



COLLABORATION AREA

Liverpool Place Strategy



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Acknowledgement of Country

The Greater Sydney Commission acknowledges the traditional owners of the lands that include the Liverpool Collaboration Area and the living culture of the traditional custodians of these lands.

The Commission recognises that the traditional owners have occupied and cared for this Country over countless generations and celebrates their continuing contribution to the life of Greater Sydney.

List of shortened terms

ANSTO	Australian Nuclear Science and Technology Organisation
RMS	Roads and Maritime Services
SWSLHD	South Western Sydney Local Health District
UOW	University of Wollongong
UNSW	University of New South Wales
WSU	Western Sydney University

Foreword

Roderick Simpson
Environment Commissioner



The Liverpool Collaboration Area Place Strategy is a first for the planning of this great place – an effort to bring together all the different stakeholders involved in Liverpool, and building on Council’s strong foundation, to set out a vision, priorities and actions that will improve quality of life as Liverpool grows and changes.

We’ve identified through our Collaboration Area process that we must plan for and build infrastructure to keep pace with population growth – without this, Liverpool will not offer the quality lifestyle or environment that people deserve.

We’re putting the Georges River at the heart of our thinking – it’s a great asset and we need to use it better. The Place Strategy sets out actions that will make it easier for people to access the Georges River, connect green links, and add to the street tree canopy. We’ve also considered better water management activities and new ways for urban renewal projects to create more sustainable places for the future.

As Liverpool transforms, we see great potential in the development of economic assets and jobs creation – from the health and education precinct and a greater diversification of businesses in the CBD, to the equine activities around Warwick Farm or the existing industrial lands.

This Strategy recognises that the responsibility for creating great places does not rest with any one organisation – we’ve already created a new way of working within government through the Collaboration Area process, and we’re convinced this is key to better decision-making.

In this way, we see the Place Strategy as a roadmap that guides collaboration, prioritises investment and brings together outstanding expertise and local knowledge as Liverpool transforms.



1

Introduction

This Liverpool Collaboration Area Place Strategy was collectively designed by the stakeholders involved in planning for the future of the Collaboration Area. Specifically, it:

- establishes a vision for the Liverpool Collaboration Area, based on the community's vision expressed in *Our Home Liverpool 2027* and the *Western City District Plan*
- identifies impediments and opportunities
- sets priorities for the Collaboration Area
- identifies actions to deliver the vision.

This Place Strategy will inform public and private policy and investment decisions by identifying and recognising complex, place-specific issues. It has brought multiple and diverse stakeholders together to identify the complexity and interrelatedness of various challenges and opportunities, and allow priorities for growth.

For these reasons, *A Metropolis of Three Cities* identifies Liverpool as a Collaboration Area. Collaboration Areas are a place-based, multi-stakeholder approach to solving complex urban issues, that the Commission conducts over 12 months. The Place Strategy sets a pathway to realising Liverpool's metropolitan role.

1.1 Liverpool's complex urban challenges

Growing the Liverpool CBD and surrounds into a metropolitan centre, with jobs, a mix of dwellings and a level of infrastructure appropriate to its metropolitan role, requires a deliberate and coordinated effort to resolve impediments to growth and leverage opportunities.

Challenges include:

- Market interest in new residential development significantly exceeds NSW Government forecasts, with planning proposals being assessed by Liverpool City Council equating to more than 30,000 dwellings, compared to the NSW Government forecast of 7,800 dwellings to 2036.
- A lack of sequencing and coordination associated with the planning proposals makes it difficult for infrastructure agencies to respond effectively to this growth.
- An extensive and diverse range of government and private stakeholders with varying objectives for the area must coordinate their efforts to help Liverpool develop as a metropolitan city.
- The rail and bus network requires higher frequency and speed of service to meet the needs of a metropolitan city.
- The constrained road network limits amenity and future growth.
- There is pressure to convert existing employment land close to the centre into predominantly residential uses.
- Local amenity, including the Georges River, needs to be improved.

With these challenges comes many opportunities:

- Liverpool City Council is an active leader in the Collaboration Area.
- Liverpool is less than 20 kilometres from the new Western Sydney Airport, and is proposed to have direct access from its opening in 2026.
- As the home to WSA Co (the Western Sydney Airport Corporation) and Western Sydney Investment Attraction Office, Liverpool will be an edge city for the new airport.

- Liverpool Innovation Precinct is strengthening with the recent opening of University of Wollongong and Western Sydney University vertical campuses, and \$740 million funding to redevelop the Liverpool Health and Academic Precinct.
- Government assets that could be leveraged to meet infrastructure needs, and enhance liveability, sustainability and productivity outcomes, include Liverpool and Warwick Farm railway stations, Liverpool bus interchange, a number of primary and high schools, TAFE, Land and Housing Corporation properties and the Sydney Water recycling facility.
- The grid street pattern provides a strong foundation for a permeable and legible city environment.
- Large-scale redevelopment, coupled with Sydney Water's recycling facility, offers opportunities for sustainability initiatives such as recycled water and stormwater management across the Collaboration Area.
- A healthy and enhanced Georges River will improve liveability and sustainability.

1.2 Places in the Liverpool Collaboration Area

The places that make up the Liverpool Collaboration Area are identified and described below, and illustrated in Figure 1.

Orange Grove Road is an employment precinct outside Liverpool City Centre, separated by busy roads and beyond walking distance of the railway stations.

Liverpool City Centre – Core is the primary commercial centre for Liverpool and a mixed use central business district accommodating high-order retail, commercial office, government services, schools and TAFE, and residential apartments.

Liverpool City Centre – Frame is a mixed use area that contains Liverpool Hospital, schools, and high density residential development.

Hargrave Park is a low rise residential area to the north of the Liverpool City Centre and Hume Highway, with a large proportion of Land and Housing Corporation dwellings. There are some pockets of mid-rise attached dwellings. The area is traversed by two creeks (Cabramatta and Brickmakers), which provide generous open space corridors. There are two schools and a small community centre, and an underpass provides access to the Warwick Farm railway station.

Sapho Road is an employment precinct that contains predominantly urban services, including a large car sales yard.

Equine Precinct accommodates the large Australian Turf Club (ATC) racecourse and associated facilities including the Inglis Hotel.

Munday Street is a mixed use area that is predominantly zoned for low density residential development and accommodates horse stabling and training facilities, interspersed with homes. The area is impacted by industrial traffic from the industrial facilities to the south (Scrivener Street) and is detached from the Liverpool City Centre by the rail corridor.

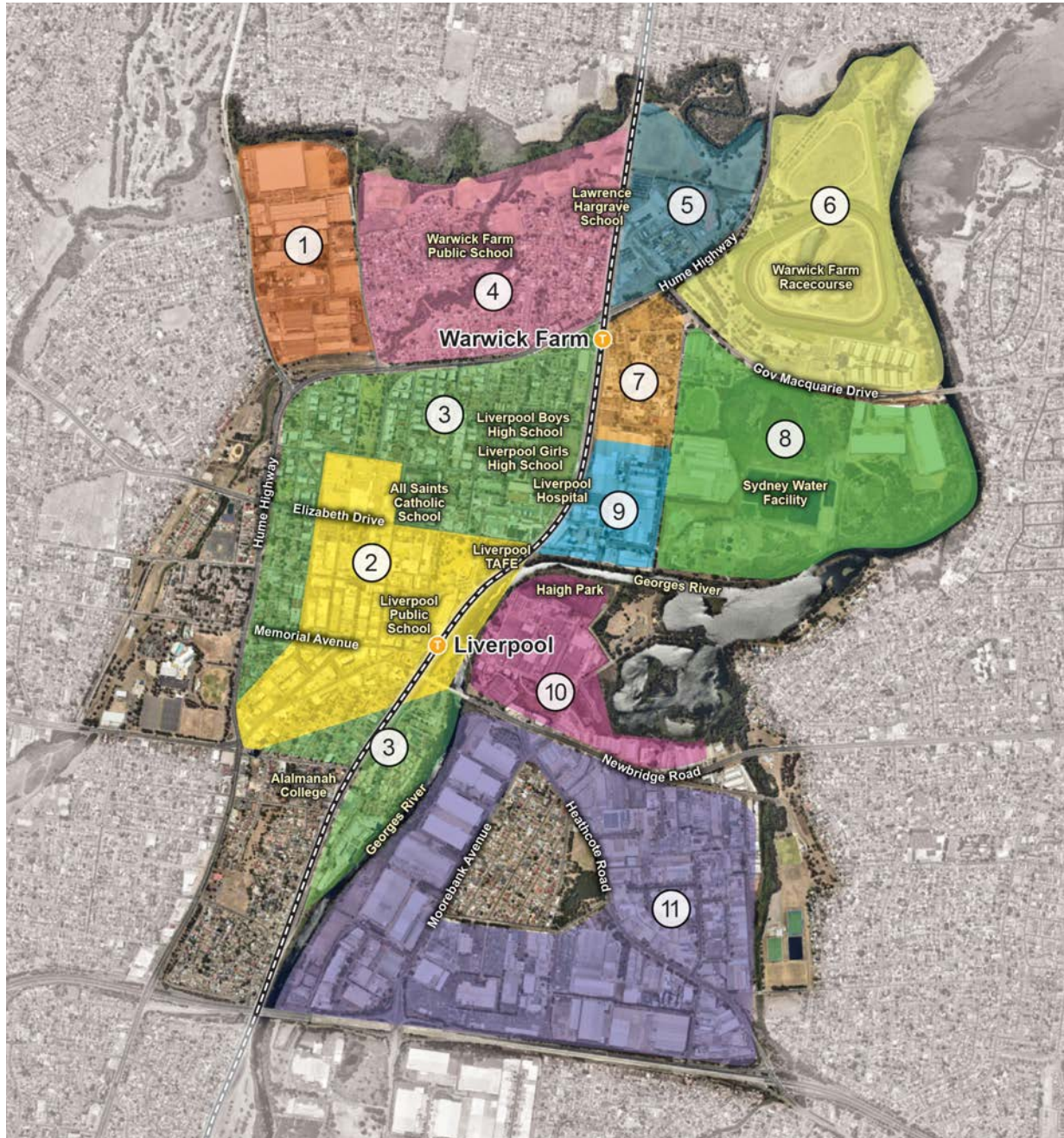
Eco/Utility contains the Sydney Water Liverpool Water Recycling Facility and open space.

Scrivener Street is a thriving industrial precinct that also contains back-of-house hospital facilities and offices.

Georges River North is an established industrial precinct with frontage to the Georges River to the east of the Liverpool railway station. Newbridge Road includes smaller properties that support urban service industries. The area is prone to flooding.

Georges River South is a predominantly industrial precinct that surrounds an established low density residential neighbourhood. The industrial sites are generally smaller apart from the lots located between Moorebank Avenue and the river. The area is cut off from the Liverpool City Centre by roads, the river and distance.

Figure 1: Places in the Liverpool Collaboration Area



① Orange Grove Road	⑤ Sapho Road	⑨ Scrivener Street
② Liverpool City Centre – Core	⑥ Equine Precinct	⑩ Georges River North
③ Liverpool City Centre – Frame	⑦ Munday Street	⑪ Georges River South
④ Hargrave Park	⑧ Eco / Utility	



2

The vision for the Liverpool Collaboration Area

By 2036, Liverpool is a rejuvenated river city, offering diverse and growing residential and employment opportunities. Major health, education and retail precincts, and a network of open spaces and parklands alongside the Georges River, create a rich mix of jobs and workplaces, public spaces, shops and entertainment.

2.1 Shared objectives to achieve the vision

The Liverpool Collaboration Area stakeholder group has agreed to seven shared objectives to guide Liverpool's growth and change to help achieve the vision. These objectives act as markers to test that future projects build towards the realisation of the vision.

Liverpool is a place ...

- with a distinctive and welcoming character where people want to live, work, invest, study and play, and the premier edge city for Western Sydney Airport
- that is connected by coordinated transport and supported by quality infrastructure
- with a vibrant, mixed use, walkable and connected City Centre with activity and intensity both day and night
- undergoing rapid economic growth with outstanding job opportunities underpinned by global leadership in health, education, research and innovation
- that is a true river city which embraces a healthy Georges River, connected to areas of parkland and open space
- differentiated by collaboration, featuring a great number of shared facilities, co-location opportunities and incidental opportunities for interaction
- with diverse housing - a range of types, sizes, tenure and price points from executive housing through to key workers and students.

2.2 Activities in the Collaboration Area

Liverpool City Centre – Core – the primary commercial centre for Liverpool and a mixed use central business district that accommodates high-order retail, commercial office, university campuses, government services and residential apartments with activated ground floor uses.

Diverse residential – a mix of housing densities and typologies, from affordable to executive housing, from low to high density, retaining or enhancing the current proportion of affordable housing.

High density residential – high density residential and mixed use in close proximity to public transport services and the city centre core

Equine – currently a mixed use area dominated by the presence of the Warwick Farm Racecourse with some residential development mixed with horse stabling and training facilities. In future, this will include more activities associated with the horse-racing industry, including horse sales, tourist accommodation, training and veterinarian services.

Eco/Utility/Recreation – a recreation area co-located with water services provided by Sydney Water, providing passive and active recreation areas connected to the river.

Business development – a light industrial/commercial zone separated from the city centre by major roads that allows a broad range of employment uses but excludes residential uses.

Industrial – viable light industrial and urban services uses that provides for future employment growth and leverages the proximity to the Moorebank Intermodal Terminal and Western Sydney Airport, and access to the M5 Motorway.

Innovation/Research/Health/Advanced manufacturing – a high-tech, transit-oriented, advanced manufacturing business park that leverages the growth of the health, education and equine sectors, excluding residential development.

Mixed use – a mixture of commercial, retail, residential and community uses that provide sustainable employment, that is complementary to, and not in competition with, the commercial core.

2.3 Understanding the challenges

The Collaboration Area process has explored and uncovered the challenges and opportunities facing Liverpool through the following strategic plans. These documents should be consulted alongside this Place Strategy to understand the wider policy context for the Collaboration Area's future:

- *A Metropolis of Three Cities*: the NSW Government's 40-year vision and 20-year plan to rebalance growth and deliver opportunities and benefits more equally and equitably to residents across Greater Sydney
- *Future Transport 2056*: focusing on the decisions the NSW Government needs to make now to address Greater Sydney's growth and change over the next 40 years
- *State Infrastructure Strategy 2018-2038*: sets out the NSW Government's priorities for the next 20 years, and, combined with *Future Transport Strategy 2056* and *A Metropolis of Three Cities* brings together infrastructure investment and land-use planning for cities and regions.
- *Western City District Plan*: translating the metropolitan-level objectives sets out in *A Metropolis of Three Cities* to inform local planning over the next 20 years.
- *Western Sydney City Deal*: a 20-year agreement between the Australian and NSW governments and eight Western Sydney councils to deliver major transformation in Sydney's outer west.

Strategies led by Liverpool City Council that have informed the Place Strategy include:

- Liverpool City Council's *Our Home Liverpool 2027* and *Economic Development Strategy 2013 – 2023*
- Amendment 52 to Liverpool Local Environmental Plan (LEP) 2008
- Draft Georges River Structure Plan
- Draft Warwick Farm Precinct Strategy
- Proponent-led planning proposals.

Stakeholders also provided valuable input at nine workshops between April 2017 and March 2018.

Figure 2: A Place Strategy for Liverpool



3

Summary of priorities and actions

	Connectivity			Liveability	
Priorities:	Priority 1: Plan for movement and place functions in Liverpool City Centre, improve accessibility and walkability, and reduce congestion in and around the centre	Priority 2: Improve public transport to and from Liverpool	Priority 3: Improve digital connectivity	Priority 4: Create and renew great places for people	Priority 5: Provide social and civic infrastructure for current and future generations
Actions:	<p>Action 1: Develop an integrated transport strategy that applies movement and place and addresses the transport challenges associated with delivering the vision, shared objectives and growth profile</p> <p>Action 2: Redevelop Liverpool Station and bus interchange with mixed use development; easier pedestrian access to bus services; a pedestrian, cycle and public transport crossing of the Georges River and a better interface with the river and open space</p> <p>Action 3: Develop a parking strategy which reduces car dependency within the Liverpool City Centre and periphery</p>	<p>Action 4: Plan for city-shaping and city-serving public transport corridors, and increased speed and frequencies to improve connections and reduce travel times to surrounding areas, Western Sydney Airport and Badgerys Creek Aerotropolis, Greater Parramatta and the Harbour CBD</p> <p>Action 5: Investigate future Metro connection to Bankstown through the integrated transport strategy</p>	<p>Action 6: Prioritise the connection of high-speed broadband throughout the Collaboration Area</p> <p>Action 7: Position Liverpool Collaboration Area through the Western City Digital Action Plan to be a pilot for the roll-out of a 5G strategy</p>	<p>Action 8: Deliver great places by prioritising a people-friendly public realm and open spaces; providing fine grain and diverse urban form; a diverse land use and housing mix, high amenity and walkability; and recognising and celebrating the character of the place and its people</p> <p>Action 9: Planning Proposals must demonstrate consistency with the sequencing of infrastructure delivery</p> <p>Action 10: Investigate the potential for master planned precincts (such as NSW Land and Housing Corporation properties in Warwick Farm and rezoned land) to improve and increase social and affordable housing above the targets set out in <i>A Metropolis of Three Cities</i></p>	<p>Action 11: Utilise existing school sites (Figure 6) to meet demand for education and other community uses, and coordinate early identification of sites for new primary and secondary schools, including the potential for specialised education streams complementing the local TAFE and university offerings</p> <p>Action 12: Identify and deliver new and enhanced social infrastructure including children's, youth, health and aged care services, libraries, and cultural, community and civic facilities within current and future people-centred precincts of the Collaboration Area</p> <p>Action 13: Investigate the establishment of a metropolitan-scale cultural/entertainment facility in the Collaboration Area</p>
Immediate imperatives <ul style="list-style-type: none"> Action 1: Develop an integrated transport strategy that applies movement and place and addresses the transport challenges associated with delivering the vision, shared objectives and growth profile (led by Transport for NSW/ Roads and Maritime Services) Action 23: update and complete the Georges River, Brickmakers Creek and Liverpool CBD Overland Flood Studies and prepare floodplain risk management plans Action 24: Prepare a floodplain constraints categorisation study (led by Liverpool City Council) and a flood evacuation study (led by State Emergency Service) Action 34: Establish an enduring Collaboration Area Partnership that facilitates the implementation of stakeholder actions and builds on existing governance structures (led by Liverpool City Council and the Greater Sydney Commission). 					

Productivity		Sustainability		Governance
<p>Priority 6: Support the growth of critical employment hubs in the Collaboration Area</p>	<p>Priority 7: Support the role and function of employment and urban services land</p>	<p>Priority 8: Develop a network of high quality open space linked by the Greater Sydney Green Grid and invest in improvements to the Georges River and its foreshores</p>	<p>Priority 9: Create a resilient place</p>	<p>Priority 10: Establish precinct-level governance to deliver the vision</p>
<p>Action 15: Undertake precinct-level planning to integrate the health and academic precinct with the City Centre – Core, Warwick Farm and Georges River</p> <p>Action 16: Leverage the Investment Attraction Fund where appropriate to support the growth of Liverpool</p> <p>Action 17: Co-locate smart jobs in emerging industries such as advanced manufacturing, robotics, med-tech and fabrication within or adjacent to the health and academic precinct and align with increased translational research capabilities</p> <p>Action 18: Increase the university and TAFE presence and align with relevant industry specialisations and new smart jobs in sectors such as engineering, med-tech robotics, agribusiness, health and aerospace</p> <p>Action 19: Provide pathways for secondary school students to higher education by integrating training related to relevant industry specialisations</p> <p>Action 20: Investigate opportunities to increase public and equine access through Sydney Water's water recycling facility as part of a network of high quality open space linked to the Greater Sydney Green Grid</p>	<p>Action 21: Protect employment land on the western side of the Georges River (Scrivener Street and Munday Street) to support health-related advanced manufacturing, med-tech and educational facilities</p> <p>Action 22: Retain and protect industrial land in the Orange Grove Road and Georges River South precincts</p>	<p>Action 23: Update and complete the Georges River, Brickmakers Creek and Liverpool CBD Overland Flood Studies and prepare floodplain risk management plans</p> <p>Action 24: Prepare floodplain constraints categorisation study and a flood evacuation study</p> <p>Action 25: Improve the quality, environmental amenity and useability of the riverbank to respond to uses associated with precinct renewal and increase walking trails and open space, in accordance with sustainable urban water management principles</p> <p>Action 26: Develop a linear parkland and a continuous network of public open spaces aligned with Green Grid priorities along the Georges River that links the City Centre with the Sydney Water site, Warwick Farm, Chipping Norton Lakes and the Holsworthy Defence site</p> <p>Action 27: Utilise and enhance the Brickmakers Creek open space corridor, including the designated future transport corridor</p> <p>Action 28: Implement Green Grid principles as part of the Place Strategy implementation</p>	<p>Action 29: Develop a demonstration project that increases green open space and tree canopy coverage in line with the NSW Government's urban tree canopy target to reduce heat island effect and temperature fluctuations</p> <p>Action 30: Prioritise low-carbon initiatives in future developments such as adaptive building designs (for example, car park conversion opportunities), prioritisation of public transport investment, precinct-level car parking strategies and energy-efficient and energy generating precinct design</p> <p>Action 31: Develop precinct-wide integrated water management strategy exploring opportunities for innovative resource management (including water and energy), public access, and eco-development to integrate Sydney Water's water recycling facility seamlessly into the surrounding city, river, and community</p> <p>Action 32: Encourage precinct-level renewable energy systems in new developments to reduce carbon emissions</p> <p>Action 33: Investigate and implement innovative initiatives to address heat island effect</p>	<p>Action 34: Establish an enduring Collaboration Area Partnership that facilitates the implementation of stakeholder actions and builds on existing governance structures</p> <p>Action 35: Prepare an implementation plan for this Place Strategy</p>

4

A collaborative process

The Greater Sydney Commission established the Liverpool Collaboration Area stakeholder group in April 2017. The Commission chairs the stakeholder group, which includes:

- Liverpool City Council
- Department of Premier and Cabinet
- Health Infrastructure NSW
- NSW Ministry of Health
- South Western Sydney Local Health District including Liverpool Hospital – (SWSLHD)
- Transport for NSW, including Roads and Maritime Services
- Schools Infrastructure NSW
- Western Sydney University
- University of Wollongong
- TAFE NSW
- Department of Planning and Environment, including Government Architect NSW and Office of Open Space and Parkland
- Department of Primary Industries
- Department of Industry
- Family and Community Services
- Sydney Water
- Office of Environment and Heritage
- State Emergency Service
- Office of Sport

This stakeholder group works under a Collaboration Area Agreement that sets out the shared vision and purpose, outputs and membership of the Liverpool Collaboration Area. The Liverpool Collaboration Area stakeholder group:

- agreed on a vision and seven shared objectives
- identified existing urban character and specialisations
- identified infrastructure, current capacity, and gaps and roadblocks to future growth
- considered where future jobs and housing might be located and the types of jobs and housing that could be available in Liverpool
- identified potential infrastructure and other projects to address future growth needs including road upgrades, health services, public transport, schools and open space
- identified opportunities to improve liveability and environmental performance.

4.1 Liverpool Collaboration Area Growth Profile

To guide a coordinated response to development pressures in the Collaboration Area, Liverpool City Council prepared three alternative growth profiles, based on its strategic planning work and recent development trends including planning proposals.

- **Growth Profile 1 – Regional City** is based on the continuation of recent growth trajectory for dwellings and jobs, which pre-dates major investment announcements including the Western Sydney Airport, Western Sydney City Deal and growth in the health and education precinct.
- **Growth profile 2 – Metropolitan City** is based on the realisation of Liverpool as a key city in the Western Parkland City, where the increase in new homes is balanced by an increase in new jobs underpinned by the Western Sydney Airport, and health, education, advanced manufacturing and innovation jobs. The Georges River becomes a focal point for the City Centre and provides opportunities for recreation and improved amenity.
- **Growth profile 3 – Satellite City** reflects the market-led opportunities to increase dwelling densities across the Collaboration Area, including on land currently used for employment.

The stakeholder group undertook two separate assessments of the growth profiles. The first was a rapid assessment of each profile to determine infrastructure implications, as facilitated by the University of New South Wales City Futures Research Centre. The key findings of the rapid infrastructure assessment were:

- Each of the growth profiles exceeds the current common planning assumptions forecast for Liverpool
- Existing transport constraints need to be addressed before further growth can occur
- Further work is required to determine flooding and evacuation risks on some land

- Health, education and innovation jobs need to increase
- Local amenity must improve
- Determining an appropriate mix of development will allow for sufficient open space, schools and other essential urban services
- The scale of growth and proximity to the Sydney Water recycling facility presents opportunities to implement sustainability initiatives such as opportunities for recycled water and stormwater management.

Overall, for all growth profiles, significant investment in transport and health infrastructure and schools, community, open space, sport and recreation facilities will be needed. State agencies have provided high-level advice on the policy and infrastructure implications of the growth profile (see Appendix A).

A second assessment used a multi-criteria analysis to determine how the growth profiles aligned to the seven shared objectives, *A Metropolis of Three Cities* and the *Western City District Plan*. The results indicated that Growth Profiles 1 and 3 exacerbate existing imbalances in access to jobs and other services, and would reinforce the Eastern Harbour City as Greater Sydney's key node for jobs and transport connections.

The collaborative process concluded that a profile providing **strong employment growth** in Liverpool is preferred, requiring retention of employment lands in strategic locations.

The **preferred growth profile 2 – Metropolitan City** anticipates that the Collaboration Area could be home to up to **16,200 new jobs** and have potential capacity for up to **18,800 new dwellings by 2036**, making a significant contribution towards Western Parkland City's population growth. In addition, Liverpool will host up to **15,000 tertiary students**.

5

Framework and response

To deliver on the vision and seven shared objectives, this Place Strategy proposes ten priorities and 35 actions. To align with *A Metropolis of Three Cities* and *Western City District Plan*, the priorities and actions are set around five themes:

- connectivity
- liveability
- productivity
- sustainability
- governance.

Four actions have been identified as immediate imperatives that must be completed prior to understanding the potential capacity and viability of different future land uses to respond to the identified challenges and issues. These actions are:

- **Action 1:** Develop an integrated transport strategy that applies movement and place and addresses the transport challenges associated with delivering the vision, shared objectives and growth profile (led by Transport for NSW/ Roads and Maritime Services and supported by Liverpool City Council)
- **Action 23:** update and complete the Georges River, Brickmakers Creek and Liverpool CBD Overland Flood Studies and prepare floodplain risk management plans
- **Action 24:** Prepare a floodplain constraints categorisation study (led by Liverpool City Council) and a flood evacuation study (led by State Emergency Service)

- **Action 34:** Establish an enduring Collaboration Area Partnership that facilitates the implementation of stakeholder actions and builds on existing governance structures (led by Liverpool City Council and the Greater Sydney Commission).

These actions will preferably be completed within six months of this Place Strategy's release. This will allow several planning proposals in the Liverpool Collaboration Area to be considered for Gateway Determination. The outcome of these studies will also determine the full potential for growth in jobs and dwellings in the Collaboration Area.

The Place Strategy uses the following terms to provide this guidance:

- **Priority:** the most important focus areas to progress *A Metropolis of Three Cities* and *Western City District Plan* as they apply to the Liverpool Collaboration Area
- **Outcome:** what the realised priority will achieve by 2036
- **Actions:** initiatives and projects that stakeholders will lead to realise the outcome.

These priorities, outcomes and actions are outlined in the following chapters. They should be considered in addition to those set out in *A Metropolis of Three Cities* and *Western City District Plan*. Current legislation and NSW Government-endorsed policies will apply to all projects and initiatives. The Place Strategy also identifies the next steps required to bring the vision to reality.

6

Connectivity – priorities and actions

6.1 Analysis of opportunities and impediments

The Liverpool Collaboration Area is well connected to the Western Parkland City and other strategic locations across Greater Sydney (Figure 3). Liverpool is approximately 20 kilometres from **Western Sydney Airport** and the emerging Badgerys Creek Aerotropolis.

Liverpool is connected to **ANSTO** by road and it is expected that research and industry links will strengthen as the Liverpool Health and Academic

Precinct matures. ANSTO leads Australia's nuclear medicine manufacturing capability and is a major supplier of nuclear medicine to hospitals and other research institutions.

Liverpool will be an important node in Sydney's **freight and logistics network** with links from the edge of the Collaboration Area connecting Port Botany and Moorebank Intermodal Terminal. Proximity to Western Sydney Airport will strengthen Moorebank industrial precinct as both develop.

Figure 3: Regional connections

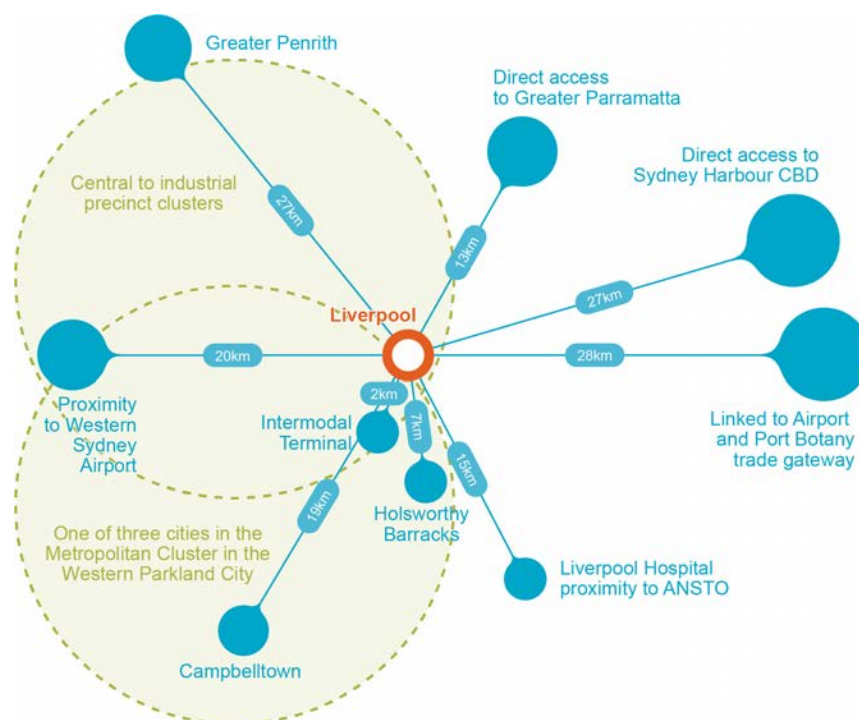
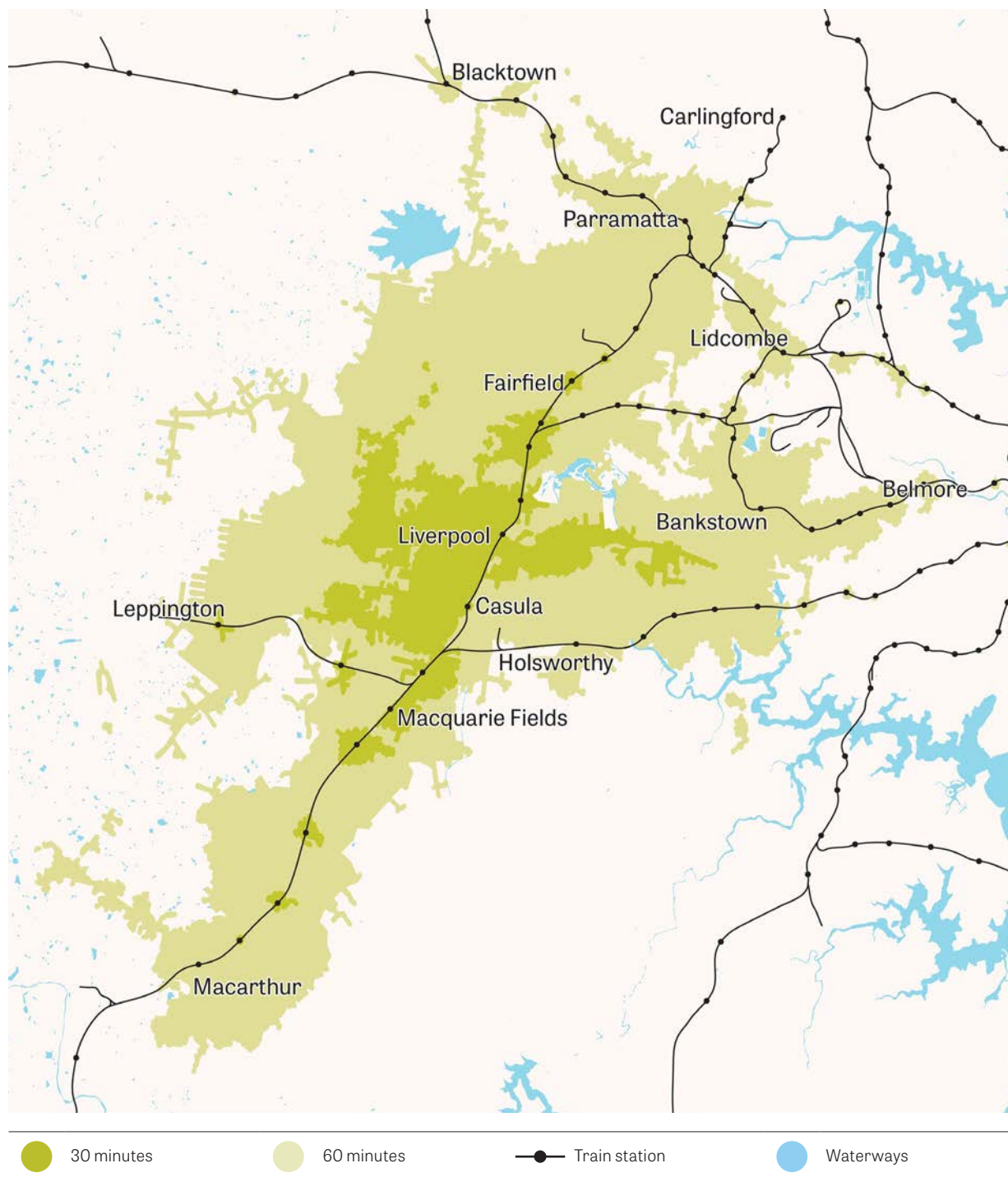


Figure 4: Sydney's population with 30 and 60 minutes of Liverpool, 2018 (Greater Sydney Commission)



High-speed broadband connectivity has the potential to improve access to health, education and other government services and contribute to a more economically and environmentally sustainable community. The City Deal includes the development of the Western City Digital Action Plan, which will set out a vision for information and communication technologies in the Western Parkland City. Liverpool could be a pilot centre for this initiative.

Liverpool is served by **passenger rail connections** on the T2 Inner West and Leppington Line, T3 Bankstown Line and T5 Cumberland Line. However, rail connections are slow and infrequent despite the 332 services and almost 30,000 passengers tapping either on or off at the Liverpool Transport Interchange each working day. In addition to heavy rail services, a **local and regional bus network** includes a dedicated bus priority service to Parramatta.

Approximately 142,000 people currently live within 30 minutes of Liverpool City Centre by public transport¹ (Figure 4). In comparison, metropolitan centres in the Eastern Harbour City have a higher population within 30 minutes, such as Randwick with over 257,000 people and Camperdown with 404,000 people.

Enhanced transport connectivity to other metropolitan cities including Campbelltown-Macarthur, Parramatta, Greater Penrith and Sydney CBD will support the growth Liverpool as a centre for employment.

The Collaboration Area adjoins, or is close to, **key arterial roads**: M5 Motorway, M7 Motorway, Hume Highway and the Cumberland Highway. Other major connections include Newbridge Road, Moorebank Avenue and Elizabeth Drive.

With **car being the dominant mode of travel** throughout both the local area and the district in general, major congestion impacts several major roads. Significant **through-traffic movements** include a key north-south movement connecting the M5 at Moorebank with the Hume and Cumberland Highways at Warwick Farm. This impacts the

performance of Moorebank Avenue, Newbridge Road and Bigge Street, particularly during peak periods.

Better **east-west and north-south connections** around Liverpool are required. Regional routes are currently too close to the centre and contribute to the traffic congestion that adversely impacts amenity.

Liverpool City Centre's **grid street pattern** and flat terrain suits sustainable modes of transport, such as walking and cycling. The extension of this grid north and east could grow and tie together the Collaboration Area's various precincts. However, only one crossing at Newbridge Road allows vehicle and pedestrian traffic to cross the Georges River. This limits the way people can move around the Collaboration Area and access different activities on either side of the river.

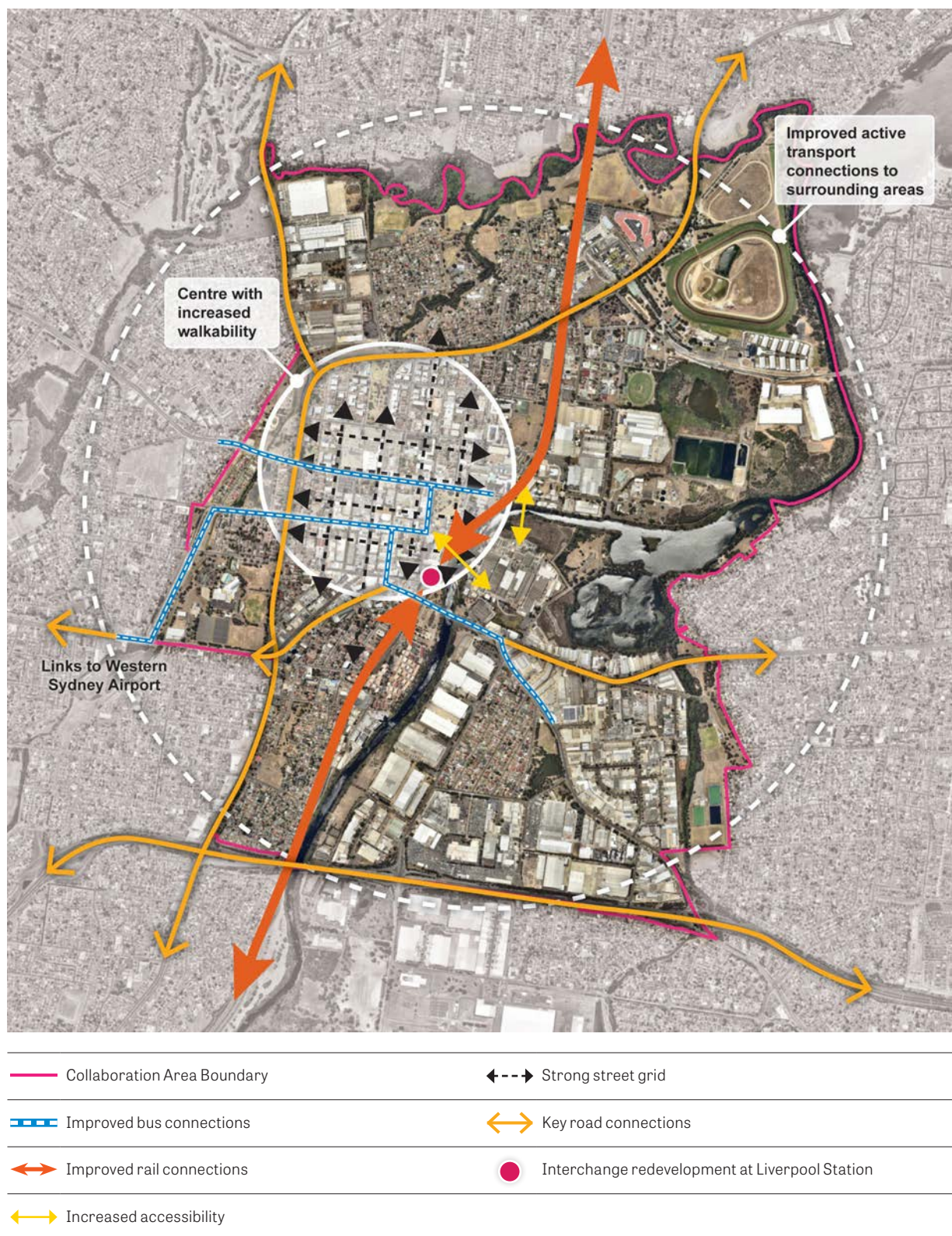
The ability for people to **walk or cycle** should be improved, with walking and cycling connections within the City Centre-core, to the west, across major roads and the river. To support a city centre that encourages and facilitates walking, cycling and active mobility, Council is implementing a Smart Pedestrian project co-funded by the Australian Government to provide data on people and vehicles that will be shared for the integrated transport strategy and as baseline information for future decision making.

The commitments made through the *Western Sydney City Deal* and identified in *Future Transport 2056* will in the longer term see direct access to and between the Liverpool Collaboration Area and Western Sydney Airport through a rapid bus service, solidifying Liverpool's connections to the airport during construction and once operational.

There could, in the future, be opportunities to enhance connections to the airport via rapid transit service and the growing Sydney Metro network.

¹ Travel catchments by all modes of public transport to arrive at Liverpool Station at 08:30am on a normal weekday
Source TfNSW/Census/Greater Sydney Commission

Figure 5: Collaboration Area connectivity opportunities and assets



6.2 Connectivity priorities

As well as the priorities and actions below, all stakeholders can champion better connectivity in the Liverpool Collaboration Area through approaches and initiatives that:


- use best-practice design and universal access principles, and improve walking and cycling connections including through-site links and use of laneways
- respond to the different movement and place functions by managing through traffic more effectively
- plan for future public transport links to the Western Sydney Airport and the proposed North-South Rail Link through the Western Economic Corridor.

Priority 1

Plan for movement and place functions in Liverpool City Centre, improve accessibility and walkability, and reduce congestion in and around the centre

Outcome

Walking and cycling links create an accessible city centre and connect major transport hubs and surrounding precincts in the Collaboration Area. Fewer people use their cars to commute to work in the commercial core, and congestion is relieved along major road corridors leading to and surrounding Liverpool.


 Actions	Primary stakeholder	Supporting stakeholder
Action 1: Develop an integrated transport strategy that applies movement and place and addresses the transport challenges associated with delivering the vision, shared objectives and growth profile	Transport for NSW	Liverpool City Council, RMS
Action 2: Redevelop Liverpool Station and bus interchange with mixed use development; easier pedestrian access to bus services; a pedestrian, cycle and public transport crossing of the Georges River; and a better interface with the river and open space	Transport for NSW	Liverpool City Council, private development
Action 3: Develop a parking strategy which reduces car dependence within the Liverpool City Centre and periphery	Liverpool City Council	Transport for NSW, RMS, Department of Planning and Environment

Priority 2

Improve public transport to and from Liverpool

Outcome

More people can access jobs and services in the Liverpool City Centre within 30 minutes by public transport from their homes, further strengthening Liverpool's role as a metropolitan city.

 Actions	Primary stakeholder	Supporting stakeholder
Action 4: Plan for city-shaping and city-serving public transport corridors, and increased speed and frequencies to improve connections and reduce travel times to surrounding areas, Western Sydney Airport and Badgerys Creek Aerotropolis, Greater Parramatta and the Harbour CBD	Transport for NSW	RMS
Action 5: Investigate future Metro connection to Bankstown through the integrated transport strategy	Transport for NSW	Infrastructure NSW, Sydney Metro Authority

Priority 3

Improve digital connectivity

Outcome

Liverpool is digitally connected to support business and research to increase competitiveness.

 Actions	Primary stakeholder	Supporting stakeholder
Action 6: Prioritise the connection of high-speed broadband throughout the Collaboration Area	NBN Co	Infrastructure NSW
Action 7: Position Liverpool Collaboration Area through the Western City Digital Action Plan to be a pilot for the roll-out of a 5G strategy	City Deal Coordination Group	Telecommunication service providers

7

Liveability – priorities and actions

7.1 Analysis of opportunities and impediments

The Collaboration Area is home to approximately 22,000 people, with 1,177 new dwellings constructed in the last five years. A **growing and diverse population** with more families living in high-quality apartments will underpin the creation of new precincts and communities based on contemporary urban planning principles, such as those identified in *Better Placed*².

The **Georges River** bisects the Collaboration Area, with industrial land predominant along the eastern banks. Re-using some of this land for new workplaces, residential areas and community uses would give more people access to the riverfront. It would also place the river at the heart of the city and create a point of difference between Liverpool and other centres in Greater Sydney.

If Liverpool is to be positioned as a metropolitan city in south west Sydney, it must be a place that offers **high quality places, spaces and facilities**.

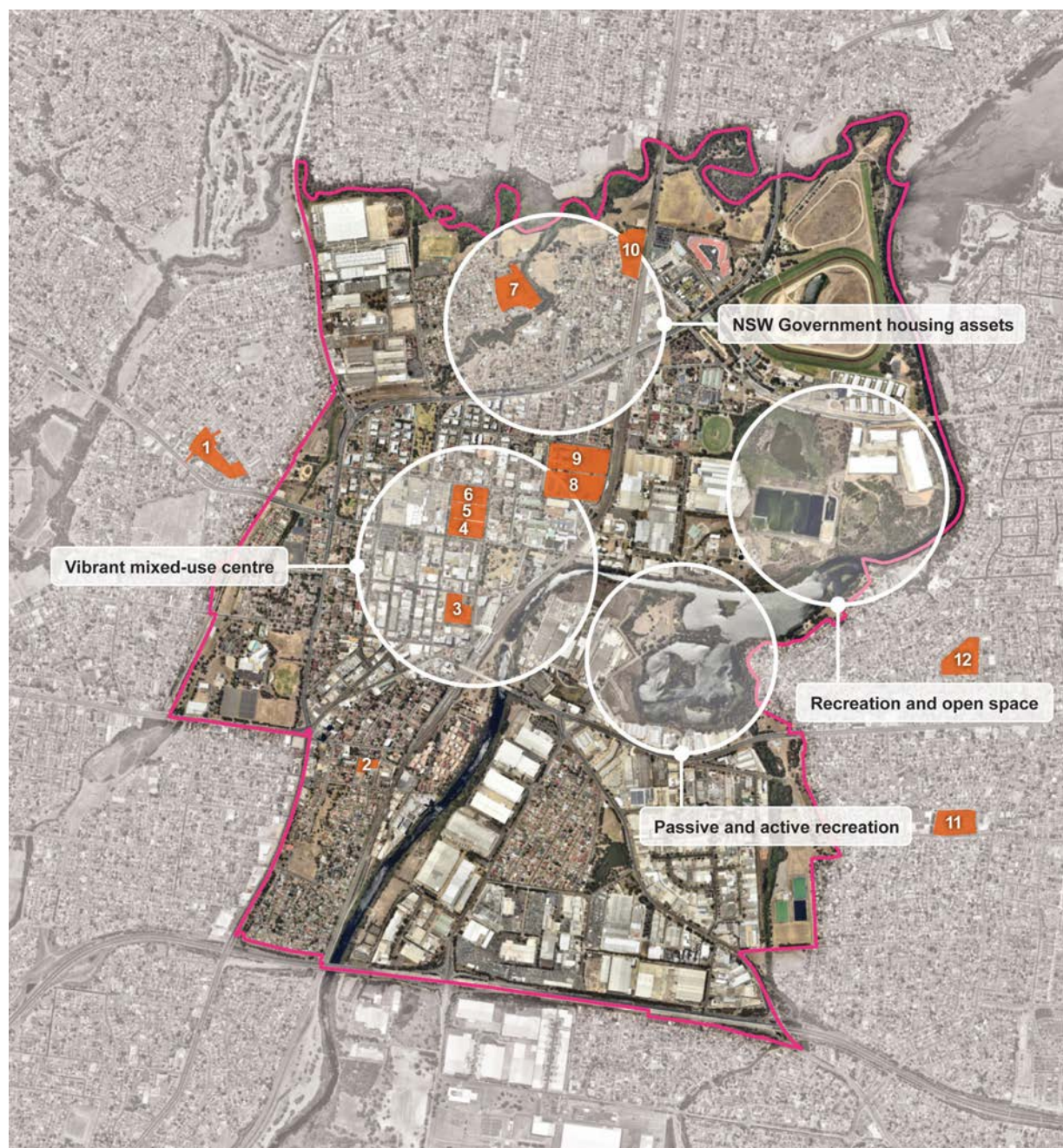
7.2 Liveability priorities

As well as the priorities and actions on page 25, all stakeholders can champion liveability in the Liverpool Collaboration Area through approaches and initiatives that:

- engage the arts and cultural sector in the design of public domain improvements and provision of new cultural facilities
- identify opportunities to enhance the provision and capacity of open space and sporting facilities
- draw on the Western Sydney City Deal's \$150 million Liveability Fund to support major community projects.

² Better Placed — an integrated design policy for the built environment in NSW, Government Architect NSW, 2017

Figure 6: Liveability opportunities and assets



 Schools	5 All Saints Catholic Boys College	10 Lawrence Hargrave School
1 Marsden Road Public School	6 All Saints Catholic Primary School	11 Nuwarra Public School
2 Al Amanah College	7 Warwick Farm Public School	12 Newbridge Heights Public School
3 Liverpool Public School	8 Liverpool Girls High School	
4 All Saints Catholic Girls College	9 Liverpool Boys High School	

Priority 4 Create and renew great places for people

Outcome

Quality mixed use development, activation strategies and public domain and open space investments combine to create great places. Liverpool is a desirable place to live and to work, and a healthy and walkable city focused on the river with a strong daytime and night-time economy and a valued arts and cultural sector. Housing options suit a range of lifestyle needs, household type or income, within walking distance of major employment precincts and rail stations.


 Actions	Primary stakeholder	Supporting stakeholder
Action 8: Deliver great places by prioritising a people-friendly public realm and open spaces; providing fine grain and diverse urban form; a diverse land use and housing mix, high amenity and walkability; and recognising and celebrating the character of the place and its people	Liverpool City Council	All stakeholders
Action 9: Planning Proposals must demonstrate consistency with the sequencing of infrastructure delivery	Liverpool City Council	Department of Planning and Environment
Action 10: Investigate the potential for master planned precincts (such as NSW Land and Housing Corporation properties in Warwick Farm and rezoned land) to improve and increase social and affordable housing above the targets set out in <i>A Metropolis of Three Cities</i>	Liverpool City Council	Land and Housing Corporation

Priority 5

Provide social and civic infrastructure for current and future generations

Outcome

Liverpool offers the right level of community services, with new or redeveloped schools and other critical social infrastructure such as leisure and community centres. Public domain improvements include a mix of new open spaces and better pedestrian access to and across the Georges River. New arts and cultural facilities complement better access to facilities such as Casula Powerhouse. The private sector facilitates the delivery of new social infrastructure in major renewal projects.

 Actions	Primary stakeholder	Supporting stakeholder
Action 11: Utilise existing school sites (Figure 6) to meet demand for education and other community uses, and coordinate early identification of sites for new primary and secondary schools, including the potential for specialised education streams complementing the local TAFE and university offerings	School Infrastructure NSW, non-government school providers	Liverpool City Council
Action 12: Identify and deliver new and enhanced social infrastructure including children's, youth, health and aged care services, libraries, and cultural, community and civic facilities within current and future people-centred precincts of the Collaboration Area	Liverpool City Council	All stakeholders
Action 13: Investigate the establishment of a metropolitan-scale cultural/entertainment facility in the Collaboration Area	Liverpool City Council	Create NSW, Destination NSW

8

Productivity – priorities and actions

8.1 Analysis of opportunities and impediments

Liverpool is an important centre within the emerging Western Parkland City. Its potential as a major economic hub for a significant proportion of the growing population is outstanding.

The **Western Sydney City Deal** sets commitments that can capitalise on Liverpool's potential and better position it to become the premier edge city for the **Western Sydney Airport**. For example, Liverpool is already home to the headquarters of WSA Co, marking it as an important centre as the airport evolves.

Through the City Deal, Liverpool will:

- be home to the Western Sydney Investment Attraction Office
- benefit from its connections to potential aerospace and defence, and advanced manufacturing industries related to the Western Sydney Airport
- be connected to Western Sydney Airport through a rapid bus connection.

Liverpool Collaboration Area's health and education precinct offers opportunities for expansion and a greater diversity of jobs. Liverpool Hospital will be upgraded with an investment of \$740 million over the next eight years. Currently 2,500 students attend the Western Sydney University and 450 attend University of Wollongong Liverpool campus³. Growth in the medical technologies (med-tech) and advanced manufacturing will increase the number of smart jobs in Liverpool. Further, the Collaboration

Area is positioned to provide high-level tertiary education opportunities as it has grown from primary, high school and TAFE schooling to now include two universities.

The **South Western Sydney Local Health District** is helping to position Liverpool as a destination of choice with the continued growth of Liverpool Hospital, connections with industry and research institutes and education providers and support for allied medical facilities.

The **Western Sydney Business Chamber** is also actively working to improve job opportunities and business diversity.

The presence of **Western Sydney University, University of New South Wales, University of Wollongong** and **TAFE NSW** presents a strong opportunity for a coordinated focus on educational governance.

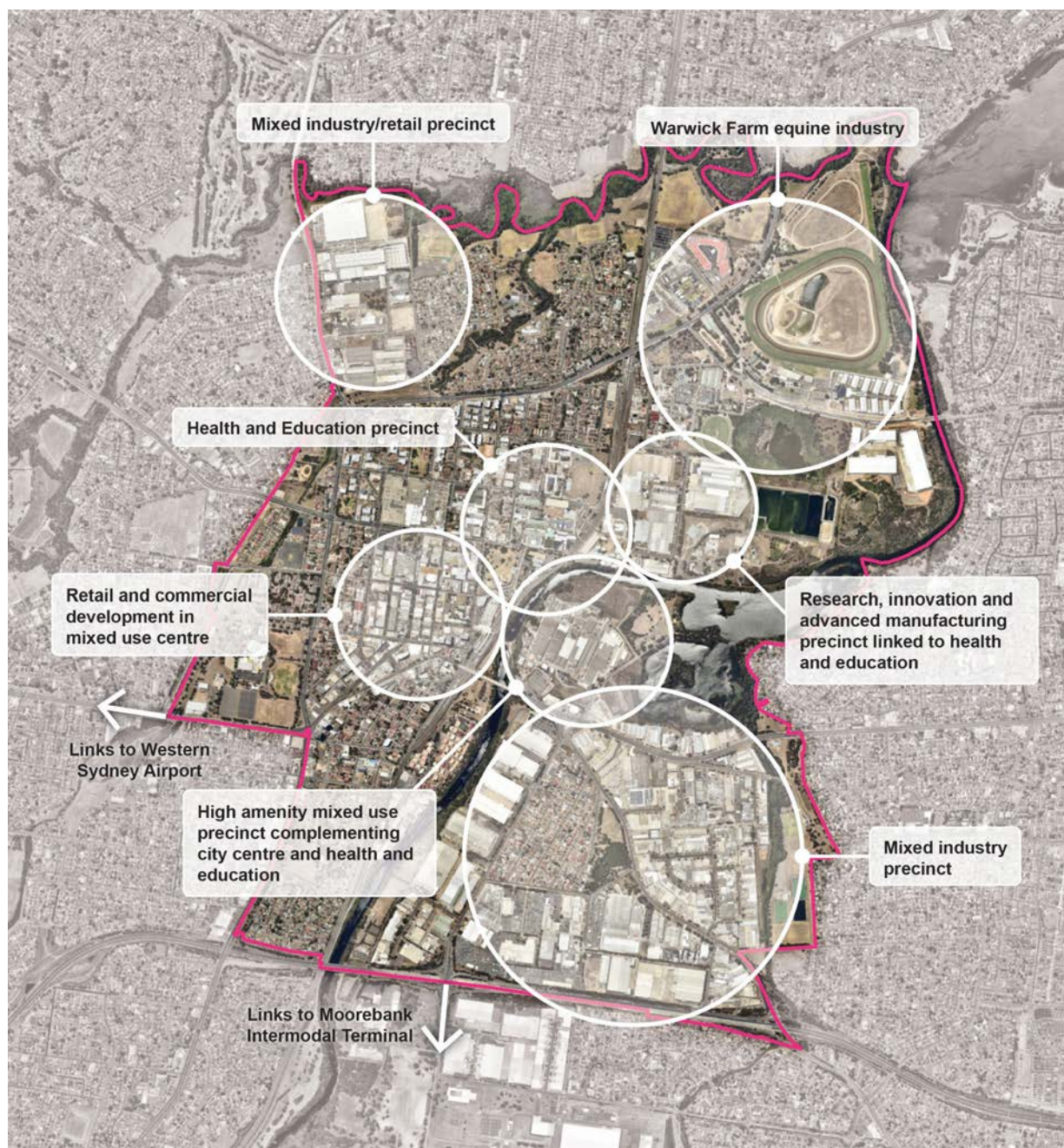
These education stakeholders have joined up with Liverpool City Council, Ingham Institute for Applied Medical Research and Health Infrastructure NSW to form the **Liverpool Innovation Precinct Steering Committee** to guide and promote the growth of the precinct.

Warwick Farm in the Collaboration Area's north is a specialised precinct for equine activities that attracts domestic and international visitation, centred on the Warwick Farm Racecourse and Inglis facility.

The industrial land east of Georges River is a **large successful industrial precinct**, generating approximately 7,500 jobs.

³ Source: Western Sydney University and University of Wollongong

Figure 7: Productivity opportunities and assets



Liverpool City Council has completed an **employment lands study** that identified potential to re-purpose some of these sites located close to the Liverpool City Centre to respond to growth opportunities, particularly those generated by the health sector. Any rezoning must achieve a net gain in sustainable jobs and the precinct must complement rather than compete with the City Centre.

Land ownership patterns in the Liverpool City Centre, including strata plan properties, creates a fine-grained character and potential for busy street activity but can also impact development of larger buildings where they may be appropriate.

To complement and leverage existing economic drivers, the **Moorebank Intermodal Terminal** will be an additional anchor directly south of the Collaboration Area, making Liverpool an integral hub in the distribution of goods throughout Greater Sydney.

8.2 Productivity priorities

As well as the priorities and actions from page 30 onwards, all stakeholders can champion productivity in the Liverpool Collaboration Area through approaches and initiatives that:

- continue to grow and diversify the Liverpool Health and Academic Precinct
- require new mixed use developments to meet demand for future jobs and support a range of business sizes, including emerging businesses and those related to Western Sydney Airport and the Western Sydney Investment Attraction Office
- provide outstanding public amenity in new developments in the Liverpool City Centre
- support the operation and growth of certain creative industries and some start-up businesses
- better connect existing and future tourism accommodation with Liverpool and other visitor destinations.


These priorities and actions will rely on the outcomes of the immediate imperatives.

Priority 6

Support the growth of critical employment hubs in the Collaboration Area

Outcome

The health and academic precinct, Warwick Farm equine precinct, and Liverpool City Centre – Core are high performing locations making significant metropolitan economic contributions.


 Actions	Primary stakeholder	Supporting stakeholder
Action 15: Undertake precinct-level planning to integrate the health and academic precinct with the City Centre - Core, Warwick Farm and Georges River	SWSLHD, LCC	Liverpool Innovation Precinct Steering Committee
Action 16: Leverage the Investment Attraction Fund where appropriate to support the growth of Liverpool	Western Sydney Industry Attraction Office	Liverpool City Council
Action 17: Co-locate smart jobs in emerging industries such as advanced manufacturing, robotics, med-tech and fabrication within or adjacent to the health and academic precinct and align with increased translational research capabilities	Liverpool City Council, private sector	SWSLHD, biotech and med-tech industry
Action 18: Increase the university and TAFE presence and align with relevant industry specialisations and new smart jobs in sectors such as engineering, med-tech robotics, agribusiness, health and aerospace	UNSW, UOW, WSU, TAFE NSW	SWSLHD, Liverpool City Council, Department of Education
Action 19: Provide pathways for secondary school students to higher education by integrating training related to relevant industry specialisations	Department of Education	Department of Industry, SWSLHD, tertiary institutions, TAFE NSW, Liverpool City Council
Action 20: Investigate opportunities to increase public and equine access through Sydney Water's water recycling facility as part of a network of high quality open space linked to the Greater Sydney Green Grid	Sydney Water	Liverpool City Council, Office of Environment and Heritage

Priority 7

Support the role and function of employment and urban services land

Outcome

An appropriate supply of employment and urban services land will meet future needs with a stronger integration with the Liverpool City Centre and Moorebank Intermodal Terminal.

 Actions	Primary stakeholder	Supporting stakeholder
Action 21: Protect employment land on the western side of the Georges River (Scrivener Street and Munday Street) to support health-related advanced manufacturing, med-tech and educational facilities	Liverpool City Council	Department of Planning and Environment
Action 22: Retain and protect industrial land in the Orange Grove Road and Georges River South precincts	Liverpool City Council	Department of Planning and Environment

9

Sustainability – priorities and actions

9.1 Analysis of opportunities and impediments

The NSW Government has set aspirational long-term objectives for NSW to be more resilient to a changing climate and achieving net-zero emissions by 2050. The *Western City District Plan* (Action 81) supports initiatives that contribute to these objectives by establishing low-carbon precincts in Collaboration Areas.

Growth will require investment in new energy, water, waste and transport infrastructure and well as investment in buildings. This offers the opportunity to make it more feasible to invest in **low-carbon high efficiency** and **water efficiency** measures at the precinct scale. This includes investigating opportunities for maximising the use of recycled water for a variety of land uses in the Collaboration Area.

Land use, transport and infrastructure planning policy can help **reduce greenhouse gas emissions** through new building standards, building and precinct scale renewable energy, transport infrastructure and parking strategies and increased waste diversion⁴.

The **Georges River** is a key attractor, lifestyle element and environmental feature of Liverpool. The draft Georges River Masterplan proposes a long-term vision to renew what is known as the Georges River Precinct, located between the Liverpool City Centre, Anzac Creek and the South Western Motorway.

Future development close to the Georges River must address **floodings challenges**. Flood risk in the Collaboration Area is addressed to varying extents

by four separate floodplain risk management studies and plans. However, they are based on information and assumptions that are 10 to 15 years old. The extent of flooding and feasible solutions that support new development on the river's eastern side are not yet fully understood.

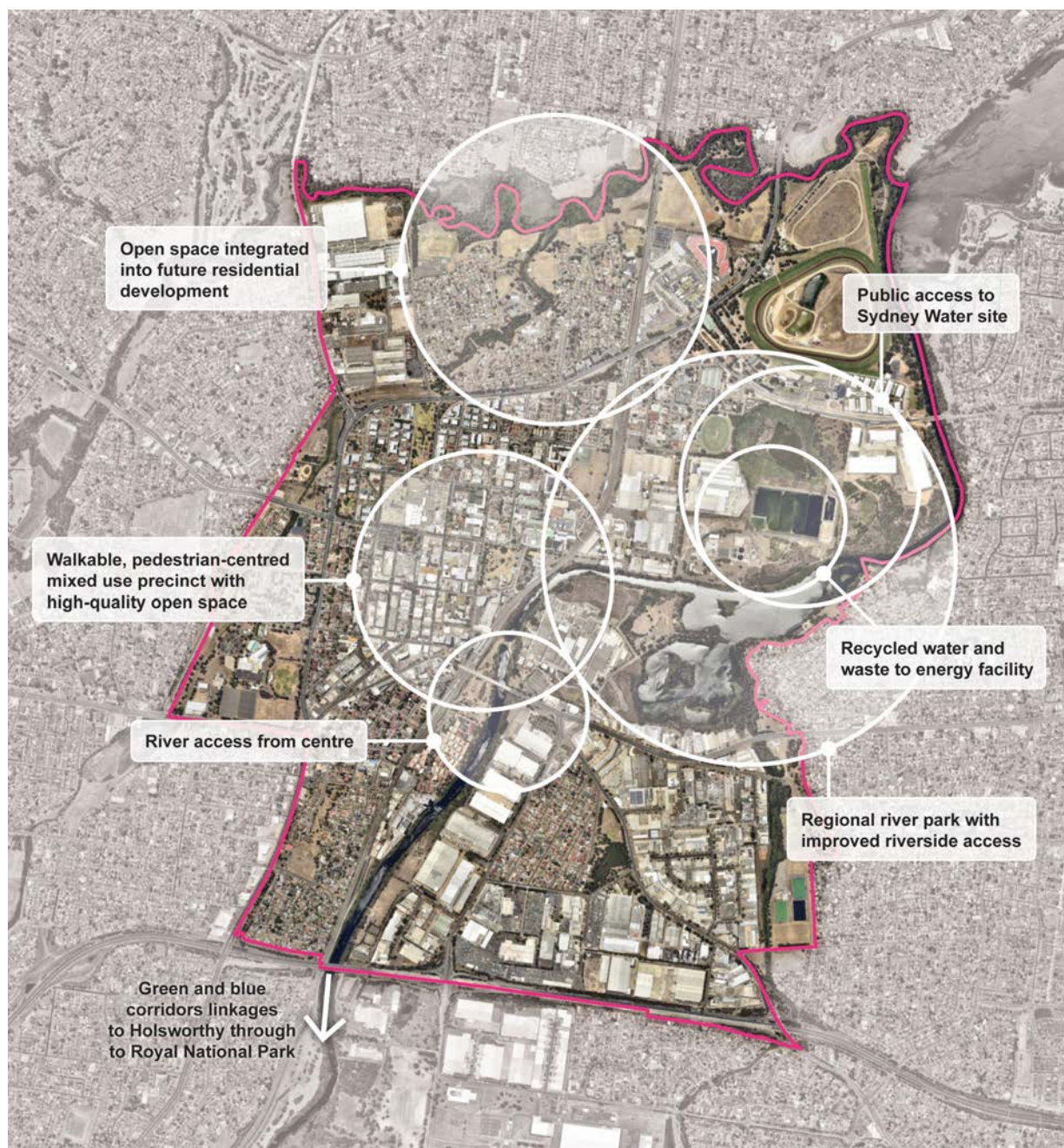
Any future design and planning works for the Collaboration Area's east must be underpinned by detailed, validated flooding investigations. In addition, a review and update of existing plans affecting the entire Collaboration Area is needed to deliver confidence that flood risk is appropriately addressed.

As with many parts of Western Sydney, the fine-grain impacts of **urban heat island effect** on Liverpool are only starting to be identified and understood. Already, it is known that future development must address the hard urban form (with a high proportion of hard and dark coloured surfaces) and increase mitigating elements such as increased green space, ground and canopy cover and water elements. Enhancing the amenity and activity within, and accessibility to, the Greater Sydney Green Grid will promote a healthier urban environment.

Liverpool will be subject to other climate change impacts including an increase in the frequency and intensity of extreme weather events. Updating Liverpool City Council's Climate Change Risk Assessment and implementing the subsequent climate response initiatives and action plans will make the Collaboration Area more **resilient to a changing climate**.

⁴ Kinesis 2017

Figure 8: Sustainability opportunities and assets



9.2 Sustainability priorities

As well as the priorities and actions on the next page, all stakeholders can champion sustainability in the Liverpool Collaboration Area through approaches and initiatives that:

- identify and implement localised water quality and stormwater improvement opportunities, including best-practice water sensitive urban design, natural landscaping and river health improvement projects
- identify climate change impacts and risks and treatment methods to mitigate the risk
- implement climate responsive initiatives and develop and implement climate change action plans
- identify opportunities for new public open space
- support the network of open spaces with pedestrian-focused streets and links
- improve the amenity and connectivity of key public open space including Bigge Park, Woodward Park, Rosedale Park, Kelso Park and the Brickmakers Creek corridor
- increase green open space, tree canopy coverage, permeable ground treatments and water elements to reduce heat island effect and temperature fluctuations, and to create improved corridor connectivity between sub-catchments
- support the NSW Government's aspiration to develop, test and trial autonomous vehicles and leverage the Smart Western Sydney Program to incorporate smart city technology in development and infrastructure.


These priorities and actions will rely on the outcomes of the immediate imperatives.

Priority 8

Develop a network of high quality open space linked by the Greater Sydney Green Grid and invest in improvements to the Georges River and its foreshores

Outcome

Liverpool is a true river city. The Georges River's riverbank quality is vastly improved, and the water quality is high enough to support on-water activities such as kayaking. Better walking trails, connections to the Greater Sydney Green Grid and links between the City Centre and the open space and parklands around the Sydney Water facility and Warwick Farm equine precinct allow more people to enjoy the river's amenity, movement and recreation opportunities.

 Actions	Primary stakeholder	Supporting stakeholder
Action 23: Update and complete the Georges River, Brickmakers Creek and Liverpool CBD Overland Flood studies and prepare floodplain risk management plans	Liverpool City Council	Office of Environment and Heritage
Action 24: Prepare floodplain constraints categorisation study and a flood evacuation study	Liverpool City Council, State Emergency Service	Office of Environment and Heritage
Action 25: Improve the quality, environmental amenity and useability of the riverbank to respond to uses associated with precinct renewal and increase walking trails and open space, in accordance with sustainable urban water management principles	Liverpool City Council	Office of Environment and Heritage, Sydney Water, private sector
Action 26: Develop a linear parkland and a continuous network of public open spaces aligned with Green Grid priorities along the Georges River that links the City Centre with the Sydney Water site, Warwick Farm, Chipping Norton Lakes and the Holsworthy Defence site	Liverpool City Council	Sydney Water, private sector
Action 27: Utilise and enhance the Brickmakers Creek open space corridor, including the designated future transport corridor	Liverpool City Council	RMS
Action 28: Implement Green Grid principles as part of the Place Strategy implementation	Liverpool City Council	Government Architect NSW

Priority 9

Create a resilient place

Outcome

A resilient Liverpool adapts to future environmental shocks and stresses and design demands, applying energy and water efficiency and innovative, place-based solutions at a precinct scale.

 Actions	Primary stakeholder	Supporting stakeholder
Action 29: Develop a demonstration project that increases green open space and tree canopy coverage in line with the NSW Government's urban tree canopy target to reduce heat island effect and temperature fluctuations	Office of Open Space and Parklands	Liverpool City Council, Sydney Water
Action 30: Prioritise low-carbon initiatives in future developments such as adaptive building designs (for example, car park conversion opportunities), prioritisation of public transport investment, precinct-level car parking strategies and energy-efficient and energy generating precinct design	Liverpool City Council	Transport for NSW, Private sector
Action 31: Develop precinct-wide integrated water management strategy exploring opportunities for innovative resource management (including water and energy), public access, and eco-development to integrate Sydney Water's water recycling facility seamlessly into the surrounding city, river, and community	Sydney Water	Liverpool City Council
Action 32: Encourage precinct-level renewable energy systems in new developments to reduce carbon emissions	Liverpool City Council	Office of Environment and Heritage
Action 33: Investigate and implement innovative initiatives to address heat island effect	Liverpool City Council	Government Architect NSW, Office of Open Space and Parklands, Office of Environment and Heritage

10

Governance – priorities and actions

10.1 Analysis of opportunities and impediments

Liverpool City Council is a large and a proactive council advocating for the growth of the area. It has developed an overarching vision for the area; the Collaboration Area process aims to help bring this vision to reality. A governance structure to continue the collaboration process and nurture Liverpool's growth is essential.

Liverpool City Council exercises the primary role of managing Liverpool as a 'place'. The Collaboration Area process demonstrates that many **partners, at all tiers of government, contribute to place-making**. Liverpool City Council has the capacity to lead the development of a governance structure that represents the many facets of the Collaboration Area.

10.2 Governance priorities

Action 14 in *A Metropolis of Three Cities* requires the Commission to develop indicators, in consultation with State agencies and Councils. This process is underway.

The Governance Group will need a place-based monitoring and evaluation framework for the Collaboration Area, that aligns with the Greater Sydney Indicators Framework.

As well as the priorities and actions below, all stakeholders can champion governance in the Liverpool Collaboration Area through approaches and initiatives that:

- identify a range of funding sources (such as local and state contributions, planning agreements, grants, funding allocated as part of the Western Sydney City Deal, special rate variations or agency budgets)
- align funding sources to infrastructure and public domain projects to ensure a coordinated and equitable funding process
- review the governance structure annually to ensure it remains fit-for-purpose.

These priorities and actions will rely on the outcomes of the immediate imperatives.

Priority 10

Establish precinct-level governance to deliver the vision

Outcome

A cohesive approach to Liverpool's development and evolution optimises assets, planned investment and transport connections. This is supported by the City Deal, and funding mechanisms that are coordinated and aligned to infrastructure and public domain projects.

 Actions	Primary stakeholder	Supporting stakeholder
Action 34: Establish an enduring Collaboration Area Partnership that facilitates the implementation of stakeholder actions and builds on existing governance structures	Liverpool City Council	All stakeholders
Action 35: Prepare an implementation plan for this Place Strategy	Liverpool City Council	All stakeholders

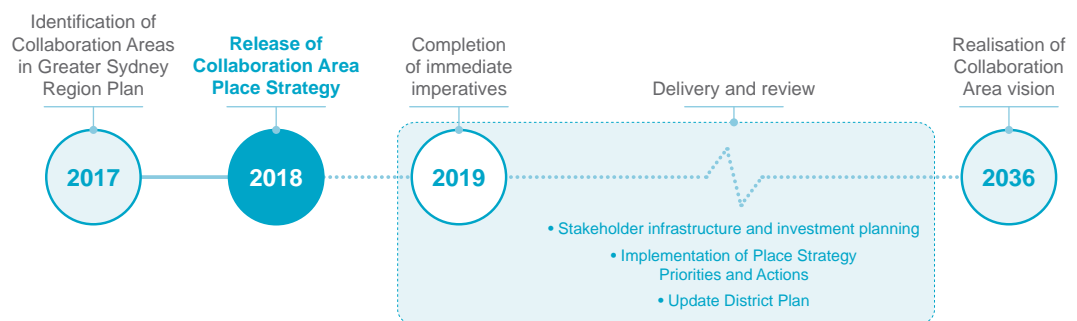
11

Next steps

Implementing the Liverpool Collaboration Area Place Strategy requires collective action and joining of resources from all stakeholders, various levels of government and the private sector. The Strategy is a decision support tool that recognises that State agencies and Council will undertake their own review and prioritisation processes before committing to infrastructure investment.

Some actions must be addressed immediately before comprehensive planning can take place. This will ensure infrastructure delivery responds appropriately to the place-specific opportunities and impediments identified in this Place Strategy, while also guiding current and future planning proposals within the Collaboration Area.

Figure 9: Road map to realising the vision for the Liverpool Collaboration Area



The Greater Sydney Commission recommends the completion of immediate imperatives by mid-2019 to establish the capacity and viability of land and infrastructure to support the future growth scenarios:

- Georges River flood study (led by Liverpool City Council)
- floodplain constraints categorisation study (led by Liverpool City Council) and a flood evacuation study (led by State Emergency Service)
- integrated transport strategy (led by Transport for NSW/Roads and Maritime Services).

11.1 The role of the Australian Government

The Australian Government is a signatory to the Western Sydney City Deal which includes catalytic investment for Liverpool that builds on the major investment in the Western Sydney Airport.

The Australian Government will play a key role in the funding and implementation of the Western Sydney City Deal.

11.2 The role of the NSW Government

The Place Strategy identifies projects that can only be implemented with the support of the NSW Government. The Collaboration Area process has involved State agencies to understand the key issues, articulate the vision and identify projects that might address the impediments to growth. The NSW Government will:

- consider the timing, costs and benefits of the projects and initiatives to achieve the Collaboration Area vision in the context of the *State Infrastructure Strategy* and respective programs
- where necessary, prepare business cases to support investment
- continue to collaborate with the Commission, Council and across State agencies to identify opportunities for improved investment decisions that deliver infrastructure supporting the vision.

11.3 The role of the Greater Sydney Commission

The Greater Sydney Commission facilitates whole-of-government coordination and partnerships with councils and establishes a stakeholder driven governance arrangement to oversee the long-term implementation of Collaboration Area Place Strategies. The Commission will:

- include the Place Strategy's objectives and actions in future updates to the *Western City District Plan* giving them a statutory basis
- transition its leadership role to Liverpool City Council and support Council to put governance arrangements in place to continue planning and development of the Liverpool Collaboration Area
- recognise the District Commissioner's strategic oversight for implementing the Place Strategy so that it continues to align with the *Western City District Plan*
- assure the progress and continued collaboration around the vision and associated projects via local planning processes such as the updated local environment plan
- elevate strategic issues and/or decision-making to Infrastructure Delivery Committee where appropriate.

11.4 The role of Council

Liverpool City Council's ongoing leadership in the Collaboration Area is critical to achieving the vision. Council will:

- act as the key point of contact for coordination and implementation of the Strategy
- help identify and facilitate opportunities for partnerships, particularly with the business community
- lead the strategic planning process, at the local level, in collaboration with State agencies, universities and key stakeholders
- provide opportunities for community engagement as the Place Strategy is implemented
- leverage community and local stakeholder input to decision making to achieve better outcomes
- help implement the Place Strategy's actions.

11.5 The role of the community

This Place Strategy reflects the community's input into the development of the *Western City District Plan*, and Council's Community Strategic Plan *Our Home Liverpool 2027*.

People will be offered further opportunities to have their say into planning for the Liverpool Collaboration Area through:

- future updates of the *Western City District Plan*
- Council's community strategic plan, local strategic planning statement and local environmental plan
- individual agency programs and projects.

12 Appendices

Appendix A: Projects and initiatives identified through collaboration

PROJECT	LEAD AGENCY	Connectivity			Liveability		Productivity		Sustainability		Governance
		Priority 1 Plan for movement and place function in Liverpool city centre, improve liveability and walkability, and reduce congestion in and around the centre	Priority 2 Improve public transport to and from Liverpool	Priority 3 Improve digital connectivity	Priority 4 Create and renew great places for people	Priority 5 Provide social and civic infrastructure for current and future generations	Priority 6 Support the growth of critical employment hubs in the Collaboration Area	Priority 7 Support the role and function of employment and urban services land	Priority 8 Develop a network of high quality open space linked by a green grid and invest in improvements to the Georges River and its foreshores	Priority 9 Create a resilient place	Priority 10 Establish a precinct-level governance structure to support the vision, and develop robust funding mechanisms
Investigate expansion of non Government schools within the Collaboration Area	Non Government School Sector				✓	✓	✓				
Upgrades to surrounding schools, including Lurnea Highschool, Liverpool West Pubic School, Marsden Road Public School, Holsworthy High School and Warwick Farm Public School	Department of Education					✓					
Locate and develop new primary school (east of Warwick Farm Train Station)	Department of Education					✓					
Upgrade Liverpool Boys/Girls High School	Department of Education					✓					
Upgrade Liverpool Public School	Department of Education					✓					
Locate and develop new secondary school (east of Georges River)	Department of Education					✓					
Locate and develop new primary school (east of Georges River)	Department of Education					✓					

PROJECT	LEAD AGENCY	Connectivity			Liveability		Productivity		Sustainability		Governance
		Priority 1	Priority 2	Priority 3	Priority 4	Priority 5	Priority 6	Priority 7	Priority 8	Priority 9	Priority 10
Expand Ingham Centre of Excellence	Liverpool Innovation Precinct					✓	✓				
Locate and develop private hospital	Liverpool Innovation Precinct					✓	✓				
Establish additional university campus	Liverpool Innovation Precinct					✓	✓				
Support growth of the health, education and innovation precinct	Liverpool Innovation Precinct					✓	✓				
Reinstate pedestrian connection through Westfields along Macquarie Street	Liverpool City Council	✓									
Develop mixed use civic precinct – Scott Street	Liverpool City Council				✓						
Develop Liverpool CBD Commercial Core Masterplan	Liverpool City Council	✓			✓						
Provide shuttle bus connecting city centre with satellite parking locations	Liverpool City Council	✓	✓								
Provide pedestrian connection across Hume Highway to Pioneer Park	Liverpool City Council	✓									
Facilitate greening of Elizabeth Street to support pedestrianisation and local traffic	Liverpool City Council				✓					✓	
Implement pedestrian focused improvements to Macquarie Street and Mall	Liverpool City Council	✓								✓	
Enhance pedestrian priority along Bigge Street and support improved access for emergency services	Liverpool City Council	✓			✓						
Provide pedestrian and bike path along Georges River, river crossing & access to railway concourse	Liverpool City Council	✓							✓		
Include a network of bicycle paths and facilities within the city centre with a focus on separated bike lanes	Liverpool City Council	✓								✓	
Expand the provision of parking at Collimore Park	Liverpool City Council	✓			✓						
Widen Governor Macquarie Drive to support regional traffic	Liverpool City Council	✓					✓				
Design and deliver bypass road from Governor Macquarie Drive into Shore Street for heavy vehicles	Liverpool City Council	✓					✓				
Develop dynamic parking system for the full range of council parking facilities	Liverpool City Council	✓		✓							
Purchase residual lot within Woodward park and masterplan recreational use	Liverpool City Council								✓		
Create Place for Healing at Collingwood House precinct	Liverpool City Council								✓		
Plan, design and implement green grid for Warwick Farm	Liverpool City Council								✓	✓	
Embellish Pioneer Memorial Park	Liverpool City Council								✓		

PROJECT	LEAD AGENCY	Connectivity			Liveability		Productivity		Sustainability		Governance
		Priority 1	Priority 2	Priority 3	Priority 4	Priority 5	Priority 6	Priority 7	Priority 8	Priority 9	Priority 10
Provide rooftop recreation and open space on Council car parks	Liverpool City Council								✓		
Creation of linear pocket park between George Street and Macquarie Street, linking the library to the mall	Liverpool City Council								✓		
Create expansive opening to Library from George Street	Liverpool City Council				✓				✓		
Implement Liverpool Street Trees strategy	Liverpool City Council								✓	✓	
Complete Bigge Park revitalisation	Liverpool City Council								✓	✓	
Increase active transport links across Lighthorse Bridge	Liverpool City Council	✓							✓		
Develop masterplan for Lighthorse Park	Liverpool City Council								✓	✓	
Locate and develop urban park on Georges River east precinct	Liverpool City Council								✓		
Develop shared path on northern bank of Georges River	Liverpool City Council	✓							✓	✓	
Provide pedestrian railway crossing at Elizabeth Street	Liverpool City Council	✓									
Design and deliver rivers islands walk	Liverpool City Council								✓		
Upgrade of Hart Park	Liverpool City Council								✓		
Install synthetic sports field Liverpool Boys/Girls High Schools	Liverpool City Council								✓		
Create continuous public access to eastern side of Georges River south of Moorebank Avenue	Liverpool City Council								✓		
Policy – Shared use of Department of Education land	Liverpool City Council				✓						
Policy – Floodplain Risk Management Study and Plan	Liverpool City Council									✓	
Policy – Climate Change Preparedness Study	Liverpool City Council									✓	
Policy – Green and Blue Grid Strategy	Liverpool City Council								✓	✓	
Policy – Aboriginal Cultural Heritage Study	Liverpool City Council									✓	
Policy – Council Community Facilities Strategy	Liverpool City Council									✓	
Expand existing road reservation corridor on Cumberland Highway to accommodate 6 lanes of traffic.	Roads and Maritime Services	✓									
Upgrade Memorial Avenue and Hume Highway intersection	Roads and Maritime Services	✓									

PROJECT	LEAD AGENCY	Connectivity			Liveability		Productivity		Sustainability		Governance
		Priority 1	Priority 2	Priority 3	Priority 4	Priority 5	Priority 6	Priority 7	Priority 8	Priority 9	Priority 10
Upgrade Hoxton Park Road, Macquarie Street & Hume Highway intersection and improve safety	Roads and Maritime Services	✓									
Preserve corridor on Hume Highway	Roads and Maritime Services	✓									
Investigate pinch point improvements for Hume Highway between Warwick Farm and Crossroads	Roads and Maritime Services	✓									
Investigate the expansion of road corridor reservation along Newbridge Road and Terminus Street.	Roads and Maritime Services	✓									
Resolve traffic conflicts at M5 near Moorebank	Roads and Maritime Services							✓			
Investigate extension of Cambridge Avenue west to M5 Motorway	Roads and Maritime Services	✓									
Provide direct road connection between M5 Motorway and Cumberland Highway (Brickmakers Bypass)	Roads and Maritime Services	✓									
Investigate widening of Newbridge Road, Macquarie and Terminus Streets, including potential duplication of Lighthorse Bridge	Roads and Maritime Services	✓			✓						
Widen Hoxton Park Road on Woodward Park	Roads and Maritime Services	✓									
Locate and develop north/south river crossing between Governor Macquarie Drive and Newbridge Road	Liverpool City Council	✓						✓			
Reconfigure connection between Newbridge Road, Moorebank Avenue and Heathcote Road	Roads and Maritime Services							✓			
Investigate corridor for additional bridges over Georges River south of Newbridge Road	Roads and Maritime Services	✓									
Policy – Active Transport Strategy – Cumberland Highway Corridor	Roads and Maritime Services	✓									
Policy – Hume Highway Action Plan (Warwick Farm to Lansvale Corridor)	Roads and Maritime Services	✓									
Policy – Active Transport Strategy – Hume Highway Corridor	Roads and Maritime Services	✓									
Policy – Flood Evacuation Study	State Emergency Service									✓	
Expand Liverpool Hospital	Sydney South West Area Health Service						✓				
Provide public and equine access to Horseshoe Lake	Sydney Water						✓		✓		
Precinct-wide integrated water management strategy	Sydney Water									✓	

PROJECT	LEAD AGENCY	Connectivity			Liveability		Productivity		Sustainability		Governance
		Priority 1	Priority 2	Priority 3	Priority 4	Priority 5	Priority 6	Priority 7	Priority 8	Priority 9	Priority 10
Implement bus priority initiatives along Moore Street	Transport for NSW		✓								
Provide rapid transit link to Western Sydney Airport	Transport for NSW		✓				✓				
Undertake scoping and design studies for mixed use redevelopment of Liverpool Railway Station and interchange	Transport for NSW				✓		✓				
Reconfigure Liverpool interchange and increased priority of active transport	Transport for NSW		✓								
Extend Metro Southwest from Bankstown to Liverpool	Transport for NSW		✓								
Upgrade Warwick Farm Station interchange underpass, commuter car parking and access	Transport for NSW		✓								
Identify north/south transit corridor for public transport	Transport for NSW	✓	✓								
Enhance walkability around the CBD using technology	Transport for NSW	✓									
Locate and develop bus, pedestrian and cycling links from Georges River Precinct to Liverpool Railway Station	Transport for NSW	✓	✓								
Policy – Integrated Land Use and Transport Service Plan	Transport for NSW	✓	✓							✓	
Policy – Express Train Services Study	Transport for NSW		✓							✓	
Policy - Bus Contract Review	Transport for NSW		✓								
Expand University of Wollongong	University of Wollongong						✓				
Expand Western Sydney University	Western Sydney University						✓				

Appendix B: CO2 emissions

Greenhouse gas emissions generated in the Liverpool Collaboration Area in 2014–15 were 453,792 tonnes of CO₂-e. This accounts for 27 per cent of emissions across the entire Liverpool Local Government Area, which is a compelling reason to act on low-carbon high efficiency outcomes in the Collaboration Area.

The largest contributors to emissions in the Liverpool Collaboration Area are concentrated in the Liverpool City Centre and the nearby health and education precinct. The three highest areas located in the city centre produced between 43,000 and 100,000 tonnes of CO₂-e in 2014–2015 (Figure 10).

Figure 10: Total carbon emissions (tonnes of CO₂) by travel zone (Kinesis 2017)

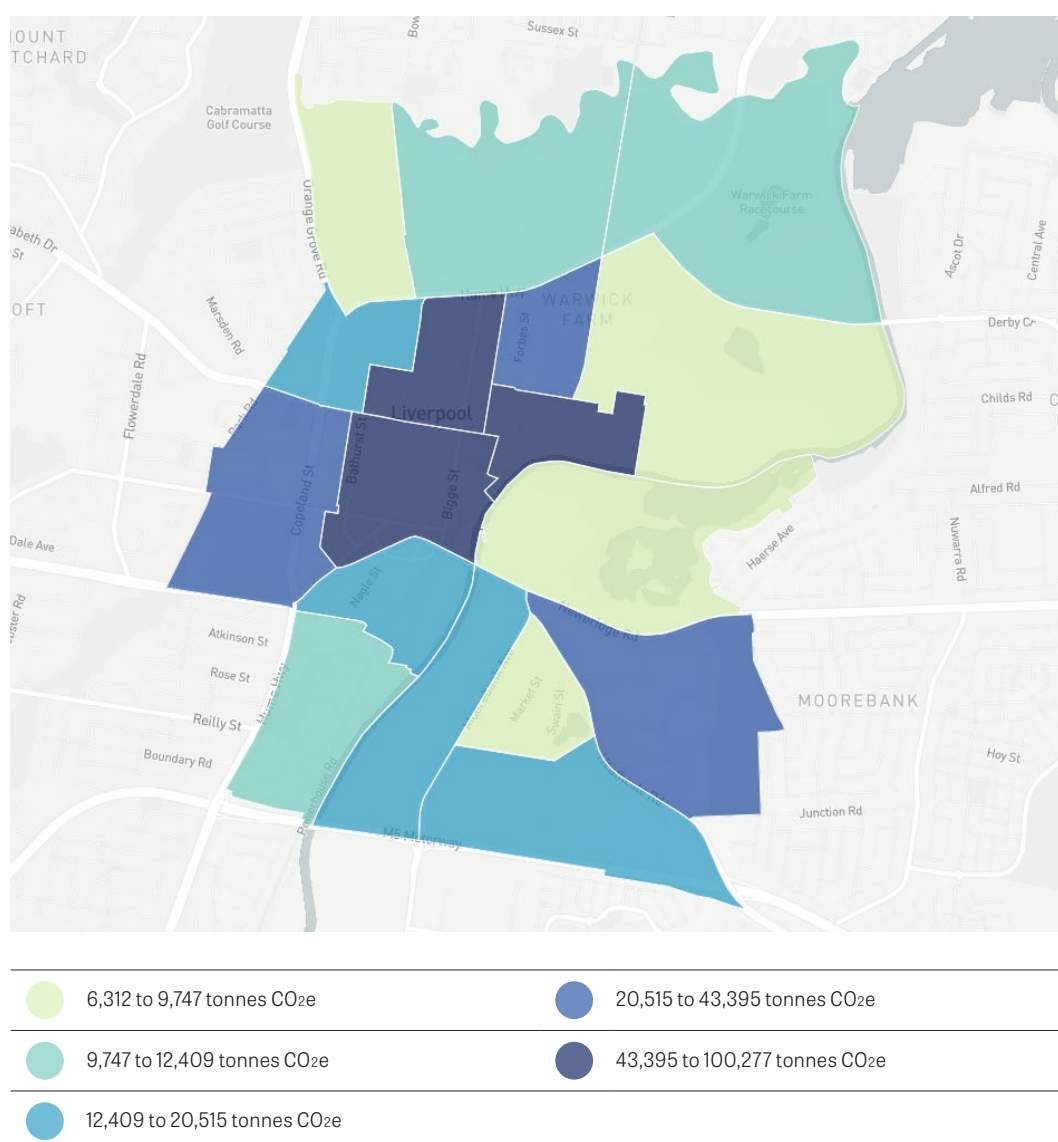
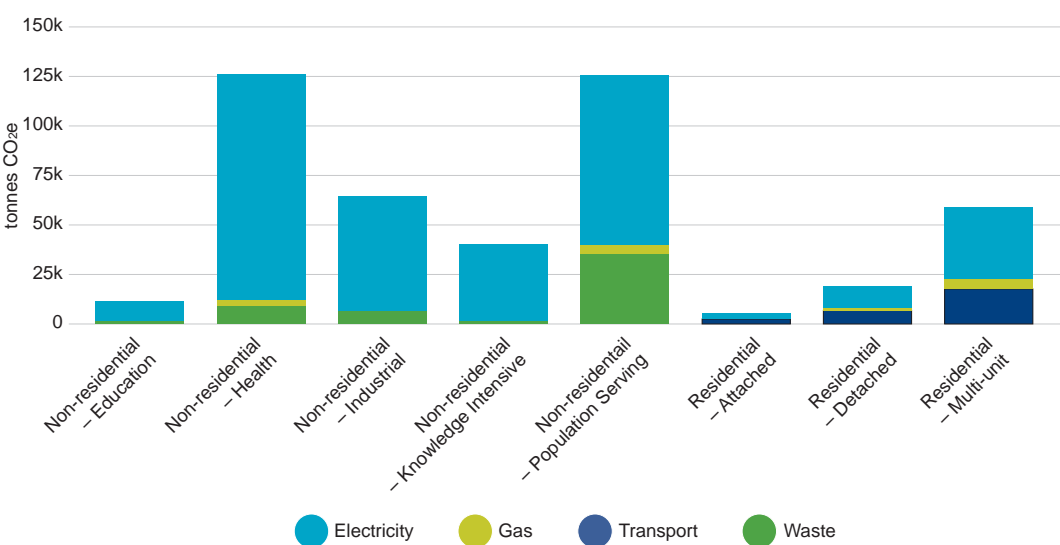


Figure 11 breaks down the percentage of emissions from the Liverpool Collaboration Area into subsectors. Major sector CO₂-e contributors are health, population serving areas as well as industrial and multi-unit residential areas. The source of emissions for each of these subsectors is primarily electricity, followed by waste, transport and gas.

Figure 11: Sectors and sources of emissions in the Liverpool Collaboration Area (Kinesis 2017)



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