District Plan, we will further explore, in consultation with stakeholders, how the final District Plan can provide direction on the enhancement of arts, culture and night time activities for the District. This will assist us to work towards better access to the arts for all communities across Greater Sydney and will consider:

- the provision of community infrastructure (library/hubs) in planning for improved places
- delivering a diverse range of night-time activities in appropriate places
- opportunities to grow the local thriving arts scene in places like the Blue Mountains and Penrith.



#### Liveability Priority 8: Foster the creative arts and culture

Relevant planning authorities should:

- integrate arts and cultural outcomes into urban development through planning proposals that nurture a culture of art in everyday local spaces and enhance access to the arts in all communities
- give due consideration to the inclusion of planning mechanisms that would incentivise the establishment and resourcing of creative hubs and incubators and accessible artist-run spaces

How these matters have been taken into account need to be demonstrated in any relevant planning proposal.

#### 4.7.3 Create opportunities for more recreation and community facilities

Adequate provision of the whole range of recreation and community facilities contribute to a liveable city. These include local and regional recreation areas, parks and natural landscapes and community facilities such as libraries, event spaces, community centres and community gardens.

With the District's good access to recreation facilities and bushland areas, future planning and decision-making should reinforce these distinguishing characteristics and continue to enhance access to these facilities.

These facilities, usually delivered by local government, are important to people at all stages of life. They should therefore be accessible and inclusive so that people of all abilities can enjoy them.

The Heart Foundation has identified that people who are not physically active are almost twice as likely to die from coronary heart diseases as those who are. As such, increasing the level of physical activity in the community is likely to have a major impact on public health.

Our planning should focus on allowing many activities to occur in the District's recreation spaces. We also need to look at more flexible use of underutilised public spaces to ensure we meet the demand for contemporary green spaces. We need to focus on multi-use recreation areas for a range of different user groups.

Future planning and decision-making should continue to enhance access to recreation and community facilities and accommodate new and shared use of facilities as required by the existing and future local communities.

The West District features many significant and valued recreation facilities and bushland areas. Future planning and decision-making should reinforce these distinguishing characteristics and continue to enhance access to these facilities.



#### Action L14: Develop a West District sport and recreation participation strategy and sport and recreation facility plan

The Office of Sport will coordinate and support the bringing together of councils to develop a Sport and Recreation Participation Strategy and a Sport and Recreation Facility Plan for the West District.

#### 4.7.4 Support planning for shared spaces

Making more productive and sustainable use of existing resources is good urban governance. Given the growing and changing population of the West District to 2036, a more clearly articulated governance system for share use of community resources could be a game changer for Greater Sydney.

By working with State agencies and local government we can identify assets that are available for complementary community use and investment. One example of this is the opportunity for government and non-government schools to collaborate with local government to access school facilities and open space. Shared use of resources could extend to:

- schools' open space resources
- community facilities such as meeting rooms, gymnasiums or art facilities
- private open space resources such as swimming pools and golf courses
- services (waste, access, recycled water) for multiple buildings within a street frontage.





### Shared spaces: Pilot project

The Hills Shire and NSW Department of Education are collaborating on a pilot project that seeks to allow shared use of government school facilities with the broader community.

While the approach taken in The Hills Shire will not fit all local communities, it is a major step forward in the process of providing better utilisation of public assets.

Across Greater Sydney this approach might provide opportunities to better integrate schools with local communities, particularly in dense urban environments where there are competing land use constraints and growing demands for access to open space and community facilities.



### Action L15: Support planning for shared spaces

To support the sharing of spaces we will:

- collaborate with State agencies, non-profit organisations, private providers and communities to identify opportunities for the shared use of community and school facilities
- support the NSW Department of Education's preparation of a joint venture template that will include the shared use of school playgrounds and other spaces
- where requested, provide strategic planning advice prior to sale regarding alternative uses of surplus government-owned land including schools.



### Liveability Priority 9: Share resources and spaces

Relevant planning authorities should consider the delivery of shared local facilities such as community hubs, cultural facilities and public libraries as multifunctional shared spaces.

How these matters have been taken into account need to be demonstrated in any relevant planning proposals.

## 4.8 Responding to people's need for services

In accordance with Action 3.1 of *A Plan for Growing Sydney*, making the District a great place to live requires the provision of the infrastructure and services that people need, from birth to the end of life. The full range of services needs that must be realised include child care, schools, hospitals, health centres and aged care, as well as cemeteries and crematoria.

The delivery of these services is the responsibility of many agencies and organisations that need to consider existing and future demand for these services. This section explores our approach to supporting the planning and delivery of these services.

### 4.8.1 Education infrastructure

In 2016, government schools in the West District accommodated almost 40,000 students representing 67% of the student population. In addition, approximately 19,000 students attend non-government schools.

By 2036, significant growth in the primary and secondary school-aged population is expected to result in an increase in school enrolments of approximately 16,000 or 28% based on the current enrolments in government and non-government schools.

Within the District, schools are spread across small towns and villages throughout the Blue Mountains and Hawkesbury, and within the more urbanised areas of Penrith.

The District's 105 government schools are characterised by moderate utilisation rates and a low level of demountable classrooms compared to more densely populated parts of Sydney. There is generally spare capacity in schools across the District.

Recent major investment in government schools include:

- Hurlstone Agricultural High School at Western Sydney University's Hawkesbury Campus
- new primary school at Jordan Springs
- School for Special Purposes at Glenmore Park.

### 4.8.2 Plan to meet the demand for school facilities

To ensure school planning meets demand requires an understanding of where the school-age population is likely to increase, stabilise or decline and, therefore, where and when new classrooms or schools will be needed, or where capacity will become available. Integrated school investment solutions can then be developed based on the unique characteristics of the District's communities.

There is significant increasing demand in Penrith and surrounds. Existing school infrastructure will accommodate the majority of new enrolments, because most growth in the District will occur in existing areas. This will be achieved through expansion and innovative approaches to the use of land, facilities and floor space.

The Department of Education currently optimises use of its infrastructure in a number of ways including:

- the realignment of school catchment boundaries
- prioritising 'in catchment area' students
- increasing the size, amenity and functionality of existing schools
- using relocatable classrooms to manage fluctuations in enrolments.

While detailed demand for government school facilities and appropriate responses will be identified by the Department of Education, our planning must recognise that schools are critical infrastructure in growing communities. Furthermore our planning should support innovative approaches to the design and location of new and expanded school facilities.

Table 4-4 Actual (2016) and Projected (2026 and 2036) NSW Public School Students for West District

School Level	2016	2026	2036	2016-2036	Change
Government Primary	24,200	28,650	30,400	6,200	26%
Government Secondary	15,150	17,300	19,700	4,550	30%
Government Subtotal	39,350	45,950	50,100	10,750	27%
Non Government Primary	9,400	11,150	11,850	2,450	26%
Non Government Secondary	9,700	11,050	12,550	2,850	29%
Non Government Subtotal	19,100	22,200	24,450	5,350	28%
Total	58,450	68,150	74,550	16,100	28%

Source: NSW Department of Education, 2016

NSW Department of Education disclaim liability to the reliance of information in the Child, Adolescent, and Student Projections 2016. Information is correct only at the time of release and reflect the assessed observed current and retrospective trend. There is no certainty that these trends will be realised at any reported time point or geography. These projections are not targets and are made independently from Departmental policy direction

Table 4-5: Count of schools by school type and sector for West District, 2016

School Type	NSW Public Schools	Catholic	Independent
Primary	80	16	2
Secondary	20	7	3
Combined (K-12)		1	20
School for Specific Purposes	3		
Environmental Education Centre	2		
Total	105	24	25

Source: NSW Department of Education, 2016 & Catholic Education Commission Centre, 2016 & Association of Independent Schools of NSW, 2016



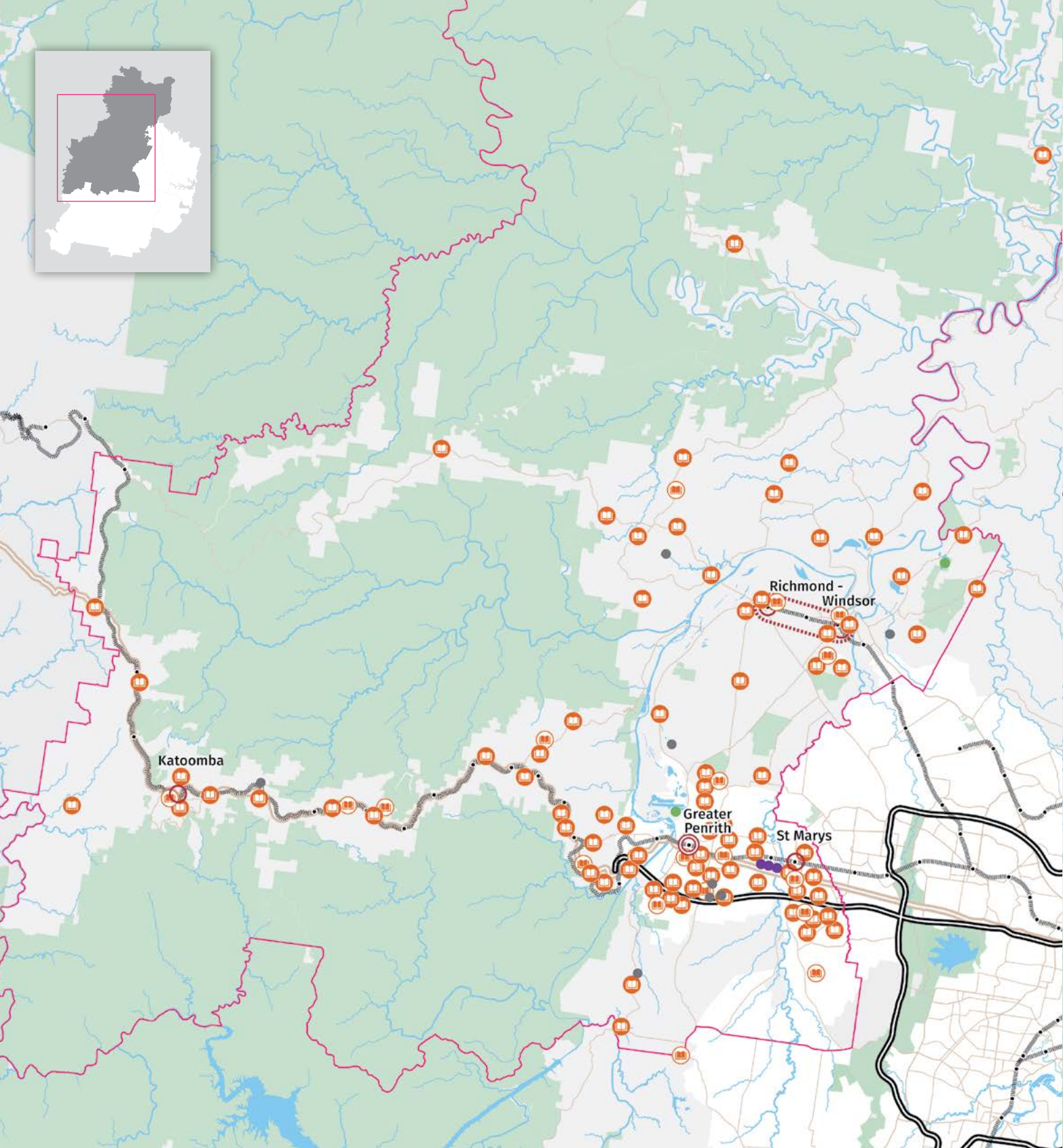


Figure 4-11: Primary Schools in the West District, 2016

WEST DISTRICT

	Strategic Centre		Government Environmental Education Centre		Metropolitan Rural Area		Motorway
	District Centre		Government School for Specific Purposes		National Parks and Reserves		Highway
	District Boundary		Non-Government Special School		Waterways		Roads
	Government Primary School		Non-Government Combined School		Railway		
	Non-Government Primary School		Metropolitan Urban Area		Railway Station		

Source: NSW Department of Education, 2016



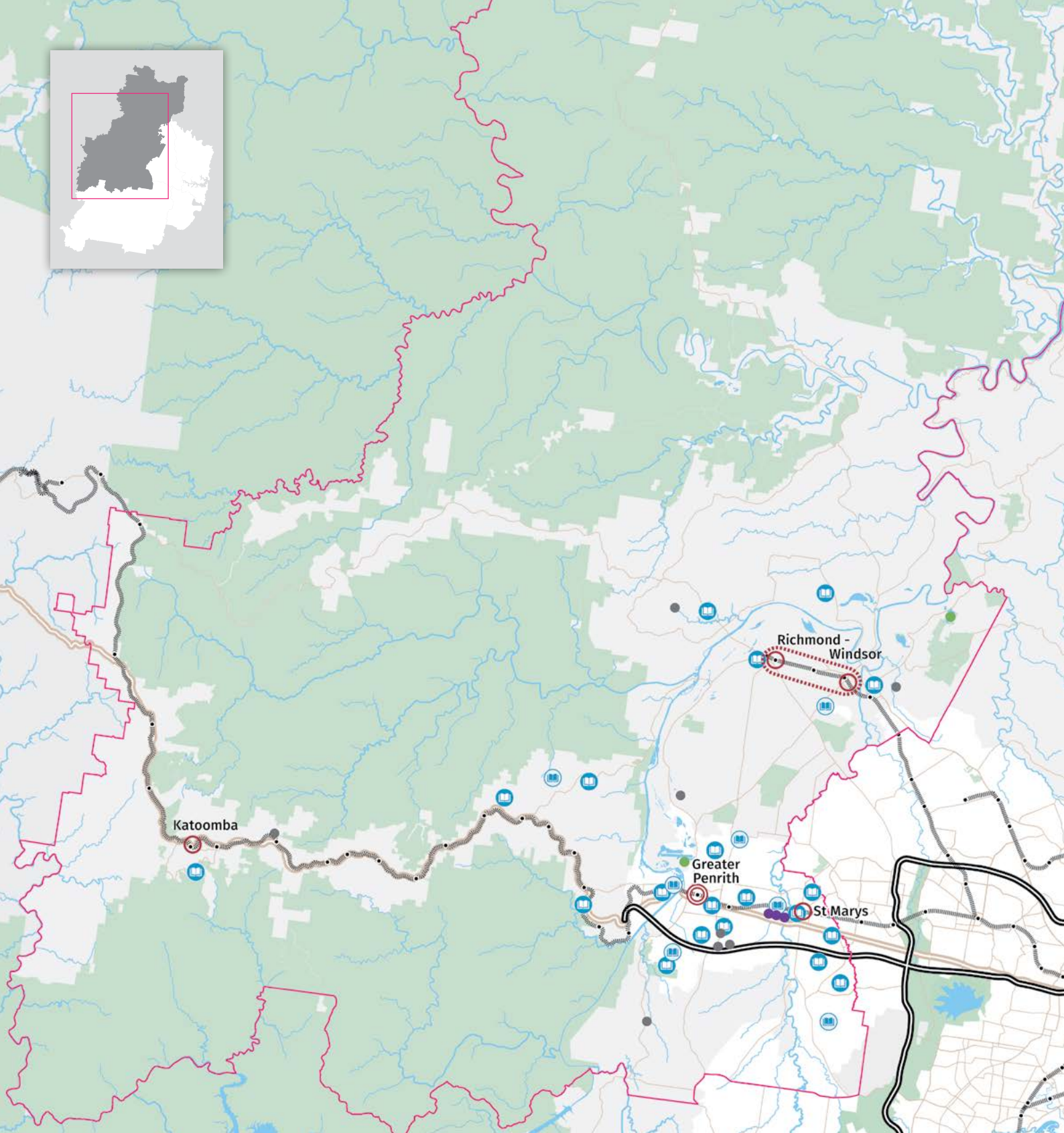


Figure 4-12: Secondary Schools in the West District, 2016

	Strategic Centre		Government Environmental Education Centre		Metropolitan Rural Area		Motorway
	District Centre		Government School for Specific Purposes		National Parks and Reserves		Highway
	District Boundary		Non-Government Special School		Waterways		Roads
	Government Secondary Schools		Non-Government Combined School		Railway		
	Non-Government Secondary Schools		Metropolitan Urban Area		Railway Station		

Source: NSW Department of Education, 2016



#### **Liveability Priority 10: Support innovative school planning and delivery**

Relevant planning authorities should give due consideration to:

- Innovative land use and development approaches including
  - using travel management plans, that identify travel options to reduce car use
  - enabling the development and construction of schools as flexible spaces, so they can facilitate shared use and change over time to meet varying community need.
- the inclusion of planning mechanisms that would incentivise the
  - development of new schools as a part of good quality and appropriate mixed use developments
  - the shared use of facilities between schools and the local community including playing fields and indoor facilities, so they can meet wider community needs.

How these matters have been taken into account need to be demonstrated in any relevant planning proposals.



#### **Action L16: Support planning for school facilities**

To better support planning and decision making across education, providers and relevant planning authorities the Department of Planning and Environment will:

- continue to release 20-year projections of the student population in the District
- annually release housing forecasts showing where and when school catchments will be affected by growth
- monitor housing completions in new growth areas to confirm where student populations are growing
- work with NSW Property and the Department of Education to identify the strategic potential of key government sites
- support the creation of a joint forum for government and non-government school sectors to work collaboratively to plan for future growth and change.

#### **4.8.3 Plan for the provision of early education services and child care facilities**

Demand for early education and child care facilities will also increase in the West District given the expected 3,300 new babies and toddlers that will reside in the District by 2036. Planning for these facilities in existing communities will increasingly require innovative approaches to the use of land and floor space, including co-location with compatible land uses such as primary schools and office buildings.

In order to meet the increasing demand for child care and early education facilities, the Department of Planning and Environment and the Department of Education are working jointly with other government and non-government agencies to improve the quality and availability of early childhood education and care facilities by streamlining the planning system and aligning it to the National Quality Framework for Early Childhood Education and Care. Out of school hours child care is essential for jobs growth and consistent with the Department of Education's arrangements for joint use.

#### **4.8.4 Support the provision of youth services**

The District's population is growing and its characteristics are also changing. The West District is also multicultural and while older people will make up a greater proportion of residents in the future, many other sectors of the community also require socially, culturally and age appropriate service provision.

The West District has considerable demand for targeted youth services and facilities. Age appropriate cultural, social and employment facilities are important to support our youth and address issues such as mental health, homelessness, pre-employment training and job readiness in a socially appropriate manner.

#### 4.8.5 Support the Aboriginal Community

A significant proportion of Aboriginal and Torres Strait Islander people live in the West District, making up 2.6% of the population and mainly living in the Penrith local government area.

Engagement with the Aboriginal community, built on trust and integrity, should be founded on a framework of self-determination and Aboriginal control, particularly in terms of the management of assets and cultural heritage, and the development of policies and strategies for economic and social opportunities.

Equity of access to appropriate whole-of-life social infrastructure can improve the Aboriginal community's health, wellbeing and economic participation. In particular, consideration of targeted health and education services, child care and aged care services are required. Collaboration with the diverse Aboriginal communities of the District will be required to determine appropriate priorities.

Federal and State agencies are working with Aboriginal communities, local government and service providers to deliver high quality educational and health outcomes.

The NSW Government has committed to the establishment of an Aboriginal Centre of Excellence in Western Sydney. The \$20 million Centre will deliver programs and services that support young Aboriginal people to transition between education and employment.



#### **Action L17: Support the provision of culturally appropriate services**

The Commission and Aboriginal Affairs will establish an ongoing engagement forum with Greater Sydney's Aboriginal community in order to better inform our planning. This will include representatives from Aboriginal Land Councils, Aboriginal youth and students, and Aboriginal service providers.

Together, we will prepare and agree on an engagement strategy, and focus on deliverable actions that align with Aboriginal community aspirations in each District. Through this approach, information can be provided to relevant planning authorities to support planning outcomes for the Aboriginal community.



#### **Liveability Priority 11: Provide socially and culturally appropriate infrastructure and services**

Relevant planning authorities should:

- collaborate with Federal and State agencies and service providers to integrate local and District social infrastructure for Aboriginal residents including preschools, child care and aged care services
- include appropriate planning mechanisms to incentivise the provision of these services required by local communities where appropriate.

How these matters have been taken into account need to be demonstrated in any relevant planning proposals.

#### 4.8.6 Support planning for health networks

The health network encompasses the whole spectrum of health facilities and services for every segment of the community. The network includes hospitals and emergency services as well as associated surgeries, clinics, pathology and allied health providers. Co-location of businesses, educational institutions and industry provides a competitive advantage. A strong health network is also a generator of local jobs.

Planning controls for productive health precincts and centres that allow complementary and ancillary services such as short-term accommodation, residential aged care, child care, specialist or allied health infrastructure in mixed use areas will support better accessibility to services.

These services will co-locate to varying degrees in smaller centres and to a greater extent in the established health care precincts where employment opportunities can be leveraged to utilise transport networks and connectivity. For these reasons, planning controls should support the creation of productive local health networks and consider the operational needs of providers.

In the West District this includes the Penrith health and education super precinct which is an important hub of economic activity, employment and investment. These health precincts support research and development capability and provide local jobs.

**4.8.7 Plan for health facilities and services**

The West District is served by Nepean Hospital at Kingswood in the Penrith health and education super precinct, a principal referral hospital supported by major health facilities in Windsor and Katoomba and a network of local health services across the Nepean Blue Mountains Local Health District.

Current planning for major new and improved health infrastructure includes:

- the next stage of the Nepean Hospital redevelopment
- a major ambulance station at Penrith
- integrated primary care centres at Jordan Springs, St Clair and Glenmore Park
- community health programs such as GP clinics, medical centres and other specialist health services as administered by the Australian Government's Primary Health Networks.



**Liveability Priority 12: Support planning for health infrastructure**

Relevant planning authorities should give due consideration to the need to support the co-location of ancillary uses that complement health precincts, including:

- residential aged care facilities
- housing for health workers
- visitor and short-term accommodation
- health and medical research activities
- child care
- non-critical patient care
- commercial uses that are complementary to and service the health precinct.

Consideration should also be given to the protection of health precincts and super precincts from residential encroachment into key employment areas.

How these matters have been taken into account need to be demonstrated in any relevant planning proposal.



#### 4.8.8 Plan for emergency services

NSW State Emergency Services, NSW Police, NSW Ambulance, Fire & Rescue NSW and NSW Rural Fire Service all work to protect the safety of our community. Not only do they prepare for, and provide assistance in times of emergency, they also build community resilience and reduce community concerns about personal safety and property security.

These highly mobile services need to be able to render assistance quickly and efficiently. The location of these services with a high level of transport connectivity is an essential requirement for emergency services, and needs to be considered in regional and local planning.

Early and ongoing collaboration with relevant planning authorities and communities is essential to delivering these services. The implementation of Crime Prevention Through Environmental Design principles through design-led planning is also required.

Improved reporting on housing completions and forecast supply by the Department of Planning and Environment will also support agencies to deliver services appropriately across the District, including improved risk profiling and an understanding of how emergency service catchments and demand will be affected by demographic change.



#### **Action L18: Support planning for emergency services**

The Department of Planning and Environment will provide demographic data and projections, as detailed in Action L10, to inform emergency service planning.



#### **Liveability Priority 13: Support planning for emergency services**

Relevant planning authorities must consider the operational and locational requirements of emergency services.

How these matters have been taken into account need to be demonstrated in any relevant planning proposal.

#### 4.8.9 Plan for cemeteries and crematoria

Cemeteries and crematoria are important infrastructure, as all cities require land for burial or cremation and associated facilities such as chapels, reception centres and car parking.

Contemporary facilities often incorporate gardens, bushland settings and open space areas reflecting society's changing preferences.



#### **Action L19: Support planning for cemeteries and crematoria**

To support relevant planning authorities in planning for the full spectrum of their residents' lives, Cemeteries and Crematoria NSW will provide guidance on the appropriate location and development consent conditions for new cemeteries and appropriate land use controls and zoning. Once made available this information will be shared on our website.



#### **Liveability Priority 14: Support planning for cemeteries and crematoria**

Relevant planning authorities should give consideration to the need and locational requirements of cemeteries and crematoria.

How these matters have been taken into account need to be demonstrated in any relevant planning proposal.







# 5 A Sustainable City

*'The integration of environment and development concerns and greater attention to them will lead to the fulfilment of basic needs, improved living standards for all, better protected and managed ecosystems and a safer, more prosperous future.'*

*Agenda 21, 1992*

A sustainable city protects and enhances its natural environment, integrating its bushland, open spaces, waterways and vegetation into the planning for how it will grow and build its resilience and efficiency. This draft District Plan outlines the priorities and actions required to safeguard the West District's environment.

It draws on *Our vision - Towards Greater Sydney 2056*, which sets out the strategic basis for Greater Sydney as an efficient and resilient city. It also draws on the ambitions of *A Plan for Growing Sydney's* Goal 3 for a great place to live with communities that are strong, healthy and well connected, and Goal 4 for a sustainable and resilient city that protects the natural environment and has a balanced approach to the use of land and resources.

This draft District Plan recognises that a metropolitan-wide approach to sustainability is needed to protect and enhance the environment. This means thinking of sustainability in terms of what is required for all of Greater Sydney and how best to then apply this thinking to protect and enhance the West District's environment.

Collaboration will be needed to protect the District's environmental elements and to adapt and respond to a changing climate, build resilience to future shocks and create more efficient natural systems as the District grows. It also proposes to make Greater Sydney a net zero carbon emissions city by 2050.

Our vision for South Creek is key to this draft District Plan's approach to sustainability. As well as improving the health of the waterway and vegetation along the South Creek corridor, the South Creek will become a spine for the District, a blue and green corridor within the landscape, which is recognised and valued by people across Greater Sydney.

This chapter outlines the sustainability priorities and actions for the West District.

The priorities are presented in two ways. Firstly, each heading outlines a priority area, and we provide context and detail to expand on the outcomes sought. Some headings cover factual issues only: these are not included in the list below.

Secondly, within the broad priority areas, there are, in many cases, more detailed priorities. We identify the specific purpose of these priorities in each case by detailing how they relate to strategic planning and planning proposals.

The priorities should be considered in strategic planning activities and planning proposals as appropriate.

The full list of sustainability priorities covered in this section are outlined below:

- enhancing the West District in its landscape
- protecting the District's waterways
- maintain and improve water quality and waterway health
- managing the District's estuaries
- protecting and enhancing biodiversity
- avoid and minimise impacts on biodiversity
- deliver Sydney's Green Grid
- align strategic planning to the vision for the Green Grid
- protect, enhance and extend the urban canopy
- improve protection of ridgelines and scenic areas
- managing the Metropolitan Rural Area
- discourage urban development in the Metropolitan Rural Area
- consider environmental, social and economic values when planning in the Metropolitan Rural Area

- provide for rural residential development while protecting the values of the Metropolitan Rural Area
- creating an efficient West District
- support opportunities for District waste management
- planning for a resilient West District
- mitigate the urban heat island effect
- integrate land use and transport planning to consider emergency evacuation needs
- use buffers to manage the impacts of rural activities on noise, odour and air quality
- assist local communities develop a coordinated understanding of natural hazards and responses that reduce risk
- managing flood hazards in the Hawkesbury-Nepean Valley.

#### **The Greater Sydney Sustainability Profile**

Our Greater Sydney Sustainability Profile, available at [www.greater.sydney](http://www.greater.sydney), provides maps and baseline information on the landscape and environmental characteristics of places across Greater Sydney, on flows of carbon, energy, water and waste, and on the resilience of communities across Greater Sydney to natural hazards.

It has been compiled to support the information contained in this chapter, and the reporting of information on the Greater Sydney Dashboard.

## **5.1 The West District's environment**

The West District's natural environment defines its sense of place. The District is renowned for its landscape, including the Greater Blue Mountains World Heritage Area, and other national parks and waterways.

In the West District, the natural environment is the starting point for planning and design, as rivers, creeks and native vegetation permeate both rural and urban areas.

The main water catchments in the District are the Hawkesbury-Nepean River and South Creek. To the east of the Nepean River, low rolling hills and wide valleys are characteristic of the broader Cumberland Plain. The fertile soils of the floodplains of these main watercourses have a long history of food production for Greater Sydney.

The Greater Blue Mountains World Heritage Area constitutes one of the largest and most intact tracts of protected bushland in Australia. Its exceptional biodiversity, range of geological formations and natural beauty are accompanied by water supply catchments, wilderness, recreation and Aboriginal and post-European-settlement cultural values.

The West District is part of the larger Sydney Basin Bioregion. The West District is within the Cumberland Subregion (often referred to as the Cumberland Plain), as well as parts of the Wollemi and Yengo Subregions

Due to its topography, history of land use and climate, the District is also subject to a number of environmental hazards, such as bushfire, extreme heat and flooding. The water quality of the Hawkesbury-Nepean and its tributaries has been reduced by stormwater runoff from urban areas and nutrient and sediment runoff from agricultural areas. Changes to flow rates, as a result of urban development, will need to be carefully managed to retain the structure of stream beds and banks.

While vast tracts of bushland remain, urban settlement and clearing has fragmented native vegetation communities and habitats. These ecological assets will continue to come under pressure with urban growth.



### The Sydney Basin Bioregion

Because biodiversity does not recognise state, district or local government planning boundaries, governments across Australia have adopted a bioregional approach to conserving and managing biodiversity in the landscape.

Bioregions are relatively large land areas characterised by broad, landscape-scale natural features and environmental processes that influence the functions of entire ecosystems. Each bioregion displays its own patterns in the landscape, ecosystem processes and fauna and flora. Within each bioregion, smaller subregions have been defined based on differences in geology, vegetation and other biophysical attributes and are the basis for determining the major regional ecosystems.

Across Australia, 85 different bioregions have been recognised, with 17 in NSW. The Sydney Basin Bioregion extends from just north of Batemans Bay to Nelson Bay, and almost as far west as Mudgee and is one of two bioregions contained wholly within the State.

As well as Sydney itself, the Sydney Basin Bioregion encompasses Wollongong, Nowra, Newcastle, Cessnock and Muswellbrook.

It includes a significant proportion of the catchments of the Hawkesbury-Nepean, Hunter and Shoalhaven river systems, all of the smaller catchments of Lake Macquarie, Lake Illawarra, Hacking, Georges and Parramatta Rivers, and smaller portions of the headwaters of the Clyde and Macquarie rivers.

## 5.2 Enhancing the West District in its landscape

This draft West District Plan considers the way the District's diversity of social, cultural and environmental conditions operate within its natural landscape. The West District has an extraordinary opportunity to imagine and plan for a 'parkland city', with South Creek as its centrepiece, where the mosaic of activities and the natural landscape provide the foundation for the area's identity.

Rural and non-urban landscapes make up 97% of the West District. We expect to see an increase in the proportion of urbanised area in the future. This presents challenges for water and ecological systems.

This draft District Plan outlines our approach to enhancing the West District in its landscape by addressing four highly interconnected elements:

1. healthy waterways, which includes natural, artificial and manipulated water systems of the District
2. areas of native vegetation, biodiversity and ecological communities
3. Sydney's Green Grid of parks and open space, which includes public areas used for sport and recreational activity, as well as the public areas and streets where people connect and linger
4. the Metropolitan Rural Area, which includes rural land, the transitional land between urban and rural areas, land used for food production and landscapes with highly valued scenic views.

### 5.3 Protecting the District's waterways

The West District's waterways include the Hawkesbury River, Nepean River, South Creek, Grose River, Colo River, Macdonald River, Glenbrook Creek, Cedar Creek and Wentworth Creek (Figure 5-1). The catchment of the Blue Mountains National Park is an important source of drinking water for the District and Greater Sydney.

Blue Mountains Swamps are listed as a threatened ecological community under NSW and Commonwealth legislation. The swamps provide habitat for threatened species and help to filter and clean water as it flows into creeks and waterfalls. Cranebrook Wetland is recognised as a regionally significant wetland.

The West District also includes manipulated waterways including Penrith Lakes, where a former quarry site is being rehabilitated into lakes, wetlands and parklands.

Some waterways are protected within national parks while others have been affected by urban and agricultural development that has changed the water quality and quantity in these networks. Future urban development will impact the waterways in the West District, particularly South Creek, which will need to be carefully managed.

Greater Sydney's other major waterways would benefit from clear strategic plans to guide protection, enhancement and access. Many waterways are managed by a range of stakeholders and we have a clear role to play in facilitating collaboration between these stakeholders. We will explore new forms of governance arrangements for the 'Blue Grid' of waterways in this regard during the review of *A Plan for Growing Sydney* in 2017.



#### **Sustainability Priority 1: Maintain and improve water quality and waterway health**

The Office of Environment and Heritage and the Environment Protection Authority have developed a risk-based framework to assist decisions that maintain, improve or restore water quality in the strategic planning process to help meet the NSW Water Quality and River Flow Objectives.

Relevant planning authorities and managers of public land should:

- adopt the Office of Environment and Heritage and the Environment Protection Authority's framework to determine the appropriate stormwater and wastewater management targets that contribute to maintaining or improving water quality and waterway health to meet the community's values
- consider more water sensitive approaches to managing stormwater to meet the water quality and quantity targets, including harvesting and re-use of water and management of riparian corridors
- develop mechanisms to allow offsetting between sub-catchments and facilitate cost-effective opportunities to meet the management targets for whole catchments and water quality objectives for receiving waters
- while management targets are being established, ensure that the quality of stormwater and wastewater from public land and new development in established urban areas maintains or improves the health of waterways, in line with community values and expectations of how waterways will be used.



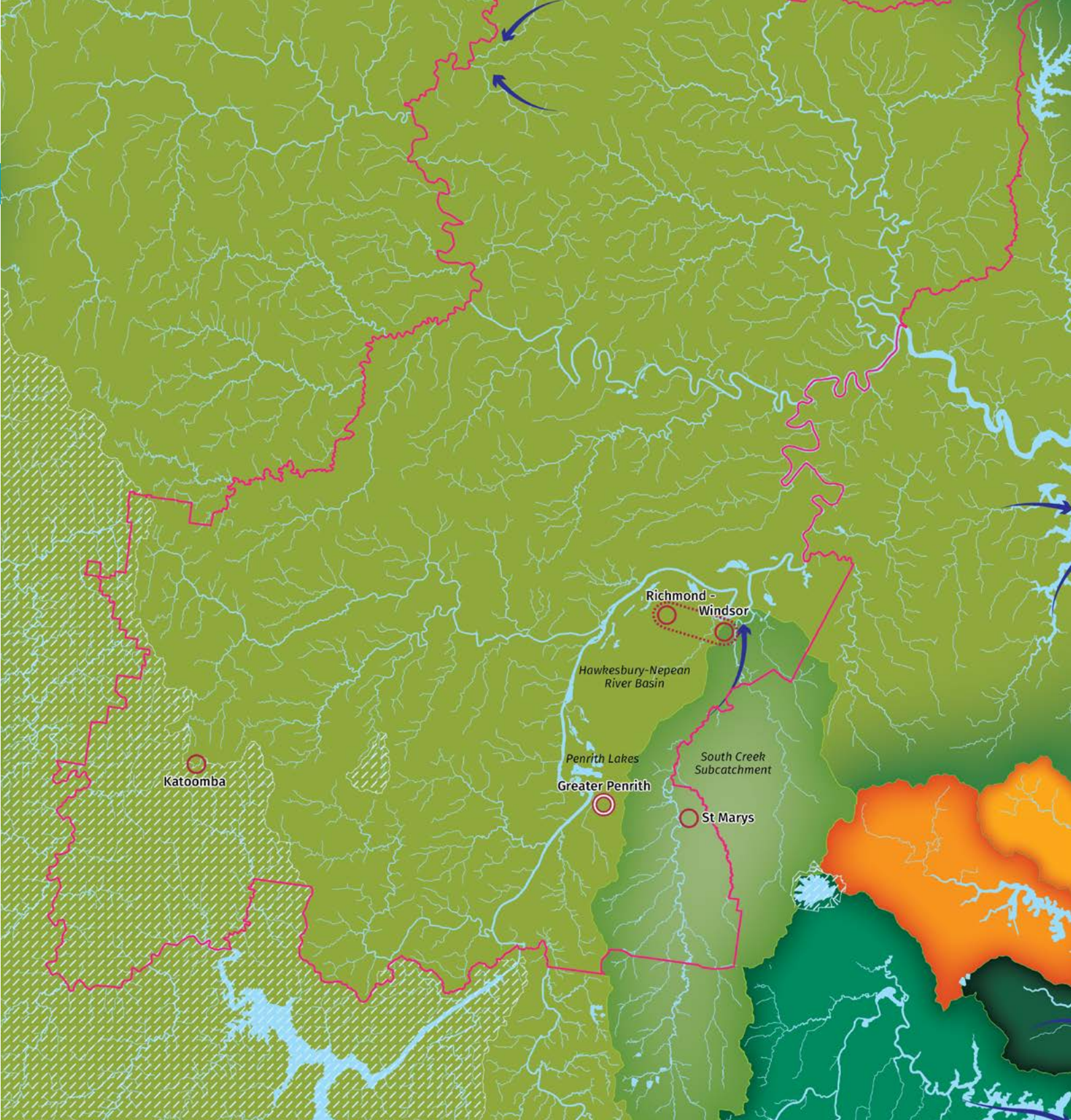


Figure 5-1: West District catchments and waterways

	Strategic Centre		River Flow Direction		Parramatta River Basin
	District Centre		Sydney Drinking Water Catchment		Georges River Basin
	District Boundary		Hawkesbury-Nepean River Basin		South Creek Subcatchment

Source: Greater Sydney Commission, 2016





### **Action S1: Review criteria for monitoring water quality and waterway health**

State agencies and councils currently apply a range of approaches to managing the District's waterways, which often flow through more than one local government area, reducing the potential to meet water quality objectives.

For the West District, these objectives cover a range of matters including protection of aquatic ecosystems, primary and secondary recreation, the attractiveness and cleanliness of the waterway and agricultural water for irrigation and livestock.

We will support monitoring programs that have consistent indicators and criteria that track progress towards meeting the community's environmental values and long-term goals for the waterway, set out in the NSW Water Quality and River Flow Objectives (available from [www.environment.nsw.gov.au/ieo/](http://www.environment.nsw.gov.au/ieo/)), noting that it can help target where management actions are needed to maintain water quality across the District. As data becomes available, it will be reported annually on the Greater Sydney Dashboard (see Section 1.2.4).

The Office of Environment and Heritage will:

- recommend criteria for monitoring water quality and aquatic ecosystem health for the different waterways in the District, linked to the NSW Water Quality and River Flow Objectives and national guidelines
- collaborate with councils and other stakeholders to undertake monitoring based on the recommended criteria for each waterway type, as resources become available
- encourage complementary monitoring programs that can help fill gaps in data on water quality and ecosystem health and raise community awareness and support for the protection of waterways
- provide open access to water quality and waterway health data through an Information Asset Register.



### **Action S2: Protect the South Creek environment and use development approaches to achieve excellent environment performance**

South Creek is one of the major tributaries of the Hawkesbury-Nepean River. South Creek begins in south west Sydney in Gregory Hills and flows north until reaching its confluence with the Hawkesbury River near Windsor. Its tributaries include Badgerys Creek, Kemps Creek, Ropes Creek and Eastern Creek.

While only 20% of the catchment is urbanised, this will increase to 80% over the next 50 years. The development of Western Sydney Airport will contribute to this process.

Some of the catchment includes natural and recreational areas used for recreational fishing and as habitat areas; however, approximately 74% of the catchment's waterways are degraded and the remaining 26% are in a moderate condition.

Major issues include:

- poor water quality, including elevated nutrient levels
- significantly altered flows due to sewage treatment plant discharges and increased peak flows during wet weather, which is resulting in severe bank erosion
- algal blooms and excessive aquatic weed growth.

The degradation of South Creek has a downstream impact on the health and amenity of the Hawkesbury River, particularly between Windsor and Sackville.

Future urban renewal and greenfield development in the South Creek catchment represents an opportunity to deliver an integrated approach to development that supports community expectations for the waterway, as identified in the NSW Water Quality Objectives and River Flow Objectives. These guidelines helped to consider community values for water quality in decision-making.



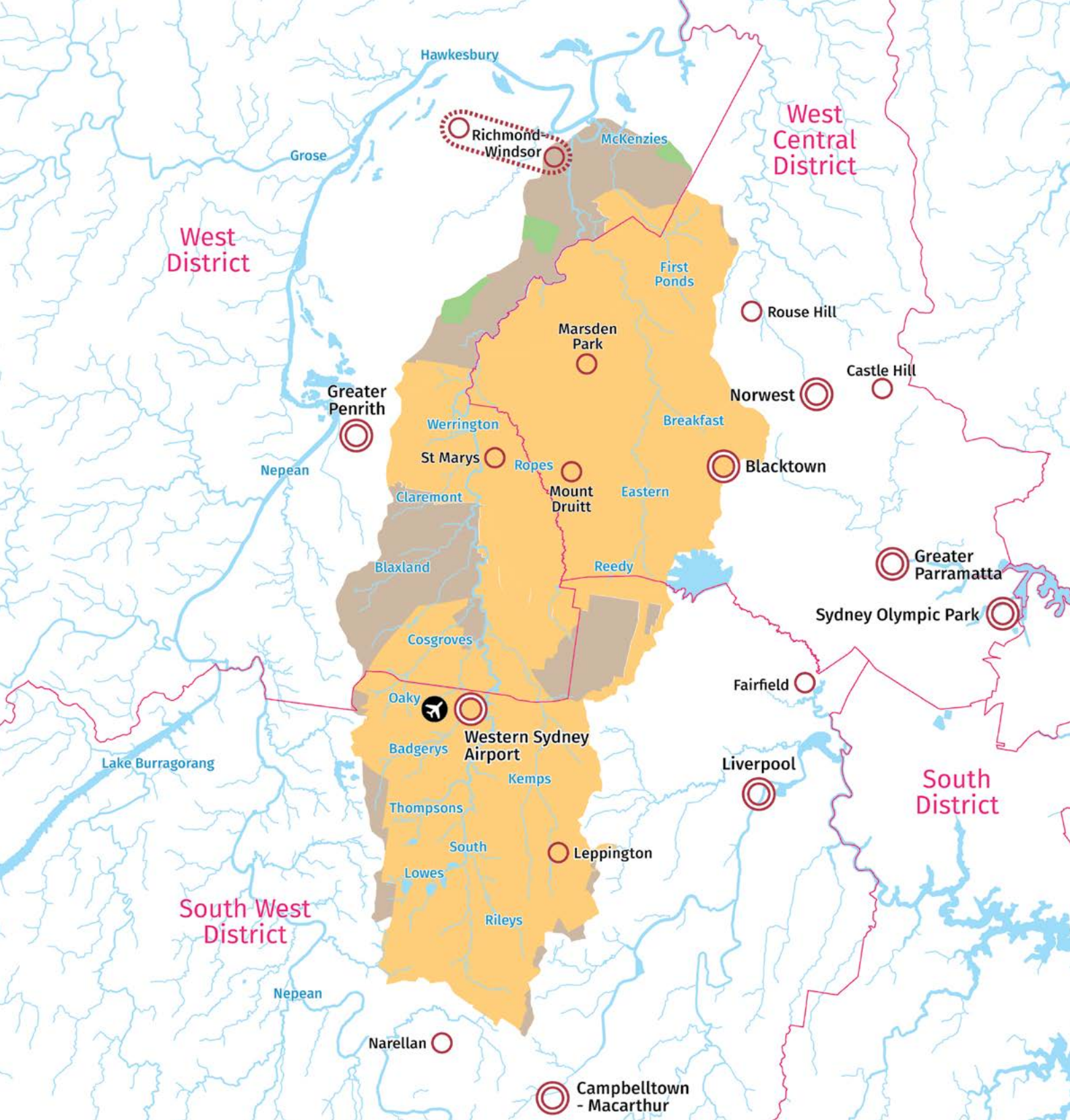


Figure 5-2: South Creek Catchment

	Strategic Centre		District Boundary		Predominantly Forest		Waterway
	District Centre		Metropolitan Rural Area		Urban Area		

Source: Greater Sydney Commission, 2016.

Statutory mechanisms, such as a Protection of the Environment Policy as detailed under the *Protection of the Environment Operations Act 1997*, could specify waterway health outcomes that public authorities must consider. Similar guidance is being developed for the *Illawarra-Shoalhaven Regional Plan* (see case study). This approach could connect waterway health outcomes to local strategic planning and development control, while informing other programs and regulatory decisions in the catchment.

We will:

- work with the Environment Protection Authority and request the Authority lead an investigation into a Protection for the Environment Policy for the South Creek catchment, working with councils and other stakeholders
- coordinate the investigation of innovative approaches to urban design, integrated water cycle management, biodiversity and riparian and open space management by other agencies and utilities
- aim for this investigation to define an identity and character of future urban development associated with the Western City.

#### **CASE STUDY: Working towards water sensitive growth**

Lake Illawarra is a popular coastal location for tourists, and supports a productive commercial and recreational fishery as well as a range of endangered ecological communities. Water quality issues in the lake are long-standing, and are still evident in some parts of the lake.

The *Illawarra-Shoalhaven Regional Plan* adopts the Office of Environment and Heritage and the Environment Protection Authority's framework that protects community benefits associated with the ecological health of the lake from any adverse effects of development in the catchment. The risk-based framework can be used as a strategic planning tool for assessing water quality management requirements for new development, including design of water quality strategies and infrastructure, and tailoring development controls and conditions of consent to manage the quality of water reaching Lake Illawarra.

#### **Action S3: Improve the management of waterways in Priority Growth Areas**



The Western Sydney Priority Growth Area will be one of the main areas of growth in the District. The Department of Planning and Environment will establish a development code for Priority Growth Areas across Greater Sydney that includes guidelines for the management of riparian corridors, with the objective of stabilising banks, maintaining water quality, protecting woodland corridors, cooling the urban environment, improving amenity and providing habitat for native species and ecological communities.

### 5.3.1 Managing the District's estuaries

In the West District, tidal influence reaches upstream of Windsor on the Hawkesbury River and extends into the Colo River and the lower sections of South Creek and Cattai Creek. These areas are identified as part of the coastal environment, which can be affected by a range of coastal processes, such as wind, waves, storm events and shifts in climatic systems. These processes continually influence the coast and require effective management.

The *Coastal Management Act 2016* directly integrates coastal management and planning requirements into local land use planning responsibilities under the *Environmental Planning & Assessment Act 1979*. Coastal management programs will be required in council community and strategic planning and integrated planning and reporting under the *Local Government Act 1993*.

Coastal management programs will guide land use planning decisions so that they better reflect coastal management issues at a district level. They may be developed for the whole or any part of the coastal zone within a local government area or across the District.

The NSW Government will provide \$83.6 million across NSW from 2016 to 2021 to:

- enable the preparation of coastal management programs
- support coastal councils to implement coastal management programs
- support delivery of state-wide science and technical advice
- review and assess programs and proposals to ensure consistency with the new coastal management framework.

### 5.4 Protecting and enhancing biodiversity

People living in the West District benefit socially and economically from biodiversity and natural ecosystems, and for some, it forms part of their cultural identity. Conservation of biodiversity is closely related to landscape, tourism and recreational values. Ecologically sustainable development requires a healthy environment which is capable of providing biodiversity and natural resources on which all economic activity depends.

Established urban areas in the West District contain areas of bushland that are important for biodiversity, as well as for their contribution to the visual landscape, waterway health and other environmental processes. Many areas of urban bushland are on public land managed by local councils, while some urban bushland is found on privately owned land. We will examine opportunities to strengthen the protection of bushland in urban areas as part of the review of *A Plan for Growing Sydney* in 2017.

The protection of habitat in rivers and estuaries and aquatic threatened species should also be considered in future planning for the West District. The *Fisheries Management Act 1994* contains separate offsetting measures to manage the impact of activities on aquatic habitats.

Conservation outcomes can be delivered more effectively and efficiently through strategic planning at the landscape level, rather than on a site-by-site basis. This is because strategic planning can consider opportunities to connect areas of biodiversity, the relationship between different areas and threats to natural features. Strategic planning can also consider the effects of conservation efforts across the landscape. District planning is, therefore, a vital part of the ongoing process of protecting and enhancing biodiversity in the landscape.

In 2014, the Independent Biodiversity Legislation Review Panel, as part of the review of biodiversity legislation in NSW, supported the consideration of biodiversity at the landscape scale and recommended the use of biodiversity certification, focused on proposed high-intensity development areas that also contain important environmental values.



The NSW Government has endorsed the Independent Panel's recommendations and in response, has developed a fresh approach to strategic conservation planning in Greater Sydney, with an initial emphasis on strategic environmental assessment and biodiversity certification of conservation planning in the West, West Central and South West Districts. In these districts, and particularly in the West and South West, strategic conservation planning will be a key strategy for balancing conservation outcomes with growth and development.

The objectives of strategic conservation planning for the West District are to:

- maintain, and where possible improve, the conservation status of threatened species and threatened ecological communities
- achieve better outcomes for biodiversity conservation than the outcomes that could have been achieved by site-by-site or project-by-project efforts
- facilitate urban growth and development in line with *A Plan for Growing Sydney* and this draft District Plan
- provide an equitable model for recognising and recovering the cost of biodiversity impacts from urban growth and development
- reduce the potential for land use conflict
- reduce the cost and timeframes for development approvals, including approvals for infrastructure.

The Commission supports this strategic approach to protecting biodiversity in the West District. This complements the delivery of Sydney's Green Grid (see section 5.5). The Commission also supports the use of local knowledge and expertise to identify fine-grain opportunities to connect and enhance smaller pockets of biodiversity in the landscape.



#### **Sustainability Priority 2: Avoid and minimise impacts on biodiversity**

Efforts to protect biodiversity values should be based on avoiding and minimising impacts to biodiversity, as far as practicable. Only when impacts cannot be avoided or minimised, should consideration be given to offsetting those impacts.

#### **Action S4: Develop a Strategic Conservation Plan for Western Sydney**



The Department of Planning and Environment, the Office of Environment and Heritage and the Commission will work in partnership to develop a Strategic Conservation Plan to introduce a new approach to protecting biodiversity in the West, West Central and South West Districts. Strategic conservation planning will:

- streamline assessments and reduce costs for major development projects and development in Priority Growth Areas
- provide opportunities to protect biodiversity offset sites in perpetuity on both public and private land, with funding for ongoing management
- help connect areas of biodiversity to waterways and Sydney's Green Grid
- provide certainty for the public and landowners and limit speculation on the future development potential of land in the Metropolitan Rural Area (see Section 5.6)
- integrate biodiversity planning across District boundaries
- retain existing vegetation and habitat where possible, and deliver offsets close to the place where biodiversity is lost.

We will support the NSW Government's work to develop a Strategic Conservation Plan for the West, West Central and South West Districts.

**Action S5: Update information on areas of high environmental value**



Detailed information on areas of high environmental value is available from sources including the Office of Environment and Heritage and councils. High quality vegetation mapping is available for most of Greater Sydney. Where necessary, data and mapping will be ground-truthed to improve its accuracy and effort will be directed towards surveys that fill any information gaps.

The Department of Planning and Environment and the Office of Environment and Heritage will:

- work with councils to update map data layers on areas of high environmental value as new information becomes available
- continue to make data on areas of high environmental value available to relevant planning authorities and the public.

**Biodiversity offsets to protect biodiversity**

The NSW Government has introduced a biodiversity offsets scheme to help address the loss of biodiversity values, including threatened species, due to habitat degradation and loss.

Biodiversity offsetting is a market-based scheme that provides a streamlined biodiversity assessment process for development, a rigorous and credible offsetting scheme as well as an opportunity for rural landowners to generate income by managing land for conservation.

'Biodiversity credits' can be generated by landowners and developers who commit to enhance and protect biodiversity on their land. These credits can then be sold, generating funds for the management of the site. Credits can be used to offset the loss of biodiversity that might occur as a result of development. The credits can also be sold to those seeking to invest in conservation outcomes, including philanthropic organisations and government.







## 5.5 Delivering Sydney's Green Grid

*A Plan for Growing Sydney* identifies the opportunity to create Sydney's Green Grid, and noted that delivering a city-wide Green Grid would promote a healthier urban environment, improve community access to recreation and exercise, encourage social interaction, support walking and cycling connections and improve the resilience of Greater Sydney.

This draft District Plan builds on the concept of Sydney's Green Grid, as articulated in *A Plan for Growing Sydney*. We see the Green Grid as a major legacy for future generations.

We have developed a long-term vision for Sydney's Green Grid with an appreciation of Greater Sydney's landscape and recognition of its diversity of elements and connections, including the Blue Grid of estuaries and waterways, variety of parks and open spaces, and connections to bushland, from local pockets of native vegetation to the Greater Blue Mountains World Heritage Area. Our detailed report, which outlines the conceptual approach behind Sydney's Green Grid is available in our background material at [www.greater.sydney](http://www.greater.sydney).

By recognising the different ways people use open space now and into the future, and by planning for open space as a Green Grid, there are more opportunities to provide:

1. **Amenity:** Open space, in particular less formal open spaces such as bushland or natural waterways, which can influence a place's character, with biodiversity and waterways having an intrinsic value that must be recognised when planning at a wider scale.
2. **Activity:** With a growing population, more people will require access to more parks and sporting grounds for organised sport and recreation.
3. **Accessibility:** These spaces need to be connected through networks of streets, places and public areas in ways that makes it easier to walk or cycle.

Our objectives for Sydney's Green Grid are for a highly connected and diverse network that:

- increases access to open space
- promotes good health and active living
- creates new high quality public areas and places
- makes the urban environment more green
- enhances green spaces
- promotes green skills in bushland and waterway care and restoration
- improves access to sport and recreation
- delivers better tools for future open space planning.

The West District open space areas include some of Greater Sydney's largest parks and reserves such as Blue Mountains National Park and World Heritage Area and Wollemi National Park. Other areas of regional open space in the West District include Penrith Lakes, the Sydney International Regatta Centre and Penrith Stadium.

Our long-term vision for Sydney's Green Grid in the West District and several priority Green Grid projects are also shown on Figure 5-3.

Different types of open space serve different purposes. The Sydney Open Space Audit, available at [www.greater.sydney](http://www.greater.sydney), has categorised open space as either regional open space, district open space or local open space. Regional open space has a region-wide catchment, serving communities across Greater Sydney. District open space serves a number of neighbourhoods or suburbs, with a catchment that often extends across council boundaries.

Regional open space makes up 70% of the District and 98% of all the West District's open spaces. As a result of the vast tracts of regional open space, most of which is national parkland within the District, all homes are within five kilometres of regional open space.



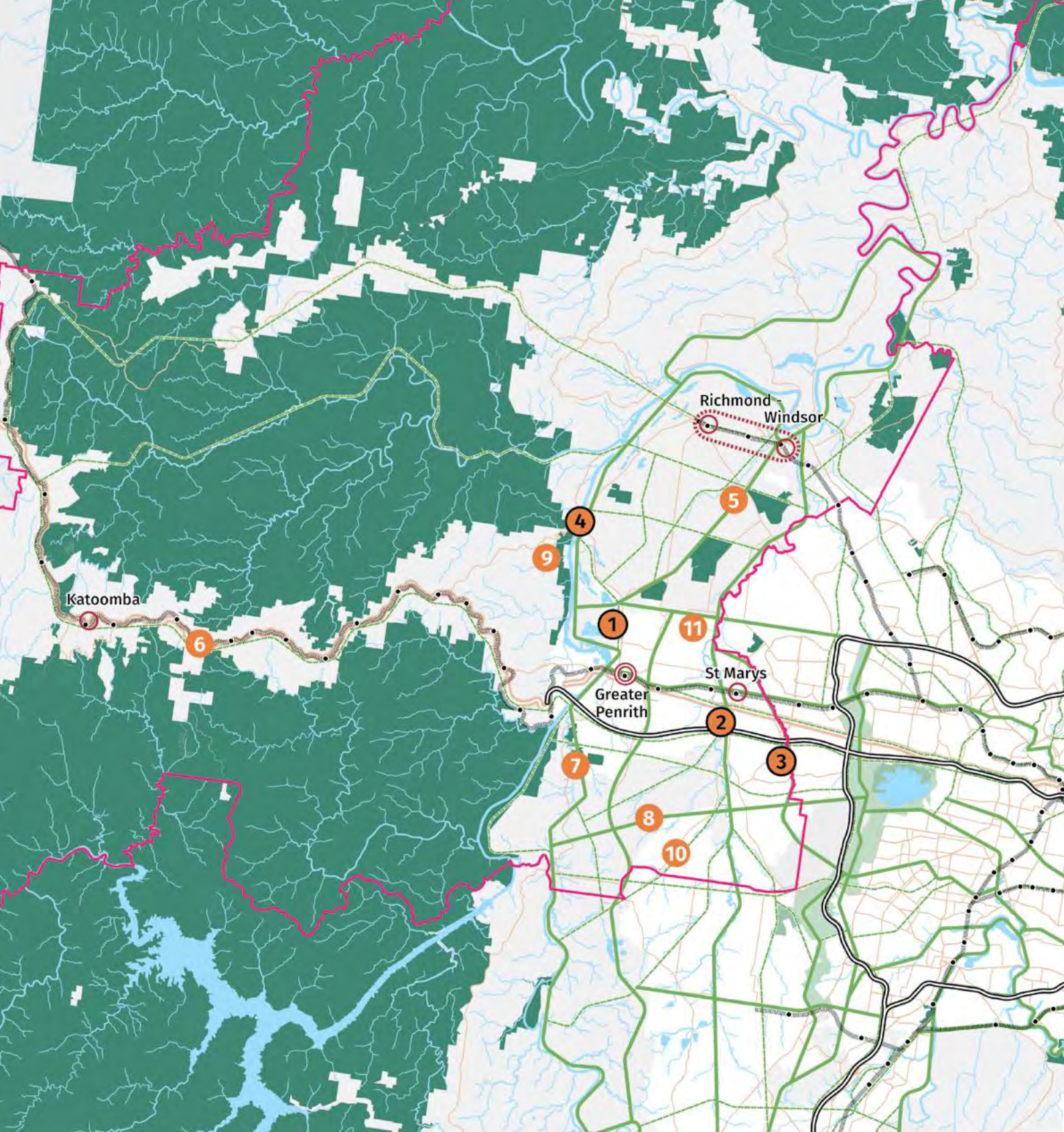


Figure 5-3: West District Green Grid

WEST DISTRICT

	Strategic Centre		Green Grid Opportunities (Other)		Railway Station
	District Centre		Priority Projects		Motorway
	District Boundary		Projects Important to District		Highway
	Metropolitan Urban Area		Waterways		Roads
	Metropolitan Rural Area		National Parks and Reserves		
	Green Grid Opportunities (Major)		Railway		



### Priority Projects:

#### 1 Penrith Lakes Parklands

Creating diverse open space parklands and waterway facilities around the lakes and along the Nepean River, with pedestrian and cycle links from Penrith and important links with the Great River Walk project.

#### 2 South Creek

Creating a continuous open space corridor along the entirety of South Creek that provides ecological protection and enhancement, better stormwater treatment and a regionally significant corridor for recreation uses.

#### 3 Ropes Creek

Protecting and enhancing ecologically valued lands, improving water quality and stormwater runoff, and providing a diverse and connected sequence of recreational open spaces, walking and cycling trails, including a green link to connect Cecil Hills, Erskine Park, Minchinbury, Mount Druitt, Oxley Park, St Marys and Ropes Crossing.

### Other important projects to deliver Sydney's Green Grid in the West District are:

#### 4 Cranebrook to Windsor Nature Reserve Corridor

Planning for the Wianamatta Nature Reserve, Castlereagh Nature Reserve and Windsor Downs Nature Reserve to protect and enhance regionally significant ecological communities and connect them to improve resilience, while also improving the water quality and treatment of stormwater along Rickaby's Creek and providing open space and links to other areas.

#### 5 Great Western Highway Penrith to Blackheath Corridor

Creating a safe and separated east-west walking and cycling connection from Penrith to Blackheath.

#### 6 Nepean Creeks - Peach Tree, Mulgoa and Surveyors Creeks

Enhancing and protecting these assets and increasing access and recreational opportunities.

#### 7 Warragamba Pipeline Open Space Corridor:

Using surplus easement lands for recreational open space, urban greening and walking and cycling trails, connecting to Mulgoa, Badgerys Creek, Kemps Creek, Blaxland Creek and Horsley Park.

#### 8 Eastern Escarpment open space and trails

Connecting a series of recreational and tourist open space facilities along the escarpment to maximise unique landscape and views.

#### 9 Blaxland Creek and Bushland Reserve

Protecting important future open spaces for the Western Sydney Priority Growth Area.

#### 10 Shanes Park and Wianamatta Regional Park

Protecting important areas of biodiversity that also provide connections to Ropes Creek and South Creek.





**Sustainability Priority 3:  
Align strategic planning to the  
vision for the Green Grid**

Consistent with Action 3.2.1 of *A Plan for Growing Sydney*, relevant planning authorities should consider opportunities to support the delivery of the West District Green Grid. This could include how land use zones can be applied, how new development controls are written, or where voluntary planning agreements and agreements for dual use of open space and recreational facilities could contribute to delivering the Green Grid.

How these matters have been taken into account is to be demonstrated in any relevant planning proposal.



**Sustainability Priority 4:  
Protect, enhance and extend the  
urban canopy**

When making strategic plans, relevant planning authorities should consider how tree canopy cover in land release and established urban areas can be protected and increased, with a focus on providing shade trees to streets.

Councils should include green cover and shade tree planting along major transport corridors in local infrastructure investment planning, development control and urban design.

How these matters have been taken into account is to be demonstrated in any relevant planning proposal

Trees in the urban environment provide many benefits. A green canopy provides shade to reduce the ambient temperature at ground level, provides habitat for biodiversity and enhances the amenity of the urban landscape. Trees in the urban environment also provide benefits by removing fine particles from the air and improve air quality. This is particularly important along busy road corridors where air quality can be improved. Some councils in Greater Sydney have already mapped areas at the greatest risk of becoming urban heat islands and are using this information to prioritise planting of shade trees to adapt to a changing climate. The *Draft Climate Change Fund Strategic Plan* includes an action to increase tree canopy coverage in heat exposed suburbs.

Across Greater Sydney, communities have developed an appreciation of visual beauty of scenic landscapes. Scenic landscapes are often associated with particular environmental attributes, have social and economic value – they can provide communities with a sense of identity, preserve links to Aboriginal and colonial era heritage and culture and provide opportunities for tourism and recreation.

As the West District grows, it will become more important to map and recognise the importance of these scenic landscapes and to develop planning and design approaches to respect and protect them.

Transport corridors can be major elements in the visual landscape. The design approach to major transport corridors should consider how the transport infrastructure fits into the landform, the natural and cultural qualities of the area, the views both to and from the corridor, the way people experience scenic landscapes, and how the transport corridor can complement and enhance the scenic qualities of the surrounding landscape.



### **Sustainability Priority 5: Improve protection of ridgelines and scenic areas**

The scenic qualities of landscapes are already recognised and considered in some areas of Greater Sydney as part of the strategic planning and development process.

All councils should identify and map areas with high scenic value and develop strategies, planning and development controls that protect important scenic landscapes and vistas. Planning and development controls should prohibit opportunities for development on ridgelines that would diminish their scenic quality.

How these matters have been taken into account is to be demonstrated in any relevant planning proposal.



### **Action S6: Use funding programs to deliver the West District Green Grid priorities**

Consistent with Action 3.2.1 of *A Plan for Growing Sydney*, councils have a leading role in delivering the West District Green Grid priorities through their planning and investment in open space. Funding programs managed by the NSW Government can be used to extend and enhance open space as part of the Green Grid. These are:

- **Metropolitan Greenspace Program:** matches funding contributions from councils to improve open spaces for recreational purposes and to create links between bushland, parks, waterways and centres.
- **Environmental Trust grants programs:** funds projects that rehabilitate or regenerate the environment, or promote environmental education and sustainability.
- **Sydney's Walking Future and Sydney's Cycling Future programs:** aim to improve walking and cycling connections.

We encourage councils to apply for funding through these programs to deliver the West District Green Grid priorities. We will also oversee the distribution of Metropolitan Greenspace Program grants.



### **Action S7: Develop support tools and methodologies for local open space planning**

As the West District grows, demand for open space and recreation areas will increase. There may also be increased demand for different types of open space to meet changing community needs.

The Commission will provide local councils with a toolkit of resources and a consistent methodology that will help councils plan for the active recreation and open space needs of their communities. The toolkit will recognise the widely varying contexts that influence opportunities to provide open space across Greater Sydney.



### **Action S8: Update the Urban Green Cover in NSW Technical Guidelines to respond to solar access to roofs**

The *Urban Green Cover in NSW Technical Guidelines* were developed to increase resilience to urban heat island impacts and help communities prepare for the impacts of climate change. The Guidelines cover vegetation, as well as permeable and reflective surfaces to minimise local temperatures and encourage evaporation from soil and plants. In the vegetation section, these guidelines identify issues that councils should consider when selecting trees such as tolerance to air and water pollution, drought or waterlogging, wind tunnelling, overshadowing and reduced sunlight, as well as lifespan and the location of underground and overhead services.

The Office of Environment and Heritage and the Department of Planning and Environment, through their participation in the Low Carbon Living Cooperative Research Centre, will review the *Urban Green Cover in NSW Technical Guidelines* to investigate taking solar access to roofs into consideration. This will mean trees selected to increase canopy cover do not overshadow roofs that have the potential to accommodate solar hot water systems and solar panels.

## 5.6 Managing the Metropolitan Rural Area

*A Plan for Growing Sydney* adopted the term Metropolitan Rural Area to describe the non-urban areas at the periphery of Greater Sydney. It is important to recognise that a significant proportion of this bushland area is under public ownership in the form of national parks.

The Metropolitan Rural Area has a range of environmental, social and economic values, including scenic landscapes, habitat and biodiversity, mineral and energy resources, water supply catchments, tourism, heritage and cultural assets and areas of productive agriculture. The Metropolitan Rural Area also supports small rural villages and areas of low intensity rural-residential development, providing opportunities for people to live in a 'rural' setting. In the West District, the Metropolitan Rural Area includes the towns and villages of the Blue Mountains, the centres of Richmond and Windsor, and rural villages such as Kurrajong, Wilberforce, Glossodia, Londonderry and Mulgoa.

There is widespread support for the continuation of agricultural production in the Metropolitan Rural Area. For this to be achieved, it is important to recognise existing and potential conflicts between these different land uses and activities and the various pressures on continuing agricultural production. Ultimately, our ambition is to see the area as an interconnected system rather than individual activities on individual parcels of land. For example, there are many public values on private land including scenic values, ecosystems services such as riparian corridors that maintain water quality in creeks and waterways or biodiversity. Conversely, private values such as continuing poultry production requires appropriate setbacks and public infrastructure to operate.

Our approach to the challenges facing the Metropolitan Rural Area is similar to the approach we take for Greater Sydney as a whole – that is, to recognise the pressures as a dynamic force that can be harnessed and redirected to achieve social, economic and environmental benefits.





The interaction of these competing interests and the variation in landscape and patterns of activity is complex and varies across the Metropolitan Rural Area. It is not a matter of planning to avoid tensions between activities – these activities are already interspersed – it is instead a challenge to manage these interactions and develop approaches to distribute costs and benefits equitably and in the context of clearly defined outcomes.

Mapping of the range of environmental, social and economic values has been completed, as part of a report on considerations for district planning in the Metropolitan Rural Area; however, mapping and understanding the range of values can only provide the basis for a more place-based or locality-specific approach to strategic planning that recognises the complexity of these areas. This will take time and require consultation due to the varying expectations of existing landowners and the public interest.

Despite the variation across the Metropolitan Rural Area, common tensions that will need to be resolved on a locality-by-locality basis include:

- biodiversity and ecosystem services on private land and the need to conserve and maintain them
- the value of land for agricultural production being less than the value from having access to, and being part of, the metropolitan area
- the impact of intensive agricultural production on adjoining properties
- pressures on the profitability and competitiveness of particular agricultural activities due to both national and global restructuring of agricultural production.

In Greater Sydney's semi-rural areas, land values are shaped by both the value of being close to the city (the urban effects) and the value of the land for agricultural production (the agricultural effect). Land values have increased due to demand for rural lifestyle properties that are close to the city.



#### **Sustainability Priority 6: Discourage urban development in the Metropolitan Rural Area**

Urban development in the Metropolitan Rural Area is not consistent with the protection of the Area's existing values. Conversion of land to urban residential development is not necessary in the short to medium term given the supply of land for housing in other parts of Greater Sydney, and conversion of rural land to suburban development does not form part of the housing targets that have been defined for the District or individual local government areas.

In general, urban development in the Metropolitan Rural Area will not be supported unless the relevant planning authority has undertaken strategic planning in accordance with Sustainability Priorities 7 and 8.

Relevant planning authorities should not support planning proposals affecting land currently within a RU (rural) or E (environmental) zone unless:

- these are in areas identified in a regional plan or a district plan as urban investigation areas
- these also form part of, or are identified as a result of, strategic planning in accordance with Sustainability Priorities 7 and 8.



**Sustainability Priority 7: Consider environmental, social and economic values when planning for the Metropolitan Rural Area**

Agriculture and primary industries are essential to Greater Sydney and to the West District's economy. They need to be planned and protected to avoid their transition to higher and better uses (in financial terms) such as suburban residential development.

In planning for the Metropolitan Rural Area, the relevant planning authority should undertake its own review of land use activities in the context of environmental, economic and social values, and consider our research regarding the multiple values and activities in their District to better understand how they are operating, the range of uses operating within them, their interdependencies, key constraints and opportunities to their effective operation and evolution.

On this basis, when planning for the Metropolitan Rural Area in the West District, relevant planning authorities should consider how to:

- provide greater certainty with regards to built form outcomes in and around villages
- articulate the different landscape and heritage values and character of rural areas, with different planning and development controls
- clarify what the future should be for rural lands to prevent speculation and protect against encroachment
- conserve Aboriginal cultural heritage
- maximise opportunities from the agriculture industry's proximity to Western Sydney Airport.

The resolution of a preferred alignment for the Outer Sydney Orbital will change the structure of major transport corridors in the West District, and flowing from this, the relationship between transport and land use boundaries. These relationships will be considered as part of the review of *A Plan for Growing Sydney*.



**Sustainability Priority 8: Provide for rural residential development while protecting the values of the Metropolitan Rural Area**

Rural landscapes provide opportunities for housing in rural towns and villages, as well as rural residential living that is already dispersed throughout the Metropolitan Rural Area. Any plans to expand rural towns and villages must first consider how these places fit in the landscape and how their valued characteristics can be protected and extended sympathetically in order to optimise their cultural and economic potential. This will involve analysis of the key characteristics of these towns and villages as part of a design-led approach.

Consideration of further subdivision for rural residential development should be approached in a similar way, with careful consideration of siting, impacts and potential to improve and ensure ongoing maintenance of biodiversity, ecological, scenic and productive values.

Relevant planning authorities should adopt a design-led approach to planning for localities that:

- considers siting and design principles for rural residential development that conserves the values identified in the report on considerations for district planning in the Metropolitan Rural Area
- considers restrictions on additional rural residential development that may be affected by existing or future rural and agricultural activity
- considers setbacks and defines appropriate buffers for rural activities
- investigates and develops innovative approaches to conserve and manage biodiversity, habitat and scenic landscapes.

Councils should liaise with the Commission to develop design-led approaches for the Metropolitan Rural Area and in the first instance, use the design approaches outlined in the NSW Government's draft Architecture and Urban Design Policy, *Better Placed* (October 2016).

How these matters have been taken into account is to be demonstrated in any relevant planning proposal.

The demand for lifestyle properties will increase. Lifestyle rural residents generally expect the amenity of suburbia and this often results in conflict with existing agricultural activities and inhibits future intensification. There is also an expectation that the services provided in urban areas including schools and community facilities, or mains water, sewerage and in some cases roads with kerbs and guttering will be provided.

These conflicts, combined with the expectation that land can be subdivided or rezoned at a future date for urban development, can further reduce productivity, leading to under investment.

The long-term potential of the Metropolitan Rural Area needs to be seen in relation to the emerging Western City. From this perspective, there is potential for the Metropolitan Rural Area to become a parkland city with possible links to food processing and logistic terminals around the Airport for domestic consumption and export. These opportunities will be explored and developed as part of the review of *A Plan for Growing Sydney* in 2017.

Less than 25% of the Metropolitan Rural Area within the West District is privately owned land. Figure 5-4 below shows the different types of uses on privately owned land in the West District portion of the Metropolitan Rural Area, and highlights that most rural land is used for grazing or is not actively used. The West District also has substantial areas of rural land devoted to irrigated and intensive forms of agriculture and intensive animal production.

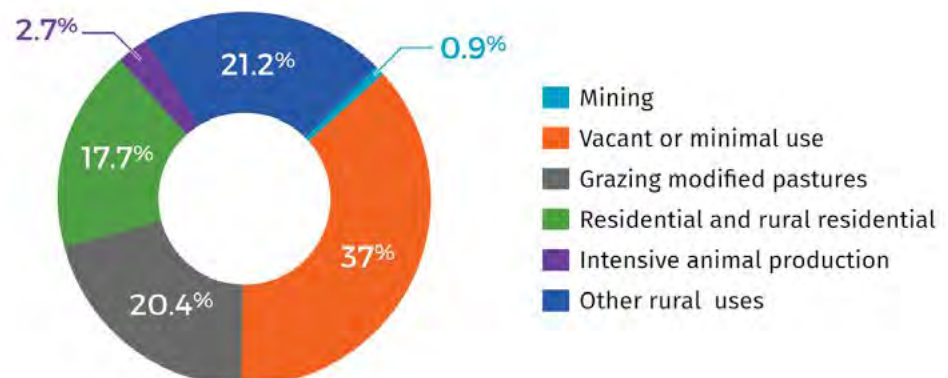
In the West District the most valuable agricultural activity is the production of eggs and poultry, nurseries for cut flowers and cultivating turf and mushrooms.

There are three agricultural clusters in the West District:

- fruit trees around Bilpin
- seasonal horticulture around Shanes Park, Llandilo and Berkshire Park
- a mix of turf farms, seasonal horticulture and citrus orchards on the Hawkesbury River floodplain between Windsor and Richmond, where there are also horse-related activities.

There are also a number of extractive industry operations in the West District, around Londonderry and the Hawkesbury River, producing materials such as clay and sand. These industries are vital as part of the overall supply of construction materials to support growth and urban development across Greater Sydney. *Sydney Regional Environmental Plan No.9 – Extractive Industry* sets out the NSW Government's approach to identifying and facilitating the development of extractive resources in Greater Sydney and the Central Coast. These types of mineral extractive industries used for construction are not subject to the Strategic Release Framework (available from [www.resourcesandenergy.nsw.gov.au](http://www.resourcesandenergy.nsw.gov.au)), which is directed to coal and petroleum (including coal seam gas) exploration.

Figure 5-4: West District Metropolitan Rural Area - land uses on privately owned land



Source: Greater Sydney Commission, adapted from the *Considerations for District Planning in the Metropolitan Rural Area of the Greater Sydney Region* report, AgEconPlus 2016.



The NSW Government provides information on existing and potential future mineral and energy resource operations across Greater Sydney, such as in the Minerals Resource Audit, and this information can be found at [www.commonground.nsw.gov.au](http://www.commonground.nsw.gov.au).

Potential exists for land use conflicts. NSW Government has policy and legislative tools to support the sustainable development of mineral and energy resources while protecting the environment, agricultural lands, health of communities and facilitating growth in housing and employment. These policy and legislative tools include:

- phased land uses commensurate with development phases of a mineral (including extractive) and energy resource industry
- *Environmental Planning and Assessment Act 1979*
- *Protection of the Environment Operations Act 1997*
- *Mining Act 1992 and Petroleum (Onshore) Act 1991*
- *State Environmental Planning Policy (Mining Petroleum Production and Extractive Industries)*
- Land Use Conflict Risk Assessment Guide
- Preliminary Regional Issues Assessment for Potential Coal and Petroleum Exploration Release Areas.

*A Plan for Growing Sydney* recommends a strategic framework and criteria to assist decision-making in the Metropolitan Rural Area. In line with Action 4.1.2 of *A Plan for Growing Sydney*, we have mapped and analysed overlapping multiple activities and Metropolitan Rural Area values for each district. A conclusion of this work is that given the complexity and variation across the area, a design-led response is likely to be more appropriate and effective than relying on generic criteria for managing the multiple interests and values, activities and conflicts that vary from locality to locality.

Design-led planning is a proactive, consultative planning process that identifies a desired outcome for a specific area, based on its characteristics, future opportunities and community values, as well as potential pathways to reach this outcome (see Section 4.6.1). This is a more holistic and integrated approach than a criteria response, which in this case manages growth and change on a site-by-site or project-by-project basis, applying a set of criteria to weigh up the benefits or costs of each project.



## 5.7 Creating an efficient West District

Increasing a city's efficiency reduces impacts on the environment and the city's carbon footprint while increasing productivity. This means progressive reduction in carbon emissions, potable water use, and waste. It also means upgrading the District's grey grid of ageing infrastructure with a focus on urban renewal areas and precincts. Incorporating water sensitive urban design measures as areas develop will help vegetation growth and protect waterways. Maximising local water recycling and the potential for stormwater harvesting can create opportunities for greening public open spaces including parks, ovals and school playgrounds.

The NSW Government has a number of policies that aim to improve energy and resource efficiency and reduce greenhouse gas emissions. These include:

- NSW Climate Change Policy Framework
- *Draft Climate Change Fund Strategic Plan*
- *NSW Government Resource Efficiency Policy*
- *Waste Avoidance and Resource Recovery Strategy 2014-21*
- *Metropolitan Water Plan*.

Improving resource efficiency is critical to reducing greenhouse gas emission reductions to meet the NSW Government target of net zero carbon emissions by 2050, in line with Australia's international commitments to combat climate change. The ambition is to make Greater Sydney a net zero carbon emission city by 2050.

Making more efficient use of water, energy, fuels and materials and improving the management of waste and recycling will help Greater Sydney become more sustainable and also help minimise risks from potential future rises in the costs of energy.

### The NSW Climate Change Policy Framework

In December 2015, Australia and 194 other countries agreed on the United Nations Paris Agreement on climate change. The key objectives of the Paris Agreement include:

- a goal to limit the increase in global temperatures to well below 2°C and pursue efforts to limit the rise to 1.5°C
- a commitment to achieve net-zero emissions globally, by the second half of the century.

The NSW Government endorses the Paris Agreement, and has released the NSW Climate Change Policy Framework, outlining how NSW will take action that is consistent with Australia's commitment to the Paris Agreement.

The NSW Climate Change Policy Framework sets out two aspirational objectives for the State; to achieve net zero emissions by 2050; and to be more resilient to a changing climate. These long-term objectives aim to attract investment in renewable energy and energy efficiency, guide public and private sector decision-making, and help make NSW Government policy consistent with national and international policy on climate change.

To implement the NSW Climate Change Policy Framework, the NSW Government has prepared the *Draft Climate Change Fund Strategic Plan*, which sets out priority investment areas and potential actions using \$500 million of new funding from the \$1.4 billion Climate Change Fund over the period from 2017 to 2022, to help NSW make the transition to a net-zero emissions future and adapt to a changing climate.

### 5.7.1 Waste management

Waste management infrastructure across Greater Sydney is largely managed and owned by the private sector.

The West District has a number of waste treatment facilities including landfills, transfer stations and organics treatment facility. Waste from the West District is sent to a combination of alternative waste treatment facilities and landfills. Hawkesbury and the Blue Mountains Councils dispose of residual waste at their council-owned landfills. Penrith Council sends a proportion of its waste to a facility in Liverpool.

*A Plan for Growing Sydney* noted the need for additional waste and recycling facilities to help manage demand as Greater Sydney grows. The West District's industrial precincts have the potential to become locations for waste management facilities, including locations for recycling municipal waste, recycling commercial and industrial waste and recycling hazardous materials from households.



#### **Sustainability Priority 9: Support opportunities for District waste management**

When making strategic plans, relevant planning authorities should:

- require appropriate land use zones to minimise the potential for conflict with the operation and expansion of existing waste facilities
- protect precincts that have functioning waste management facilities from encroachment by residential and other sensitive development
- consider ways to encourage design measures such as fully enclosing these facilities to minimise dust, odours and noise impacts to mitigate the risks and potential impacts of waste facilities on surrounding communities.

How these matters have been taken into account is to be demonstrated in any relevant planning proposal.



#### **Action S9: Identify land for future waste reuse and recycling**

As the West District grows, the need to manage waste will grow. In higher density neighbourhoods, there may be opportunities to improve the efficiency of waste collection services by introducing innovative precinct-based waste collection, reuse and recycling.

In accordance with Action 4.3.2 of *A Plan for Growing Sydney*, the Environment Protection Authority and the Department of Planning and Environment, in participation with councils, will identify additional land for waste management, reuse and recycling and how and where precinct-based waste collection services could operate within Greater Sydney.

### 5.7.2 Energy and water

Making more efficient use of energy and water is a cost effective way to reduce carbon emissions, reduce pressure on waterways and ecosystem, and reduce costs. The NSW Government has released *A Draft Plan to Save NSW Energy and Money*, as part of the NSW Climate Change Policy Framework. Steps to reduce greenhouse gas emissions will rely on action taken at the local and district scale, as well as national and international efforts. Monitoring the use of energy and water can help guide and support targeted measures to make the West District more efficient and sustainable.

We will report annually on carbon emissions across Greater Sydney on the Greater Sydney Dashboard in accordance with the C40 (Carbon Disclosure Protocol) requirements. Access to data will help support the identification of targeted and cost-effective initiatives to help meet the NSW target of net zero carbon emissions by 2050.

We will also report on a range of environmental measures in line with Action IM3 above (see Section 1.2.4).



Adopting a place-based approach and identifying Collaboration Areas enables us to plan for improved environmental performance. This could also improve the ability to:

- renew and replace inefficient infrastructure (greening the infrastructure grey-grid)
- organise utilities, car parking, amenities, open space, urban green cover and public spaces
- apply and further develop successful approaches from other areas of Greater Sydney.



**Action S10: Embed the NSW Climate Change Policy Framework into local planning decisions**

We will work with councils, the Office of Environment and Heritage and other State agencies to see how best to implement the NSW Climate Change Policy Framework across Greater Sydney. We will identify which actions in the *Draft Climate Change Fund Strategic Plan* could be delivered in partnership with State agencies and councils to improve energy efficiency, reduce emissions and improve environmental performance.



**Action S11: Support the development of initiatives for a sustainable low carbon future**

When identifying areas that are likely to undergo significant change, relevant planning authorities should identify areas that have the potential to become low carbon – high environmental efficiency areas. Our goal is to enable progressive reduction in carbon emissions potable water use and waste and to upgrade the District's ageing infrastructure, with a focus in the first instance, on NSW Government-led urban renewal areas, priority precincts and Priority Growth Areas.



**Action S12: Support the development of efficiency and environmental performance benchmarks**

Improving the energy and water efficiency of buildings, and reducing waste in urban renewal projects and infrastructure projects has a wide range of benefits, including reduced greenhouse gas emissions, reduced costs associated with energy use, and greater appeal to building owners and tenants.

Adopting innovative transport technologies, such as electric vehicles, can also help make the West District more sustainable and efficient. Electric vehicles also have other benefits, such as lower levels of noise and air pollution that can be particularly valuable in densely-settled urban areas.

The Commission, in partnership with the NSW Climate Council, the Australian Government, State agencies and utility providers, will investigate ways to define environmental performance targets and benchmarks for areas and projects, and implementation measures to help reach these targets. This will include consideration of the potential growth in use of electric vehicles and options for standardised approaches to charging locations for electric vehicles.

We will also consider ways to move towards greater sharing of open source data to support better environmental performance.

## 5.8 Planning for a resilient West District

*Urban resilience is “the capacity of individuals, communities, institutions, businesses and systems within a city to survive, adapt and thrive no matter what kinds of chronic stresses and acute shock they experience”.*

### 100 Resilient Cities project

The West District's rivers, floodplains and bushland contribute to its character and lifestyle; however, the interface between urban activities and the natural landscape can bring risks including flooding and bushfires. Impacts from natural hazards have the potential to increase as the climate changes, requiring adaptive responses.

The NSW Government has a number of policies and programs that aim to make NSW more resilient to natural hazards and a changing climate. As well as the NSW Climate Change Policy Framework and the *Draft Climate Change Fund Strategic Plan*, AdaptNSW, the NSW and ACT Regional Climate Change Model and a number of other climate change adaptation programs are in place.

The most significant natural hazards and acute shocks that could affect the West District include bushfire, heatwaves and flooding. The next section takes a specific focus on flooding in the Hawkesbury-Nepean Valley. These natural phenomena will be exacerbated by climate change.

**AdaptNSW** is a NSW Government-led approach to understanding climate change and to managing risk and taking actions to adapt to extreme weather. Projections to 2030 across Greater Sydney are:

- **Rain:** Average annual rainfall is expected to increase by +1.7% in the Sydney Basin. Rainfall is projected to increase during autumn (+9.7%). Rainfall is projected to reduce in spring (-2.6%) and marginally in summer (-0.2%). Parts of the West District are at risk of flooding and increases in the amount and intensity of rainfall could make this worse.
- **Bushfire:** The Forest Fire Danger Index (FFDI) quantifies bushfire weather conditions, combining observations of temperature, humidity and wind speed. Fire weather is classified as severe when the FFDI is above 50. Severe fire weather is projected to have a slight increase in summer months to 2030. Decreases are projected during autumn and across the Sydney Basin in spring. A reduction during autumn is likely due to increases in rainfall. The West District has experienced some of the most damaging bushfires in Greater Sydney, particularly in the Blue Mountains Local Government Area. The climate, vegetation, topography and pattern of development in the Blue Mountains means that bushfires will continue to be a hazard.
- **Heat:** Hot days, measured by the number of days a year with a maximum temperature over 35°C, are projected to increase by an average of four days per year by 2030. The West District already experiences more hot days than other parts of Greater Sydney and exposure to extreme heat will be an ongoing challenge for the District.
- **Cold:** Changes in cold nights, measured by minimum temperature (less than 2°C) can have considerable impacts on native ecosystems and agricultural crops.

Planning law in NSW requires new development on bushfire-prone land to comply with the provisions of the NSW Rural Fire Service's *Planning for Bush Fire Protection 2006* as consistent with s. 79BA of the *Environmental Planning and Assessment Act 1979*.

Placing development in hazardous areas or increasing housing density in areas with limited evacuation options increases risk to people and property from bushfire. Designing neighbourhoods to minimise the perimeter of land that interfaces with the hazardous areas can also reduce risks.

Although clearing vegetation around developments on bushfire-prone land can help reduce risks from bushfire, clearing must be balanced against the protection of bushland and its ecological processes and systems.

The Rural Fire Service will continue to require that new development comply with the requirements set out in *Planning for Bush Fire Protection 2006*.

Managing flooding is an important priority for communities across Greater Sydney. All local government areas in the West District are exposed to some flood threat, whether from major rivers or local overland flow. Damage caused by flooding can be significant.

In NSW, councils have responsibility for managing flood risk, including the development of flood studies and floodplain risk management studies. The NSW Government provides councils with technical, financial and policy assistance in floodplain risk management. The NSW Government has also prepared the *Floodplain Development Manual 2005*, to guide local planning for development on flood liable land.

Compared to many cities around the world, Greater Sydney enjoys excellent air quality, which enhances our 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, particularly in parts of the West and South West Districts. We will examine options to improve air quality as part of the review of *A Plan for Growing Sydney* in 2017.

Transport movements along major road 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. There are controls in place in the *State Environmental Planning Policy (Infrastructure) 2007* to assist in reducing the health impacts of rail and road noise and adverse air quality on sensitive adjacent development.

Reducing particle pollution is a priority for the West District community as exposure can be particularly harmful. The national standard for particle pollution has been exceeded in Greater Sydney for up to 11 days per year in the last decade and the fine particle standard has been exceeded for up to 14 days per year. These events are often associated with extreme events such as bushfires and dust storms.

We support public transport, walking and cycling, and electric vehicles as opportunities to reduce air pollution. We will collaborate with the Office of Environment and Heritage and other agencies and utilities to report annually on air quality across Greater Sydney through the Greater Sydney Dashboard.



#### **Sustainability Priority 10: Mitigate the urban heat island effect**

Relevant planning authorities should consider where the urban heat island effect is experienced, and the location of vulnerable communities and use strategic plans and development decisions to reduce impacts from extreme heat.

How these matters have been taken into account is to be demonstrated in any relevant planning proposal.





**Sustainability Priority 11: Integrate land use and transport planning to consider emergency evacuation needs**

Relevant planning authorities should coordinate with Transport for NSW and the State Emergency Service to consider land use and local road planning, so that it is integrated with emergency evacuation planning and takes into account the cumulative impact of growth on road evacuation capacity.

How these matters have been taken into account is to be demonstrated in any relevant planning proposal.



**Sustainability Priority 13: Assist local communities develop a coordinated understanding of natural hazards and responses that reduce risk**

The Commission, the NSW Government and local councils will continue to adopt a range of tools, resources and implement actions to adapt to climate change and reduce risks to public and private assets. The Commission will also explore ways to coordinate, improve and communicate information about risks associated with climate change to local communities.



**Sustainability Priority 12: Use buffers to manage the impacts of rural activities on noise, odour and air quality**

When preparing strategic plans and development controls, and when considering development applications, relevant planning authorities will:

- work with the Environment Protection Authority, the Department of Primary Industries and councils to identify approaches (that may include buffers) for agriculture and primary industry activities
- use strategic plans to prevent or limit development in areas that would be in conflict with agriculture and primary industry to manage land use conflict
- protect agriculture and primary industry activities from encroachment by residential and other sensitive development.

How these matters have been taken into account is to be demonstrated in any relevant planning proposal.



**Action S13: Incorporate the mitigation of the urban heat island effect into planning for urban renewal projects and Priority Growth Areas**

Air temperatures in the District and other parts of Greater Sydney are expected to increase due to climate change and increasing urbanisation. The highly urbanised environment in parts of the West District can increase localised heat even more. The Office of Environment and Heritage has mapped areas where extreme heat is experienced and where it is likely to increase with climate change. These maps are available at [www.climatechange.environment.nsw.gov.au](http://www.climatechange.environment.nsw.gov.au).

The Department of Planning and Environment will consider ways to reduce the impact of the urban heat island effect in its planning for priority urban renewal precincts and corridors, and in the new Development Code for Priority Growth Areas across Greater Sydney.



**Action S14: Review the guidelines for air quality and noise measures for development near rail corridors and busy roads**

Transport movements along major road and rail corridors generate noise and are a source of air pollution. The degree of noise or air pollution on busy roads can be related to volume of traffic and the level of truck and bus movements. There are controls in place in *State Environmental Planning Policy (Infrastructure) 2007* to assist in reducing the health impacts

of rail and road noise and adverse air quality on sensitive adjacent development.

The Department of Planning and Environment will work with other State agencies to review *State Environmental Planning Policy (Infrastructure) 2007* and update the *Development Near Rail Corridors and Busy Roads—Interim Guideline* (Department of Planning 2008) to include contemporary air quality and noise information. This will include analysis of likely rail corridor and road vehicle movement patterns in 2036 to provide an understanding of where air quality and noise issues might need to be managed into the future.

The Environment Protection Authority, in collaboration with the Department of Planning and Environment and other relevant stakeholders, will develop principles for reducing emissions and exposure to air pollution, for use by relevant planning authorities which can be considered when preparing strategic plans and development decisions across Greater Sydney.



**Action S15: Identify and map potential high impact areas for noise and air pollution**

Across the West District, the Environment Protection Authority and councils already provide a framework for the operation of potentially hazardous activities to operate and manage any impacts on air quality and noise.

The Environment Protection Authority will work with the Department of Planning and Environment and councils to identify and map buffers around industries that have been granted a licence to pollute. Buffers will vary based on the level of risk of impacts on the surrounding community.

## 5.9 Managing flood hazards in the Hawkesbury-Nepean Valley

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

Unlike most other river catchments in Australia, the Hawkesbury-Nepean Valley floodplain has significantly higher depths during flood events created by several narrow gorges in the Valley that constrict the flow of floodwaters downstream. Limited flood warning time is a risk factor, and there is a complex interaction between the main flow of the river and the multiple rivers and creeks that contribute to the catchment. This creates challenges for urban development and emergency management planning in the catchment.

Already, up to 134,000 people live and work on the floodplain and could require evacuation during a flood; this population will double over the next 30 years. Over 25,000 homes and two million square metres of commercial space are subject to flood risk from the Hawkesbury-Nepean River between Bents Basin and Brooklyn Bridge. This risk will continue to increase as development intensifies in response to existing land use planning controls.

In 2016, the NSW Government released a Hawkesbury-Nepean Valley Floodplain Management Strategy. As part of this Strategy, the NSW Government commenced detailed concept designs, environmental assessments and business case planning for the raising of Warragamba Dam wall for flood mitigation. If approved, this will significantly reduce the frequency of flooding for existing downstream settlements, including Windsor, Richmond and parts of Penrith but would not eliminate all flood risk in the Valley.

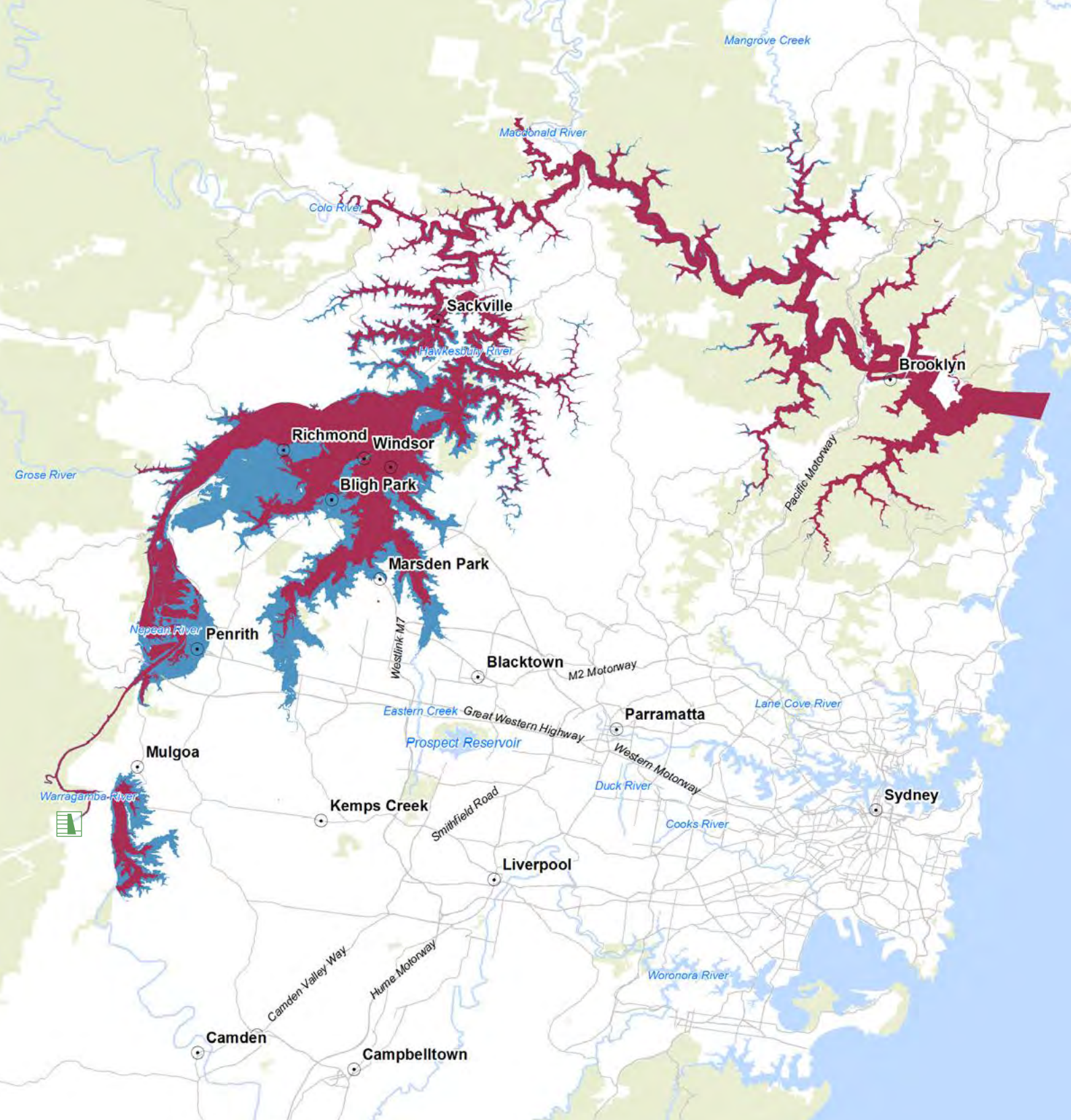


Figure 5-5: Hawkesbury-Nepean Valley floodplain

	Town		Warragamba Dam		1 in 100 Year Flood
	Roads		National Parks		Probable Maximum Flood (PMF)
	Creeks and Rivers		Water Body		



### **The Hawkesbury-Nepean Flood Risk Management Task Force**

The NSW Government has established the Hawkesbury-Nepean Flood Risk Management Task Force to lead Stage Two of the review into flood management and preparedness in the Hawkesbury-Nepean Valley.

This follows Stage One – the Hawkesbury-Nepean Valley Flood Management Review (March 2014) – completed by the Department of Primary Industries, which looked at the current flood management and planning in the Hawkesbury-Nepean Valley to identify opportunities to improve the ways in which floods are managed.

In June 2016, the NSW Government announced the Hawkesbury-Nepean Flood Risk Management Strategy, which was developed by the Task Force, to reduce the potential flood risk to life and property in the Hawkesbury-Nepean Valley.

The Task Force continues to work closely with NSW Government agencies and other stakeholders to lead policy thinking and provide expert advice to State and local governments and to communities on ways to reduce flood risks in the Hawkesbury-Nepean Valley.

The key land use planning responses to flood risk will be refined once the NSW Government considers the final business case for the dam raising and additional associated flood risk management investigations across the floodplain. Directions on changes to planning controls will be considered to preserve the risk to life benefits of the dam raising, limit pressure on flood evacuation routes and reduce flood evacuation complexity.

Irrespective of the dam raising, a more strategic land use approach to regional flood risk is required to manage the existing and ongoing flood risk. Growth in the Valley must be carefully managed in terms of absolute numbers and in the distribution of homes and commercial development.

The application of appropriate flood related development controls and restrictions on new development are likely to continue to apply in key areas of risk across the floodplain. In addition, better integration of land use and road planning must account for the cumulative impact of growth on available flood evacuation road capacity and the complexity of flood emergency operations.

Key planning principles currently under investigation for future implementation as part of a formal statutory mechanism (such as a state environmental planning policy) include:

- avoiding intensification and new urban development on land below the current 1 in 100 chance per year flood event (1% annual exceedance probability (AEP) flood event)
- investigating the benefit of applying flood related development controls at levels higher than the current the current 1 in 100 chance per year flood level. This is in recognition of the higher flood depths above the current planning level (1 in 100 chance per year flood level) applied in this Valley and the potential impact on evacuation planning and property
- providing for less intensive development or avoiding certain urban uses in areas of higher flood risk and allowing more intensive development in areas of lower flood risk, subject to an assessment of the cumulative impact of urban growth on regional evacuation road capacity and operational complexity of emergency management
- balancing desired development outcomes in centres such as Penrith with appropriate flood risk management outcomes
- avoiding alterations to flood storage capacity of the floodplain and flood behaviour through filling and excavation ('cut and fill') or other earthworks
- providing for the application of more flood compatible building techniques and sub-division designs.



**Action S16: Address flood risk issues in the Hawkesbury-Nepean Valley**

The Commission and other State agencies will continue to work together to reduce flood risks in the District in line with outcomes of the Hawkesbury-Nepean Valley Flood Risk Management Strategy.

In the interim, prior to the implementation of a statutory mechanism for the Hawkesbury-Nepean Valley, relevant planning authorities will need to demonstrate that the above principles have been addressed when making strategic plans to ensure that the cumulative growth in the Hawkesbury-Nepean Valley does not increase the risk to life.





# Glossary

Term	Draft District Plan definition
Central City	The metropolis of three cities includes the developing Central City, which is anchored by Greater Parramatta and the Olympic Peninsula (GPOP) in the West Central District and the strategic centres of Blacktown (also associated with Western City), Norwest, Macquarie Park (also associated with Eastern City) and Rhodes.
Collaboration Area	A Collaboration Area is a designated place where a significant productivity, liveability or sustainability outcome can be better achieved through the collaboration of different levels of government and in some cases the private sector or landowners. It is also a place where the Commission will seek to lead or be a major player in facilitating the collaboration.
District centres	<p>District centres play a significant district role due to the presence of one or more of the following characteristics:</p> <ul style="list-style-type: none"> <li>• the scale of retail activity, generally over 50,000 square metres of floor space</li> <li>• the presence of health and education facilities that serve the district and the local community</li> <li>• the level of transport services</li> </ul> <p>District centres also generally have between 5,000 to 10,000 jobs</p>
Eastern City	The metropolis of three cities includes the established Eastern City, which spans the North, Central and South Districts and the strategic centres of Northern Beaches Hospital, Macquarie Park (also associated with Central City), Chatswood, St Leonards, North Sydney, Sydney City, Randwick Health and Education, Green Square-Mascot, Sydney Airport, Port Botany and Kogarah.
Employment Lands Development Program	The Employment Lands Development Program provides information on planning for employment lands and business parks across metropolitan Sydney and is administered by the Department of Planning and Environment. The Program produces an annual report on the supply of and demand for employment lands.
Greater Parramatta	Greater Parramatta includes Parramatta City, and the precincts of Westmead, Parramatta North, Rydalmere and Camellia.
Greater Parramatta and the Olympic Peninsula (GPOP)	Greater Parramatta and the Olympic Peninsula (GPOP) is the first Collaboration Area of the Commission. GPOP spans 13 kilometres east-west from Strathfield to Westmead and seven kilometres north-south from Carlingford to Lidcombe and Granville and includes the strategic centres of Greater Parramatta and Sydney Olympic Park. The Parramatta River flows east through the heart of GPOP and the planned Parramatta Light Rail forms the GPOP spine.
Greater Sydney	Greater Sydney is defined as the 33 local government areas of Bayside, Blacktown, Blue Mountains, Burwood, Camden, Campbelltown, Canada Bay, Canterbury-Bankstown, Cumberland, Fairfield, Georges River, Hawkesbury, Hornsby, Hunters Hill, Inner West, Ku-ring-gai, Lane Cove, Liverpool, Mosman, Northern Beaches, North Sydney, Parramatta, Penrith, Randwick, Ryde, Strathfield, Sutherland, The City of Sydney, The Hills, Waverley, Willoughby, Wollondilly and Wollahra.

Term	Draft District Plan definition
Greater Sydney Dashboard	The Greater Sydney Dashboard will be an interactive web-based tool that will provide access to indicators for cross-District issues such as jobs and housing targets to assist decision-making. It will be used to gain insights from our collaborations and build on evidence already commissioned by various State agencies and councils. The Dashboard will also include a data store to assist decision-making and strategic planning.
Global Sydney	Global Sydney is the combination of the Western, Central and Eastern Cities.
Gross Domestic Product	Gross Domestic Product (GDP) is a measure of the size of a country's economy and productivity defined as the market value of all final goods and services produced in a country within a given period of time. (Source: Regional Development Australia, Sydney Metropolitan Region Economic Baseline Assessment Update, Final, July, 2013)
Gross Value Added	Gross Value Added is the measure of the value of goods and services in a particular area.
Health and education jobs	Health and education job categories are: Education; Health Care; and Social Assistance based on the Australian and New Zealand Standard Industrial Classification (ANZSIC) 2006 used by the Australian Bureau of Statistics.
Health and education super precincts	Health and education super precincts are important locations for knowledge-intensive jobs, innovation and service delivery. They contain Greater Sydney's most important higher education and specialist health institutions and are assets that create significant opportunity to drive economic prosperity and social wellbeing.
Housing market areas	Greater Sydney's 18 housing market areas are based on research by the City Futures Research Centre at the University of New South Wales that identified that approximately 82% of all household moves made in Greater Sydney are within 15 kilometres of their previous home.
Industrial jobs	Industrial job categories are: Agriculture, Forestry and Fishing; Mining; Manufacturing; Electricity, Gas, Water and Waste Services; Wholesale Trade; and Transport, Postal and Warehousing based on the Australian and New Zealand Standard Industrial Classification (ANZSIC) 2006 used by the Australian Bureau of Statistics.
Knowledge-intensive jobs	Knowledge-intensive job categories are: Information, Media and Telecommunications; Financial and Insurance Services; Rental, Hiring and Real Estate Services; Professional, Scientific and Technical Services; and Public Administration and Safety based on the Australian and New Zealand Standard Industrial Classification (ANZSIC) 2006 used by the Australian Bureau of Statistics.
Local centres	Local centres vary in size from a few shops on a corner to a vibrant main street. They are on a smaller scale than district centres and generally serve the local population.
Local Environmental Plan	A Local Environmental Plan (LEP) is a statutory spatial plan which comprises planning controls that are typically the main mechanism for determining the type and amount of development that can occur on a parcel of land. In the Greater Sydney Region, LEPs can be made by the Minister for Planning or the Greater Sydney Commission.

Term	Draft District Plan definition
Metropolitan Rural Area	The Metropolitan Rural Area is the non-urban area within the Greater Sydney Region. It includes rural towns and villages, farmland, floodplains, national parks and areas of wilderness. Rural towns and villages are distinct from urban areas in that they provide mainly for local growth needs, as distinct from the needs of the broader Greater Sydney Region. The Metropolitan Rural Area creates a rural and bushland backdrop to Sydney and will be managed to balance local growth needs with environmental protection, resource management, agriculture, tourism and culture, research activity, military uses and community safety.
Parramatta City	Parramatta City covers the central business district of Parramatta.
Planning controls	Planning controls are the combination of land use zones and development standards that control the use and built form of development. Development standards may limit height, density, set back from the road or property boundary and lot size for development or subdivision.
Priority growth areas	The Priority growth areas of Greater Sydney identified by the NSW Government as major greenfield development areas. Information about Priority Growth Areas is available on the Department of Planning and Environment's website.
Priority Precincts	Priority Precincts are areas that the Minister for Planning considers have a wider social, economic or environmental significance for the community or have redevelopment potential on a scale that is important in implementing the State's planning objectives. Priority Precincts are envisaged as larger areas, usually made up of multiple land holdings, capable of delivering significant additional growth and requiring coordination from State and local government to realise their potential.
Population-serving jobs	Population-serving job categories are: Retail Trade; Accommodation and Food Services; Arts and Recreation Services; Construction; and Other Services based on the Australian and New Zealand Standard Industrial Classification (ANZSIC) 2006 used by the Australian Bureau of Statistics.
State Environmental Planning Policy	A State Environmental Planning Policy is a statutory plan, typically prepared by the Department of Planning and Environment and endorsed by the Minister for Planning. It can be a spatial plan for particular land in NSW, and/or it can set policy which applies to particular land or all land in NSW.
Strategic centres	<p>Strategic centres have one or more of the following characteristics:</p> <ul style="list-style-type: none"> <li>• a higher proportion of knowledge-economy jobs, principally relating to the presence of major hospitals, tertiary education institutions, stand-alone office development or a combination of these</li> <li>• the presence of existing or proposed major transport gateways</li> <li>• a major role in supporting the increased economic activity of the Eastern, Central or Western Cities.</li> </ul> <p>Strategic centres also tend to have over 20,000 jobs:</p>
Sydney City	Sydney City includes the contiguous areas of Sydney CBD, Barangaroo, Darling Harbour, Pyrmont, The Bays Precinct, Camperdown-Ultimo Health and Education, Central to Eveleigh, Surry Hills and Sydney East.



Term	Draft District Plan definition
Transport gateways	Transport gateways are locations with major ports or airports, and their surrounding precincts. They perform an essential and ongoing role to connect Sydney with locations across Australia and the world. Transport gateways are vital to Sydney's prosperity and often support large concentrations of complementary business activity and employment.
Urban Feasibility Model	The Urban Feasibility Model is a strategic planning tool developed by the Department of Planning and Environment which calculates the potential of an investigation area to deliver housing, based on planning and development controls and economic feasibility, framed by development costs and the local housing market.
Western City	The metropolis of three cities includes the emerging Western City focused on the proposed Western Sydney Airport. The Western City will encompass the West and South West Districts and include the strategic centres of Penrith, Liverpool, Campbelltown-Macarthur and Blacktown (also associated with Central City).



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