Draft
District Strategy:

ACT Government







Tuggeranong
2022

This district strategy document is a draft. The draft strategies include ideas, aspirations and potential opportunities for the districts of Canberra as the population and city changes in the future.

The Environment, Planning and Sustainable Development Directorate has undertaken technical work to prepare this initial draft document and is seeking community input and feedback to help shape the future of Canberra through this document.

In the draft document we have made suggestions about how we might plan the future of districts considering how and where we could accommodate different types of development, increasing population, supporting services, how to maximise the benefits of future transport possibilities and how to improve the economic and social roles of our centres. The strategies also consider the importance of the environment and suggested new ecological areas and connectivity and possible new connections for walking and cycling.

We encourage you to provide comments on these draft strategies, and ideas and initiatives presented in them and to suggest others as well; so that we can make sure we get a good balance between protecting areas that people value and accommodating future growth and change.

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Minister's Foreword



Canberra is one of only a few cities planned from day one—and planned to be nestled in the landscape. As our city continues to grow, we are planning for its future. We are considering our planning legacy and heritage values, our place as the Nation's Capital.

Since the original Griffin Plan, our city was set out with a City Centre and districts. These districts provide opportunities to support a fair, sustainable and dynamic city. I am eager to see the valued character of each of our districts supported through the introduction of district strategies in the reformed planning system.

The community is playing a vital role in the development of these new district strategies. Consultation began in 2019 with district planning workshops. Each draft district strategy is shaped by the views of the people who live and work in, or frequently visit, that district. They are dynamic documents that will evolve with our city. I now look forward to hearing community feedback and discussion on these draft district strategies.

The district strategies will put the themes and directions from the ACT Planning Strategy into a more localised context. They will set the vision, priorities and values of each district and embed them in the planning system. They will capture the key planning matters raised by Canberrans and provide clear guidance to help deliver desired planning outcomes. They will enhance and protect the defining characteristics of each district—the things we value most, such as natural space, liveability, diversity of lifestyle choice and more.

The district strategies will work together with the new Planning Act, new Territory Plan, 2018 ACT Planning Strategy and development assessment processes to support an outcomes-focussed planning system that is accessible, easy to use and delivers a sustainable and compact city that gets the right balance between community, environment and economic needs.

The district strategies will be part of our new, contemporary and best practice planning system that keeps our valued urban form and connection to the natural landscape and helps make Canberra a unique and welcoming place to live.

Mick Gentleman, MLA

Minister for Planning and Land Management

November 2022

Acknowledgement of Country

Yuma. Dhawura nguna ngurumbangu gunanggu Ngunnawal.

Nginggada dindi dhawura Ngunnawalbun yindjumaralidjinyin.

Mura bidji mulanggaridjindjula.

Naraganawaliyiri yarabindjula.

Hello. This country is Ngunnawal (ancestral/spiritual) homeland.

We all always respect elders, male and female, as well as Ngunnawal country itself.

They always keep the pathways of their ancestors alive.

They walk together as one.

The Environment, Planning and Sustainable Development Directorate acknowledges the Ngunnawal people as Canberra's first inhabitants and Traditional Custodians. We recognise the special relationship and connection that Ngunnawal people have with this Country. Prior to the dislocation of Ngunnawal people from their land, they were a thriving people whose life and culture was connected unequivocally to this land in a way that only they understand and know, and is core to their physical and spiritual being. The disconnection of the Ngunnawal people from Culture and Country has had long-lasting, profound and ongoing health and wellbeing effects on their life, cultural practices, families and continuation of their law/lore.

The Environment, Planning and Sustainable Development Directorate acknowledges the historic dispossession of the Ngunnawal people of Canberra and surrounding regions. We recognise the significant contribution the Ngunnawal people have played in caring for Country as for time immemorial they have maintained a tangible and intangible cultural, social, environmental, spiritual and economic connection to these lands and waters.

District Strategy Summary – Tuggeranong

A future vision for Tuggeranong

Tuggeranong District is defined by its protected landscape edges, full of Ngunnawal cultural history and significance.

Over time the establishment of new strategic transport connections has stimulated the revival of Tuggeranong District. The potential future establishment of light rail in the Athllon Drive corridor has sharpened the role of this spine for development.

The Tuggeranong town centre, at the southern end of this corridor, has grown as a location for jobs, shopping and services, thereby increasing its primary service centre role for the district and the wider ACT economy. It has grown its population in apartment and mixed-use developments, while ensuring that opportunities for new employment floorspace have been provided.

The town centre is complemented by linked nodes of business on the Athllon Drive light rail corridor at Drakeford Drive and Wanniassa.

Group centres are better connected by rapid transport. They have grown and consolidated their everyday shopping and services role while addressing some of the deficit in nearby jobs for local residents.

The district's local centres, particularly in the areas around Kambah, support community development with public spaces, shops and community facilities for residents nearby.

Open space links between Tuggeranong's suburbs provide amenity and recreational opportunities for residents. Water quality problems are a thing of the past. Lake Tuggeranong, in particular, 'cools' the town centre and is a recreational and amenity focus for the district.

District strategies have been prepared for nine districts in the ACT, based on five big drivers, 10 targets, and 12 implementation pathways. These inform the specific directions and initiatives to be delivered in each district.







5 big drivers	10 targets	Directions for Tuggeranong
Blue-green network Vegetation, nature reserves, open space, water elements and cultural heritage elements are protected and provide the setting for a city 'in the landscape.' The blue-green network also includes connections for walking and cycling throughout the urban area, sometimes aligned with natural corridors where conservation values can be protected.	• More nature and retaining water in the city. • Expand liveable blue-green network connections.	• Improve biodiversity and water quality outcomes across the district including Lake Tuggeranong. • Enhance open space linkages between suburbs to improve connections across the district.
Economic access and opportunity across the city Selected major economic hubs and group and town centres across Canberra are a focus to strengthen the city's role in the national economy, but also to provide greater economic diversity and expanded access to employment opportunities for residents.	• Improve economic opportunities in districts with a shortage of jobs. • More jobs accessible to home.	• Enhance employment role of Tuggeranong town centre linked to nodes of economic activity along the Athllon Drive corridor (at Wanniassa and Drakeford Drive). • Better understand and enhance the economic role of existing group centres including Conder, Calwell and Chisholm to strengthen access to employment opportunities across the district.
Strategic movement to support city growth The developing public transport network provides access to employment centres and is a focus for future high quality infill development. The road network increasingly provides for multiple travel modes, as well as dedicated movement corridors for private/public and commercial vehicular traffic. Land use planning will be informed by transport planning and traffic modelling to address existing and potential traffic and parking issues.	• Reduce car dependence. • More active transport.	• Deliver new strategic transport connections including future light rail to the Tuggeranong town centre via Athllon Drive. • Investigate other key corridors towards Kambah and Chisholm to support growth and enhance job accessibility.
Sustainable neighbourhoods New residential development is of a height and density appropriate to neighbourhood characteristics and amenities, provides a mix of housing types and is a means for sustainable transformation, including enhanced walkability and better connections to centres, zero carbon initiatives, and social and affordable housing.	• Expand walkable access to shops and services. • More inclusive and fair communities.	• Focus new residential development mixed with employment opportunities in Tuggeranong town centre and in future light rail and rapid corridors.
Inclusive centres and communities Group and local centres provide walkable access to daily necessities for surrounding communities. Possible centres are identified for investigation of appropriate planning and non-planning initiatives to support their ongoing viability and role as a community meeting place. This could include communities where social stresses may be in evidence, however the actual centres are to be confirmed through further analysis. In addition, new community facilities support growth and underpin wellbeing across Canberra.	• Greater activation of group and local centres. • Improved community wellbeing.	• Consider the role and function of existing group and local centres which may include Kambah, Wanniassa, Fadden, Chisholm, Monash, Calwell, Gordon and Conder. Depending on the results of this consideration and whether further action is required, investigate planning and non-planning initiatives to support centre viability and role as a meeting place.

Delivering the district strategies – 12 implementation pathways

1 Blue-green network preservation and expansion

Restore, protect and fill gaps in the network of nature reserves across the ACT and delivering initiatives set out in environmental policies and legislation. Provide and extend connections for walking and cycling throughout the urban area aligned with the network of natural corridors, where conservation values can be protected, to contribute to a living blue-green network.

2 Detailed planning for future housing and employment

Undertake further analysis, research and investigations to inform more detailed planning for future employment floorspace and housing.

3 Territory Plan – applying urban character and design principles

Make changes through the statutory planning system and Territory Plan, such as rezoning or implementation by district policies or zone policies.

4 Transport and land use integration

Integrate land uses in planning for infrastructure projects like light rail and transport network development.

5 Employment and economic focus areas

Select centres to be a focus for enhanced economic development and employment outcomes through targeted planning and policy initiatives.

6 Establish new innovation precincts

Enhance the economic contribution of geographic areas where high value industry, research, health and education institutions and elite institutions are clustered together by enhancing physical and networking connections through targeted planning, asset development and management, and coordination initiatives.

7 Group and local centres initiatives

Provide targeted interventions to address declining group and local centres in established urban areas including some centres where socio-economic indicators are below the Canberra average.

8 City making and 'urban improvement'

Develop key precincts to contribute to remaking the city through 'urban improvement' – this means improving streets and public domain with more connections and greenery to encourage walking and enhance local liveability.

9 Facilitate the zero carbon transition

Provide the infrastructure needed to deliver the transition, as well as supporting and encouraging building owners and development proponents to transition.

10 Integrated infrastructure planning

Integrate planning and delivery of infrastructure to support growth, including civil infrastructure, environmental upgrades and management, and community and recreational facilities.

11 Governance for comprehensive redevelopment

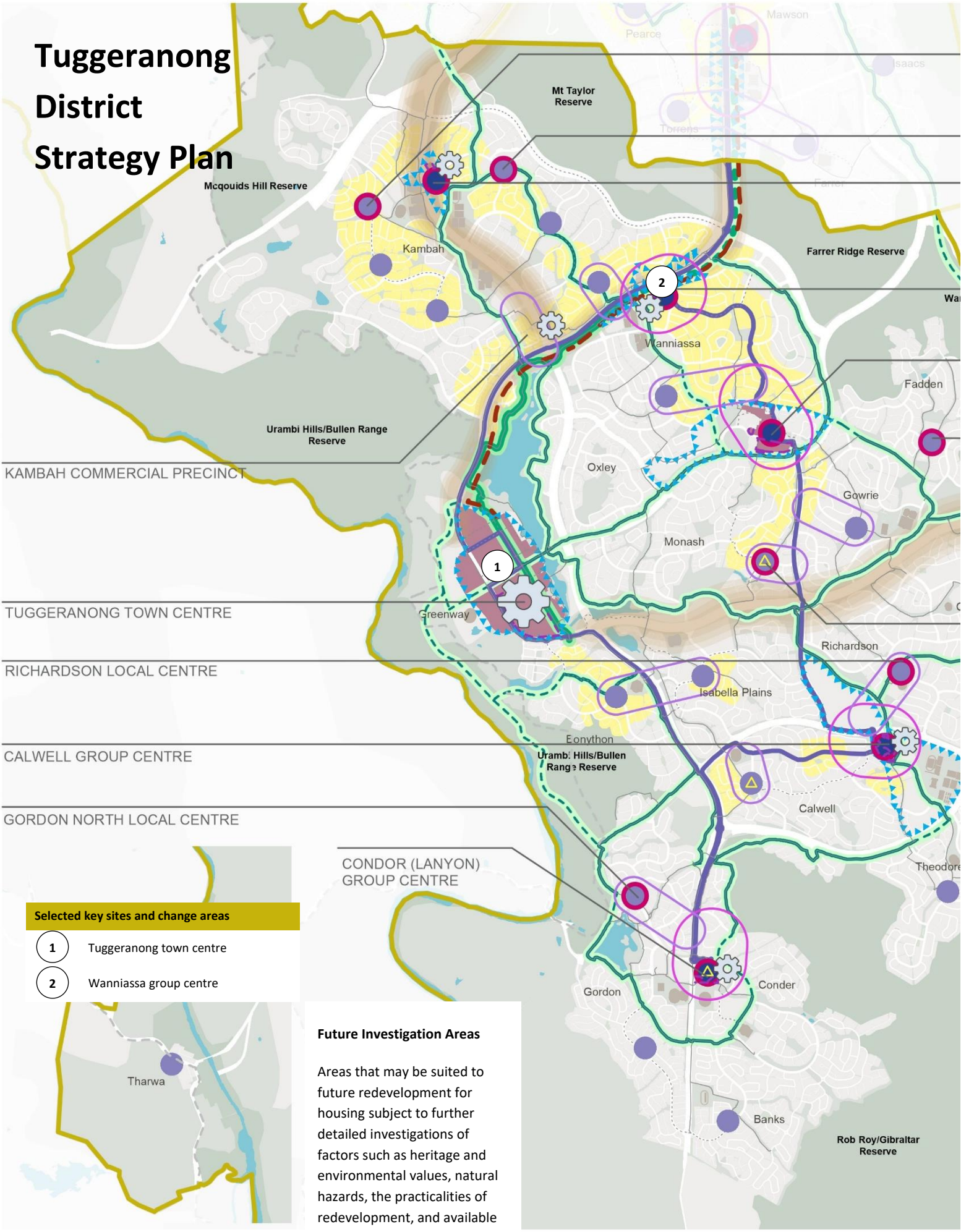
Investigate a new 'urbanising agent' or governance models to facilitate significant redevelopment and urban improvement.

12 Social and affordable housing contributions

Investigate future initiatives to support increased social and affordable housing in Canberra.

Note: Not all implementation pathways will apply in each district, and the numbering does not reflect an order of priority.

Tuggeranong District Strategy Plan

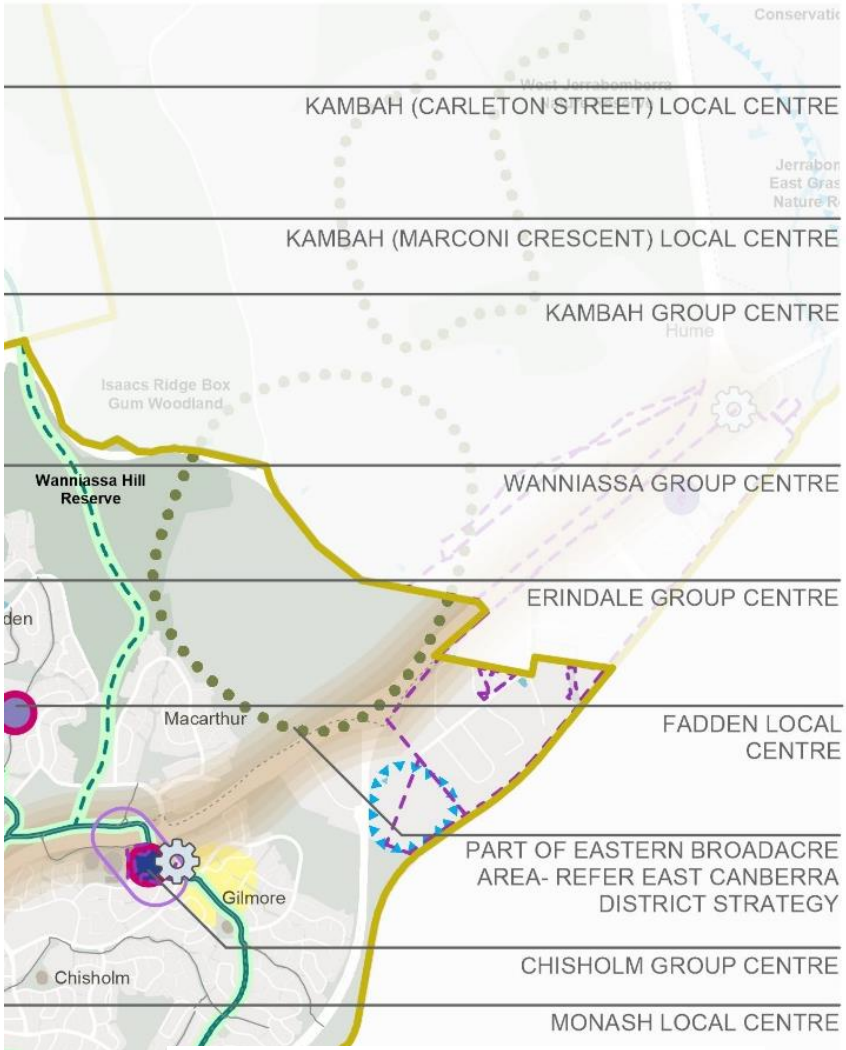


Selected key sites and change areas

1. Tuggeranong town centre
2. Wanniassa group centre

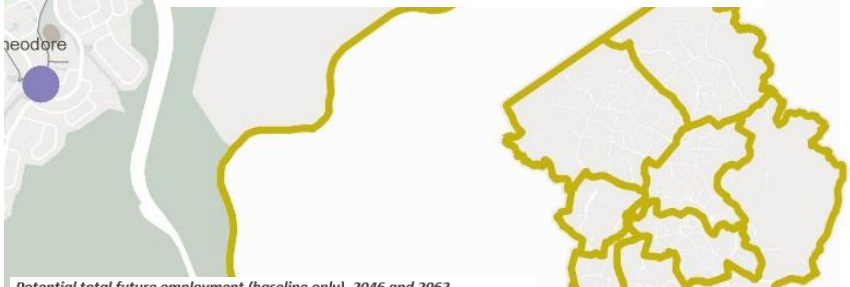
Future Investigation Areas

Areas that may be suited to future redevelopment for housing subject to further detailed investigations of factors such as heritage and environmental values, natural hazards, the practicalities of redevelopment, and available infrastructure.



Potential future infill housing demand – for further investigation, 2063

Tuggeranong District	Dwellings
Potential housing demand for Tuggeranong (infill)	4,800
Proposed, possible and potential future change areas (estimate)	4,000-4,400



Potential total future employment (baseline only), 2046 and 2063

Jobs by centre	2046	2063	Economic & Employment Focus areas
Tuggeranong town centre (incl. service trades area)	12,500	14,000	✓
Calwell group centre	300	300	✓
Chisholm group centre	300	300	✓
Conder group centre	600	600	✓
Kambah group centre	200	200	
Wanniassa group centre	400	400	
Erindale group centre	1,200	1,300	
Local centres	1,500	1,600	
Other (rest of district)	5,300	5,900	
Total	**22,100**	**24,600**	

LEGEND

Note: This is a common legend for all similar district plans and not all items listed will appear on this drawing

District Boundary

Blue-Green Network

- Open Space
- Nature Reserve
- Water Bodies
- Sportsfields

Existing Connections

- Primary
- Secondary

Possible Future Connections

- Primary
- Secondary

Economic Access and Opportunity

- Economic and Employment Focus
- City/ Town/Group/Local Centre
- Service Trades/Industrial
- Local Centre
- Group Centre
- Innovation Precinct

Strategic Movement

- Current Light Rail Corridor
- Proposed Light Rail Corridor
- Current Rapid Bus Corridor
- Proposed Rapid Bus Corridor
- Current Active Travel Community Network
- Proposed Active Travel Community Network
- Bicentennial National Trail
- Strategic Investigation Corridor

High Speed Rail Alignment

- Proposed
- Alternate

Sustainable Neighbourhoods

- Future Investigation Areas
- Rapid Stop to Local Centre 200m Connections
- Rapid Stop to Group Centre 400m Connections

Key Sites and Change Areas

- Proposed
- Possible
- Potential

Inclusive Centres and Communities

- New Community and Recreation Facilities
- Possible Centre Revitalisation Opportunity
- Shopping Centre Improvement Program Underway

Scale at A4 1:50000

0 250 1000
100 500

N

1. Introduction



Photo credit: ACT Government.

The role of district strategies and the wider planning system

District strategies have been prepared in the wider context of the review and reform of the ACT's planning system.

Review and reform process

Our city is growing. With more people living and working in Canberra, we need a planning system that can facilitate and guide this growth without compromising the characteristics of the city that we value.

A modern planning system is fundamental to our vision of a liveable and sustainable city. We want a planning system that is focussed on delivering positive outcomes for the residents of Canberra, encourages innovation and new ideas and is efficient and easier to use.

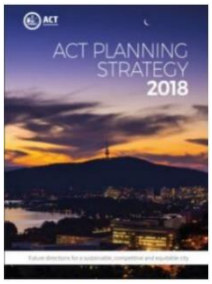
In the 15 years since the last major review of the Territory Plan, the long-term aspirations for Canberra have evolved to reflect the importance of adapting to climate change, delivering key infrastructure for our growing population and providing greater housing choice and accessibility. Together with the 2018 ACT Planning Strategy, this has shaped how we plan for Canberra's future.



Through the ACT Planning System Review and Reform Project we are reviewing and reforming our planning system in a holistic way to deliver better outcomes for communities, development, the environment and people across Canberra. **The district strategies are one part of this process, alongside a new Planning Act and a new Territory Plan with an outcomes-focussed approach**.

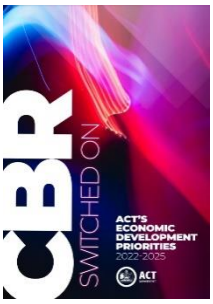
Established policy framework

District level planning bridges the gap between ACT-wide and local area planning. It sits within the existing ACT planning policy framework. The district strategies present an opportunity to illustrate how to deliver, across the districts, the vision of the 2018 ACT Planning Strategy and the directions set down within key ACT policy documents. Other relevant policies and strategies have also been considered.



ACT Planning Strategy 2018

The ACT Planning Strategy 2018 provides a vision for a more compact and efficient city and a strategic direction that future urban growth will be supported by delivering up to 70% of new homes within Canberra's existing urban footprint. To achieve this, new development will be concentrated in areas close to the City Centre, town and group centres and along key transit corridors. This urban form is highlighted in the ACT Planning Strategy Policy Plan.



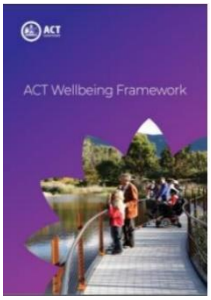
CBR Switched On – ACT's Economic Development Priorities 2022–2025

The 2022 priorities for economic development post-COVID include for Canberra to be a city that gives you back time, delivers a net zero city and focusses on knowledge-based economic growth. The Chief Minister's Statement of Ambition includes building on Canberra's strength as the knowledge capital and continuing Canberra's track record in innovation and entrepreneurship. The three missions underpinning the strategy include a focus on developing innovation precincts to attract talent, and facilitating investment in key industries including space, cyber, security, defence, renewables, and advanced technologies.



ACT Climate Change Strategy 2019–25

In May 2019, the ACT joined many other cities, states and territories around the world in declaring a state of climate emergency. The ACT Climate Change Strategy 2019–25 sets out the Government's response. It outlines actions to meet the ACT's legislated emissions reduction target of 50–60% (below 1990 levels) by 2025 and establishes a pathway for achieving net zero emissions by 2045.



ACT Wellbeing Framework

The ACT Wellbeing Framework describes that qualities such as "having the opportunity and ability to lead lives of personal and community value – with qualities such as good health, time to enjoy the things in life that matter, in an environment that promotes personal growth – are at the heart of wellbeing."



ACT Transport Strategy 2020

The ACT Transport Strategy 2020 sets out the Government's approach to achieving flexible, reliable and sustainable options for Canberrans to make their journeys, and provides a framework for planning and investment in transport for the next 20 years. It describes how the ACT Government will deliver connected public transport; high quality environments for walking and cycling; and a road network that allows us to move people and goods safely and reliably across the city.



ACT Infrastructure Plan

The ACT Infrastructure Plan provides a framework for how the ACT Government will build new and renew established infrastructure to cater for a city of 500,000 people. The plan is a comprehensive, multi-decade plan detailing over $14 billion worth of infrastructure investments. The focus of the plan is on health, education, transport and community services. The plan is currently being updated.

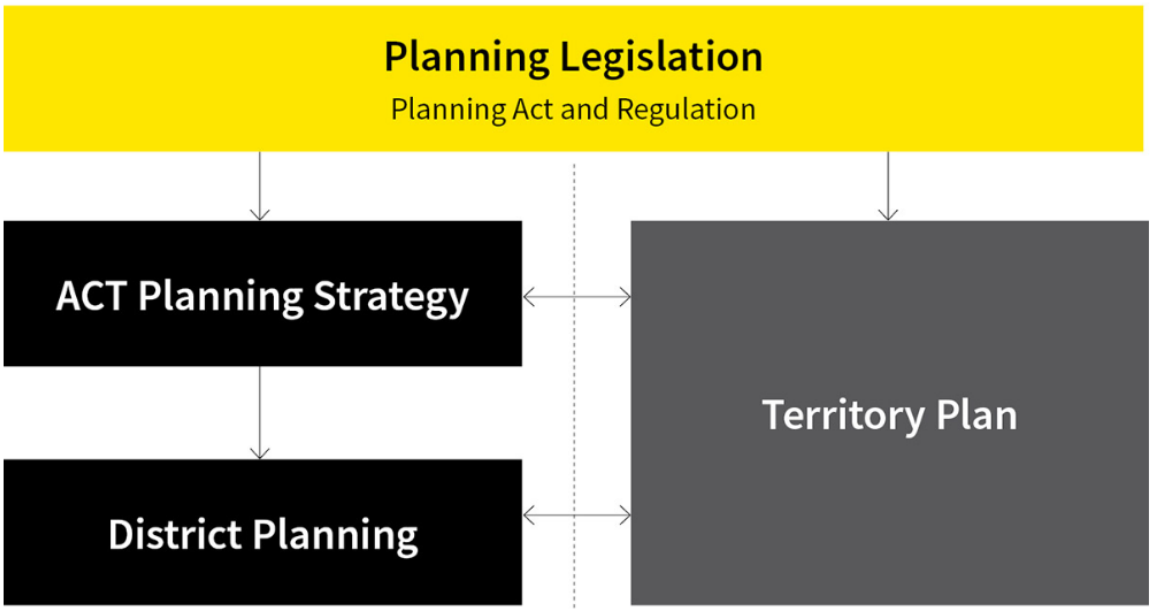
Role of the district strategies

The district strategies will facilitate the implementation of the new Planning Act by setting directions and future planning outcomes for each district. District planning allows for managing growth and change strategically within and between districts. District planning also provides the opportunity to recognise the distinctive character of each district and reflect this in the planning system.

The district strategies are intended to address an existing gap by providing a line-of-sight between metropolitan level planning, policies and legislation and on-the-ground outcomes that are influenced through the Territory Plan by:

- setting a future direction for each of Canberra's districts
- providing a guide for implementing the ACT Planning Strategy at a district level, including guidance on desirable areas of growth and change based on their accessibility to services, transport and amenities – consistent with good planning practice – to inform the district policies under the new Territory Plan
- informing the provision of infrastructure, community needs assessments, and assessment of major development and rezoning proposals and more detailed precinct and site planning
- assisting in achieving coordination between infrastructure, transport, planning, climate change and living infrastructure strategies and delivery of initiatives at a district level.

Figure 1: District planning within the reformed planning system



Source: ACT Government, 2022.

District policies

Under the new planning system, the existing structure plans, concept plans and precinct codes that sit within the Territory Plan will be refined and combined into new **district policies**. The district policies will set out specific planning requirements applying to a district or areas within a district where tailored policies are required to deliver the desired development outcomes.

The district strategies will inform the preparation of the district policies in identifying areas of potential future land use change and providing guidance on the expected character of development in those areas.

What do the district strategies cover?

District strategies for nine districts

District strategies have been prepared for nine districts, as shown in Figure 2:

- Belconnen
- Gungahlin
- Inner North and City
- Inner South
- Molonglo Valley
- Tuggeranong
- Weston Creek
- Woden
- East Canberra

East Canberra

East Canberra District includes the parts of Canberra known as Majura and Jerrabomberra, including the Oaks Estate. The district strategy for East Canberra is different to the other urban districts as its land uses are predominantly for employment and future planning will need to be informed by the outcomes of the Strategic Assessment for the Eastern Broadacre area.

Most new development and population growth will be in these nine districts. Strategic planning must take into account the special features, characteristics, challenges and opportunities of each district.

Other districts may be considered in the future, as necessary. For example, the western edge of the ACT is under investigation for its capacity to accommodate future development, which could result in a future district depending on the investigation's outcomes.

Data sources and methodology

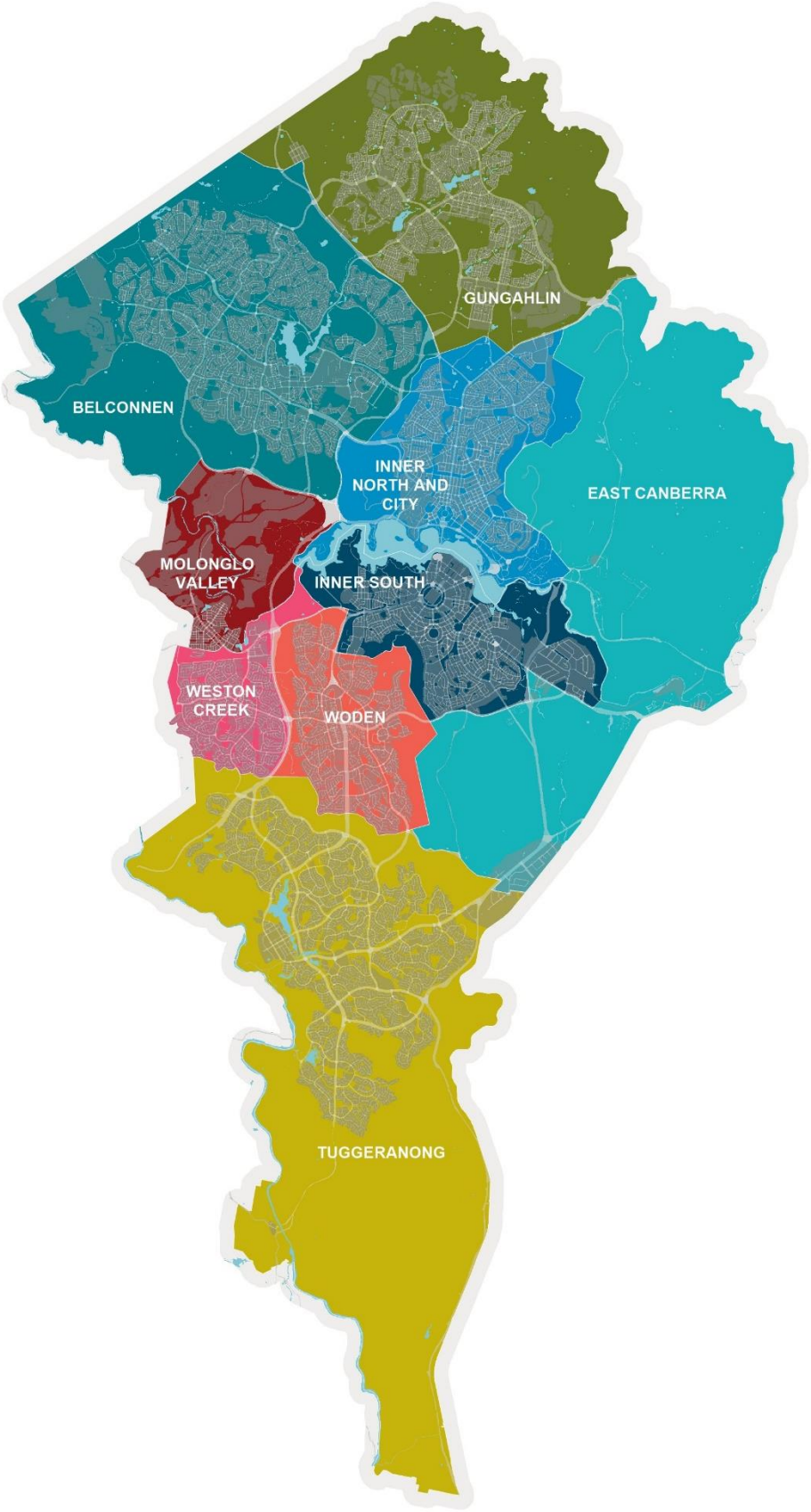
The preparation of the district strategies has drawn on a wide variety of sources including:

- outcomes from stakeholder engagement activities by district
- ACT Government strategies and plans
- ABS Census data and government population projections (based on 2016 census data)
- previous studies and analyses on housing, employment, infrastructure, transport, environment and community facilities
- data and mapping for biodiversity, heritage, transport modelling, flood modelling and bushfire risk modelling (noting that improved mapping and understanding of risks is needed in the future)
- engagement with ACT Government directorates (see Appendix 4).

The planning for each district has considered different development scenarios, evaluated in terms of key elements such as transport accessibility, access to amenity and services and sustainability considerations, and refined to the preferred approach, which is documented in the district strategies.

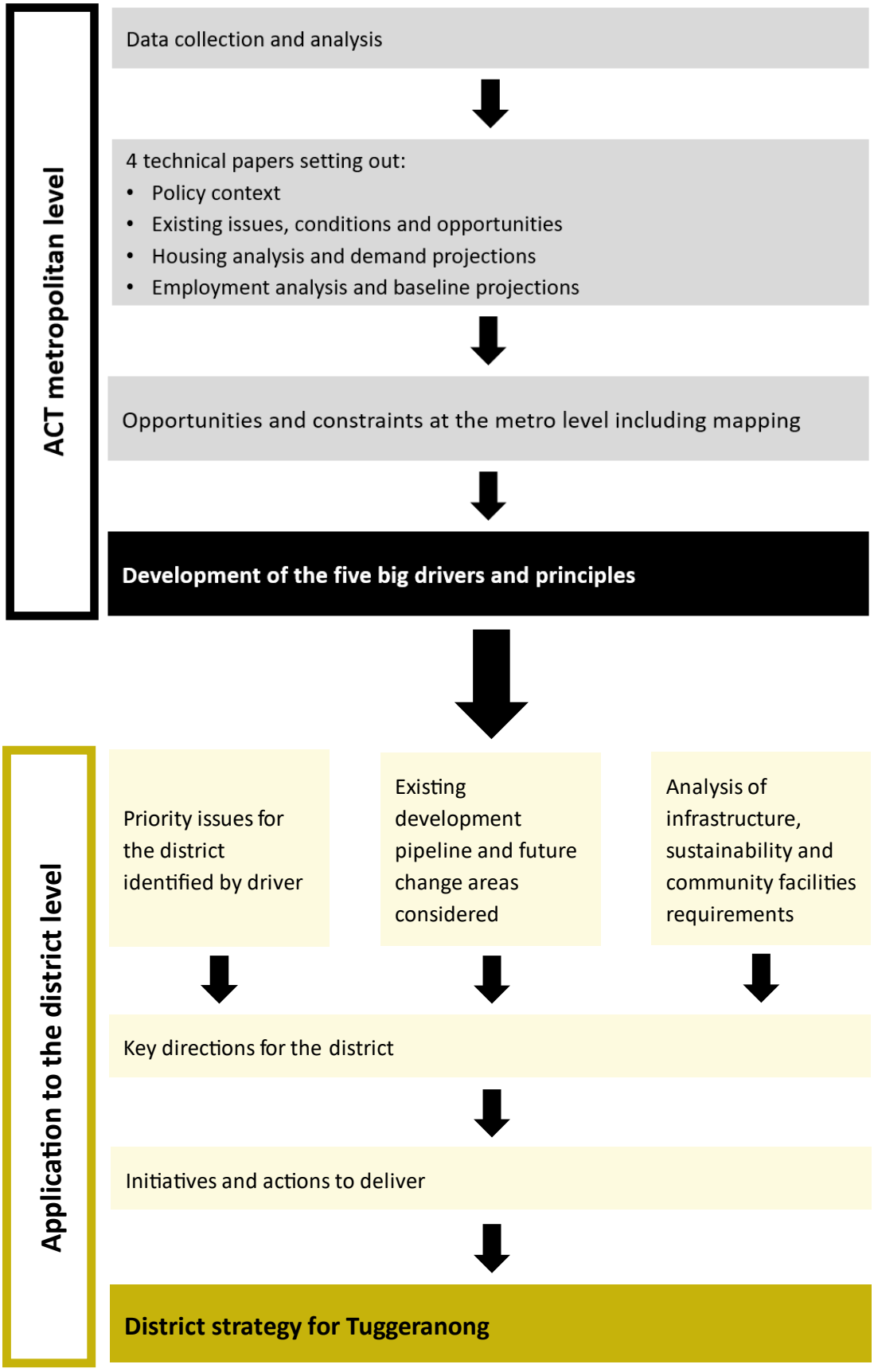
An overview of this methodology is provided in Figure 3.

Figure 2: District boundaries



Source: ACT Government and Tait Network, 2022.

Figure 3: District strategies methodology



District strategies will be dynamic documents

This is the first version of the district strategies, which have been developed to reflect the available information and data. The strategies will be 'living documents' that can be regularly updated to reflect new ideas, projects, strategies or policies adopted by the Government, and updated Census data, population and employment projections. The legislation requires us to consider at least every five years whether a review of the district strategies is necessary.

Note: The data in this document refers to both 2016 and 2021 ABS Censuses as not all the 2021 Census data was available when the district strategies were prepared. Similarly, the population forecasts used to inform the housing and employment targets are those prepared by ACT Treasury in early 2022, which were prior to the release of the 2021 Census results.

The intention is to update the strategies when additional 2021 Census data is available and the ACT's population projections have been revised, so they reflect emergent trends and provide more detailed analysis of areas of potential future change and development.

Time horizons for the district strategies

The 2018 ACT Planning Strategy identified a need for an additional 100,000 dwellings in the ACT over a 25-year period. **This estimate was based on historically high rates of growth observed in the ACT in the years preceding 2018.**

The most recent ACT Treasury population projections (prepared in early 2022 and based on 2016 Census data) and observed trends from previous ABS Census data suggest these rates of growth may not be sustained over the long term, with continued uncertainty around the impact of COVID-19 on migration levels and population growth. Modelling based on these population projections suggests that 100,000 additional dwellings in the ACT will be required through to around 2063.

As such, the district strategies address two time horizons:

- **2046** – a roughly 25-year horizon, when around 57,800 dwellings may be needed across the ACT
- **2063** – a longer term horizon when the 100,000 additional dwellings may be needed for the ACT

Planning for the longer-term 2063 horizon, in addition to the medium term in 2046, allows us to build in additional capacity for future growth in the right locations to respond to unexpected changes in demand and population growth. Longer term planning also allows for opportunities for alignment with delivery of crucial supporting infrastructure including major transport initiatives.

How to use this document

The rest of this document is set up in four sections. A glossary of terms is provided at the end of the document.

2 ACT metropolitan context

Section 2 sets the scene for the preparation of the district strategies in the wider metropolitan context. This includes: consideration of macro-level trends and issues that are affecting planning in Canberra and how we need to plan in future; the key themes that have emerged from consultation with the community; exploration of the existing demographics, housing stock and affordability, and employment characteristics of the ACT and each district; and identification of the potential future number of people and jobs that need to be accommodated in the districts.

3 Five big drivers of district planning

Section 3 describes the five big drivers at the metropolitan level that have guided the district planning:

- Blue-green network
- Economic access and opportunity across the city
- Strategic movement to support city growth
- Sustainable neighbourhoods
- Inclusive centres and communities

Under each driver, the existing spatial context, opportunities and challenges, and a series of planning objectives are outlined, along with 10 key targets that will enable monitoring of delivery.

4 Delivering the district strategies

Section 4 outlines 12 implementation pathways that will be used to deliver the district strategies. These pathways provide a program of action over the short, medium and long term, and are linked to the district-specific initiatives in Section 5. Not all of these pathways will apply in each district.

5 District strategy for Tuggeranong

Section 5 outlines the district strategy for Tuggeranong. The district strategy sets out ’s context and opportunities and constraints. It contains a district strategy plan and key directions for the district based around the five big drivers. The district strategy also describes a series of district-specific initiatives for each driver, principles guiding future development of selected key sites within the district, and the infrastructure that may be required to support the delivery of the district strategy.

2. ACT metropolitan context

The ACT Planning Strategy provides Territory-wide directions and considers the regional context that Canberra and the ACT sit within. While the district strategies consider that broader regional context, these district strategies focus on the ACT and, specifically, its nine districts.



Photo credit: ACT Government.

Ngunnawal Country

The ACT is Ngunnawal Country and has been for tens of thousands of years. The foundational elements of this landscape are its geology, landform, flora and fauna, and the living culture of the Ngunnawal people.

These foundational elements of place are all the more important in the face of climate change and extreme weather. They must be understood aesthetically and practically in the context of the development of Canberra and nature in the city; and as part of Canberra's evolving urban structure.

Planning on Ngunnawal Country

Planning for future development should begin with understanding of Country and its importance and connection for Ngunnawal people. Country is much more than just a place; it is the interconnections between Ngunnawal people, the landscape and all its values past, present and future. It is the lore, law, language and songlines of Country that guide Ngunnawal people in caring for Country.

The district strategies commit to supporting the health and wellbeing of Country, about which we have so much more to learn. If we commit to valuing, respecting and being guided by the Ngunnawal people – who know that if we care for Country it will care for us – then the learning journey gives us the best chance of success in caring for and connecting to Country as Canberra continues to develop. Respectful collaborations and conversations are needed with the Ngunnawal people where appropriate about Canberra's continued development. This includes recognition of Ngunnawal peoples' rights under the ACT Human Rights Act 2004 and delivery on the Closing the Gap, ACT Aboriginal and Torres Strait Islander Agreement and Reconciliation Action Plan targets.

The landform and terrain, waterways, vegetation and natural reserves of the ACT – and the native flora and fauna and humans it supports – are the living embodiment of Country. These landscape elements are also fundamental to Canberra's evolving urban structure. They frame and dictate the footprint of urban design and development. The principle of caring for Country and Country will care for you plays a significant role in the future design of the ACT.



Connecting to Country

Restoring Ngunnawal cultural places in the Ginninderra Creek catchment: Mulanggang Traditional Aboriginal Landcare Group and Ginninderra Catchment Group

Photo credit: Still 3:05; Restoring Aboriginal Cultural Places in the Ginninderra Catchment – Gubur Dhaura from Ginninderra Catchment Group on Vimeo.
https://ginninderralandcare.org.au/aboriginal-landcare/

Macro trends and issues affecting planning

A range of broader, macro-level factors will influence how Canberra evolves.

The district strategies consider some of these factors and their potential implications and opportunities from a spatial and policy perspective. Many things have changed since the 2018 ACT Planning Strategy was developed, including trends and influences that may not have been evident at that time; many of the issues described below also need to be considered in more detail in metropolitan-level and other planning.

Climate change

Climate change is a fundamental threat to our planet and existing way of life; it must be a primary consideration in all planning for cities. The district strategies should make sure:

- development in Canberra considers sustainability and carbon impacts, consistent with the ACT Government's target for net zero greenhouse gas emissions by 2045
- the city is resilient to the impacts of climate change, and that these are considered in the locations for and types of development
- public and open space is central to urban design and built form planning due to its multiple beneficial roles.

Transport innovations and active travel

A range of transport innovations are emerging to provide flexible, reliable and sustainable options for Canberrans to travel. These innovations include the growing use of zero emissions vehicles – both private cars and in public transport networks – micro-mobility (e-scooters and e-bikes) and potentially in future, autonomous cars.

Growth in zero emissions vehicle use requires supporting infrastructure within our districts, noting particularly the ACT's phasing out of internal combustion engine vehicles from 2035.

Charging stations and other infrastructure may be able to be used to support local centres or integrate with community facilities. New housing can support reduced car use by encouraging walking and cycling friendly development and shared zero emissions vehicle access.

City-shaping transport

Transport infrastructure has a crucial ability to shape and dictate the urban form of a city, particularly large projects such as light rail, high speed rail or major roads.

The locations of major transport infrastructure should consider elements such as accessibility to residents, accessibility to employment, efficient connections to the wider network and integration into the existing urban fabric. The ACT's future rapid transit network presents opportunities for development to align with improved amenity and accessibility within each of the districts.

Future industries and employment

Our economy and ways of working are constantly evolving. The COVID-19 pandemic has had a particularly significant impact in some sectors; for example, more people working from home is changing how commercial floorspace is used. There may be a need for increased flexibility in how commercial floorspace is used and where it is located.

Planning needs to consider the types of employment the ACT will have in the future. The city's competitive advantage in knowledge-based sectors will continue. As the city matures, more opportunities for industrial and 'land-hungry' employment uses may be required. Areas with more limited access to jobs and opportunities need to be considered to address spatial inequality.

Knowledge and innovation precincts

Innovation precincts are urban areas that have networks of organisations, start-ups, research institutes, knowledge intensive business and education institutions. The presence of many tertiary education and other anchor institutions in the ACT presents logical opportunities for the development of innovation precincts.

Establishing these types of precincts will require consideration of the land uses surrounding universities and major hospital precincts within some districts, alongside other success factors including internal connections and balancing land diversity, liveability, amenity and affordability.

Retail

Retail trends constantly evolve with consumer desires and expectations; this can influence the structure and character of centres. The COVID-19 pandemic has accelerated trends towards online shopping, shifting the offering of centres away from traditional retail formats and towards experience-based services and food.

There may be opportunities within districts to revitalise declining local centres by opening them to a greater range of uses that are compatible with residential development.

Role as the national capital

Canberra has an important role as the national capital. This brings many advantages to the ACT: the tourism sector benefits from the presence of significant cultural institutions, attractions and national landmarks; and the city is the home of the Australian Government. Many institutions, embassies, landmarks and events that relate to Canberra's status as the national capital are concentrated in central Canberra; that is, the Inner North and City and Inner South districts respectively.

The National Capital Plan (NCP) and designated areas, administered by the National Capital Authority (NCA), have an important role to play in planning and shaping the development of the areas in which many of these institutions and landmarks sit, as well as other parts of the ACT.

The district strategies reinforce the location of the elements that contribute to Canberra's role as the national capital. They maintain the Griffin design for the City Centre and surrounds, landscape, vistas and views, and promote ease of access to and provision of services and facilities for the functions of government and associated office areas.

There may be opportunities to build on the tourism features in other districts to distribute tourism-related benefits, such as Gold Creek, the National Arboretum and Mount Stromlo.

Post-COVID environment

The COVID-19 pandemic has substantially impacted our way of life, although the long-term impact on our cities remains uncertain. Impacts have included altering our 'ways of working', our travel patterns and the functions of our centres, with more of a focus on 'the local' with more people working from home regularly.

The district strategies can reconsider the traditional roles of the City Centre and other centres in the ACT's hierarchy, with a shift to providing a greater diversity of uses for local business and enhancing the 'experiential role' of centres. There may be a greater need for flexibility in land uses in Canberra's commercial centres to respond to shifts in demand, particularly if remote working patterns continue.

There is a need to continue to monitor trends which may arise out of the pandemic that will need to be planned for in future.

Housing affordability

Housing affordability remains a critical issue, with property prices and rents consistently among the most expensive in Australia. While household incomes in Canberra are, on average, higher than other cities, this often masks the lack of affordable housing for those on lower incomes.

Housing affordability is a complex issue that cannot be solved by planning alone. The district strategies can consider ways to support housing affordability, such as requiring contributions to social and affordable housing within developments, facilitating housing choice and diversity, and locating future housing close to amenities and services to minimise other costs of living for residents.



Photo credit: ACT Government.

What we have heard from the community

In 2021, the ACT Government held a series of face-to-face workshops in each of the districts so the community could share ideas about what is important in creating liveable, diverse, accessible, compact, efficient, sustainable and resilient districts.

These workshops identified four key themes for the planning for all ACT districts: **environment**, **infrastructure and transport**, **building and housing, and community amenity**. A summary of the feedback is provided for all districts in Table 1, with the findings specific to the Tuggeranong District provided in Section 5.

These themes have all been considered in the preparation of each of the district strategies.



Photo credit: ACT Government.

Table 1: Feedback from the community for all districts, 2021

Environment	Infrastructure and transport	Building and housing	Community amenity
Trees and planting Increase street tree and undergrowth planting to support wildlife and improve urban cooling. Develop urban/micro forests.	**Foot and cycle paths** Connect foot and cycle path networks, supporting interchange between transport modes. Upgrade paths and accessible paths.	**Urban density** Locate urban density near commercial centres complemented with greenspaces. Consider concerns about high volumes, tall buildings, and development quality. Prevent negative impacts of densification on infrastructure and services.	**Education facilities** Better connect planning and education to make sure capacity in response to increased residential densities. Connect to public transport, roads and active travel options.
Open green space Protect and activate reserves and green corridors, particularly in areas of housing density. Maintain views of hills and ridges.	**Public transport** Increase connection, frequency, sustainability and utilisation of the public transport network.	**Housing diversity** Provide diverse housing including public housing, affordable housing, ageing in place and family homes.	**Employment and retail precincts** Revitalise and enhance shopping precincts and amenities. Increase employment opportunities in urban centres.
Water sensitive urban design Monitor and manage water quality. Increase amenity at waterfront locations.	**Roads** Reduce congestion and increase traffic calming. Increase safety of people from roads.	**Environmentally friendly** Design and construct new buildings to high environmental standards. Provide solar access in higher density living. Integrate buildings with natural spaces.	**Playgrounds and recreation spaces** Renew and activate existing playgrounds, sporting areas and facilities.
	Parking Retain parking. Recommend additional parking locations such as park and ride. Plan for new developments to make sure suitable parking within the development.	**Significant places** Plan sites to preserve and enhance their significance.	**Inclusivity** Integrate and educate about diverse groups including disability, Culturally and Linguistically Diverse (CALD), Aboriginal, religious and various age groups. Encourage inclusive community facilities.
			Community spaces Renew and activate existing spaces. Create new public spaces including cultural and religious facilities, meeting, volunteer and event spaces. Support needs of all age groups.

Note: The feedback in Table 1 is taken directly from consultation and as expressed by participants.

Existing characteristics of the ACT and districts

The district strategies require an understanding of the existing context of the ACT in terms of its demographics, housing stock and affordability, and employment specialisations.

The district-by-district snapshot in the following pages provides a comparison of these factors between districts. **The differences between districts further emphasises the need for a more spatially-focussed planning approach to respond to the cultural and natural heritage places, and characteristics and important considerations for each district**.

Note: The data used in this section refers to both 2016 and 2021 ABS Censuses (at the ABS Statistical Area 3 level) as not all the 2021 Census data was available when the strategies were prepared. The intention is to update the district strategies when additional 2021 Census data is available and the ACT's population projections have been revised.

Population

Of the districts, Belconnen had the largest share of population in the ACT at 23% as of the 2021 Census, followed by Tuggeranong and Gungahlin (see Figure 4). The age profile differs between districts (see Figure 5), with the Inner North and City having a larger share of young adults (20–29 years age group) compared to the other districts, and Weston Creek, Woden and the Inner South having the highest proportions of retirees (over 65 years age group).

Dwellings and housing

Separate houses remain the dominant type across the ACT at 63% of dwellings in 2021, with Tuggeranong (82%), Weston Creek (80%) and Belconnen (69%) having the highest proportions (see Figure 6). However, the share of households living in semi-detached and apartment dwellings is rapidly increasing, reflecting trends such as decreasing household sizes and affordability, noting there is ongoing demand for separate houses. The proportion of semi-detached housing types is generally consistent across the districts, with Molonglo Valley (24%), Gungahlin (21%), Woden (20%) and the Inner North and City (18%) having a higher proportion than the ACT as a whole (17%).

Dwelling types

In this analysis, 'separate house', 'medium density' and 'high density' refer to different development typologies, which may be different to how these terms are used in other contexts.

- **Separate house** refers to detached dwellings, typically on single blocks in areas zoned for low density residential.
- **Medium density** refers to attached and semi-detached dwellings (such as dual occupancies, townhouses and the like) and low-rise apartments.
- **High density** refers to apartment typologies of more than three storeys in height.



Figure 4: Total population by district, 2021

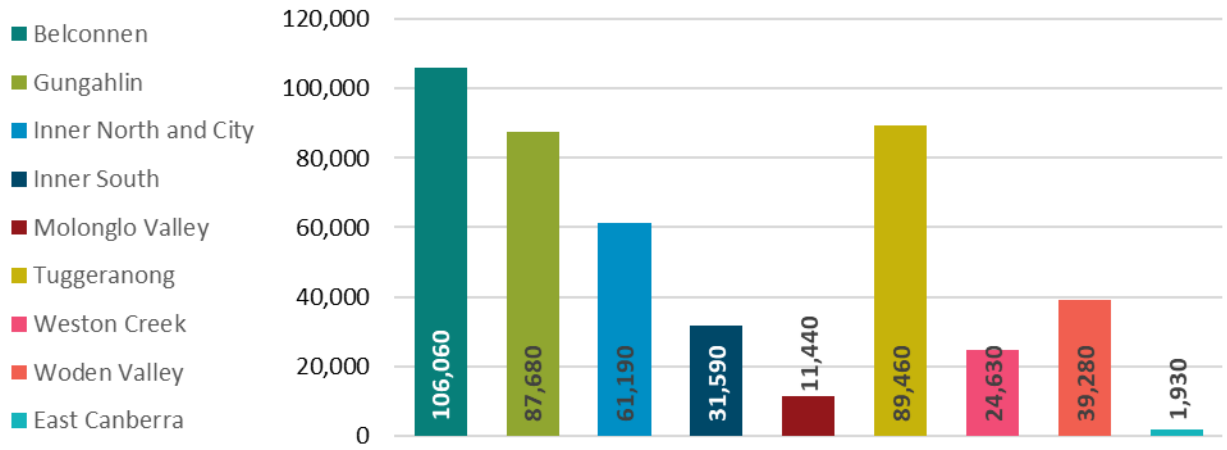


Figure 5: Age profile by district, 2021 – proportion of the population by age group

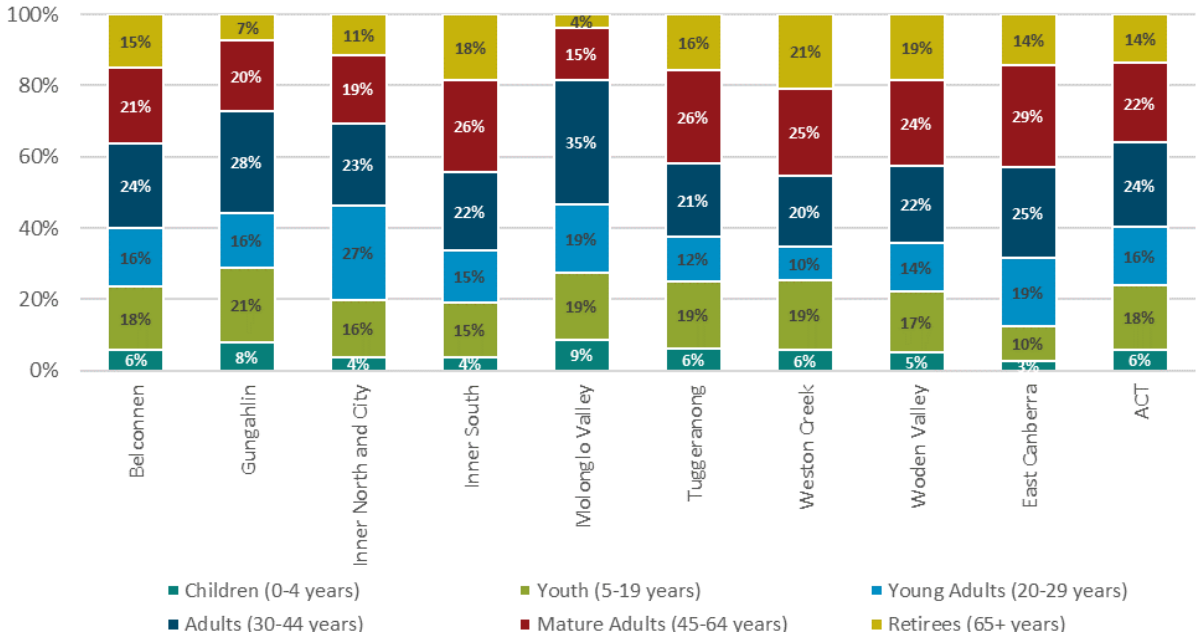
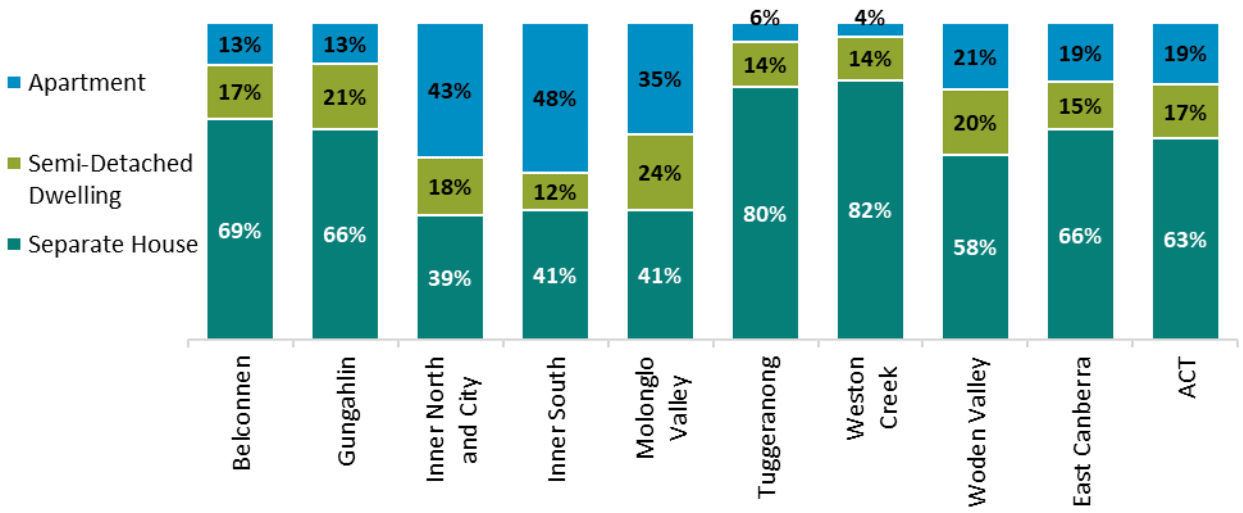


Figure 6: Housing types by district, 2021 (excludes 'other' dwelling types) – proportion of total dwellings



Note: data based on Statistical Area 3 (SA3) boundaries. Percentages may not add to 100% due to rounding.

Around 31% of ACT households were renting as of 2021. Rental households are said to be in housing stress if they spend 30% or more of their income on housing. The 2021 Census data suggests that besides East Canberra (which has a very small population overall), Belconnen has the highest proportion of rental households in rental stress (25%), followed the Inner North and City and Tuggeranong (both 24%); all are above the average (23%) across the ACT (see Figure 7).

Employment

Of the 220,000 jobs across the ACT (as of 2016), the Inner North and City had the highest share (31%), followed by the Inner South (22%) (see Figure 8). Among the districts with town centres, Gungahlin had the smallest share of jobs at 6%.

Employment industry types

Employment types have been grouped into four broad industry categories (see Table 2) based on 1-digit Australian and New Zealand Standard Industrial Classification (ANZSIC) used by the ABS – industrial, population serving, knowledge intensive and health and education.

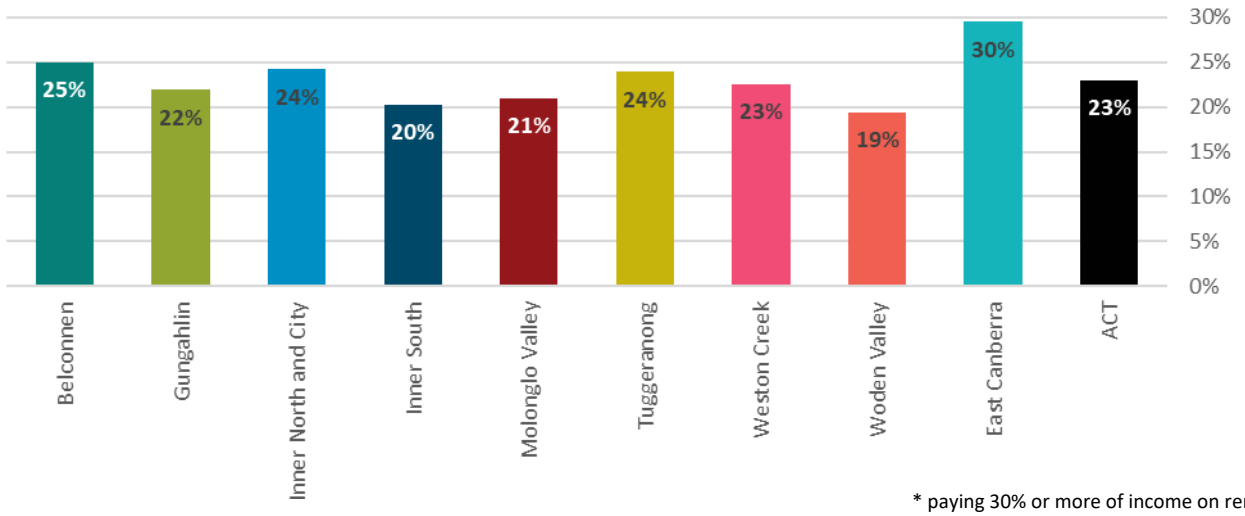
In terms of industry types, knowledge intensive jobs make up around half of the ACT's employment, with the Inner North and City having the largest share (see Figure 9). Population serving jobs (including construction, retail and hospitality) make up the largest share in Molonglo Valley (noting it currently has no town centres or group centres which would influence this) followed by Gungahlin.

The largest shares of health and education employment are in Weston Creek and Woden, influenced by older populations and employment at Canberra Hospital and ACT Government offices. Industrial employment has the smallest share, concentrated in established industrial precincts in the Inner South, Gungahlin and East Canberra.

Table 2: Four broad industry categories for employment

Industrial
Agriculture, forestry and fishing
Mining
Manufacturing
Wholesale trade
Transport, postal and warehousing
Population serving
Construction
Retail trade
Accommodation and food services
Arts and recreation services
Other services
Knowledge intensive
Information media and telecommunications
Financial and insurance services
Rental, hiring and real estate services
Professional, scientific and technical services
Administrative and support services
Public administration and safety
Health and Education
Education and training
Health care and social assistance

Figure 7: Proportion of rental households in rental stress by district, 2021*



* paying 30% or more of income on rent

Figure 8: Age profile by district, 2021 – proportion of the population by age group

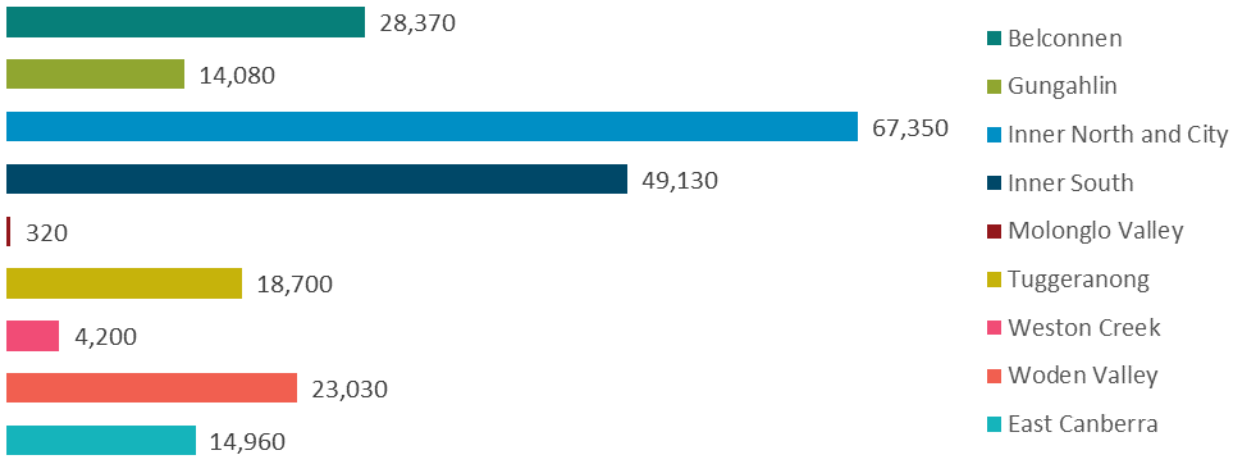
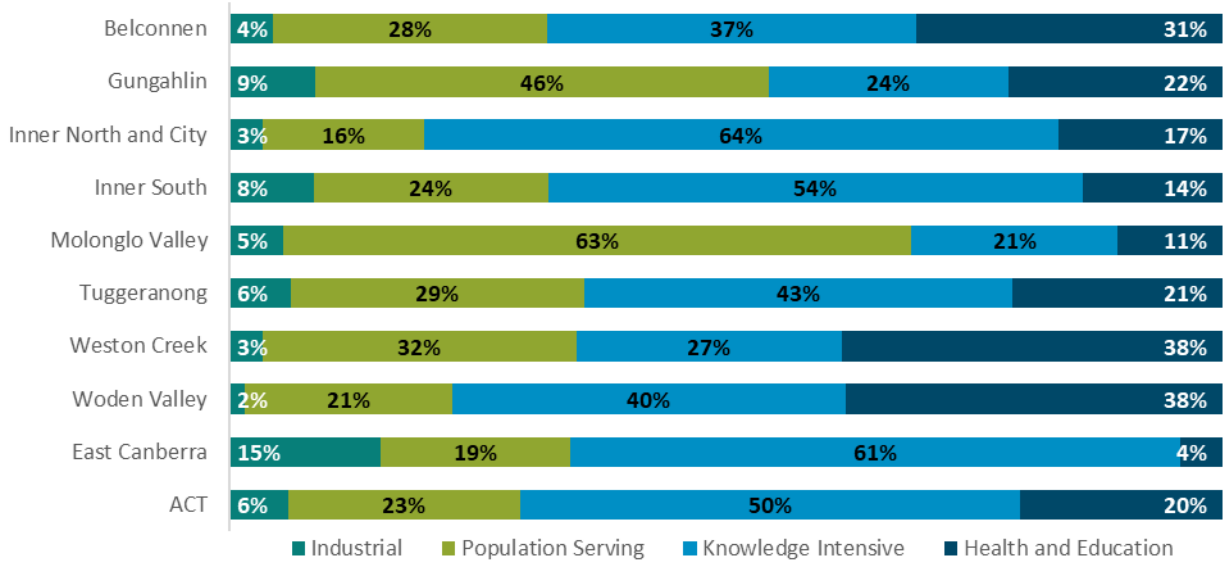


Figure 9: Proportion of jobs by industry type by district, 2016 (note: 2021 Census data not yet available)



Note: data based on Statistical Area 3 (SA3) boundaries. Percentages may not add to 100% due to rounding.

Planning for population and jobs

The district strategies use projections on the number of people and jobs that might be accommodated in the future. These are a starting point for land use and infrastructure planning, but initiatives in the district strategies will also influence future growth.

Note: The data and forecasts in this section are based on population projections from early 2022, which were prior to the release of the 2021 Census results. The intention is to update the district strategies when additional 2021 Census data is available and the ACT's population projections have been revised, so they reflect emergent trends and provide more detailed analysis of areas of potential future change and development.

Projected population

Understanding where the population is projected to grow or change helps the government plan for where housing, employment and infrastructure will be needed. Existing projections suggest the population will increase by around 135,000 people across the ACT by 2046 (a 31% increase on 2021). Some districts will see more growth than others, with the Inner North and City expected to have the largest share of the growth, apart from the greenfield area of Molonglo Valley. Over this time, the age profile is also projected to shift, with an increase in the proportion of people in the retiree age bracket (aged over 65 years).

What does this mean for housing?

Housing demand modelling was undertaken to establish the potential future dwellings in each district to cater for the projected population growth, with adjustments to recognise prospects for future additional dwellings. This modelling used the population projections combined with observed trends and propensities in ABS Census data over time to identify the number and type of dwellings that may be required; categorised as separate houses, medium-density dwellings and high-density dwellings.

As noted above, this modelling identified a need for around 57,800 new dwellings across the ACT in 2046, reaching 100,000 new dwellings in 2063.

Assuming the ACT's target for 70% of new dwellings to be within the existing urban boundary, **this means a target of around 40,500 new dwellings in infill areas by 2046 with 17,300 in greenfield precincts and, by 2063, 70,000 infill and 30,000 greenfield dwellings respectively**.

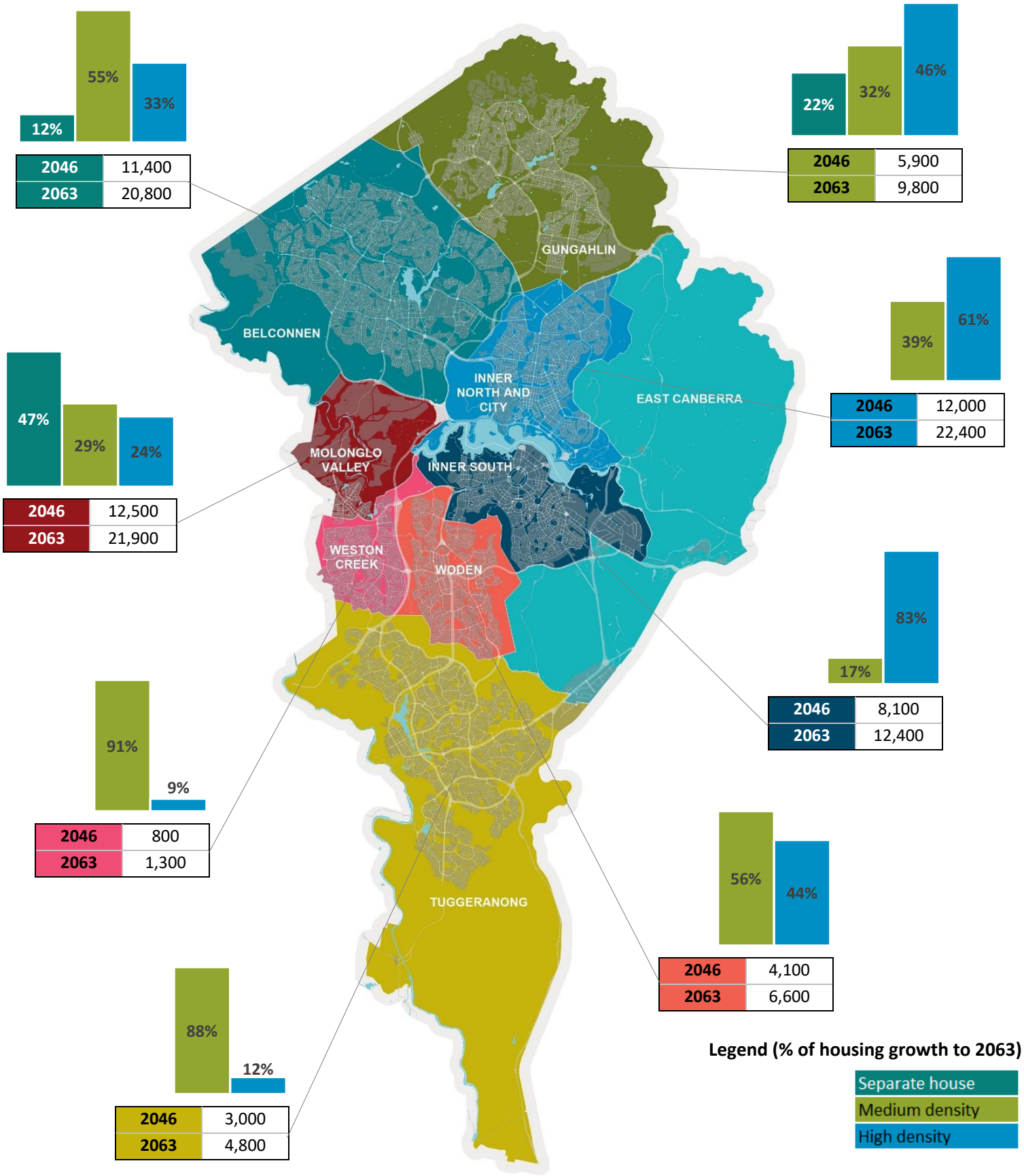
Distribution to districts

This overall dwelling growth has been allocated into the ACT's districts in alignment with the population in ACT Treasury's projections (note – this is not necessarily where new housing *should* go). The resulting dwelling targets for the longer-term (2063) horizon for each district are shown in Figure 10. Most growth in dwellings is projected in the Inner North and City (22%), Molonglo Valley (22%) and Belconnen (21%) districts.

The district strategies consider the housing targets in identifying areas for potential change across the city, including **infill areas**, while also having regard to greenfield precincts that are actively being planned by the ACT Government.

Focussing on urban growth opportunities within the existing urban area reduces the environmental consequences of continued urban expansion and reflects emerging changes in how we are living, including in smaller households, and what is affordable in relation to not only housing type but also location.

Figure 10: Potential future housing demand, based on recent population projections, 2046 and 2063



Source: ACT Government and SGS Economics and Planning, 2022.

Note: More detailed planning will determine where future development will be allocated. This is likely to depart from the future dwelling distributions shown here. Housing modelling has not been undertaken for East Canberra.

What does this mean for employment?

Modelling was undertaken to develop baseline employment forecasts by employment area across the ACT to help guide the district spatial planning at a strategic level. The forecasts have identified notional job targets for key employment areas, including the town, group and local centres and other precincts such as industrial areas. The forecasts account for employment that is:

- generated by population growth and new housing – jobs associated with population services like retail and hospitality
- strategic employment – less focussed on a local population catchment, such as large government offices or industrial precincts.

The modelling utilised the ACT's population projections and trends observed in Census data for employment and industry types, the spatial distribution of jobs across the ACT's centres and other employment precincts, and other more recent ABS data to forecast the future level of growth across the ACT by employment type. The employment forecasts can be used to understand and plan for the type and amount of floorspace that may be needed in locations in future.

The resulting employment forecasts for the ACT show a target of around 85,000 additional jobs by 2046, and another 57,000 jobs between 2046 and 2063 (the longer term planning horizon).

Distribution to districts

The projection of additional jobs in each district is shown in Figure 11. The allocation is influenced by the existing distribution and location of jobs between centres and other employment areas within the ACT (based on the 2016 Census). Over the projection periods employment will grow in the Molonglo Valley as it develops. The central city area shared between the Inner North and City and Inner South is projected to see the largest share of jobs given the presence of major employment precincts in those districts.

Where used for centre or precinct planning, the forecasts should be considered a baseline or a minimum. Areas and centres where the district strategies have identified policy aspirations for a particular focus on generating additional employment beyond these baseline forecasts are also indicated in the district-specific section (see Section 5).

Note:

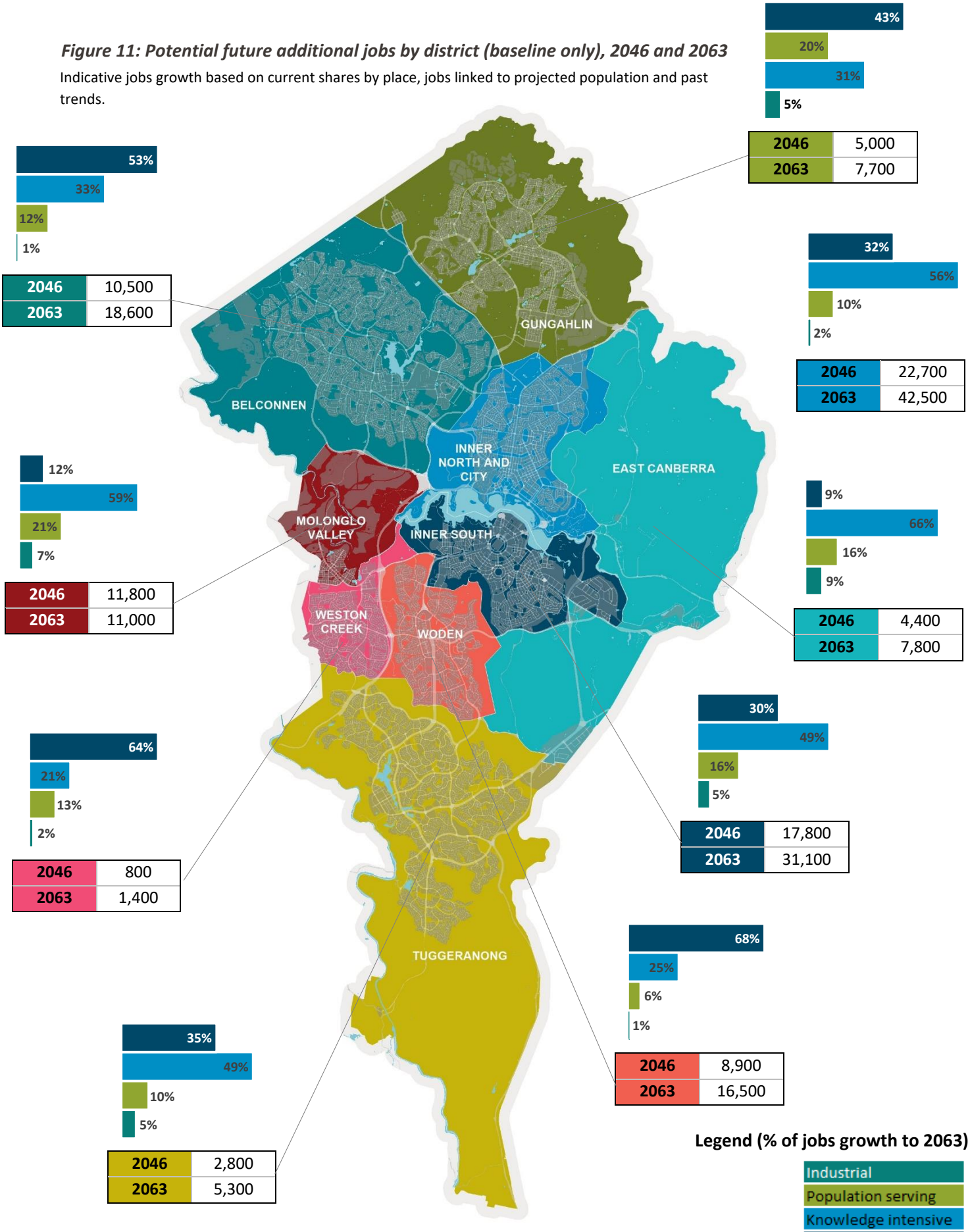
The analysis of potential employment futures is linked to the population projections from early 2022, which were prior to the release of the 2021 Census results.

The district and place allocations draw on the 2016 spatial distribution of employment.

The intention is to update the district strategies when additional 2021 Census data is available and the ACT's population projections have been revised, so they reflect emergent trends and provide more detailed analysis of areas of potential future change and development.

Figure 11: Potential future additional jobs by district (baseline only), 2046 and 2063

Indicative jobs growth based on current shares by place, jobs linked to projected population and past trends.



Source: ACT Government and SGS Economics and Planning, 2022.

Note: excludes small number of jobs in areas outside of the nine districts.

3. Five big drivers of district planning



Photo credit: ACT Government.

Objectives for the district strategies

In preparing each district strategy, a range of 'planning and design objectives' were applied. These objectives were informed by the proposed growth of each district, the spatial context and existing challenges and opportunities.

The vision of the 2018 ACT Planning Strategy is for Canberra to be a sustainable, competitive and equitable city that respects Canberra as a city in the landscape and the national capital, while being responsive to the future and resilient to change. The Planning Strategy has the following five related themes.

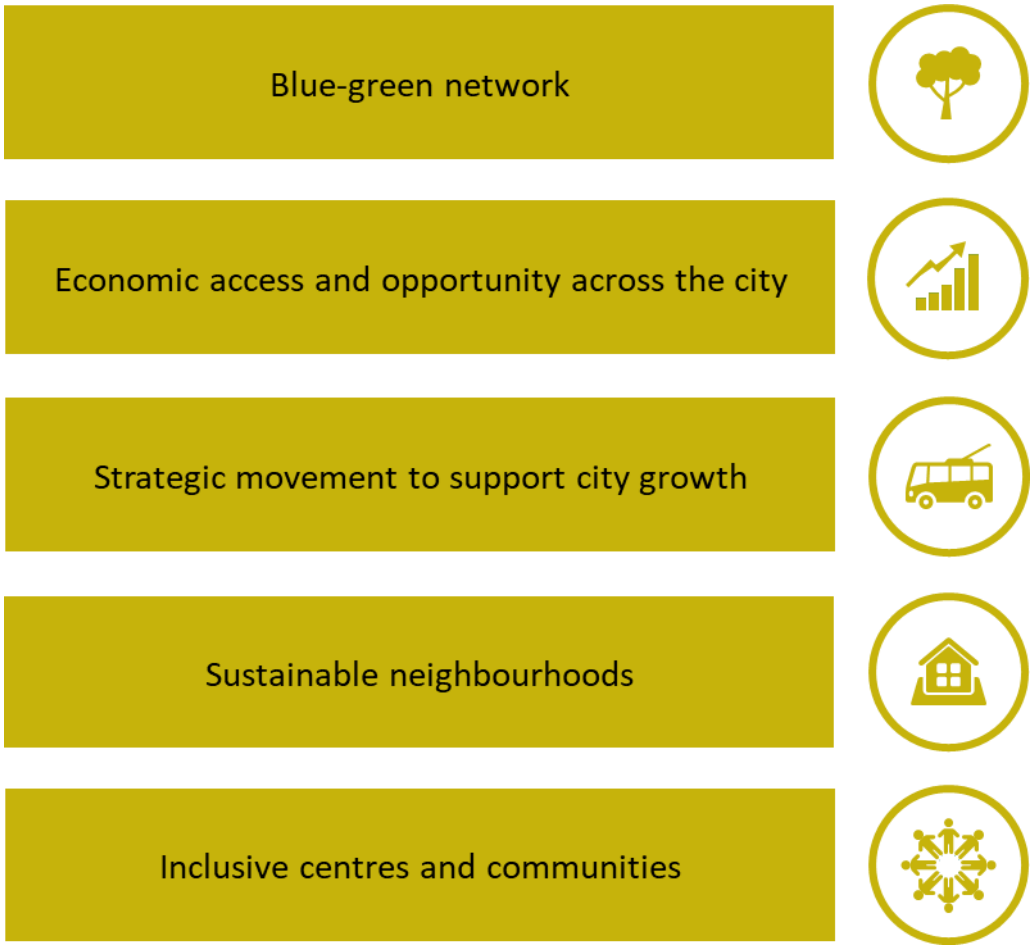


Five big drivers

To translate the vision and directions of the Planning Strategy to the district level, planning and design objectives were developed and applied under the following **five big drivers**.

These drivers and the district planning consider not just where development may happen, but the social, environmental, economic, transport and amenity factors that are also essential to creating liveable places. New development should be supported by appropriate community facilities, transport and other infrastructure, and employment opportunities. Avoiding and mitigating further impacts on our natural environment and open spaces must be considered.

Figure 12: The five big drivers of district planning



The following pages consider the existing spatial context and opportunities and challenges at the metropolitan level for each of the five big drivers and outline the associated objectives for the district planning. **These objectives have guided the approach to the planning work and will, in turn, guide what is expected of future development across all the districts.**

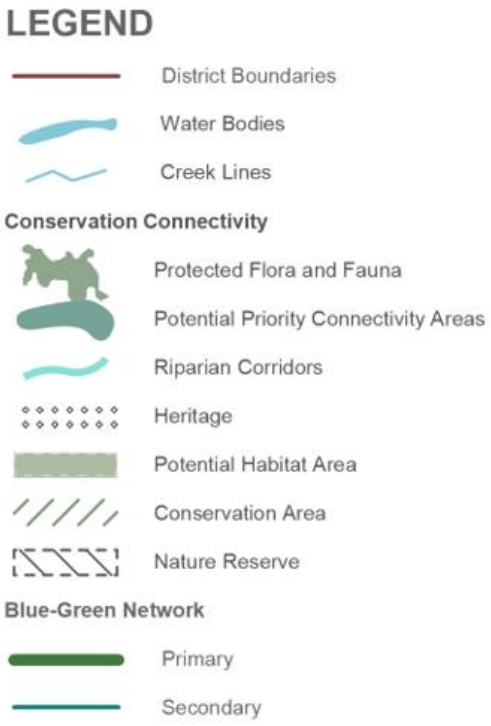
The Planning Strategy themes that each objective responds to are highlighted by the numbering in the objectives table for each of the five big drivers.

Blue-green network

Ecological sustainability integrates the protection of natural environment values with respect, protection and support for cultural systems and values.

The ACT is exemplary in conserving more than 70% of its 236,000 hectares in formal nature reserves and national parks. An additional 6,600 hectares is public urban open space that contributes considerably to residents' wellbeing. Many important environmental and cultural values occur on sites across the urban area and are highly valuable as they support threatened ecosystems, provide habitat for native species or facilitate habitat connectivity.

Integration of formal and informal conservation areas with the evolving urban structure can include a well-designed 'blue-green' infrastructure network. This network is founded on the landscape context and paths, cycleways and recreational open space. It facilitates community wellbeing, links towns and urban areas and supports natural and cultural values. Such access allows people to understand and build their awareness of their city within its broader natural and cultural contexts and to be participants contributing to the character, conservation, stewardship and enjoyment of place.

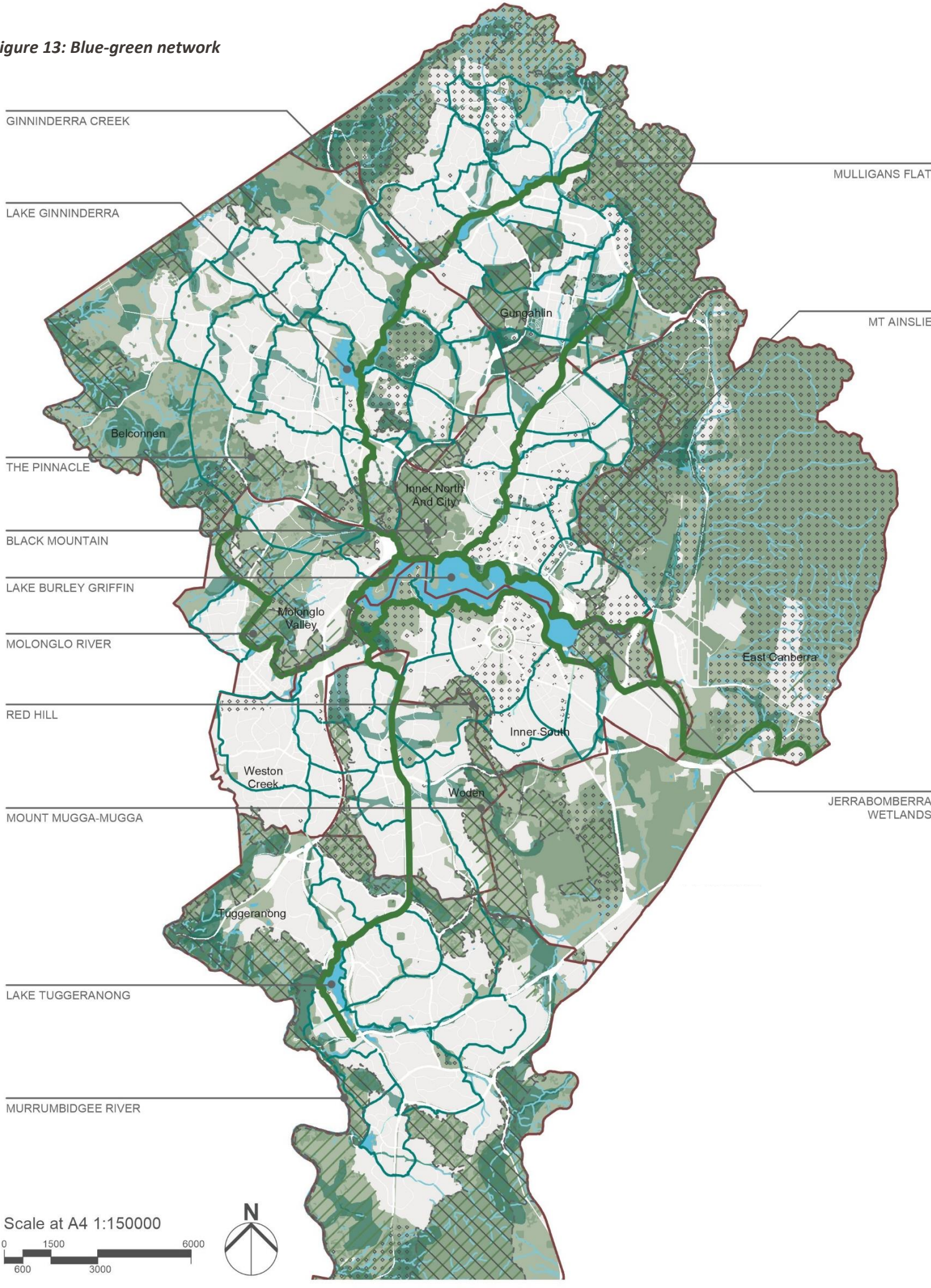


Primary network: spans Canberra, along the waterways which bring life to this place – the Molonglo River, Sullivan's Creek, Ginninderra Creek and Yarralumla Creek.

Secondary network: intersects with the primary network through and between districts, building upon the existing active travel networks.

Blue-green connections: extend liveable blue-green network by establishing priority connections.

Figure 13: Blue-green network



The blue-green foundation for development

The **primary network** spans Canberra's landscape and waterways giving life to this place, providing cultural pathways and resources for Ngunnawal ceremony and cultural practices. It includes the Molonglo River, Sullivan's Creek, Ginninderra Creek and Yarralumla Creek, amongst others.

This primary network provides functions for recreation and active travel, where this is consistent with the role of these corridors and places for biodiversity, as well as flood conveyance and storage, stormwater treatment and tree canopy. The network welcomes all Canberra's residents and provides the opportunity to celebrate Traditional Custodians' cultural connection and understanding of Country as the region's first people.

The **secondary network** intersects with the primary network to connect through and between districts while building upon the existing active travel network. These secondary connections reflect the specific layout and characteristics of each district. Their design will enhance and generate new corridors between places, both for people and for biodiversity.

Together, the primary and secondary networks create a liveable blue-green network, intersecting with existing networks (public transport and streets, urban reserves and public open space) at new junctions with potential for place making and enhancing the community's understanding and connection to Country. The ACT's active travel network supplements this as the **tertiary network** in local streets and places (illustrated at the district level in Section 5).

Sitting alongside these networks are connections and areas for conservation and biodiversity. Where human recreation opportunities and conservation and biodiversity values can be appropriately integrated, primary or secondary liveable blue-green network extensions should be contemplated as Canberra develops.

Planning should reflect aims and initiatives in ACT Government policies

District planning does not take precedence over other Government plans and policies, but instead supports and enhances the objectives and initiatives for our environment and cultural heritage as set out in key documents including the ACT Nature Conservation Act 2014, ACT Nature Conservation Strategy, ACT Water Strategy, ACT Climate Change Strategy 2019–25, national park and nature reserve plans, the draft Mature Native Trees Action Plan and Canberra's Living Infrastructure Plan: Cooling the City (2019), amongst others. The Environment, Planning and Sustainable Development Directorate (EPSDD) also has Closing the Gap and reconciliation action plan commitments and is developing a cultural resource management plan to support Ngunnawal people to care for Country.

Ecology and heritage

The heritage and ecological qualities of the ACT are special and need to be respected and protected. This includes threatened and protected species, threatened ecological communities, nature reserves and national parks, and priority areas for a biodiversity conservation network, habitat connectivity and environmental restoration. It also includes heritage places – both Aboriginal and European – and intangible living cultural values.

The protection of heritage and biodiversity values is mandated by ACT Government and Australian Government law and should be a primary consideration in all planning and development decisions.

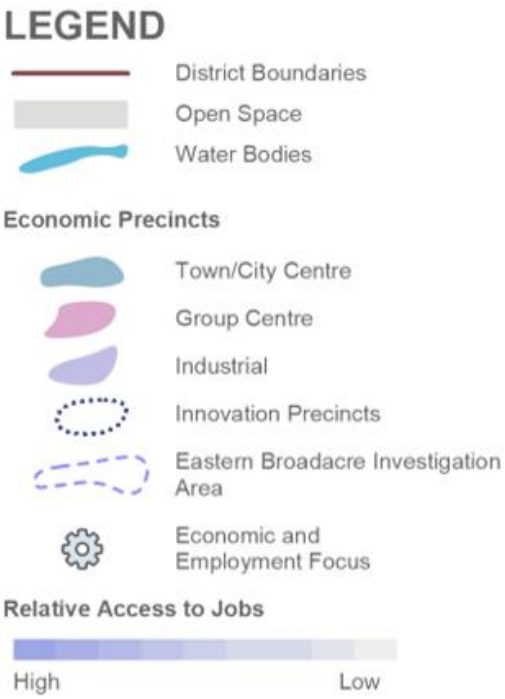
Table 3: Objectives for district planning – blue-green network

Alignment to Planning Strategy themes	Objectives
2 3	**Plan and design with Country** – Plan with the Ngunnawal Traditional Custodians of Country to protect, restore and manage sites of cultural significance through Connecting to Country conversations with the Ngunnawal knowledge holders as appropriate.
3	**Restore, protect and expand the 'blue' network** – Take opportunities to restore, protect and expand the quality of water courses and riparian corridors, creeks and wetlands, including by implementing and maintaining water sensitive urban design (WSUD) initiatives in new public space and infrastructure.
1 3 5	**Build on the urban structure, heritage and the 'green' network** – Build on Canberra's Griffin legacy and urban street hierarchy by integrating nature in the city, ecological sustainability, bio-diversity sensitive urban design (BSUD), wildlife habitat corridors and 30% surface permeability.
3 4	**Expand opportunities for human movement through the blue-green network where compatible with conservation and biodiversity values** – Protect nature reserves, urban parks and open space areas while integrating as part of the 'urban experience' for public enjoyment and recreation appropriate to the nature of the space at the ACT, district and local scales while recognising that some spaces and connections are required for conservation outcomes and may not be suitable for recreational uses.
3 4	**Maintain and expand urban tree canopy cover** – Maintain and expand vegetation cover and permeability in private and public open space for its habitat, biodiversity and 'cooling' values while avoiding and minimising bushfire risk.

Economic access and opportunity across the city

Providing better access to economic opportunities closer to home can be achieved by: enhancing the ACT's hierarchy of employment centres; building on clusters of advanced health, education, science, technology and sports activities to develop innovation precincts; and providing direct and faster public transport connections. Contemporary centres that attract people are typically characterised by a mix of uses and a diversity of building forms, size, type and affordability.

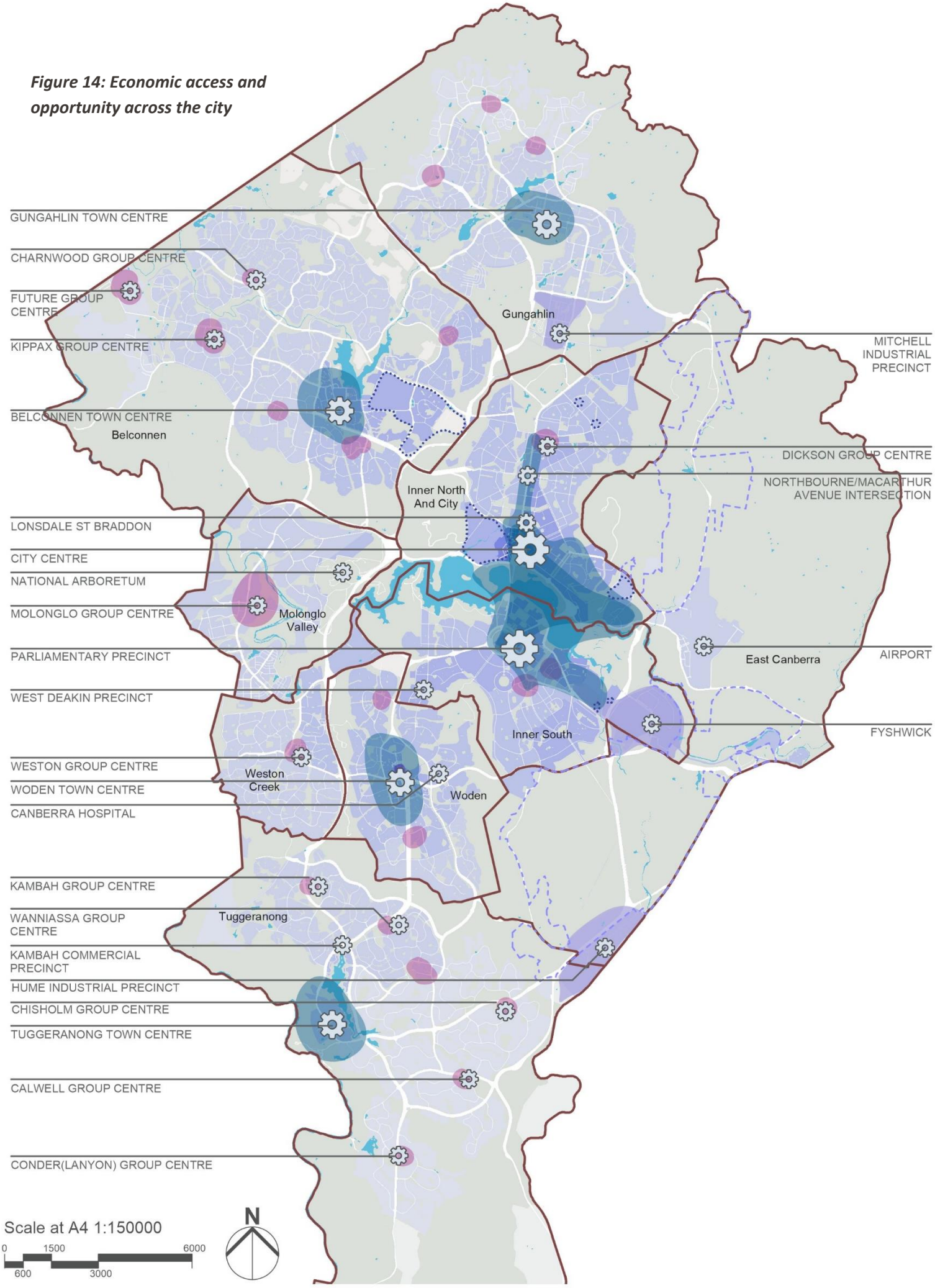
Accommodating future industrial land in existing and new industrial precincts will add to economic diversity and growth.



Innovation precincts: areas with clusters of key employment uses and anchor institutions, such as hospitals, university campuses and science hubs, and elite sports precincts, where planning will seek to better integrate built form, movement and connections to contribute to economic growth, economic diversification and collaboration.

Economic and employment focus: locations where planning and other initiatives will support Canberra's key economic nodes and precincts as well as strengthening selected town and group centres to provide more economic opportunities and jobs closer to home.

Figure 14: Economic access and opportunity across the city



Established hierarchy of centres (City Centre and town, group and local centres)

The existing hierarchy of centres is intended to provide a focus for retail, services and employment and encourage a multi-centred urban structure. However, many of Canberra's existing and emerging concentrations of office employment and other key assets are not contained to these centres. At the same time, many smaller centres are declining, with higher vacancy rates, lower patronage and reduced economic output.

Impact of out-of-centre development

Areas such as Canberra Airport have grown as employment locations, including campus office precincts. While these office precincts are important areas for business and economic growth, they are outside the centres hierarchy and disperse employment more widely. The Parliamentary Zone and surrounds contain major Australian Government and other offices hosting core employment. However, Australian Government decisions on office locations and staffing levels may not align with the ACT Planning Strategy or the desired hierarchy of centres.

The City Centre's key role

The City Centre continues to have a key role in Canberra's economy. It is increasingly the pre-eminent location for knowledge jobs, major retailing, hospitality and entertainment activities. Creative and cultural uses are also concentrated in and around the City Centre.

Other major employment centres and hubs

Canberra Airport plays a critical economic role and will continue to develop as an aviation and business hub. Hospitals, health hubs, university campuses, science hubs and even sports precincts across the ACT are also emerging as key employment centres.

They provide an opportunity to further develop as innovation precincts. Canberra also has a range of major attractions and national institutions, reflecting the city's role as the national capital and providing significant tourism and visitor opportunities that benefit the ACT economy.

Importance of industrial areas

There is a low share of jobs in industrial-based employment sectors but this may grow in future along with growth in the population and the economic diversity of the city. The industrial precincts of Fyshwick and Mitchell are therefore critical as locations for basic urban services (activities that are important to the functioning of cities) and future growth prospects, while Hume also provides a region-wide hub for higher-impact industrial activities and freight and distribution functions. These areas should be protected from encroaching commercial, residential and retail uses that could be accommodated in centres. Demand for future industrial land uses needs to be accommodated in these existing areas and in new industrial precincts which will be identified where possible, to add to Canberra's economic diversity.

Concentration of employment and disconnect with where people live

The existing spatial distribution of employment centres and economic drivers are highly concentrated in the East Canberra, Inner North and City, and Inner South districts while the public transport network is focussed on travel to the central and inner employment hubs. Analysis of 'Effective Job Density' (a measure of access to jobs – Figure 15) shows that residents in Canberra's central areas – particularly the Inner North and City, Inner South, Woden and the east of Belconnen – have the best access to employment. Residents in the northern parts of Gungahlin, Tuggeranong and northern and western Belconnen typically have the lowest proximity and access to jobs.

Flow on and compounding effects in access and opportunity

This disconnect between where people live and their relative access to a pool of employment makes a difference to the life opportunities of residents in the areas with less access. The spatial disadvantage in terms of access to jobs is sometimes compounded by relative socio-economic disadvantage. Socio-economic indicators below the Canberra average are typically found and concentrated in selected outer suburbs (see Figure 22 under the Inclusive centres and communities driver). To address this spatial disconnect between job concentrations and residential locations, the district strategies plan for and support more jobs being available locally, including in the town centres and centres in greenfield precincts and outer suburban areas, as well as enhanced access to existing key employment centres in central Canberra via the transport network.

Figure 15: Effective job density (EJD), 2016

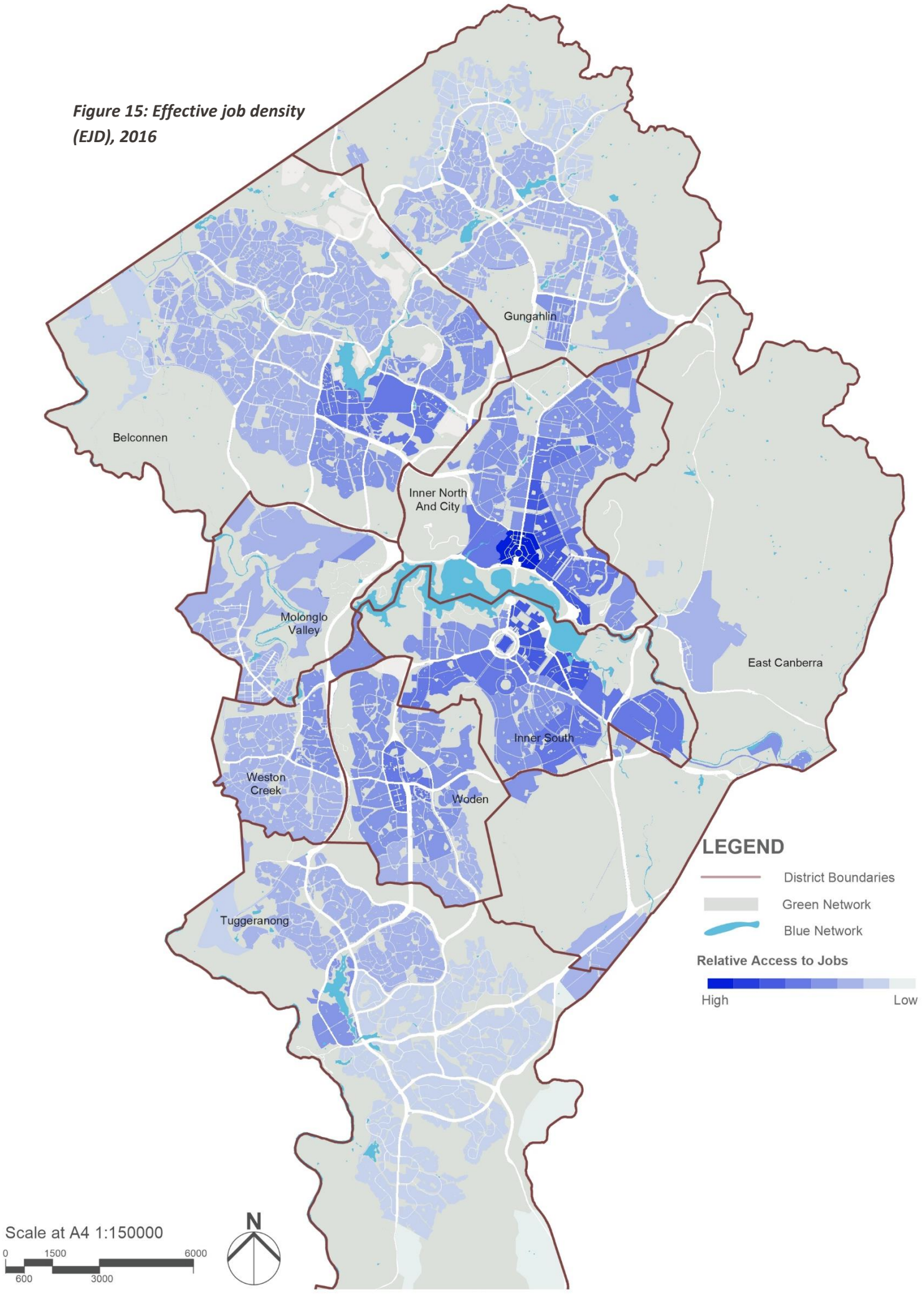


Table 4: Objectives for district planning – economic access and opportunity across the city

Alignment to Planning Strategy themes	Objectives
	**Reinforce the pre-eminent City Centre** – Reinforce the City Centre as the pre-eminent commercial, retail, entertainment and accommodation location in the heart of the city.
	**Provide jobs close to home in town and group centres** – Reinforce and concentrate services, retail and office development in town and group centres, reinforcing the idea of what is sometimes referred to as the '30-minute city' (see ACT Transport Strategy) with a particular economic and employment focus on: • regional/district office development, civic and cultural investment in Gungahlin, Belconnen, Woden, Molonglo Valley and Tuggeranong • district and local retailing, service and enterprises in group centres in areas with poor job access.
	**Integrate future employment floorspace to meet job aspirations** – Build sufficient capacity for employment floorspace into planning controls in town and group centres, including light industrial. This can be aligned with projections and aspirations for employment growth.
	**Support public and active transport and public domain with amenity in centres** – Provide local public/active transport networks and public domain treatments that support liveability/amenity within and between all centres including tree canopy cover and cool public spaces.
	**Protect and expand vital industrial and service trades precincts** – Protect existing industrial and service trades precincts from encroachment of uses that are allowed for elsewhere (in other zones), and support opportunities for employment growth, including allocating industrial land in new/greenfield areas.
	**Develop selected innovation precincts** – Build on clusters of advanced health, education, arts, science and sports activities to develop innovation precincts where feasible.
	**Develop visitor attractions as economic assets** – Build on science, tourism, arts and visitor assets to create additional employment opportunities.

Strategic movement to support city growth

Public transport is essential to contemporary sustainable cities. It is the urban structure for community and economic city life – connecting people to the activities that sustain them.

The light rail network is city-shaping infrastructure, supported by the rapid bus network. Both provide the opportunity to stimulate development, deliver supporting initiatives to encourage walking and cycling, and enhance urban design to make sure there is a lively and sustainable city. The rapid transit network as shown in Figure 16 aligns with the initiatives in the ACT Transport Strategy. Strategic investigation corridors that might support future rapid transport links and a stronger network of connections to and between activity nodes are also identified – these are explored more in Section 5 for each district.

Major freight and commercial traffic will utilise movement corridors (road and rail) that are separated from high amenity settlement areas.



Figure 16: Strategic movement to support city growth



Strategic public transport

The district strategies provide the land use response to the ACT Transport Strategy 2020 with the particular aim of addressing Canberra's car dependence and accelerating Canberra's evolution to a lively sustainable city. Only about 8% of journey to work trips are currently by public transport.

A key focus of the district strategies is the role of the public transport network in supporting the desired growth and revitalisation of centres, and reaching the Planning Strategy direction of achieving up to 70% of new housing within the existing urban footprint.

The district strategies adopt a long term perspective on Canberra's future development directions, including its distributed network of centres and economic activity nodes. In addition to existing or proposed strategic public transport or other movement corridors, 'strategic investigation corridors' are also identified. These corridors might support future rapid transport links and a stronger network of connections to and between activity nodes. Future analysis would confirm their role and viability as extensions to the strategic movement network.

Light rail network

Part of the strategic public network, the light rail network is a transformative opportunity for the ACT to capitalise on its urban structure and centres hierarchy with:

- Gungahlin to the City Centre completed
- extension to Commonwealth Park approved and construction commencing in 2024
- the City Centre to Woden in the planning stage, representing a major opportunity for transport-focussed land use and development in the Inner South and Woden.

Future corridors are proposed and require further investigation, including Belconnen to Canberra Airport and Woden to Tuggeranong.

Rapid and local buses

The established rapid bus network is also key strategic transport for the city and for connecting and reviving centres – particularly group and local centres. Local buses remain critical connectors to the rapid and light rail network, and to supporting neighbourhoods and local access to services.

Major roads and freight

Safe and efficient freight movement is vital to the liveability and prosperity of the ACT. Orbital transport networks (road, rail and air) are planned and designed for larger vehicles and trucks associated with bulk goods movement to key freight hubs. The major road network facilitates movements of traffic, particularly north–south via peripheral parkways such as the Tuggeranong and Majura parkways. It is important that these corridors are reserved and designed primarily for by-passing, freight and commercial traffic, focussed on 'business to business' connections, and with a reducing role for commuter and journey to work traffic.

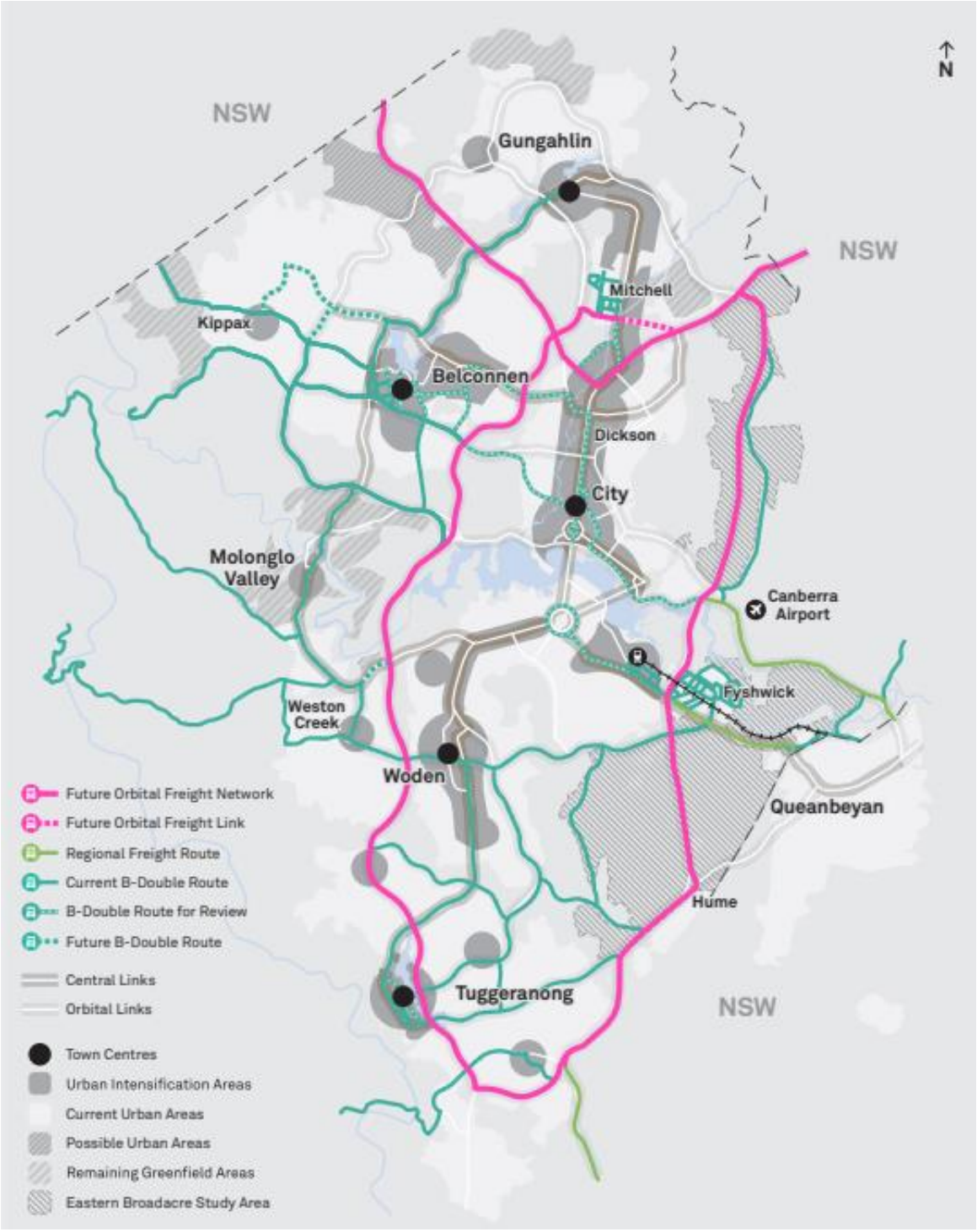
District road hierarchies provide for the 'last kilometre of a journey', between arterial roads and local destinations. Planning for access and design for interface issues, including delivery, loading, parking, noise and amenity is essential to support city life.

The ACT is a signatory to national transport reforms that require infrastructure upgrades to the freight network. These include road and bridge upgrades to accommodate heavy and higher mass freight vehicles, subject to funding over time. The Building an Integrated Transport Network – Freight (2016) and the ACT Transport Strategy also outline long-term objectives for Canberra's freight network (illustrated in Figure 17). Canberra Airport is also a key asset within the city's distribution and freight network.

The freight network is a crucial part of Canberra's functioning as a city. It is an important factor for

ACT-wide place and movement planning, but is most relevant for the East Canberra district, where Canberra Airport and other freight hubs are concentrated.

Figure 17: ACT orbital links and freight network



Source: ACT Government, 2020

Active travel

Given parts of Canberra's topography are relatively flat, major active travel networks across the city provide a genuine commuter alternative to other forms of transport in many areas. They also provide opportunities to integrate physical activity into daily life to improve peoples' health and wellbeing.

Canberra has a relatively high rate of cycling compared to other Australian cities, particularly for social and recreational trips. Walking, cycling and micro-mobility participation needs to further increase over time to shift from vehicle to active travel modes.

Prioritising new off-road paths and protected cycleways on key routes and completing missing path links is required to improve active travel infrastructure.

The ACT's 'Movement and Place' transport and planning approach promotes active travel based on the function of a street. Active streets can make it easier for people to shift away from private car dependence, connect with public transport and reduce the amount of land dedicated to roads and parking.

Shifting to sustainable forms of transport reduces emissions and improves the quality of life for Canberra's growing population. Main community routes in the ACT's cycling network prioritise efficiency and separation of facilities for the safe and direct movement between districts and key centres. Active streets that are safe, green, accessible and walkable provide local access and create places for people, not cars.

The ACT's Active Travel Plan has been designed to enable more people to take up active travel, making it safer, more accessible, convenient and enjoyable to choose walking, cycling or micro-mobility – whether for commuting, exercising or socialising.

Table 5: Objectives for district planning – strategic movement to support city growth

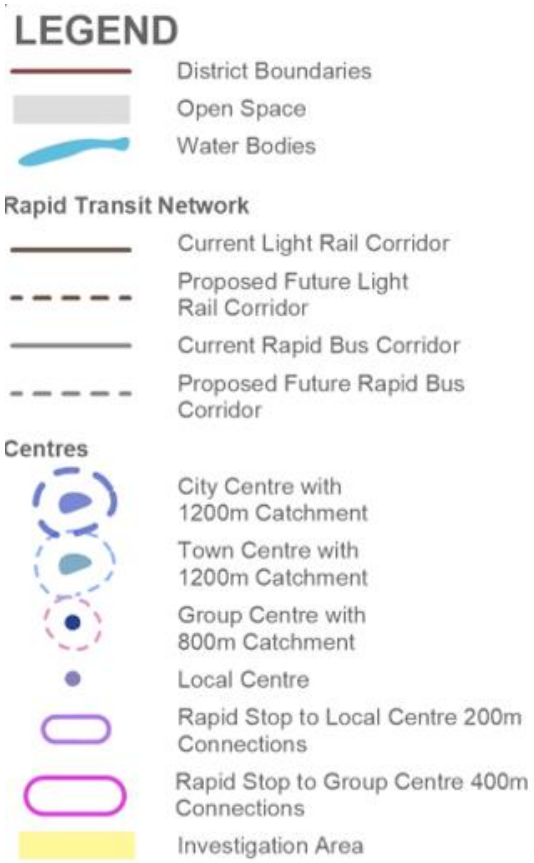
Alignment to Planning Strategy themes	Objectives
	**Provide transport connections to employment and economic opportunities** – Provide strategic transport connections with direct and timely access to central and eastern concentrations of jobs, particularly from lower socio-economic and 'job-poor' areas in the outer parts of the city.
	**Develop movement corridors for all modes of transport** – Develop multimodal corridors containing Canberra's rapid public transport network along new and existing urban boulevards with an emphasis on creating attractive places.
	**Dedicate heavy vehicle movement corridors** – Direct heavy vehicular traffic to road-focussed 'movement corridors' such as the orbital reserved/designed primarily for by-passing, freight and commercial traffic, and away from residential development wherever possible.
	**Support housing renewal and connections to centres** – Provide rapid transit routes that support high amenity residential intensification/mixed-use urban outcomes with direct connections to centres (as appropriate).
	**Provide rapid connections to key group and local centres** – Provide a rapid network that assists to connect and revive key group and local centres (particularly economic and employment focus centres), reinforcing '30-minute city' aspirations (see ACT Transport Strategy).
	**Develop the local bus network** – Develop the local bus network to: • strengthen connections to the rapid routes and light rail • increase local community accessibility to services • support local centre and community revitalisation.
	**Provide a safe and comprehensive commuter cycling network** – Identify opportunities for expanding and upgrading cycling corridors to create a safe and comprehensive commuter network that connects all group and local centres and connects to rapid transport stops. Prioritise pedestrian and cyclist safety and amenity, including separation of paths from general traffic.
	**Accelerate decarbonisation of the transport sector** – Use the transport sector to contribute to emissions reduction by: • expanding public transport options to service high-density developments through light rail or electric buses • expanding active transport infrastructure and considering speed limits to protect riders in suburban areas • enabling zero emissions vehicle infrastructure in all new developments at appropriate building or precinct scale to support zero emissions vehicle uptake in alignment with the ACT's electric vehicle charging outlook, Zero Emissions Vehicle Strategy and the recent announcement of phasing out of internal combustion vehicles from 2035.

Sustainable neighbourhoods

Creating sustainable places requires an integration of the right mix of land uses, urban density and local amenities such as accessible public spaces, walkable streets and connectivity via active and local transport to retail and services. The more amenities, the more diversity and density that can be supported.

New development is a means for sustainable transformation. It enables 'urban improvement' including improving streets and public domain with more connections and greenery to encourage walking and local liveability, while also contributing to the zero carbon ambition.

New development in future should incorporate new social and affordable housing, including the 15% target on residential land release sites in the ACT Housing Strategy.



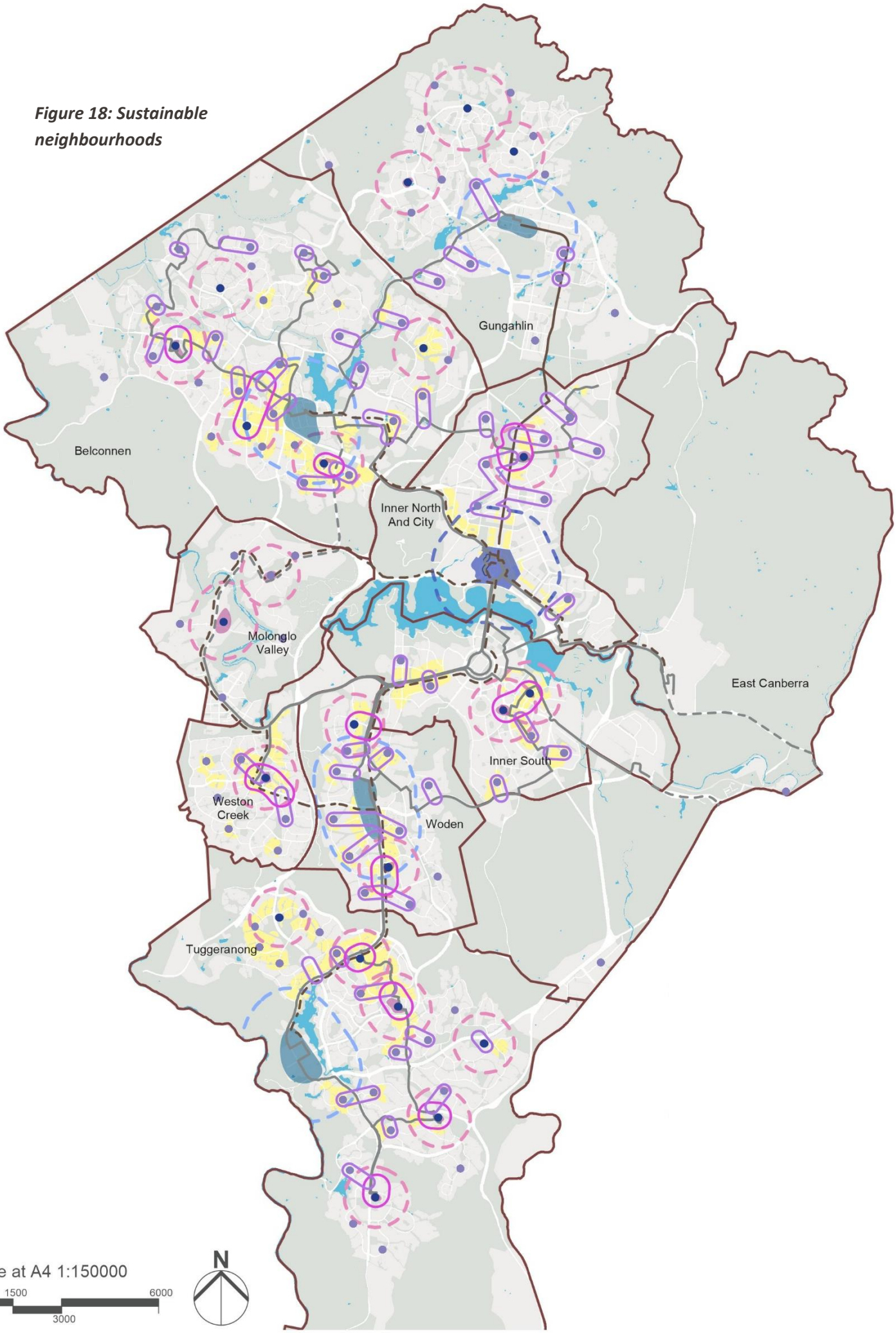
Rapid stop connecting to local and group centres: areas which may be suited to redevelopment to enhance public transport connectivity which respond to:

- stops on the rapid transport network (including future light rail)
- existing centres up to 1,200m from a stop
- existing centres with public space linkage to the stop
- and provide either a 200m wide or 400m wide corridor.

Opportunities to develop these areas will be considered in Future Investigation Area analysis and planning.

Town and group centre catchments: indicate catchments within typical travel distance from centres, based on the ACT's hierarchy of centres – larger centres with more services cater to a larger catchment. Note these catchments differ from the walking area catchments identified in the ACT Active Travel Plan.

Figure 18: Sustainable neighbourhoods



Mixed-use centres to support local liveability in appropriate places

Many centres have evolved to have a strong mix of employment and residential uses; these are typically emerging as desired locations. However, some districts have less land use diversity in their local or group centres, which can impact on the mix of employment, level of usage and activity, overall amenity and ability to fulfil their role in the centres hierarchy. Post-COVID, mixed-use centres will be potential assets to focus on as more people work from home and spend more time locally than previously. Providing land use and built form diversity in appropriate locations can also contribute to affordability and economic aims.

However, mixed-use developments cannot apply in all precincts. Allowing for too much development of typical mixed-use typologies, particularly in areas outside of centres or ad-hoc locations, risks creating empty ground floor shopfronts and undermining the centres hierarchy. Sufficient floorspace for non-residential uses should be planned for and delivered in centres, based on a detailed understanding of likely demand, whether through land release, redevelopment or planning controls.

Existing capacity for more density around centres in the right places

Areas close to centres are the logical location for higher density housing and development to be concentrated. Housing densities around several centres are likely lower than they should be given the centres hierarchy designation and the policy aspiration for a compact city. More variety in housing types in the core of centres and adjacent areas can provide more choice for different households and help address issues with housing diversity and affordability. There will be opportunities for increased development densities to be delivered in key corridors and centres where it is most suited and, importantly, aligned with public transport investment. The type and character of housing should be aligned with its relative access to amenities and transport, recognising that new investment in facilities and transport, and 'urban improvement' initiatives can help deliver the conditions for 'density with amenity'.

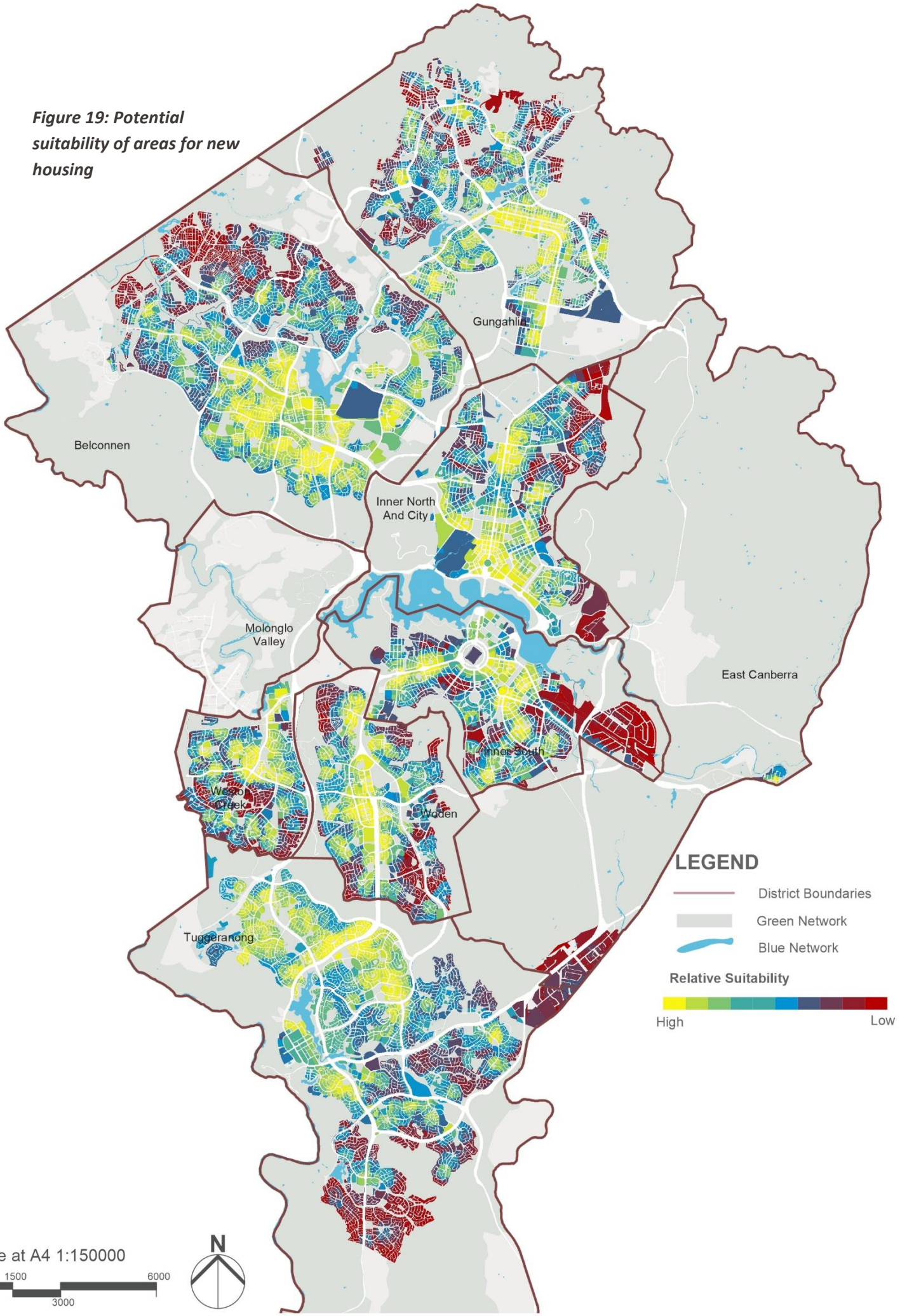
Suitability for new housing

Future development and new homes are best located in the **most liveable and well-serviced locations within Canberra's footprint,** consistent with good planning principles. To inform this, mapping of liveability indicators has been undertaken, including:

- canopy coverage
- blue infrastructure
- vegetation
- heritage
- land use
- slope analysis
- street hierarchy
- public versus private land ownership
- public transport networks
- active travel networks
- key cycle routes
- community assets
- dwelling density
- urban form typologies
- open space typologies and associated catchments
- the City Centre and town, group and local centres and associated catchments
- transport corridor networks and catchments.

This mapping also reflects macro indicators such as access to employment, health, schools, community facilities and public transport. These indicators are combined into the 'suitability' map for new housing shown in Figure 19, with the highest suitability shown in yellow and the lowest in red.

Figure 19: Potential suitability of areas for new housing



Future investigation areas

The suitability mapping was combined with an urban character analysis to identify **future investigation areas** for housing and accompanying development in each district. Section 5 outlines the extent of these areas, based on the top 25% of suitability across the ACT, with the anticipated urban character of these areas shown in more detail in the subsequent mapping.

Note: heritage and environmental values in these areas will be protected from future development investigation.

Urban character analysis

The urban character classifications not only focus on appropriate housing types given the context, but also on appropriate types of open spaces, parks, streets, amenities, facilities and services.

When applied in urban planning and design, a transect is a line or section though a city showing changes in types of urban environments. An **urban transect** is generally at its most compact and dense in the City Centre and steps down through the built form as it moves further to the urban edge – examples of this are provided in Appendix 1.

The six urban character types of the 'rural to urban transect' are typically described as follows:

- Natural, defined by a wilderness condition including lands unsuitable for settlement (T1)
- Rural, defined by sparse settlement, cultivation and agricultural lands with supportive buildings (T2)
- Suburban, defined by low-density residential areas with naturalistic planting (T3)
- General Urban, defined by a mixed use but primarily residential urban fabric (T4)
- Urban Centre, defined by higher density mixed-use buildings (T5)
- Urban Core, defined by highest density and height with the greatest variety of uses (T6).

Only the Suburban, General Urban, Urban Centre and Urban Core character types (T3 to T6) are used to describe the anticipated urban environment in each district.

In summary:

The suitability mapping identifies areas *that have the characteristics to accommodate future additional housing* development – shown as **future investigation areas.**

The transect mapping identifies *what built environment typology is appropriate* in these areas – shown through **urban character types.**

More detail on transect thinking and a series of urban design principles for each of the four urban character types is provided in Appendix 1.

The future investigation areas will be refined and updated in future versions of the district strategies to reflect implications from the results of the 2021 Census, revised population projections and the application of the urban transect thinking in more detailed planning.

The locations that are currently shown as future investigation areas may not ultimately be required to meet projected housing demand in each district.

Note: The **urban character types** are not the same as and are not intended to replace the land use zones in the Territory Plan. Their application in each district and how they would inform changes to zoning requires further analysis, including established character, heritage sites and values, environmentally sensitive areas and natural hazards such as bushfire risk.

Rapid stop-to-centre connection areas

The mapping for the sustainable neighbourhood driver shows areas connecting rapid and light rail stops to group and local centres. These highlight where a centre is not directly serviced by a rapid or light rail alignment but could be better connected by careful placement of stops or by appropriate development linking to existing stops. The area between and around the stop and centre represents an opportunity for additional housing consistent with public transport-oriented development principles (and the objectives outlined below).

As the future investigation areas are considered in detail, the prospects for developing the rapid and light rail stop-to-centre connection areas will be considered (noting that future alignments are subject to change and further investigation). The presence of these opportunity areas would be a consideration in identifying preferred pockets for additional development and density within the investigation areas. Within the opportunity areas, appropriate urban character types would be identified.

As with the future investigation areas, not all these stop-to-centre connection areas are expected to be required to meet projected housing demand. They will be considered systematically and 'turned on' for more detailed planning as a result of the future investigation area analysis.

Other future development areas

In each district, various locations are either identified to accommodate future residents and where planning is already underway, or are flagged as possible or potential sites for development.

These sites are categorised in the district strategy and other district-specific maps to reflect:

- **proposed change areas** – areas for which there is confirmed future development or well-progressed proposals
- **possible change areas** – areas which are subject to current proposals and/or require further investigation
- **potential future change areas** – areas that may be considered for future development in the long term but which require further investigation, analysis and feedback.

Indicative structure planning ideas and principles for selected key sites in the above categories of change area are included in Section 5, following the discussion of initiatives under each of the five drivers.

Public domain

The public domain is the framework of communal social life. It forms the setting for public events and accommodates daily needs, social exchange and gathering and casual socialisation, and active recreation.

The distinct character or feeling of a place is most keenly appreciated in the layout of streets, parks and public places as a network and in the detail of public places. Both public and private buildings have the responsibility to frame the city's public spaces in a manner that supports a convivial and engaging social life for people.

In general terms Canberrans have access to a lot of public space. However, there may be opportunities for public space to be enhanced and catalysed on, including being activated and upgraded to align additional density with enhanced local amenity. Local public domain connectivity and quality is poor in many locations. Planning at the district level highlights opportunities to create new connections while delivering complementary living infrastructure initiatives to address urban heat and contribute to canopy cover and permeable surface targets. Better quality can be generated in tandem with new development in selected locations.

Aligned with the other elements, there may be new opportunities to increase walking and cycling in the post-COVID environment; more localised living provides support for an expansion of active travel, including more walking and cycling to access local jobs, services and amenities.

Sustainable transport and walkability

Australians are becoming amongst the most unfit, obese and inactive citizens on the planet. Recent studies suggest this derives, at least in part, from low-density cities creating a primary dependency on cars to move about our cities and landscapes.

Canberra should strive to encourage movement across diverse travel modes, always underscored by links to public transport including light rail. New development and revitalised areas should prioritise contemporary sustainability considerations, including layouts and ways of movement that encourage walking and cycling while continuing to provide efficient, but not excessive, means for private transport.

Design quality

Design quality needs to be a primary consideration of planning as it contributes to a broad variety of benefits, including:

- making places where people want to be
- designing in opportunities for physical activity
- enhancing landscapes and microclimates
- creating low energy and water use buildings.

Particularly in the Inner North and City and Inner South districts and other designated areas across Canberra, design considerations should reflect and contribute to the aims and ideals of the National Capital Plan, building on the blueprint for Canberra in the original Griffin plan and the ongoing work of the National Capital Design Review Panel.

Contribution to zero carbon

New development has to make an 'oversize' contribution to lowering carbon emissions given the constraints to retrofitting the existing housing stock.

In addition to major existing initiatives and commitments announced by the ACT Government, new development can make the most significant contribution to lowering emissions through waste management and facilitating the shift to zero emissions vehicles. Where scale and yields allow, precinct-based approaches to zero carbon are enabled and will have the biggest impact; incremental change should also be expected as individual or clusters of new dwellings are developed.

Achieving zero carbon will require a major transition in the ACT's energy systems, shifting transport to zero emissions energy such as renewable electricity and phasing out fossil-fuel gas. This will require upgrades to our electricity system; for example, the deployment of battery storage systems within homes, neighbourhoods and at strategic electrical infrastructure nodes. Our buildings and homes, both new and existing, will need to adapt, for example through the installation of zero emissions vehicle chargers.

Natural hazards

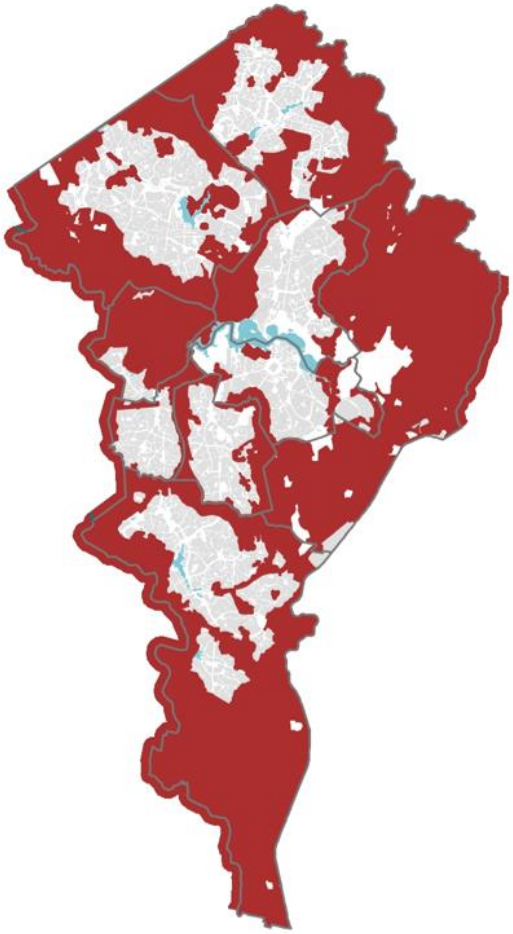
New development will also need to contribute towards mitigating risks from natural hazards, the frequency and intensity of which are likely to increase with climate change.

Natural disasters have an enormous impact on people, the environment and communities. While the ACT has low incidences of emergencies and natural disasters compared to other cities in Australia, a growing ACT population, changing urban landscape and impacts of climate change all contribute to an evolving risk environment.

This makes it essential to understand and mitigate against the likelihood and consequence of the natural and other hazards we face as a community.

As the bush capital, Canberra faces risks, particularly from bushfires, which need to be factored into how the city develops, particularly in greenfield areas. The ACT has a wide variety of vegetation types, including grasslands, dry and wet forests, woodlands, pine forests, bogs and fens. Vegetation in urban areas also impacts on fire behaviour, with suburban fuels (including landscaping and garden beds) a key contributor to bushfires encroaching into urban areas. Significant portions of the nine districts are bushfire prone land, as shown in Figure 20.

Figure 20: Bushfire prone land in our districts



Source: ACTmapi.

As well as bushfires, the ACT is at potentially at risk from a range of hazards. Those of highest risk include heatwaves, severe storms, bio-security emergencies, disruptions to energy supply, flash flooding and incidents with hazardous materials. The ACT Government has existing policies which will be considered and integrated in the planning for new development across our districts, including:

- ACT Emergencies Plan
- Strategic Bushfire Management Plan 2019–2024
- The Territory Wide Risk Assessment 2017
- Climate Change Risk Assessment.

Affordability

Global best practice is to incorporate affordable housing in new projects. London has a 35% contribution requirement for developments that seek to be 'fast tracked'.

Approximately 23% of Canberra's rental households have been estimated to be in housing stress as of 2021. This stress will increase as house prices and rents rise and other costs of living increase. Without meaningful additions to new social and affordable housing across the ACT economic productivity will be affected as labour market depth is eroded (because workers can't access affordable shelter) and public resources are diverted to address social and health impacts (of homelessness and household stress).

Under the ACT Housing Strategy, the ACT Government dedicates at least 15% of new residential land releases each year to affordable, community and public housing. In addition, investigations are underway into planning and design provisions that encourage the supply of affordable housing.

The ACT Government has released a Build-to-Rent Investment Prospectus, outlining plans to encourage more long-term rental developments in the ACT and to provide financial support for affordable rental proposals.

Table 6: Objectives for district planning – sustainable neighbourhoods

Alignment to Planning Strategy themes	Objectives
1 4 5	**Locate density with amenity in and around centres** – Increase housing densities in and around centres (where supported by amenity attributes such as opposite parks, on tree-lined streets and lakefronts) and near or able to be connected to rapid transit stops. Include greater density and variety in housing types in the core and adjacent areas.
2 4	**Strive for mixed-use precincts and centres** – Provide floorspace for non-residential uses on the ground floor integrated with residential in planned precincts in centres as appropriate and where evidence for the floorspace warrants.
3 4 5	**Improve the urban environment** – Where additional density is proposed, work with development proponents to: • leverage, activate and upgrade open space to enhance public domain • enhance the civic amenity of centres with new squares and/or new community buildings • modify and expand existing street networks to improve walkable access to centres • protect and restore open space areas and corridors, or create new open space connections, to fill gaps and enhance ecological sustainability in the blue-green network.
5	**Improve street walkability** – Improve street walkability, particularly in greenfield and urban renewal or redevelopment contexts, through interventions that establish walkable block lengths and areas.
3	**Address urban heat** – Counter the urban heat island effect and prescribe deep soil landscape and urban tree canopy requirements in public space and within developments.
3	**Water sensitive urban design (WSUD)** – Implement WSUD in all major developments to improve stormwater quality, reduce peak run-off into local waterways and improve surface permeability.

Alignment to Planning Strategy themes	Objectives
4	**Require better design quality** – Build on the work of the National Capital Design Review Panel, require higher standards of design including the adoption of design standards focussed on achieving: • memorable urban character – parks, squares, streets and infrastructure • public domain interface – contribute to the activation of public space • architectural character – contribute to the spatial definition of public space, essential for all buildings of scale (above two storeys in height) • housing quality – improve the liveability of housing at higher densities.
3	**Provide infrastructure to support zero carbon transition** – All major site developments to provide infrastructure to support zero carbon transition, including precinct-based initiatives where yields and scale warrant.
3 4	**Require focus on risk mitigation of natural hazards** – Require planning for new development across districts to contribute toward mitigation of risks of natural hazards including bushfires, including alignment with existing ACT Government policies and risk assessments.
4	**Affordable housing** – Continue to dedicate at least 15% of new residential land releases each year to affordable, community and public housing, and investigate planning and design provisions that encourage the supply of affordable housing.

Inclusive centres and communities

All residents in Canberra should be able to walk to a group or local centre where they feel welcome and safe and can find basic goods for day-to-day living.

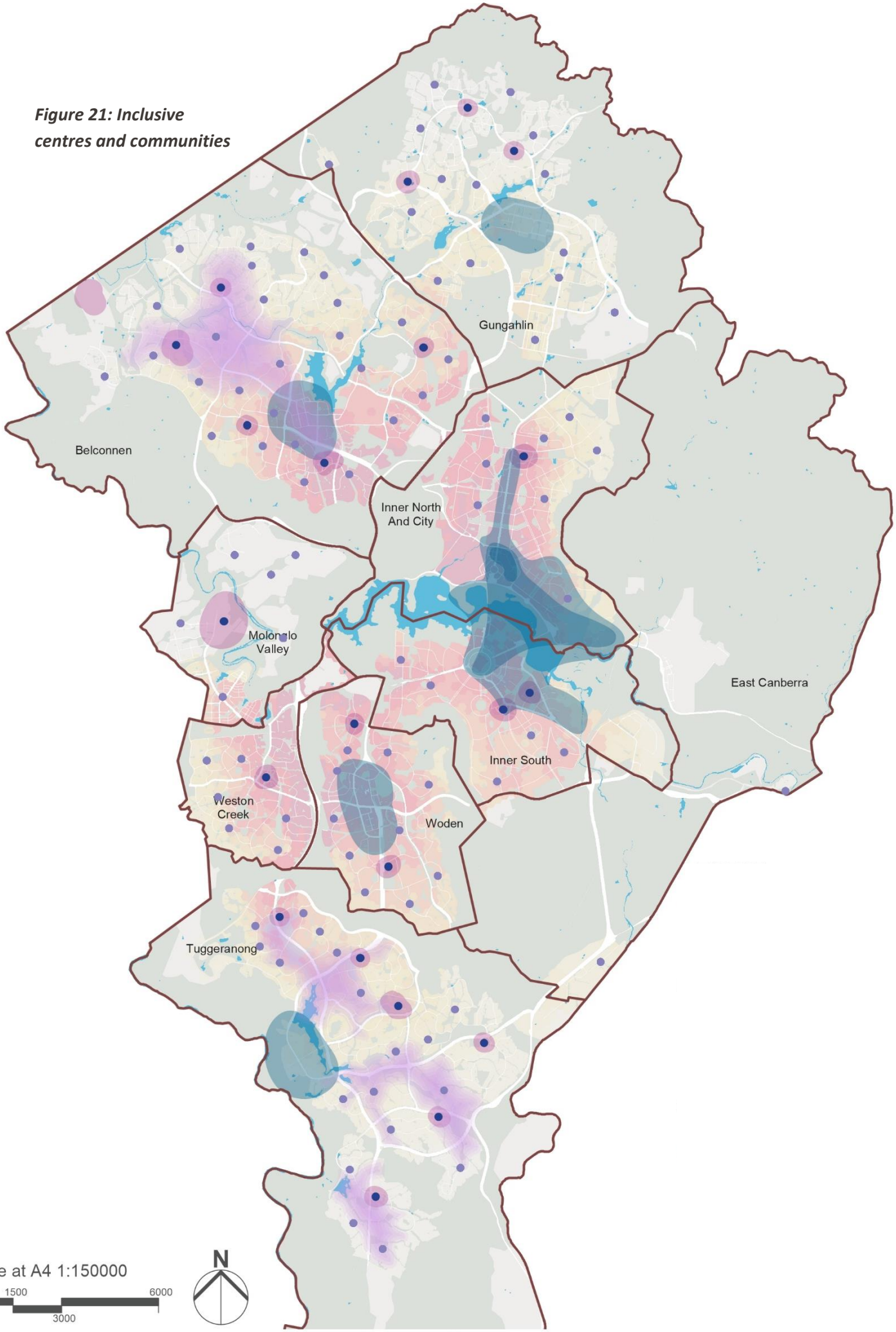
Communities that are not subject to new development and growth or those with centres that are declining should not be 'left behind'. Selected group and local centres, including some in communities where socio-economic indicators are below the Canberra average, will be candidates for interventions or new investment to drive positive change and revitalisation.

Planning for and provision of community infrastructure will support new development and aim to address areas with lower-than-average socio-economic outcomes, with a focus on strengthening centres as hubs for community life.



Social and community focus areas: areas with socio-economic indicators lower than the Canberra average, where targeted centres will be a particular focus for intervention, new investment and revitalisation.

Figure 21: Inclusive centres and communities



Areas with fewer growth prospects should not be left behind

Pockets of suburban Canberra contain communities where socio-economic indicators are below the city average. This is shown in mapping of the 'SEIFA index' (see Figure 22), which shows such areas in, for example, parts of Tuggeranong and northern and western Belconnen. Lower than average socio-economic outcomes in these areas may be compounded by poor access to employment opportunities.

Sometimes these areas have fewer amenities and attributes that would typically attract new development, which when 'done well' brings benefits in activation, upgraded public areas and new shops and facilities. There is a risk that without opportunities for new development and planning attention, some communities and the local centres they contain will be neglected or left behind.

Ongoing viability of group and local centres

The intended primary function of group and local centres is to meet convenience-shopping needs and provide community and business services to meet the daily needs of neighbourhoods. Group and local centres have an important social role as an informal meeting place and a transport role in being accessible by active travel, contributing to healthy and sustainable living. While some centres are functioning well, and many have seen increased popularity through the COVID-19 pandemic with more people working from home and taking advantage of local shops and facilities, there has been a progressive decline in the economic role and physical condition of others.

Targeted support for stagnant or declining local centres and for communities with below average socio-economic indicators – social and community focus areas – is an important agenda in the district strategies.

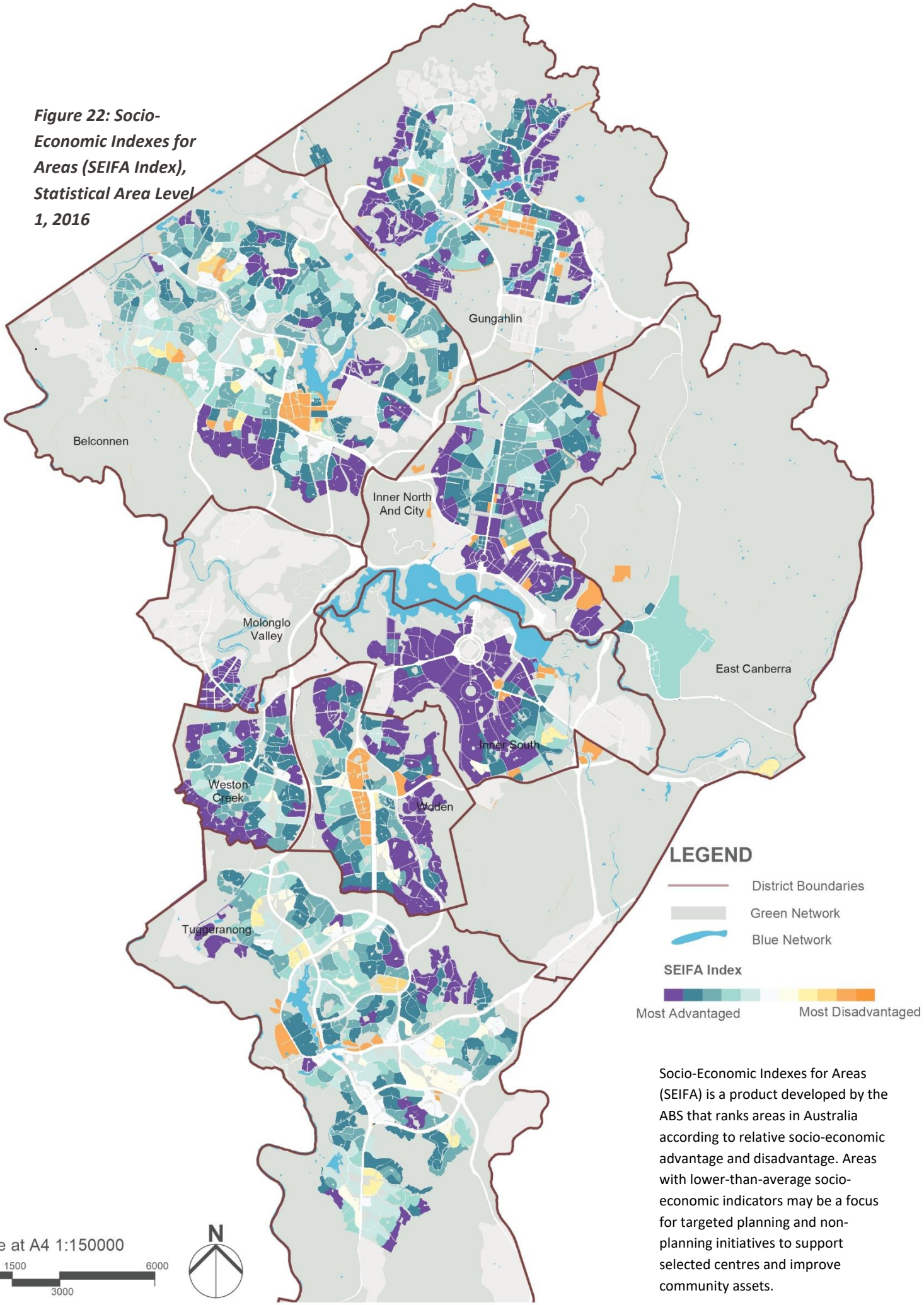
Group and local centre revitalisation

Only certain group and local centres with amenities and characteristics – such as good access by walking and cycling or public transport, an attractive mix of shops and proximity to open space – may attract new development. More often a declining centre will require an intervention or new investment to drive positive change and revitalisation. This might be an upgrade to a public area or nearby park, modifications to traffic access arrangements, investment in a new or upgraded community facility, installation or upgrading of a communal outdoor area within the centre or changes to planning controls to facilitate new investment and uses. The potential for investment should be informed by the identity of centres, including their built form, character, landscape setting, role and function, usage, and an assessment of community values through consultation.

Commitment to upgraded social and affordable housing

Some of the social and community focus areas with below average socio-economic indicators may also include precincts of social housing. Wherever these precincts are being redeveloped, it is expected that a net additional number of suitable new social housing dwellings would be provided.

Figure 22: Socio-Economic Indexes for Areas (SEIFA Index), Statistical Area Level 1, 2016



Socio-Economic Indexes for Areas (SEIFA) is a product developed by the ABS that ranks areas in Australia according to relative socio-economic advantage and disadvantage. Areas with lower-than-average socio-economic indicators may be a focus for targeted planning and non-planning initiatives to support selected centres and improve community assets.

Community facilities should align with needs

Planning for community facilities is crucial to support the liveability of new and existing communities, alongside housing, employment and other land uses. Social infrastructure (such as schools, health facilities, libraries, arts and cultural facilities and general community spaces) should be considered as important as any other form of infrastructure. Early Childhood Education and Care (ECEC) will also be a key component of education when considering the future community facility needs to each district in the ACT.

The provision of community facilities should reflect and 'keep pace' with changing requirements. This relates to servicing new development and addressing 'backlogs' or targeting communities in need. Different approaches may be needed in each case.

There is an emerging 'mismatch' in the distribution of community facilities with the population. While locating community facilities will depend on their nature and the populations they are serving, it is apparent there are significant 'dead zones' when it comes to community facilities. This indicates a lag in their provision in growth areas over recent decades. Figure 23 shows the relative access to community facilities (not including park assets). The areas where provision is generally deficient align somewhat with the communities where socio-economic indicators are below the Canberra average.

The importance of community facilities in the right locations

Community facilities should be in areas that are the most accessible (by different transport modes) and co-located with complementary uses to create community hubs. Typically, town and group centres should be priority locations for community facilities, consistent with the centres hierarchy directions in the ACT Planning Strategy. There is a wide range of facilities provided across the ACT; however, in some cases these may not be in the best locations for accessibility. Areas with poorer access are aligned with those with lower socio-economic indicators, particularly the outer suburbs, reinforcing these areas as priorities for policy attention.

Changing trends in provision and delivery

Changes in society influence the types of facilities that communities need, such as changes in participation in different sports and physical activity, religious affiliation, the ageing of the population and other demographic changes. There is currently an uneven distribution in the number of facilities between districts, influenced by changes in the practice of providing new facilities and because of lags in provision to new communities. Adaptability is increasingly important for facilities to be able to respond to changes in demand.

Many challenges face the delivery of new or upgraded community facilities, particularly in established cities. Challenges include constrained land supply, capital costs and maintaining their viability. Different types of facilities have different operating models and challenges. Some types will be wholly provided by government, others by not-for-profit organisations or the private sector; some require large land areas, while others can be integrated with mixed-use buildings or co-located.

Provision of facilities needs to align with growth

To create robust and resilient local communities, the provision of community facilities needs to align with anticipated future population growth and changes in demographics. The emphasis on district-by-district housing futures provides a stronger platform for facilities planning and provision to service that community. Providing new community facilities presents the opportunity to diversify the types of uses in our centres and contribute to civic amenity, and sustainability aspirations through their design.

Figure 23: Relative accessibility of community facilities, 2022

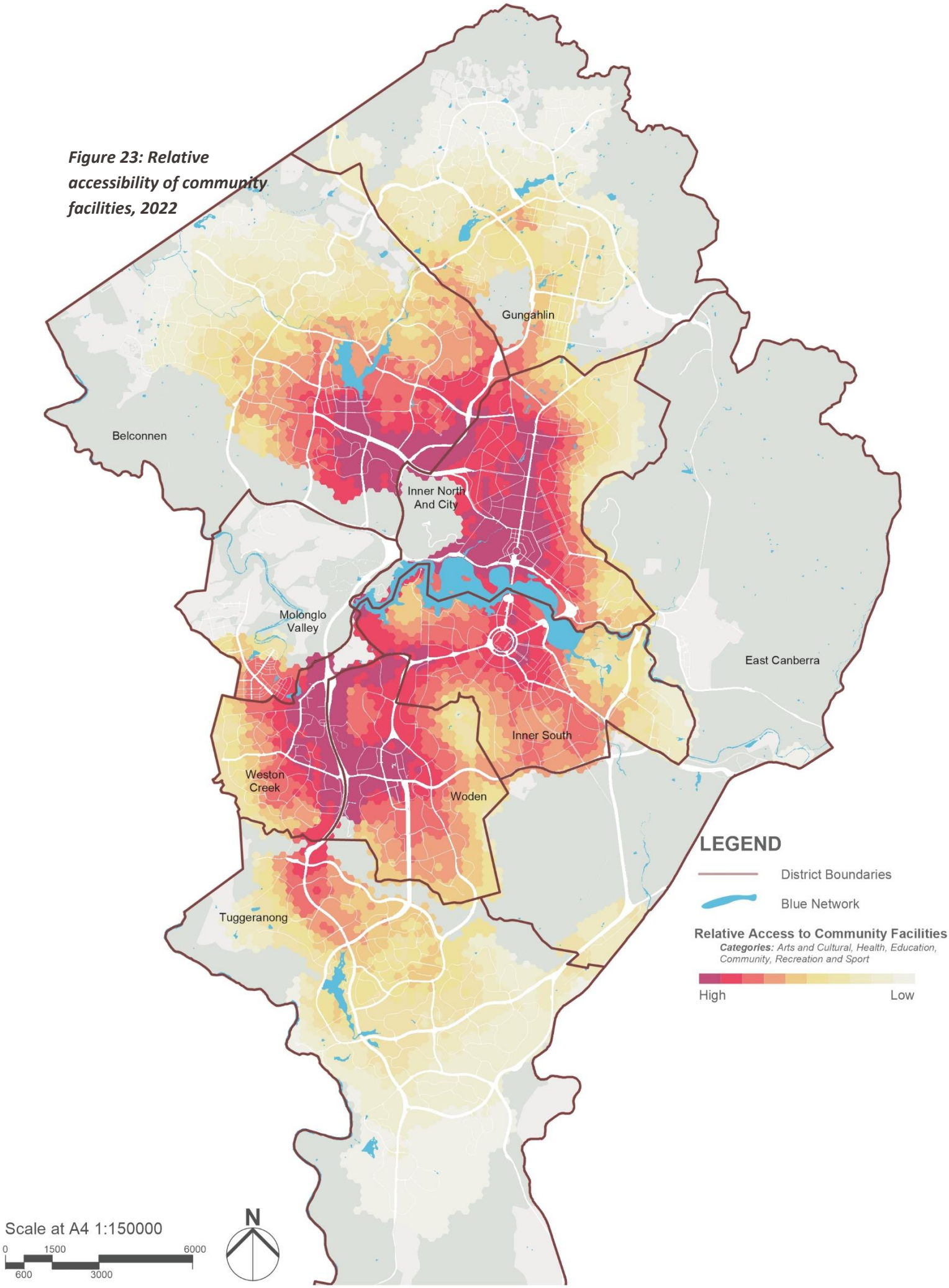


Table 7: Objectives for district planning – inclusive centres and communities

Alignment to Planning Strategy themes	Objectives
2 4 5	**Support the long-term viability and social role of group and local centres** – Undertake targeted revitalisation initiatives in selected group and local centres that are at risk of decline to realise opportunities and address areas with below average social and economic indicators (social and community focus areas identified using the SEIFA index).
4	**Provide social and affordable housing** – Guarantee that, as a minimum, a net additional number of suitable new social housing dwellings is provided within a district when social housing precincts are redeveloped.
1 4	**Align community facilities with planned growth in infill areas** – Provide new community facilities in infill areas aligned with projected and planned population and housing growth.
2 4 5	**Co-locate community facilities for efficiency and accessibility** – Integrate and co-locate community facilities with complementary uses in centres and accessible locations, including transit stops, to foster the creation of community hubs, particularly around major facilities such as schools (including early childhood education and care).
4 5	**Provide community facilities as new communities are developed in greenfield areas** – Provide new community facilities in accessible locations (planned centres) in all greenfield areas.
3 4	**Align community facilities with sustainability** – Locate and design new community facilities to contribute to the ACT's sustainability agenda, including in landscape design, tree plantings and energy efficiency.

Targets

Establishing a realistic set of targets represents a commitment to implementing the district strategies. Not all the intent associated with the objectives behind the five big drivers is able to be measured. However, the 10 targets suggested in Table 8 have been crafted to encapsulate the main aims of the district strategies. The targets will be refined in future to become key considerations across the ACT Government and used in the measurement of progress in delivery.

The targets for 'more nature and retaining water in the city' in the table rely on achieving existing ACT Government plans and strategies. The remaining targets will – once identified – represent meaningful aspirations given current performance against the suggested metric and the amount of projected future development. Other targets not mentioned here also remain relevant, including net zero carbon and the 70% urban infill target.

Table 8: ACT-wide targets for planning

5 big drivers	Targets to 2046
Blue-green network	**More nature and retaining water in the city** ● Achieve the outcomes in the ACT Nature Conservation Act, ACT Nature Conservation Strategy, ACT Water Strategy, reserve management plans, the draft Mature Native Trees Action Plan, and the Living Infrastructure Plan, including urban tree canopy target (30% or equivalent) and surface permeability (30%). **Expand liveable blue-green network connections** ● Increase walking and cycling links integrated with the identified liveable green network corridors (e.g. by 80–120 kilometres; currently approximately 340 kilometres)
Economic access and opportunity across the city	**Improve economic opportunities in districts with a shortage of jobs** ● Increase the percentage of all Canberra jobs outside of Inner North and City, Inner South and East Canberra districts (e.g. 45–50% of all jobs; currently 40% in 2016 based on ABS 2016 Census). **More jobs accessible to home** ● Decrease in the average journey to work travel time (e.g. to 15–20 minutes; currently 27 minutes based on ACT Travel Survey 2017).
Strategic movement to support city growth	**Reduce car dependence** ● Increase share of journey to work trips by public transport by 2046 (e.g. to 10–15% of trips; currently 7.1% in 2016 based on ABS 2016 Census). **More active transport** ● Increase share of all trips by walking or cycling (e.g. 25–30% of trips; currently 16.9% in 2017 based on 2020 ACT Transport Strategy).
Sustainable neighbourhoods	**Expand walkable access to shops and services** ● Increase the share of all dwellings that are within a walkable catchment to a town centre (1,000m), group centre (800m) or local centre (400m) (e.g. 55–60%; currently approx. 52%). **More inclusive and fair communities** ● Increase the share of all dwellings that are social housing (e.g. 7–10%; currently 5.7% in 2021 based on occupied dwellings in ABS 2021 Census).
Inclusive centres and communities	**Greater activation of group and local centres** ● Increase the share of population serving jobs that are in local centres (e.g. to 25–30%; currently 23.7% based on ABS 2016 Census). **Improved community wellbeing** ● More than 8 in 10 Canberrans rate their personal wellbeing as either typical or high, in line with the ACT Wellbeing Framework.

4. Delivering the district strategies



Photo credit: ACT Government.

Implementation pathways for delivery

A range of actions will implement the initiatives and achieve the directions for the ACT's districts in the short, medium and long term.

This section describes 12 types of implementation pathways. These are referenced for each of the initiatives identified for each district in Section 5. **Future versions of the district strategies will provide more specific actions for implementation of proposed, potential and possible change areas, future investigation areas and supporting infrastructure.** Note: not all 12 pathways are necessary or will be applied in every district, and numbering is not a reflection of an order of priority.

1 Blue-green network conservation and expansion

The blue-green network is a foundational element of the district strategies. A key aim is to fill in gaps and connections in the primary, secondary and tertiary networks to enable people to move through and experience elements of the natural environment **where this is compatible with biodiversity and conservation values**.

Many elements of the blue-green network and heritage are protected by existing legislation. Initiatives and objectives for environmental and cultural heritage are set out in ACT Government policies. Key legislation and policy documents include the Nature Conservation Act, ACT Nature Conservation Strategy, ACT Water Strategy, ACT Climate Change Strategy 2019–25, national park and nature reserve plans, the draft Mature Native Trees Action Plan, and Canberra's Living Infrastructure Plan: Cooling the City (2019). The ACT Government is also delivering initiatives to support and expand the blue-green network, including working with Ngunnawal Traditional Custodians to care for Country. Blue-green network matters are also considered through the assessment and referral process for new developments.



Photo credit: ACT Government.

2 Detailed planning for future housing and employment

This first version of these district strategies covers a range of topics and elements. They have been developed based on currently available information.

Some areas will undergo further analysis, research and investigation to develop and refine the strategies for future updates and to inform other planning work. It is intended that the district strategies will be updated over time to reflect new information and remain relevant to Canberra as it develops.

Areas for future planning in the short term will include the following:

- **Planning for future employment** – Detailed studies and an ACT-wide strategy for employment lands and retail planning are crucial to informing both land-use planning decisions and economic development initiatives.
    - This will require updated modelling of employment futures and identification of employment floorspace needs, covering industrial, retail and commercial activities, visitor and tourist requirements, and distribution hubs.
- **Investigation area analysis and planning** – More detailed analysis of housing demand and future dwelling requirements with updated population projections will inform the refinement of the extent of the identified future investigation areas. These areas may be needed for future housing and will require accompanying infrastructure, including civil and community infrastructure, and other amenities to sustainably support their development.
    - This analysis will consider the full complement of 2021 Census data and be based on population projections and housing demand modelling. It will consider the existing pipeline of development and the identification of future change areas in determining what additional areas for housing are needed.
    - Refinement of the future investigation areas and identification of areas for future planning to accommodate additional housing will be based on:
        - the suitability and urban character analysis
        - opportunities to better connect rapid transit stops to group and local centres and focus development in the areas between and around these areas
        - the objectives identified for the five drivers in the district strategies as relevant.

The preliminary analysis suggests that Canberra has ample capacity for housing development well into the foreseeable future (beyond the horizon of these district strategies), supported by targeted infrastructure investment. Analysis included the suitability of areas for housing, the character types, existing distribution of density, potential of key sites within the established urban area and unconstrained greenfield development areas. In due course, it will be appropriate to reconsider the 70% urban infill target with a view to further constraining the outward expansion of the urban area.

Mitigating the impacts of natural hazards, particularly bushfires but also other risks, will be another crucial consideration to be factored into this planning, recognising that potential hazards vary between districts and between infill and greenfield development locations. Future planning will also consider the impacts and influences of surrounding areas in NSW, as well as any lasting impacts from the COVID-19 pandemic on work and travel behaviours.

3 Territory Plan

Many initiatives identified for each district will require some form of implementation through the statutory planning system and the Territory Plan.

Rezoning or other changes to the Territory Plan

Some sites or precincts may be rezoned or require other changes to planning controls to allow for particular land uses or built form outcomes in line with the district strategies.

These changes can be implemented through **changes to the Territory Plan**.

Changes to the Territory Plan are not to be inconsistent with the National Capital Plan.

Implementation via district policies

The district policies will be a new part of the statutory planning system, replacing the existing structure plans, concept plans and precinct codes.

Principles and controls that need to apply to a site beyond what is allowed under the zoning **will be specified in the district policies.** This will include specific sites identified in the district strategies.

Changes to Territory Plan Policies

Some initiatives may require adjustments to Territory Plan Policies, which apply across the ACT, such as the Subdivision Policy or Residential Zones Policy.

Changes to these Policies may **include provisions in some zones to facilitate outcomes in line with the objectives of the district strategies**, such as controls in the RZ2 Suburban Core zone to support development typologies more reflective of that zone's Policy Outcomes.

Changes implemented via the Territory Plan may include the rezoning of some areas to reflect the identified urban character types that have been derived from the suitability analysis in the district strategies. Appendix 1 includes a table that illustrates how the urban transect character types broadly align with the Policy Outcomes and land use zones in the Territory Plan (noting that the urban character types are not intended to replace the land use zones in the Territory Plan).

EPSDD will have primary responsibility for implementing these changes through the statutory system and the development assessment (DA) process, working with referral agencies and consulting with the community and development proponents to make sure the best outcomes are achieved and that new developments adequately reflect the vision and directions outlined for each district in the district strategies.

4 Transport and land use integration

The integration of transport infrastructure with land uses is a fundamental part of the thinking that has gone into the preparation of the district strategies. Major infrastructure, like future light rail corridors and the rapid bus network, provide significant opportunities for land use change.

This can help reinforce and capitalise on the ACT's multi-centred structure, align new development with improvements to accessibility and, in turn, contribute to our city's liveability and sustainability.

Integrating transport and land use will require strong and ongoing collaboration between ACT Government directorates to realise the full benefits of major transport investments. Responsibilities for different elements of planning and delivery rest with different areas. Future planning for transport and land use integration will see ongoing collaboration particularly between EPSDD, Transport Canberra and City Services (TCCS), Major Projects Canberra (MPC), Suburban Land Agency (SLA) and City Renewal Authority (CRA).

Future government plans and strategies will continue to consider land use and transport issues together, rather than in isolation. Future versions of the district strategies will reflect new policies and plans as they are developed, such as the draft Active Travel Plan, alongside existing strategies (such as Building an Integrated Transport Network – Freight and the 2020 Transport Strategy) and future planning for the extension of the light rail network. Integrating transport and land-use planning will also need to address issues around the infrastructure and logistics needed to support 'last kilometre' journeys for freight in suburban areas as well as freight access and capacity in and around existing industrial hubs. In some districts 'strategic investigation corridors' are identified. These corridors might support future rapid transport links and a stronger network of connections to and between activity nodes. Future analysis would confirm their role and viability as extensions to the strategic movement network.

Complementary policies and plans are currently being developed to implement the ACT Transport Strategy 2020, and future iterations of the District Strategies prepared by EPSDD will also need to reflect these plans.

5 Employment and economic focus areas

The strategies identify centres or locations across the districts as focus areas for enhanced economic development and employment outcomes, including the City Centre and town centres which act as major employment bases in each district. Selected group centres also require attention to address the existing spatial imbalance in the location of jobs across Canberra.

These focus areas will require more detailed analysis and planning to understand and inform their future capacity for employment and residential floorspace, planning for both mixed-use and single-use formats. Diversity and mixed use are critical to centre success but planning needs to carefully curate these outcomes to appropriately balance residential and non-residential uses (or higher value residential uses will dominate). This detailed planning should consider elements important to 'place' such as transport connections, public domain and infrastructure, reflecting the district planning objectives in Section 3, particularly those for the economic access and opportunity driver.

The more detailed planning should also focus on economic development, aligning with the strengths of each centre and the district as a whole, the centres hierarchy, and the broader strategic aims for employment across Canberra and the region. This planning work may be led by EPSDD, but will require close collaboration with SLA, CRA, TCCS and Chief Minister, Treasury and Economic Development Directorate (CMTEDD).

6 New innovation precincts

Innovation precincts have different definitions and forms. They generally refer to specific geographic areas where industry, research and education institutions and other organisations such as start-ups cluster together and build on proximity to each other. Potential benefits from these types of precincts include contribution to growth and diversification of the economy, better collaboration between different sectors, and opportunities to leverage investment in institutional assets.

Factors in the success of innovation precincts include:

- quality of place and a physical environment that is walkable and amenable
- being a precinct that is diverse and inclusive and provides broad opportunities
- the affordability of premises
- having a critical mass of related enterprises
- having necessary information technology infrastructure to support firms and attract others
- being highly accessible
- having anchor enterprises or institutions that are engaged with industry
- having a competitive advantage – leveraging distinctive assets
- having an open and democratic operating environment that promotes collaboration, including shared or collaborative spaces
- having governance arrangements that nurture the precinct's vision and its long-term economic development objectives.

Figure 24: Success factors for innovation precincts



Source: *Unlocking Enterprise in a Changing* Economy, Victorian Department of Environment, Land, Water and Planning, 2018.

Some of these factors are physical and can be facilitated through the planning system, such as through land use zoning, permissible uses and other planning controls. Successful innovation precincts require both physical and non-physical initiatives, including sustained and ongoing effort and collaboration between governments and the private sector.

The district strategies identify initial potential innovation precincts in the Belconnen and Inner North and City districts (see Figure 14) that build on specific assets already present in these districts. To make the most of these opportunities, strong collaboration will be required between the ACT Government and industry, and between directorates (EPSDD, CMTEDD – Economic Development, and others) to establish and support the development of these precincts. It will be important to identify the needs and challenges facing the specific sectors in these precincts, and for the precincts to have clear purposes and goals.

7 Selected group and local centres revitalisation

Targeted planning and non-planning initiatives to support declining group and local centres is an important element of the district strategies. EPSDD will undertake a review of group and local centres to inform a group centre revitalisation program and a local centre revitalisation program respectively. The district strategies identify some of these centres in different districts, flagging them for possible revitalisation. Criteria to identify centres will include:

- capitalising on planned investments, community needs and considering economic and housing context to determine where work should be prioritised
- potential based on proximity to infrastructure, retail analysis and needs, and the distribution of services to help us figure out which ones are looked at first.

There should also be a focus on areas in relatively disadvantaged communities (the social and community focus areas identified by having below ACT average social and economic indicators as reported by the SEIFA index. **A program of interventions to help drive revitalisation and positive change may include:**

- upgrades to open space
- improvements to local traffic and transport arrangements
- new or upgraded community facilities
- changes to planning controls to support new investment and types of uses, including additional retailing and opportunities for employment.

Selected group centres have also been identified for an economic and employment focus and this will be part of the revitalisation agenda for these centres. As with the integrated infrastructure planning pathway, delivering these initiatives will require collaboration across the ACT Government and with the community.

8 City making and ‘urban improvement’ through precinct and key site development

Planning for proposed, potential and possible change areas will be based on the objectives established in these district strategies. Development in these precincts and other key sites can play a critical role in their wider context where they are able to ‘remake’ the city through ‘urban improvement’. This means incorporating improvements to the structure of streets and public domain in neighbourhoods as higher density development occurs. More detailed planning is a platform for considering these types of improvements.

Many parts of Canberra already have good urban structure and provide a foundation for good local planning and design, for example:

- urban subdivisions situated intentionally and respectfully in the landscape, integrating natural features
- distinctive street character with a recognisable hierarchy of roles and incorporating urban tree canopy
- connected walkable street networks that design in opportunities for physical activity and social exchange
- buildings that front onto streets and parks, providing oversight of and access to public spaces and public transport.

As Canberra grows and the light rail and public transport network expands, ACT Government policies like Movement and Place point to making urban places work for all modes of travel including walking, cycling and public transport, not just private vehicles. As roads integrate more travel modes and attention turns towards their 'place' role, adjacent redevelopment should respond accordingly.

Development can complement and reinforce multimodal boulevard activity, providing for a variety of transport choices to support more intensive land use development nearby. Street design will seek to balance the needs of users, and the speed of movement particularly of private vehicles, to support the 'place' function of the corridor and give surrounding suburbs access to strategic and metropolitan transport networks by:

- providing new street, park and lane connections to public transport and cycling and walking networks that break down the existing lack of connection
- establishing built form that positively fronts all public edges, rather than fencing these off
- contributing to improvement in the quality of the public domain and landscape, including WSUD and additional deep soil plantings for tree canopy
- making great local urban places, integrating all transport modes with amenity.

Future development in some parts of Canberra needs to include initiatives to bring amenity and density together to achieve 'urban improvement'. Four types are:

1. achieving multimodal boulevards
2. realising lively local centres
3. shortening long or large urban blocks to make a more walkable Canberra
4. accessing Canberra's green network.

Appendix 2 sets out the conditions in which each of these four types of 'urban improvement' should be applied, with specific initiatives identified to achieve this. These treatments will not necessarily be applied in all circumstances or all districts, but the aim is for new development in Canberra to allow for diversity while also contributing to the wider benefit of the community. Mechanisms will be developed to achieve these 'urban improvement' outcomes where additional development is being proposed.

9 Precinct-based zero carbon initiatives

The ACT Government has committed to phase out light internal combustion engine vehicles from 2035 and transition away from the use of fossil-fuel gas by 2045. This will increase electricity demand, requiring upgrades to our electricity system. Infrastructure such as battery storage systems will need to be deployed within homes, neighbourhoods and at strategic electrical infrastructure nodes. Some initial planning system changes to facilitate this are being considered and further changes will be needed over time.

Building owners will need the ability to adapt existing buildings, for example by changing their heating and cooling systems from gas to fully electric. This may require additional infrastructure on or around the building. The planning system will need to enable these changes; support and incentives may also be needed.

While some initiatives may be mandated, there are opportunities for development proponents to go beyond minimum standards. This should be encouraged. Precincts and larger scale development sites should test the scope for precinct-based initiatives that contribute to the ACT's energy transition, as well as broader resilience outcomes.

The initiatives are most likely to be viable where 50–100,000 square metres of floorspace (or more) is proposed. This equates to around 500 or more dwellings and significant retail and office floorspace. However, smaller developments should be encouraged to take action where possible.

Precinct based initiatives may include:

- using new development as a catalyst to convert existing buildings in the precinct away from gas
- buildings with above-minimum energy efficiency
- actions to support zero emissions vehicles that are above-minimum 'EV Ready' standards
- reduced 'Scope 3' embedded emissions (e.g. low emissions building materials)
- recycled water systems to support extensive greening and zero sewer in large-scale developments that can connect to the broader neighbourhood for sewer mining (recycling of wastewater) and support enhanced greening
- innovative waste solutions targeting localised food and garden organics waste diversion through centralised composting facilities, community gardens and, if feasible, distributed medium-scale organics waste management systems
- sustainability certification, for example through the Green Building Council of Australia.

These initiatives will need to be integrated as controls, where appropriate, in the new ACT planning system and Territory Plan. Initiatives identified for each district will contribute towards this zero carbon agenda.

10 Integrated infrastructure planning

As well as actions within the planning system and related transport planning and investment, there are initiatives that require implementation by different parts of ACT Government to deliver on the vision and directions for each district.

This will include items like upgrades and decisions concerning civil infrastructure (stormwater, electricity supply, road network and sewer), environmental upgrades and management, and the management and planning of existing and new recreational and community facilities such as major infrastructure (for example, schools and Early Childhood Education and Care (ECEC) – which also contribute to community and social outcomes by making school facilities available for community use outside of school hours). Different directorates and agencies have a role in planning for these (for example, EPSDD, Education Directorate, ACT Sport and Recreation, ACT Property Group, ArtsACT, Libraries ACT), **requiring a cohesive approach and collaboration across ACT Government to align plans for these pieces of infrastructure with the objectives and aims of the district strategies**.

District and local community facilities assessments and other analyses, including consultation with the community, will be needed to confirm and address potential gaps in provision, including more detailed analysis of need, location and viability of potential new community facilities in each district. The Education Directorate is currently preparing updated feasibility and demand studies for future school needs using recently updated student demand projections.

11 Governance for comprehensive redevelopment

Delivering on the district strategy planning and urban design principles may require more significant interventions in some places than just rezoning land or applying new planning controls. This is particularly the case in areas where holistic thinking and significant intervention and 'urban improvement' is needed.

In some parts of Canberra, the existing urban structure means that delivering sustainable infill development is more challenging and may require and benefit from the amalgamation and re-assembly of some sites.

Having clear governance and agency responsibility or clarity of a body that has responsibility for being an 'urbanising agent' can be an important part of this. This requires clarity in responsibility for communicating, planning, brokering, co-ordinating and funding particular projects, which could be for a particular site or a whole precinct. There is benefit in these functions being clearly identified in relation to governance, funding and delivery responsibilities. The intention is to have a body that has the remit and capacity to act as the overarching agent for change. This could be within existing government structures or require more deliberate focus.

Functions and responsibilities that need to be clearly identified and allocated include:

- preparing planning proposals and precinct plans and subdivision designs, demonstrating exemplary urban design and feasibility, to be integrated into the Territory Plan
- procuring the infrastructure to support new development
- undertaking demonstration projects (either independently or through other delivery models such as public, private partnerships)
- developing models for value sharing, which encourage landowner participation and allow for optimal assembly of sites to deliver outcomes
- establishing mechanisms for achieving public domain contributions or upgrades, serving multiple objectives including enhanced access to open space as well as opportunities to address urban heat (for example, enhancing tree canopy), in consideration of development outcomes
- meeting the relevant targets for land release, dwelling numbers, housing choice and affordability, employment and mixed-use development
- using a triple bottom line approach to urban development so urban uplift is combined with public benefit and environmental improvements.

It is proposed that an urbanising agent or clear identification of specific responsibilities and governance models is still to be defined but could be established to bring together skills from across the ACT Government for projects where the above aspects are required to facilitate specific outcomes in key precincts in some districts. It is proposed that EPSDD will do further work on this concept for consideration by government.

12 Social and affordable housing contributions through new development

The results of the 2021 Census show that around 23% of rental households in the ACT are in housing stress. The Australian Housing and Urban Research Institute (AHURI) recently found[1] that the ACT has a current shortfall of 3,100 social housing dwellings and a projected shortfall of 8,500 by 2036.

The price of housing and shortage of accessible, affordable stock is influenced by a range of factors outside the ACT Government's control. Nevertheless, the ACT Housing Strategy recognises the crisis of affordability in Canberra and includes initiatives focussed on building the social and affordable housing stock.

These include the Growing and Renewing Public Housing program and a commitment to dedicate at least 15% of eligible releases in the Indicative Land Release Program each year to affordable, community and public housing. The SLA also offers the Affordable Home Purchase Scheme, which assists low-to-moderate income households by providing homes for purchase at affordable prices.

The planning system also has a role to play in facilitating diverse housing forms, including through new models such as co-housing, manor houses and build-to-rent, which can contribute to more affordable housing options in the private market.



Photo credit: ACT Government.

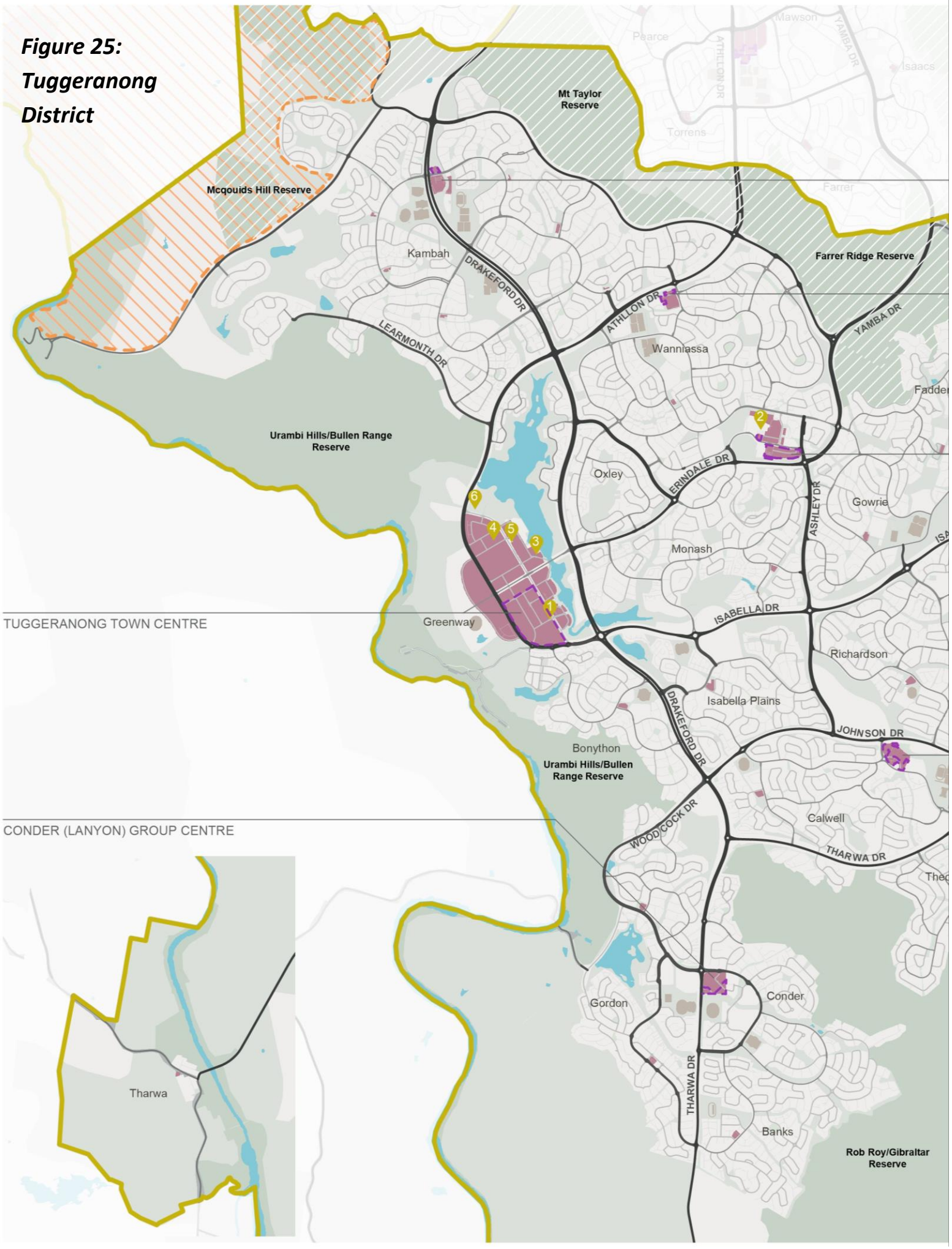
[1] Lawson, J., Pawson, H., Troy, L., Nouwelant, R., and Hamilton, C. (2018) Social housing as infrastructure: an investment pathway, AHURI Final Report No. 306, Australian Housing and Urban Research Institute Limited, Melbourne, https://www.ahuri.edu.au/research/final-reports/306, doi:10.18408/ahuri-5314301

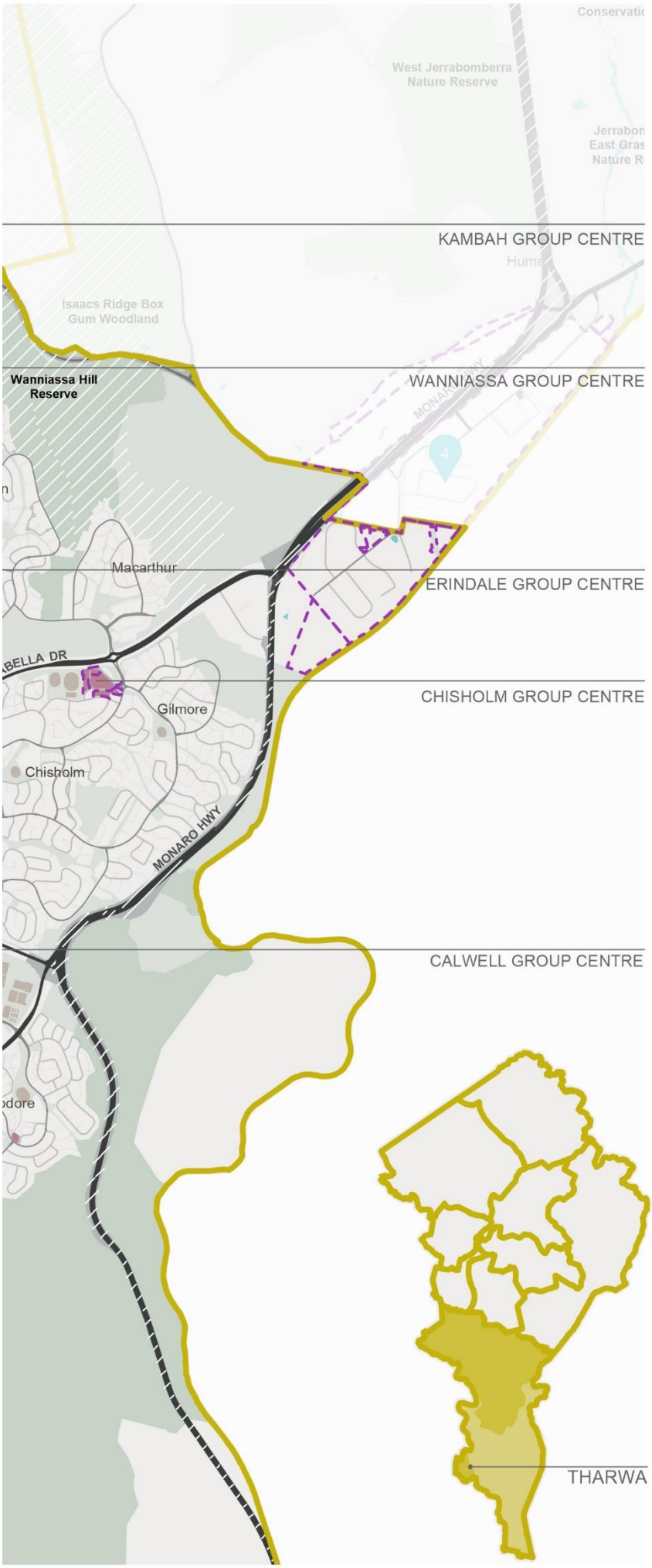
5. District Strategy for Tuggeranong



Photo credit: ACT Government.

Figure 25: Tuggeranong District





LEGEND

Note: This is a common legend for all similar district plans and not all items listed will appear on this drawing

- District Boundary
- Open Space
- Nature Reserve
- Water Bodies
- Sportsfields
- Designated Area Under National Capital Plan
- City/ Town/Group/Local Centre
- Industrial/Service Trades
- Western Edge Investigation Area
- Bicentennial National Trail
- Eastern Broadacre Study Area

Destinations

1. CIT Tuggeranong
2. Erindale Library
3. Tuggeranong Library
4. Tuggeranong Bus Interchange
5. Tuggeranong Community Health Centre
6. Lakeside Leisure Centre

Scale at A4 1:50000

0 100 250 500 1000

N

Tuggeranong District context

Tuggeranong is the second largest district in the ACT by area and population. Tuggeranong town centre is the main area for employment and services, including the service trades precinct, CIT campus, Southern Cross Stadium and government offices. The district has many local and group centres serving generally low-density suburbs.

Tuggeranong has a generally older and ageing population, with the largest age cohort in 2021 being 'mature adults' 45–64 years old (see Figure 26). Population projections for Tuggeranong predict modest future growth. However, the district has many attributes and advantages, including established infrastructure and centres, that can be built on to sustain and improve its accessibility, amenity and employment opportunities for current and future residents.

Opportunities and constraints

Natural features, connections and heritage

Tuggeranong is the southern-most part of the ACT. It provides a gateway to the rural areas of the ACT, Tharwa village and the Brindabella Ranges.

While Tuggeranong has some steeply sloping areas, mostly along its edge, a large part is relatively flat with gradients of less than 3%. At more than 20%, Tuggeranong has the fourth highest tree canopy cover compared to other districts. It has the largest quantity of parks and recreation zoned land across the ACT, although their quality and useability varies. Many areas are relatively cool in hot weather. However, parts of Tuggeranong town centre are an urban heat 'hotspot'. Larger suburban blocks contribute to the green network and the amenity of the blue-green network for people.

Lake Tuggeranong is a key amenity feature of the district and ecologically important as part of a water system flowing into the Murrumbidgee River. Water quality in the lake can be improved through WSUD investments in the Tuggeranong suburbs to reduce pollution effects from urban development, and other measures to enhance the blue-green network and natural values.

Tuggeranong District is home to many threatened ecosystems and species, including critically endangered Box Gum Woodland, the Macquarie Perch, Pink-tailed Worm-Lizard, Key's Matchstick Grasshopper and Tuggeranong Lignum, and aquatic-riparian habitat along the Murrumbidgee River and its tributaries.

Tharwa village, at the south-western edge of the district, is a significant location for heritage, including cultural heritage for the Ngunnawal people.

Employment hubs and economic activity

Tuggeranong District has a network of 18 local centres and six group centres. The Tuggeranong town centre is the only centre providing more than local retail and service functions.

While the town centre is the major employment hub for the district, and includes Australian Government offices, Tuggeranong District overall has a relatively small share of employment (8.7% of the ACT as of 2016) compared to its share of the population (20% of the ACT in 2021).

This illustrates a mismatch between where people live and work, with many people travelling outside the district for their jobs. As shown in Figure 14, much of the district has a low level of relative access to employment, particularly those suburbs furthest south.

This correlates with some areas that have socio-economic indicators lower than the Canberra average.

The 'off-centre' location of the Tuggeranong town centre reduces its accessibility to residents.

The Hume industrial precinct is partly within the district (on its north-eastern boundary). It serves a key regional function for the ACT and surrounding areas by catering to freight, logistics and other heavier industries. This area may be a focus for future growth associated with development occurring across the border in NSW at South Jerrabomberra.

Across the district, the largest proportion of jobs are in knowledge intensive industries (43%), followed by population-serving (29%) and health and education (21%) sectors. Industrial employment makes up the smallest share of jobs (6%).

Transport and travel

Travel distances between Tuggeranong and surrounding districts are long. There is heavy reliance on Drakeford Drive, Athllon Drive, Yamba Drive and the Monaro Highway for residents to stay connected with the rest of the ACT.

The ACT Transport Strategy indicates that a potential future part of the light rail network is expected to extend from Woden to the Tuggeranong town centre via Athllon Drive, also servicing the Wanniassa group centre. Establishing light rail in the district will be a significant long-term opportunity to deliver transport-oriented development and associated employment, enhance this important corridor and improve transport accessibility.

Tuggeranong is currently serviced by two rapid bus routes, which take in the Conder, Calwell, Erindale and Wanniassa group centres as well the town centre, travelling to Woden and then to the City Centre and Belconnen. The district is also serviced by three 'peak' express services that operate to the City Centre and the Parliamentary Triangle on weekdays.

In contrast to some other districts, the road network in Tuggeranong is relatively unconstrained, with fewer existing road and traffic issues and surplus capacity in the system.

The dispersed and suburban street layout of Tuggeranong and wide road corridors mean that enhancing connectivity for active travel can be difficult and that the district is generally more car dependent.

Housing and affordability

The largely suburban and low-density character of the district mean that opportunities for future intensification may be relatively limited outside of the town centre and strategic public transport corridors. However, generally larger block sizes can also provide opportunities for low- to medium-density infill development in appropriate locations, while preserving the existing tree canopy and capitalising on the open space network to improve amenity and urban character.

Single detached dwellings are the most common dwelling type in the district, making up approximately 80% of the existing housing stock in 2021 (see Figure 26). This proportion has declined from around 87% in 2016, reflecting an increase in apartment and medium-density development in recent years, particularly in the southern part of the town centre. No future areas are identified specifically for residential development in the district. Land release sites are currently limited to Wanniassa and Hume for employment floorspace, and non-urban land to the far south. However, there will be multi-unit development projects delivered by the private sector.

The areas with the best overall suitability for future growth are generally concentrated in the town centre and northern half of the district, aligned with the Athllon Drive corridor and the indicative future light rail route, the group centres and town centre, and much of Kambah.

The suburbs furthest south generally show a lower ranking in relative suitability, influenced by

travel distances and accessibility to facilities and services. These areas might be suited to future infill residential development to support group centres and their growth as service and employment locations, particularly if also linked to enhanced transport connections to other employment locations including the Tuggeranong town centre.

As of 2021, the district had a similar proportion of rental households experiencing rental stress (23.9%) to the rest of the ACT (23%).

Community facilities and local and group centres

Tuggeranong has a large number of existing community and recreational facilities, including libraries in the town centre and Erindale, Southern Cross Stadium, Tuggeranong Arts Centre and the Lakeside Leisure Centre. However, these are more concentrated in the north and west of the district, with the outer-most suburbs to the east and south having more limited levels of accessibility. Previous studies have also noted the poorer quality of some assets in the district and the under-utilisation of others. Any future proposed development may need to consider upgrades to facilities, as well as their accessibility and the need for facilities as the population ages.

Tuggeranong has a large number of local centres. Kambah, the largest suburb in Canberra, has multiple centres. Some local centres are not performing as well as others. There may be a need to consider how these centres operate within the broader network and system of centres to make sure they remain viable and can continue to function as local assets for the community. Some group and local centres may require targeted planning and non-planning interventions or new approaches to improve and maintain their viability over the long term.

Tharwa village will not be a growth area. The focus will be on public domain improvements, road safety upgrades, economic development opportunities, heritage and land conservation.

Note: the snapshot on the following page refers to both 2016 and 2021 ABS Censuses as not all the 2021 Census data was available when the district strategies were prepared. The intention is to update the strategies when additional 2021 Census data is available and the ACT's population projections have been revised.

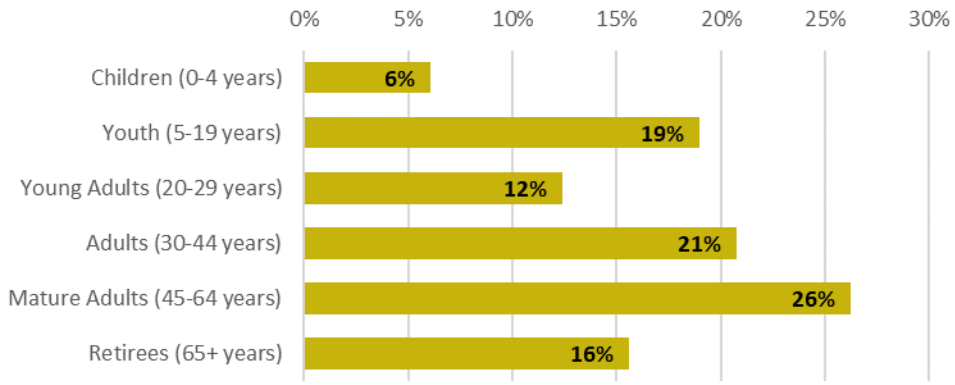


Photo credit: ACT Government.

Tuggeranong District – current snapshot

Tuggeranong District population

Figure 26: Age profile, 2021

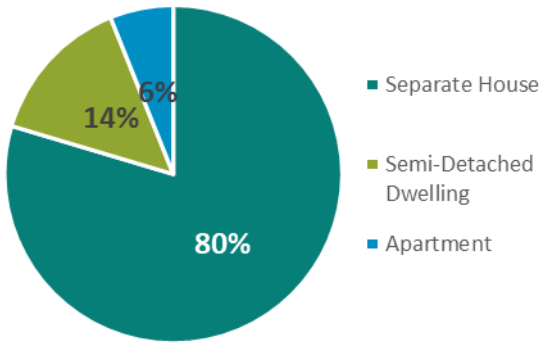


89,461 people in 2021

(19.7% of ACT)

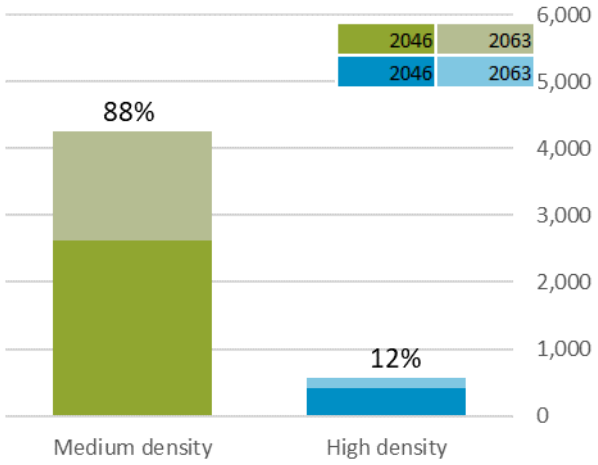
Tuggeranong District housing

Figure 27: Housing types, 2021 – proportion of dwellings



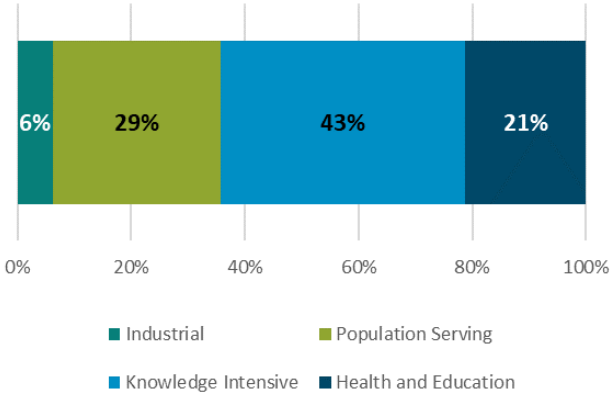
23.9% of rental households in housing stress in 2021 (23% across ACT)

Figure 28: Potential future housing demand based on population projections – additional dwellings (2046 & 2063)



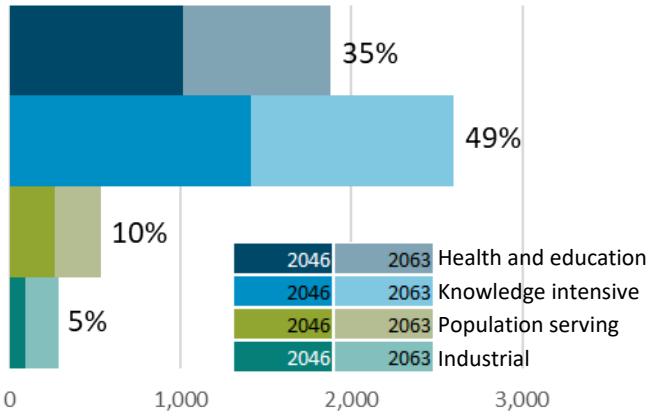
Tuggeranong District employment (note: 2021 Census data not yet available)

Figure 29: Proportion of jobs by industry type, 2016



18,700 jobs in 2016 (9% of ACT)

Figure 30: Potential future employment – additional jobs (2046 & 2063)



Note: data based on Tuggeranong Statistical Area 3 (SA3) boundaries. Percentages may not add to 100% due to rounding.

What the community has told us

Key themes that emerged for Tuggeranong District from the district planning consultation undertaken in 2021 are summarised in Table 9.

Feedback informed the analysis and preparation of this district strategy. Feedback related to both the key themes from the ACT Planning Strategy and each of the five big drivers that have underpinned the district level planning as described in Section 3.

Table 9: Feedback from the community for Tuggeranong District, 2021

Compact and Efficient city	Diverse Canberra	Sustainable and Resilient Territory	Liveable Canberra	Accessible Canberra
Avoid overshadowing of public spaces.	Provide spaces for arts and cultural community activities.	Retain trees.	Upgrade and improve sporting and play facilities.	Create more cycleways with links between Tuggeranong and Canberra Hospital.
	Preserve green spaces and bushland.	Build efficient and smaller housing.	Restore and upgrade vacant community assets.	Address traffic congestion.
	Enhance local shops and commercial precincts.		Create community gardens.	Improve walking connections between suburbs and to the town centre.
			Improve education options.	Make cycleways a priority at road crossings.

Note: The feedback in Table 9 is taken directly from consultation and as expressed by participants.

District Strategy for Tuggeranong

Key directions

The following directions highlight the vision for Tuggeranong in the future.



Improve biodiversity and water quality outcomes across the district including Lake Tuggeranong.

Enhance open space linkages between suburbs to improve connections across the district.



Enhance the employment role of Tuggeranong town centre linked to nodes of economic activity along the Athllon Drive corridor (at Wanniassa and Drakeford Drive).

Better understand and enhance the economic role of existing group centres including Conder, Calwell and Chisholm to strengthen access to employment opportunities across the district.



Deliver new strategic transport connections including light rail to the Tuggeranong town centre via Athllon Drive.

Investigate other key corridors towards Kambah and Chisholm to support growth and enhance job accessibility.



Focus new residential development mixed with employment opportunities in Tuggeranong town centre and in future light rail and rapid transit corridors.



Consider the role and function of existing group and local centres which may include Kambah, Wanniassa, Fadden, Chisholm, Monash, Calwell, Gordon and Conder, and where required, undertake targeted initiatives to support centre viability and community development.

District strategy plan

The Tuggeranong District Strategy Plan (Figure 31) highlights the key structural elements and directions for the district based on each of the five big drivers described above.

The district strategy plan highlights the following elements (for some districts not all elements are relevant or shown in the maps):

- current and possible future blue-green network values and connections
- current and proposed new transport routes and links, and others for strategic investigation
- centres and locations requiring a particular focus on economic development and employment
- group and local centres that are a focus for consideration of planning and non-planning initiatives to support their ongoing viability and role as a community meeting place (centres to be confirmed though further investigation)
- any new or future proposed community and recreational facilities
- sites and precincts that are identified for future development through existing estate development planning, the ILRP or development proposals and an estimate of the number of dwellings they may deliver
- future investigation areas that will be considered for additional housing in future versions of the district strategies.

Initiatives for Tuggeranong

A series of **initiatives** will support delivery of the directions of the Tuggeranong District Strategy. The initiatives are related to each of the five big drivers and their associated planning objectives.

The following sections document these initiatives under each driver, and their pathways for implementation in line with those described in Section 4. While some are already planned or underway, the potential timing for delivery is also shown, based on the following indicative timeframes:

- Short term – next 5 years
- Medium term – next 10 years
- Long term – next 20 years
- Longer term – 20+ years.

Future housing and jobs – for further investigation

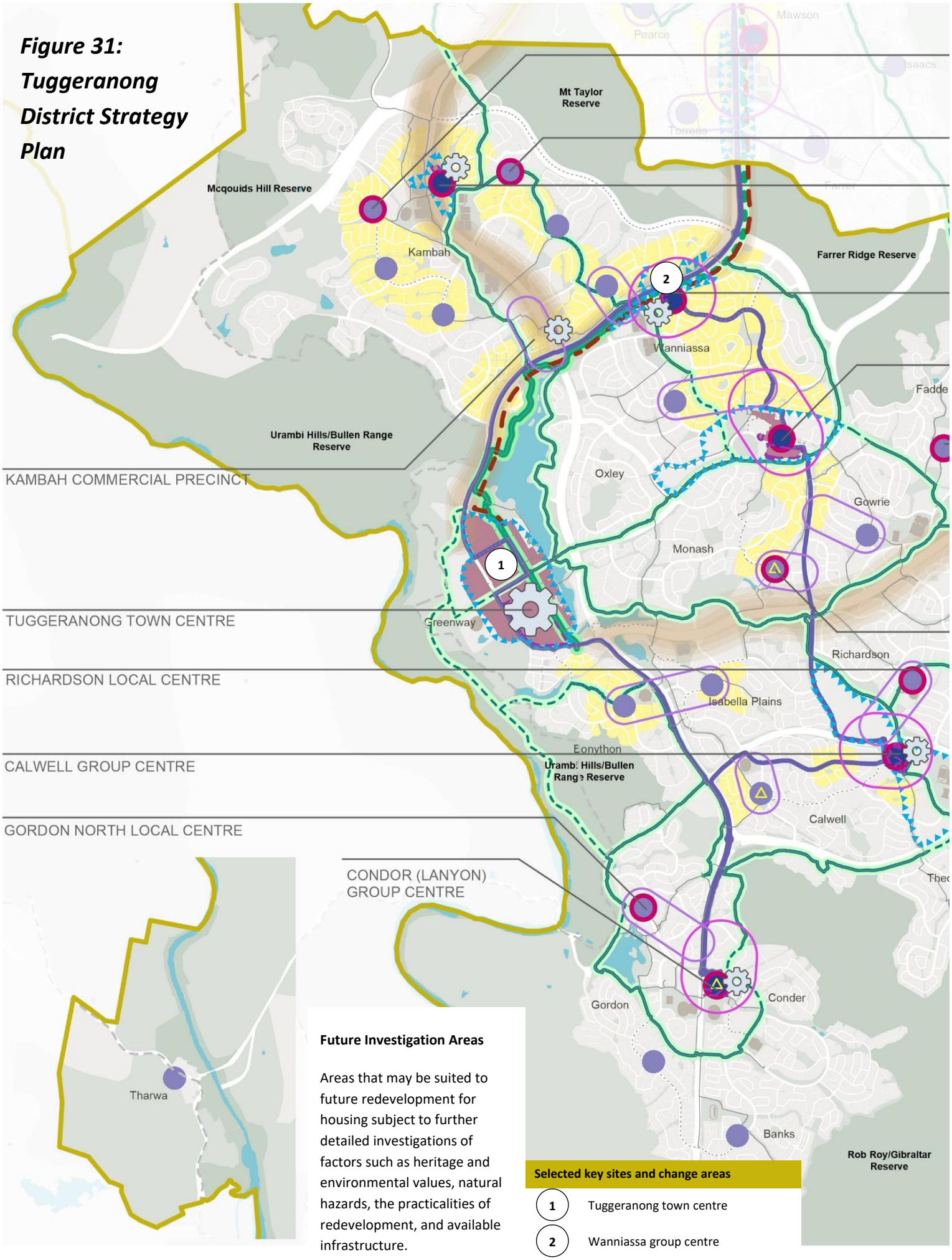
The potential future housing demand identified for Tuggeranong is for around **an additional 4,800 dwellings by 2063**, all as infill development as there are no greenfield precincts planned for the district.

The proposed, possible and potential future change areas will contribute towards meeting this demand. In addition, the identified future investigation areas will be further considered to understand their potential for future housing. **The objectives under the five big drivers will be foundational to informing where future change in the district occurs.**

Incremental development under existing planning controls is also anticipated within the district. This will contribute to meeting the housing demand.

The total baseline potential future employment across the district in 2063 is around 24,600 jobs. The distribution between centres and locations is shown in the table accompanying the map (Figure 31). These projections link the change in jobs to projected population growth and reflect the existing distribution of employment across the ACT. Centres which are priorities as economic and employment focus areas are indicated (with a ringed circle), implying that higher than baseline employment numbers are desirable in these centres.

Figure 31: Tuggeranong District Strategy Plan

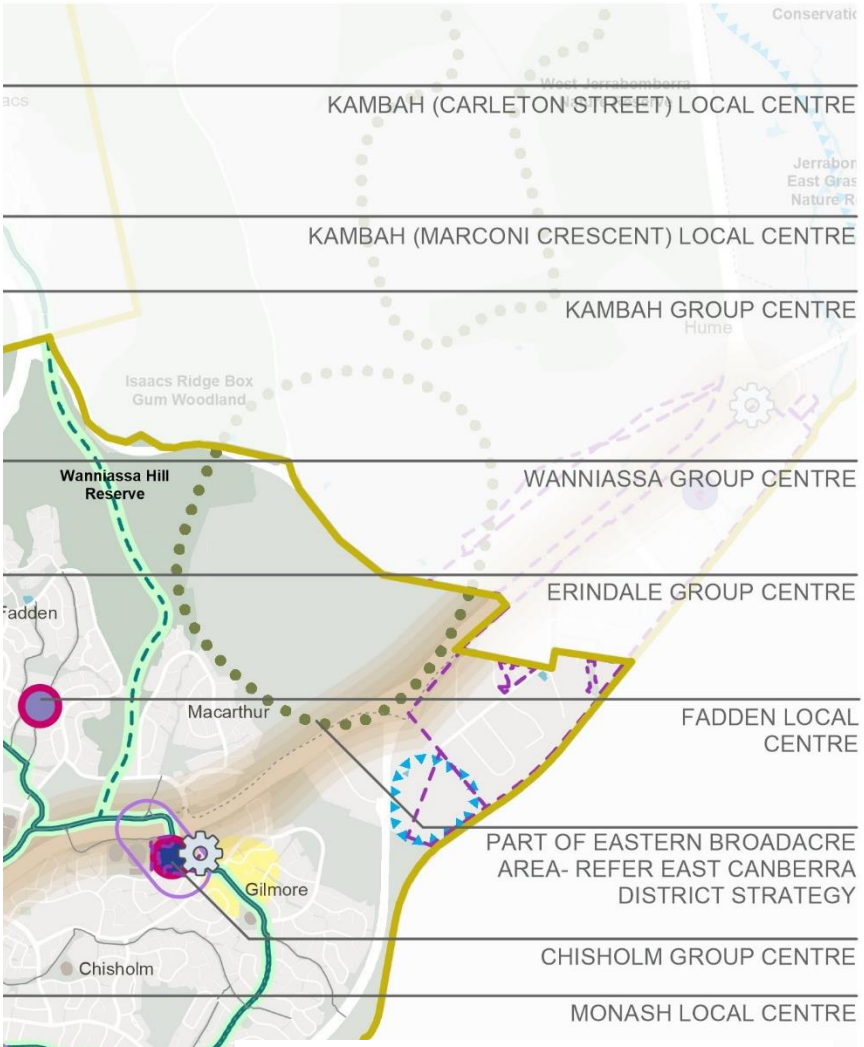


Future Investigation Areas

Areas that may be suited to future redevelopment for housing subject to further detailed investigations of factors such as heritage and environmental values, natural hazards, the practicalities of redevelopment, and available infrastructure.

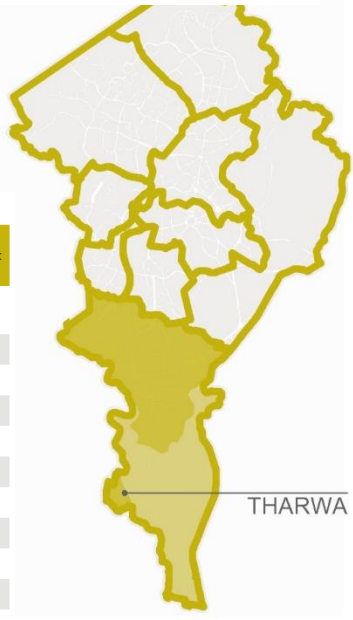
Selected key sites and change areas

1	Tuggeranong town centre
2	Wanniassa group centre



Potential future infill housing demand – for further investigation, 2063

Tuggeranong District	Dwellings
Potential housing demand for Tuggeranong (infill)	4,800
Proposed, possible and potential future change areas (estimate)	4,000-4,400



Potential total future employment (baseline only), 2046 and 2063

Jobs by centre	2046	2063	Economic & Employment Focus areas
Tuggeranong town centre (incl. service trades area)	12,500	14,000	✓
Calwell group centre	300	300	✓
Chisholm group centre	300	300	✓
Conder group centre	600	600	✓
Kambah group centre	200	200	
Wanniassa group centre	400	400	
Erindale group centre	1,200	1,300	
Local centres	1,500	1,600	
Other (rest of district)	5,300	5,900	
Total	**22,100**	**24,600**	

LEGEND

Note: This is a common legend for all similar district plans and not all items listed will appear on this drawing

District Boundary

Blue-Green Network

- Open Space
- Nature Reserve
- Water Bodies
- Sportsfields

Existing Connections

- Primary
- Secondary

Possible Future Connections

- Primary
- Secondary

Economic Access and Opportunity

- Economic and Employment Focus
- City/ Town/Group/Local Centre
- Service Trades/Industrial
- Local Centre
- Group Centre
- Innovation Precinct

Strategic Movement

- Current Light Rail Corridor
- Proposed Light Rail Corridor
- Current Rapid Bus Corridor
- Proposed Rapid Bus Corridor
- Current Active Travel Community Network
- Proposed Active Travel Community Network
- Bicentennial National Trail
- Strategic Investigation Corridor

High Speed Rail Alignment

- Proposed
- Alternate

Sustainable Neighbourhoods

- Future Investigation Areas
- Rapid Stop to Local Centre 200m Connections
- Rapid Stop to Group Centre 400m Connections

Key Sites and Change Areas

- Proposed
- Possible
- Potential

Inclusive Centres and Communities

- New Community and Recreation Facilities
- Possible Centre Revitalisation Opportunity
- Shopping Centre Improvement Program Underway

Scale at A4 1:50000

0 250 1000
100 500

N

Blue-green network

As new development in Tuggeranong happens, careful consideration will be given to plan and enhance the network of waterways and green space (the blue-green network) that protects our environmental and cultural values and improves their sustainability and resilience to climate change. The blue-green network map (Figure 32) highlights many areas with such values and where future connections and enhancements for people and biodiversity outcomes can be created. Tuggeranong District includes many nature reserves including Mcquoids Hill, Urambi Hills, Farrer Ridge, Wanniassa Hill, Pine Island, Tuggeranong Hill and Rob Roy Range nature reserves, which are home to threatened species of flora and fauna.

Closer to the urban part of the district, habitat connectivity is highest around the Murrumbidgee River corridor and areas interfacing with nature reserves, with lower level regional and local linkages through the suburbs. Priority connectivity areas for improvement could include along Tuggeranong Creek, Village Creek, Wanniassa channel, the creek line through Gordon and Conder, and along the Murrumbidgee as it flows along the periphery of the district and along the Monaro Highway. While many of these connective elements and ecological communities are protected by legislation, any new development in the district must consider and enhance these, including the use of WSUD initiatives.

The amenity and condition of the blue-green network for the community is important. Lake Tuggeranong is the primary asset for the district. The amenity of the lake's edges will be enhanced as the population increases in higher density apartment developments around the town centre. Improving the open space and riparian corridor network across the district will make the spaces more useable for residents while protecting and improving environmental values. Improvements could include urban design interventions at the edges of parks to build on existing water courses, and the introduction of new wetlands and water quality treatment initiatives to address issues including blue-green algae and turbidity. The map suggests enhancements to the primary and secondary networks to address gaps in the existing network and make new connections to the town centre and north into the Woden District.

Tuggeranong includes many heritage items and areas of significance for both Aboriginal and European cultural heritage, particularly at and around Tharwa. The landscape setting and surrounds of Tharwa are significant for their proximity to the Murrumbidgee River, relatively intact areas of critically endangered woodlands and other sensitive ecological communities. Protecting and improving these assets will be of utmost importance in planning for Tharwa in future, as set out in the Tharwa Village Plan.

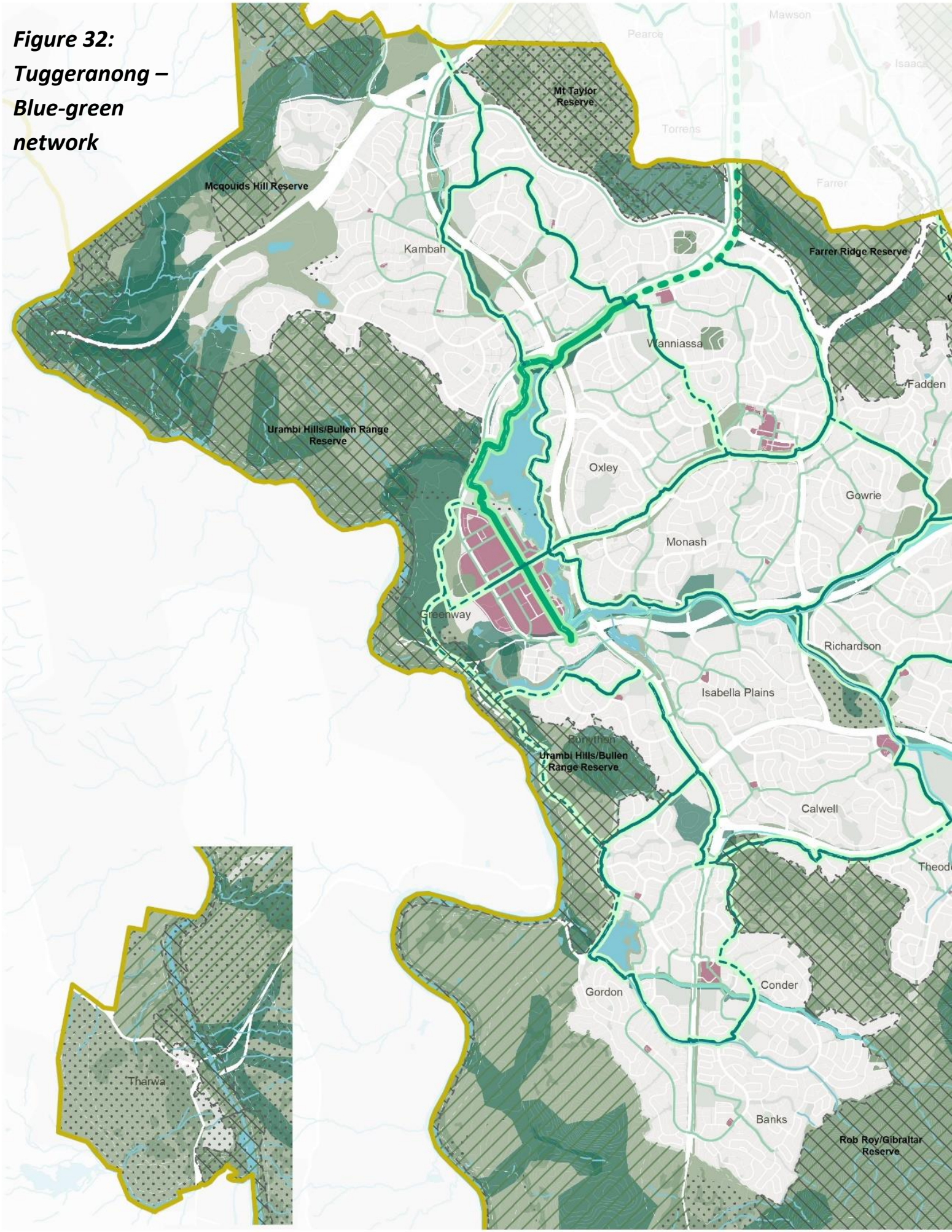
Table 10: Tuggeranong initiatives – Blue-green network

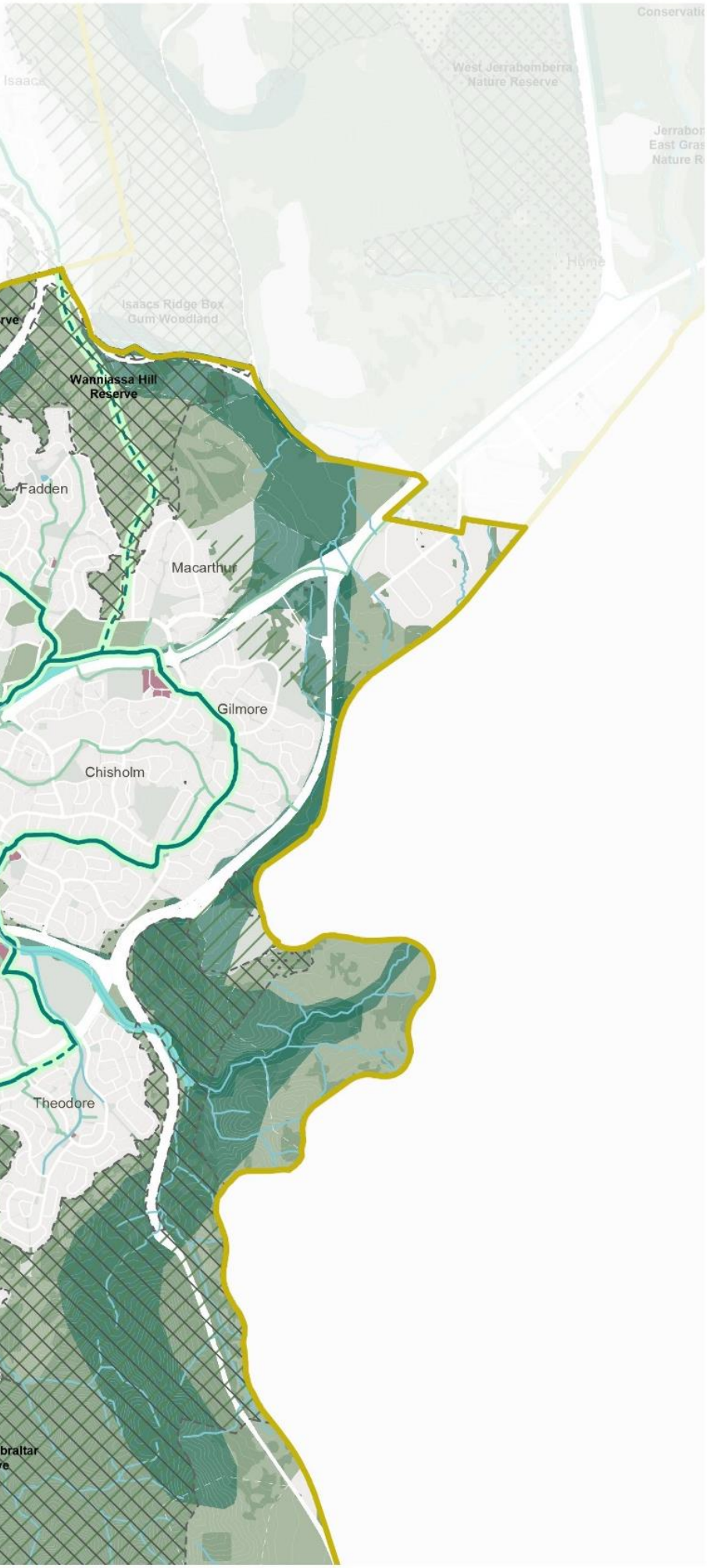
Initiatives	Implementation pathway	Timeframe
Conserve, restore and reconnect priority grassland, woodland and riparian habitat corridors and catchments throughout the district, including around Lake Tuggeranong, the Murrumbidgee River and Tuggeranong Creek, and maintaining appropriate buffers between nature reserves and any new development.	1	Ongoing
Enhance the existing open space network to fill gaps and enhance useability for residents through urban design interventions, including around Lake Tuggeranong.	1 8	Medium term
Utilise and enhance the green network as areas are developed to provide greater amenity including enhanced canopy coverage for new path networks, and address existing gaps in connectivity within and between suburbs.	1	Ongoing
Implement initiatives to improve biodiversity outcomes including potential for new wetlands and water quality initiatives across the district.	1	Medium term
Implement enhanced WSUD as part of all future development proposals in the district.	3	Short term
Make sure future development of Tharwa is consistent with principles and actions set out in the Tharwa Village Plan to protect and enhance the natural environment, maintain heritage and promote sustainability.	1 3	Ongoing



Photo credit: ACT Government.

Figure 32: Tuggeranong – Blue-green network





LEGEND

Note: This is a common legend for all similar district plans and no all items listed will appear on this drawing

- District Boundary
- Open Space with 5m Contours
- City/Town/Group/Local Centres
- Water Bodies
- Creek Lines

Conservation Connectivity

- Protected Flora and Fauna
- Potential Priority Connectivity Areas
- Riparian Corridors
- Heritage
- Potential Habitat Area
- Conservation Area
- Nature Reserve

Blue Green Network

Existing Connections

- Primary
- Secondary
- Tertiary

Possible Future Connections

- Primary
- Secondary

Scale at A4 1:50000

0 100 250 500 1000

N

Economic access and opportunity across the city

Analysis of the 2011 and 2016 censuses, using 'Location Quotient' analysis (Figure 33), shows that Tuggeranong's strengths are in the education, accommodation and some of the industrial sectors (the latter linked to Hume). Emerging sectors are in the health and the knowledge intensive category including professional services, information technology and administration. With an ageing population there may be opportunities to build on the district's existing and emerging strength in health. Overall, the level of growth in employment over the 2011 to 2016 period was lower than some of the other districts, suggesting a need for focussed investment to improve local job opportunities beyond retail employment, which is declining as a sector. This profile of Tuggeranong's industry sectors and strengths should inform future planning for the district's economic and employment centres and precincts.

Location Quotient

Location quotient (LQ) is a measure of relative industry specialisation of a local economy compared to a larger area. In the chart below the share of jobs by industry in Tuggeranong has been compared to the ACT as of 2016. A LQ score (*along the x-axis)* greater than 1 indicates a relative industry specialisation in the district and the higher the LQ the higher the specialisation. The other variable is growth between 2011 and 2016 (*along the y-axis*).

Of most importance are the **two right hand quadrants of the diagram** – the top right shows industries that are specialised and growing, and the bottom shows industries that are specialised but contracting in employment. The size of the circles represents the numbers of jobs in each sector.

Figure 22: Location quotient – Tuggeranong District 2011-2016



Source: SGS Economics and Planning, 2022, based on ABS 2011 and 2016 Censuses.

A key issue for Tuggeranong is the need for more localised employment, closer to where people live. The district's location and large size mean many residents, particularly those from the outer suburbs, travel significant distances to existing concentrations of employment. A more general need to understand the capacity and need for employment lands across the ACT will inform detailed planning at the place level to address this issue. For Tuggeranong, this will include a focus on some group centres in areas where the population has lower accessibility to existing employment, particularly Conder, Calwell and Chisholm. These are targeted as economic focus areas; however, there is a need to understand the distinctive or enhanced role these centres could play and how they may be improved collectively while acknowledging that not every centre requires or will have capacity for substantial new investment and development. TCCS is investigating upgrades to public spaces for the Calwell and Conder group centres.

At the same time, a focus on planning and enhancing the town centre is needed. The town centre will remain the district's predominant location for employment, particularly given the future extension of the light rail network. More private sector investment is needed to complement the existing public sector presence and potentially to enhance the offer of tertiary education, which is currently concentrated in other parts of the ACT (with the exception of the Tuggeranong CIT). Future planning for the town centre will focus on developing a commercial office strategy and identifying strategies to attract tertiary education providers. Identifying strategic sites for more intensive redevelopment, containing a mix of residential with significant employment floorspace, should also be considered.

Over the long term, and aligned with the planning and delivery of potential future light rail, investigations will consider the suitability of establishing nodes along the Athllon Drive corridor. These nodes could have a small enterprise character (e.g. low impact trades, urban enterprise, niche maker activities and specialised and fringe retail) as well as mixed-use activity; they would complement the economic role of the town centre. This potential corridor is highlighted by the economic and employment focus area at the Wanniassa group centre and the intersection with Drakeford Drive nodes, shown as 'cogs' on the map (see Figure 34).

Table 11: Tuggeranong initiatives – Economic access and opportunity across the city

Initiatives	Implementation pathway	Timeframe
Undertake place planning for the Tuggeranong town centre in light of potential future light rail, including development of a commercial office strategy and identification of opportunities to redevelop strategic sites within the town centre while retaining service trades function.	2 5	Short term
Aligned with planning for potential future light rail, investigate opportunities for, and the suitability of, nodes of small enterprise opportunities along the Athllon Driver corridor at the Wanniassa group centre and Drakeford Drive intersection linking into the town centre.	4 5	Long term
Undertake analysis of all group centres to understand their economic function and capacity for more employment floorspace, with a particular focus on Conder, Calwell and Chisholm, and enhance opportunities for accessible employment for residents in nearby suburbs.	2 5	Short term
Investigate strategies to attract additional tertiary education to the town centre, building on the existing Tuggeranong CIT presence and other community facilities.	5 10	Medium term

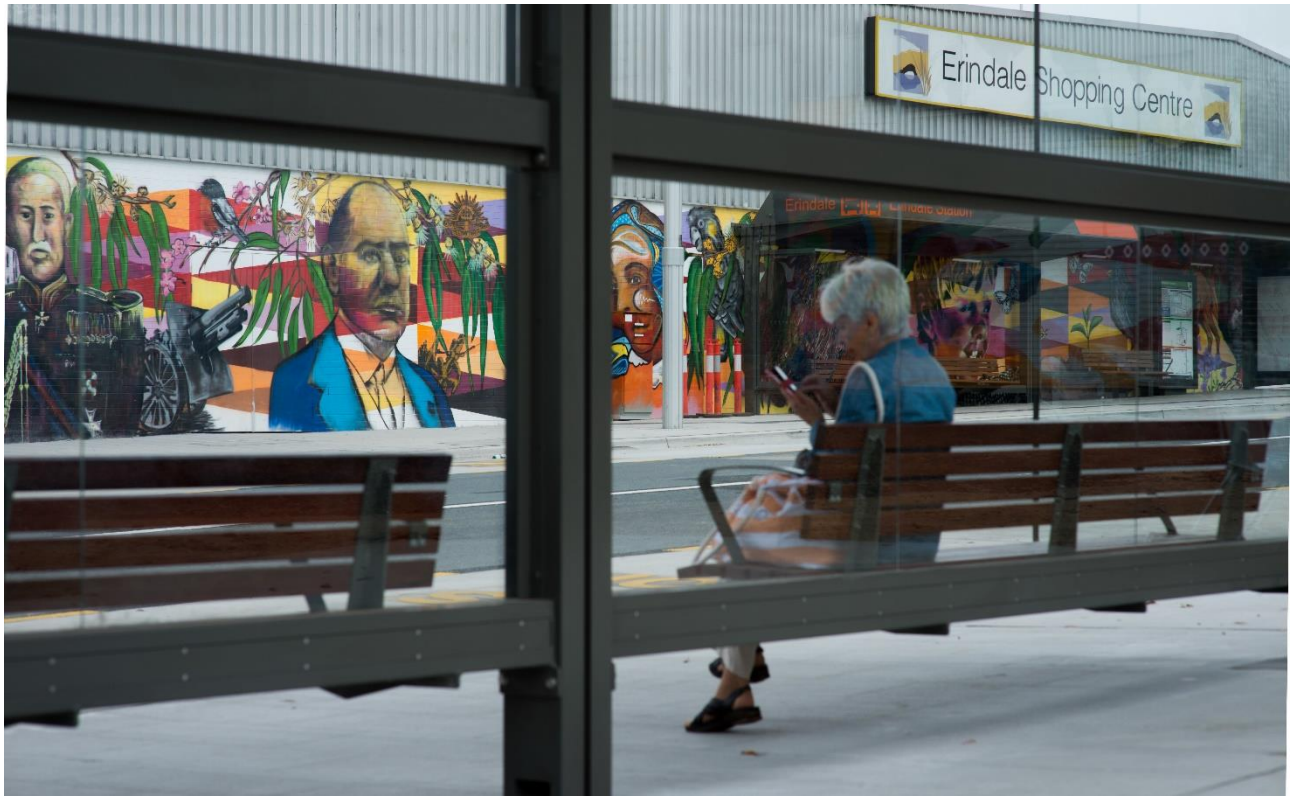
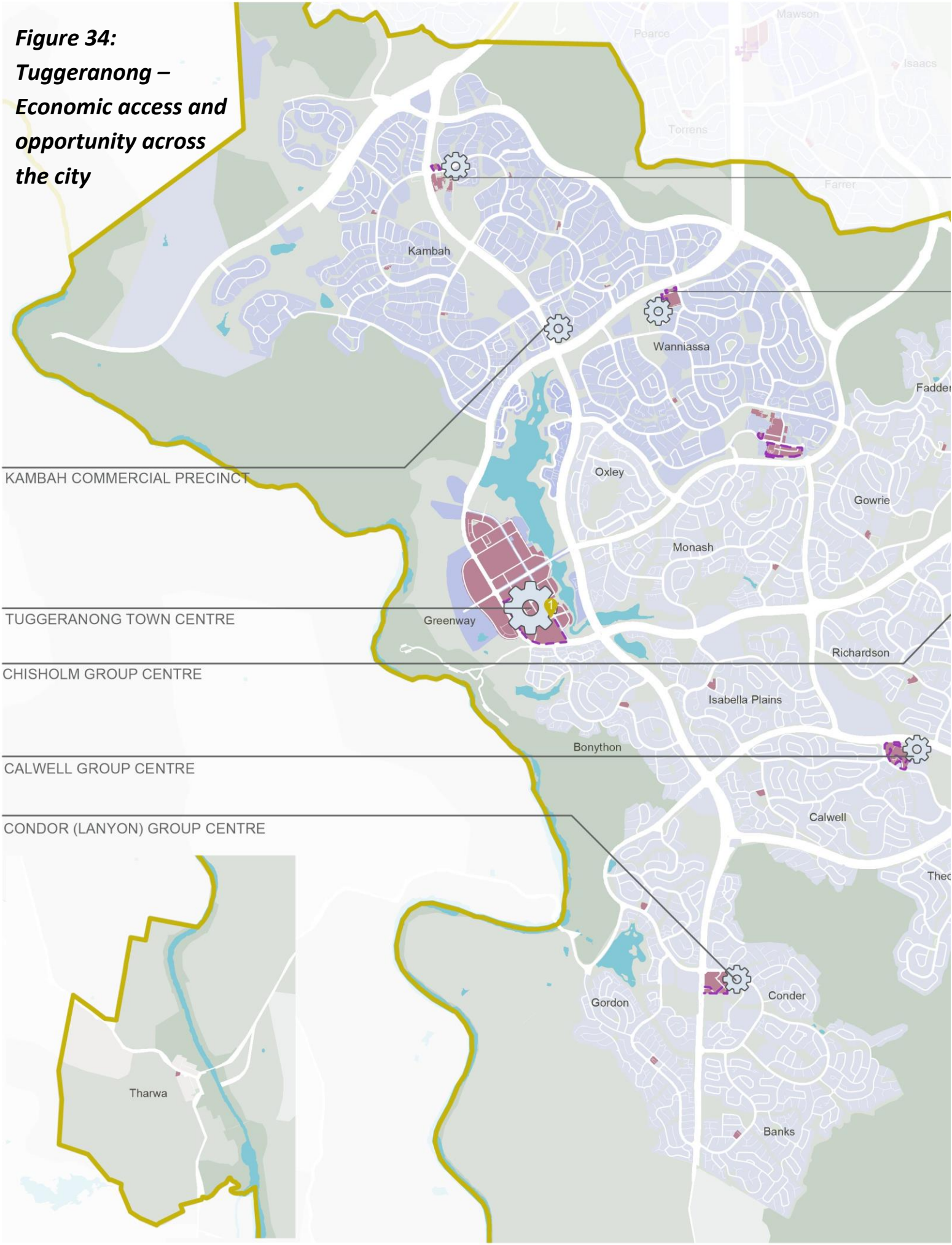
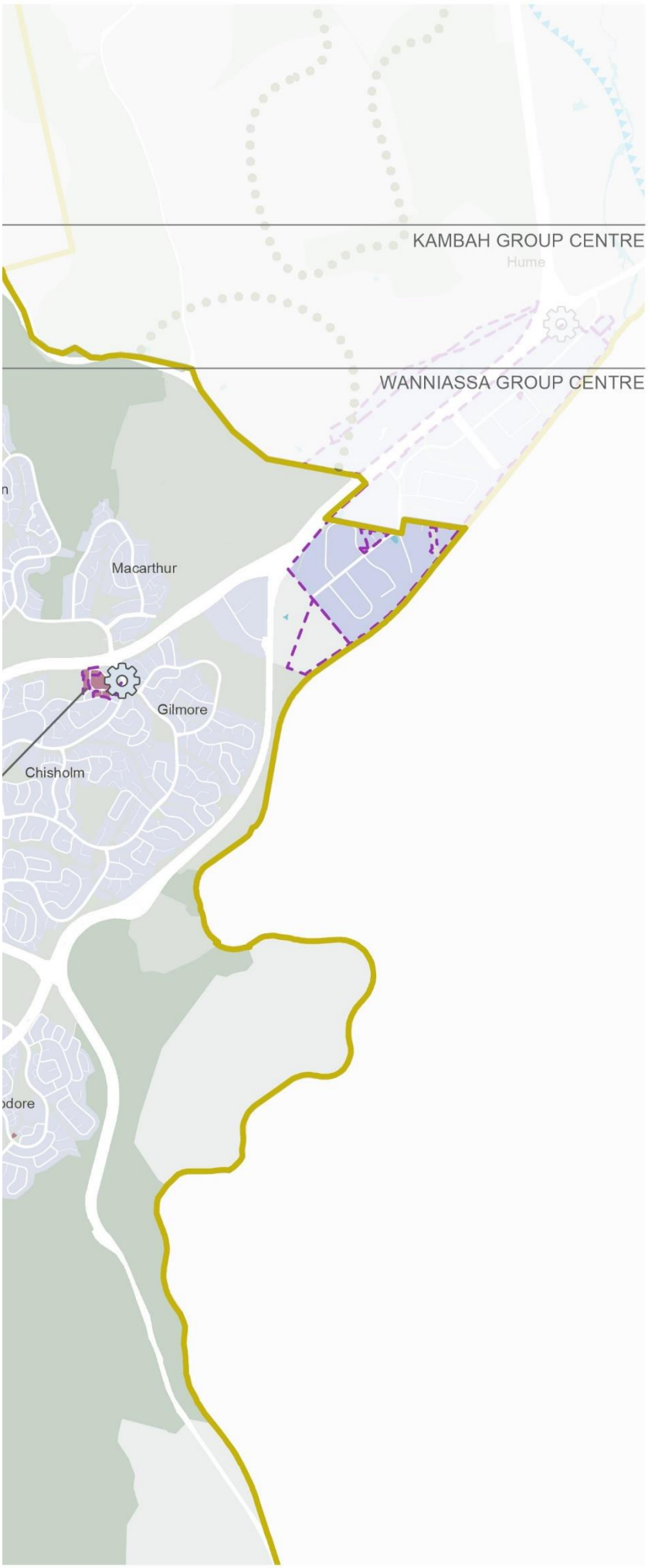


Photo credit: ACT Government.

Figure 34: Tuggeranong – Economic access and opportunity across the city





LEGEND

Note: This is a common legend for all similar district plans and not all items listed will appear on this drawing

- District Boundary
- Open Space
- Nature Reserve
- Water Bodies

Economic Drivers

- Economic and Employment Focus
- City/Town/Group/Local Centres
- Industrial/Service Trade
- Innovation Precinct

Relative Access to Jobs

High — Low

Destinations

1 CIT Tuggeranong

Scale at A4 1:50000

0 250 1000
100 500

N

Strategic movement to support city growth

The possible future extension of Canberra's light rail network to Tuggeranong will be a catalysing initiative. While the alignment requires further investigation and planning, the future route will support the movement of people between the town centre and Woden and, ultimately, the City Centre and other parts of the light rail network. It will provide the opportunity to improve job accessibility as well as facilitate housing and other development in some locations, including the potential for nodes of economic activity along the route (as described above). Stops along the light rail route must align with and support these nodes.

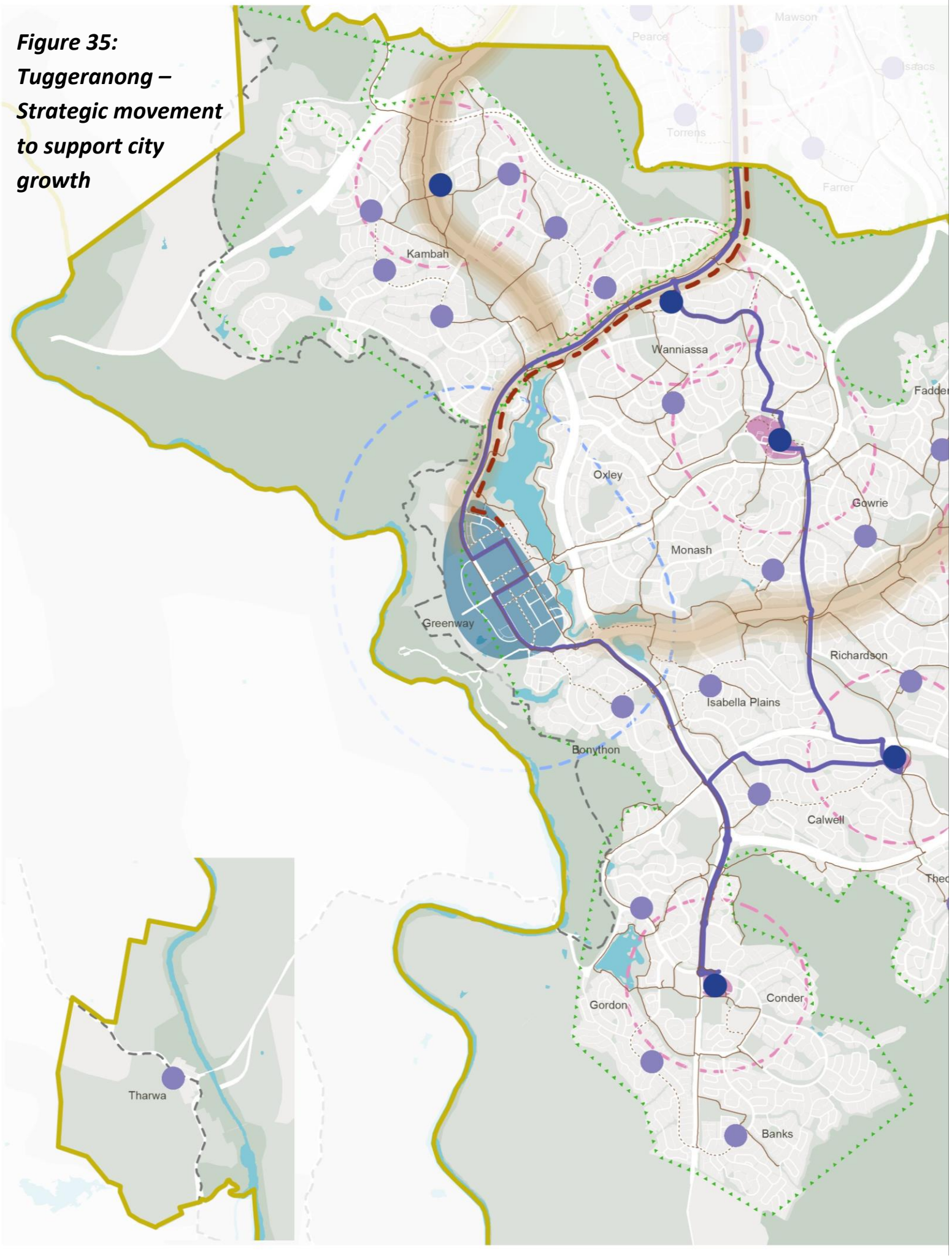
Alongside light rail, other improved transport connections within the district will support growth and better access to jobs. Tuggeranong currently has rapid transit routes that service some of the group centres. In line with the agenda for economic and employment focus areas, an additional rapid transport connection could be investigated from the town centre to Chisholm and on to Hume. It would not only provide access to the industrial precinct by public transport, but enhance the role and accessibility of Chisholm as a service centre for workers in Hume.

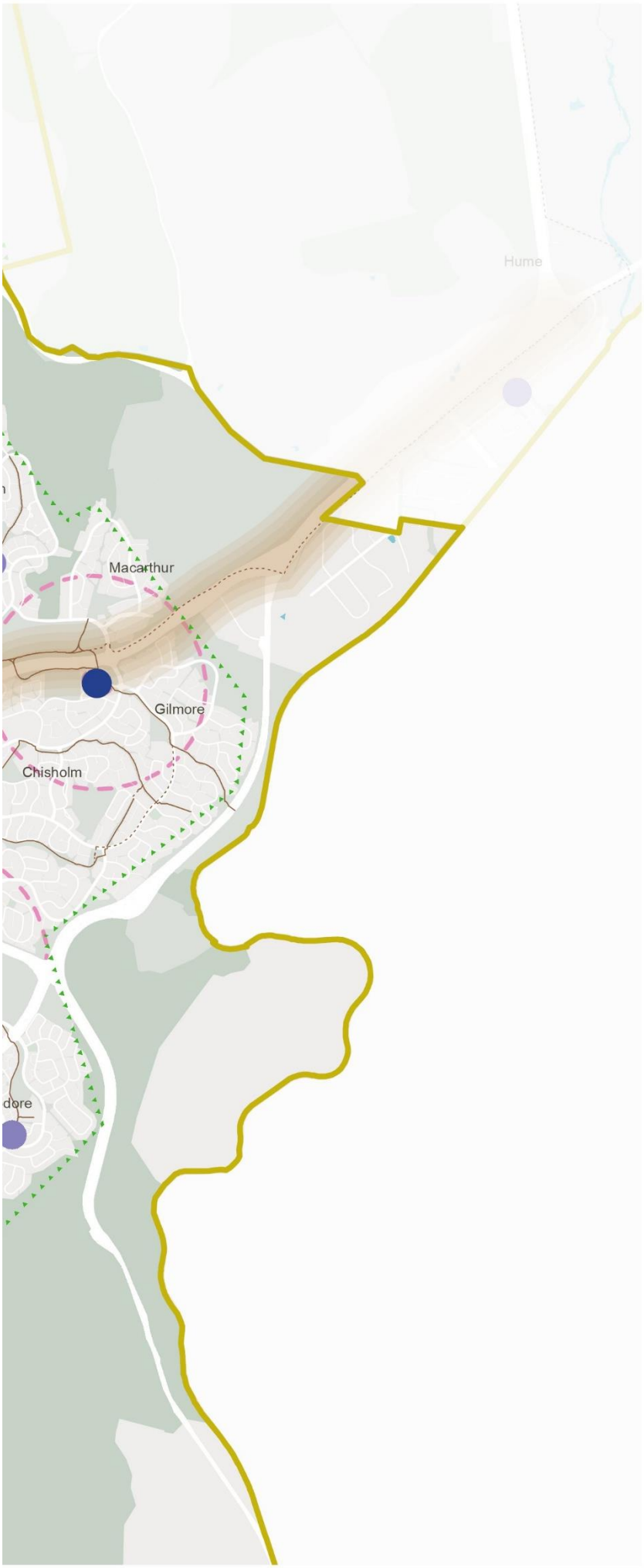
Local transport improvements around particular centres and to the active travel network will also be needed for the district. Improvements include the future expansion of the micro-mobility network and the implementation of the ACT Transport Strategy. Initiatives and upgrades that are currently planned or underway include upgrades to the pedestrian bridge and path network in the town centre including at the foreshore of Lake Tuggeranong, the duplication of Athllon Drive, shared path improvements along Drakeford and Sulwood Drives, and improvements to off road paths and access to Mount Taylor Nature Reserve. Upgrades to the Monaro Highway between Hume and Chisholm, which are being funded by the Australian Government, will enhance connectivity into East Canberra.

Table 12: Tuggeranong initiatives – Strategic movement to support city growth

Initiatives	Implementation pathway	Timeframe
Further investigation and future delivery of the light rail network to Tuggeranong town centre, including potential for economic corridor and enterprise activity nodes at Wanniassa group centre and Drakeford Drive intersection along Athllon Drive.	4	Long term
Investigate potential for an additional rapid transport connection between the town centre, Chisholm group centre and Hume in the context of enhancing employment access for residents.	4	Medium term
Expand the micro-mobility network across the district and other initiatives to facilitate an enhanced multimodal network in line with implementation of the ACT Transport Strategy.	4	Short term
Implement upgrades to priority active travel routes and other initiatives as identified in the implementation of the ACT Transport Strategy, including shared path and pedestrian crossing upgrades in the town centre and along Drakeford and Sulwood Drives.	4	Short term

Figure 35: Tuggeranong – Strategic movement to support city growth





LEGEND

Note: This is a common legend for all similar district plans and not all items listed will appear on this drawing

- District Boundary
- Open Space
- Nature Reserve
- Water Bodies

Rapid Transit Network

- Current Light Rail Corridor
- Proposed Future Light Rail Corridor
- Current Rapid Bus Corridor
- Proposed Future Rapid Bus Corridor
- Passenger Rail & Rail Freight
- Strategic Investigation Corridor

Non-Vehicular Movement

- Current Active Travel Community Network
- Proposed Active Travel Community Network
- Bicentennial National Trail
- Current Micromobility Area
- Proposed Micromobility Area Expansion

Centres

- City Centre with 1200m Catchment
- Town Centre with 1200m Catchment
- Group Centre with 800m Catchment
- Local Centre

High Speed Rail Alignment

- Proposed
- Alternate

Scale at A4 1:50000

0 250 1000
100 500

N

Sustainable neighbourhoods

Figure 36 highlights proposed, possible and potential change areas and future investigation areas in Tuggeranong District (based on the locations ranked in the top 25% for suitability across the ACT). The map illustrates the desired urban character in each of these locations in line with the urban character types described in Section 3 and Appendix 1, ranging from the higher density urban core around the town centre down to the suburban character.

Further detailed analysis will be required to better understand both future demand for housing (based on revised population projections drawing on the results of the 2021 Census) and the best locations for this housing development within the future investigation areas. This analysis, in turn, will inform changes to the Territory Plan and planning controls.

This further planning work will inform future development on the sites identified as 'proposed, possible and potential change areas' and make sure they deliver the desired urban character. These sites will require further due diligence to determine their suitability and realistic capacity for development. Detailed planning will factor in the other important elements of delivering sustainable neighbourhoods including contribution to sustainability aims and active travel.

Figure 36 highlights areas between rapid transport network stops and centres within the district for potential future renewal, primarily in the Athllon Drive corridor. These areas align with the potential for future light rail and centres on the rapid bus network. These stop-to-centre connections have been highlighted to make sure any future renewal has a strong relationship between growth, transport infrastructure and access to amenities. Any new higher density development must be focussed around the corridor and centres and may include development in nodes along the route as described above. There should be a strong focus on the public domain to support this, illustrated by the four approaches to City Making and 'Urban Improvement' in Appendix 2.

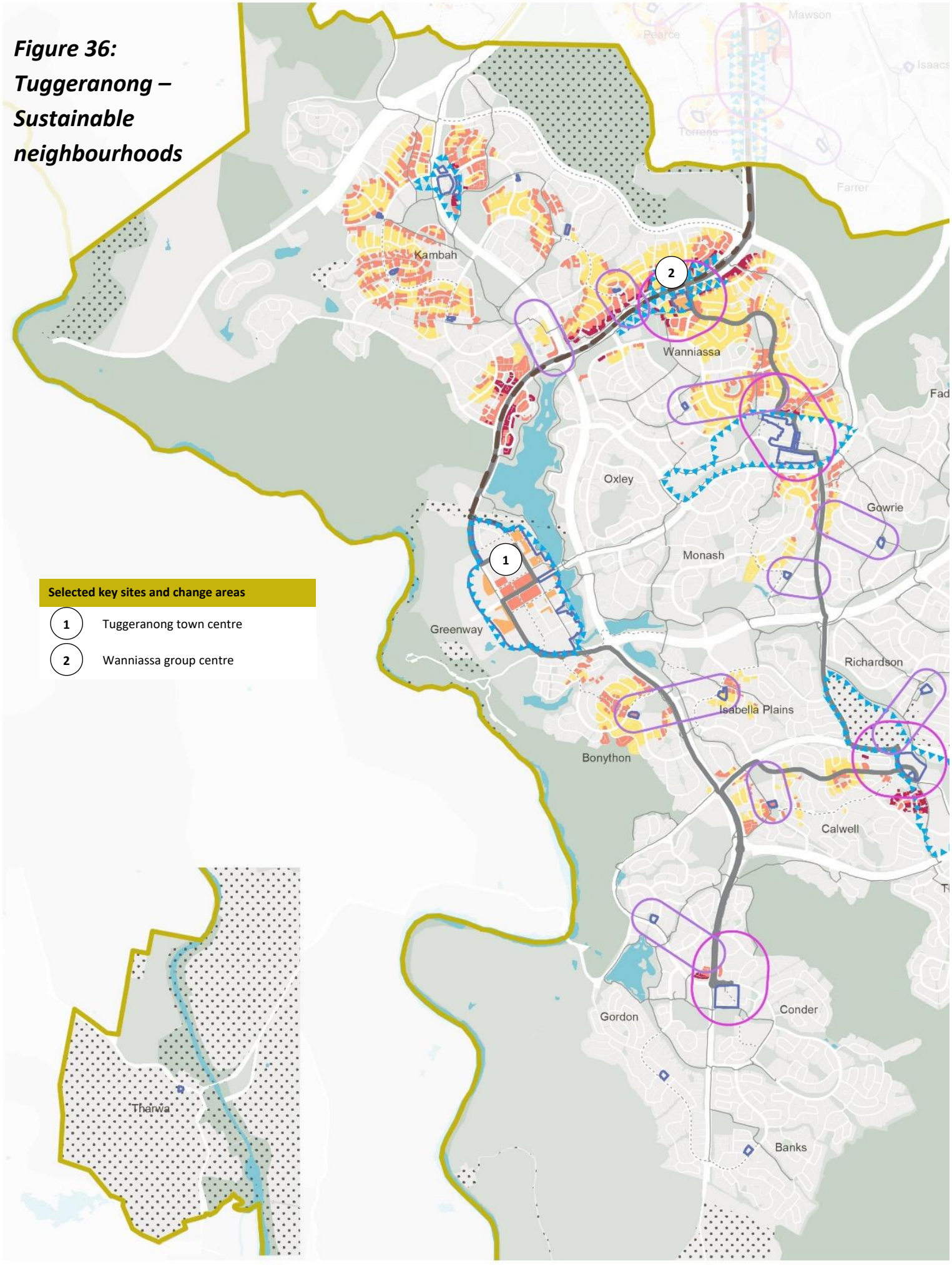
A greater mix of densities and uses, particularly around group centres and in medium-density typologies, will also be appropriate. This will be subject to detailed planning and reflect future planning for employment lands at the metropolitan level and the need for different land uses in these centres. Enhancements to the rapid transport network should be a key consideration in planning for where new development will be appropriate around group centres.

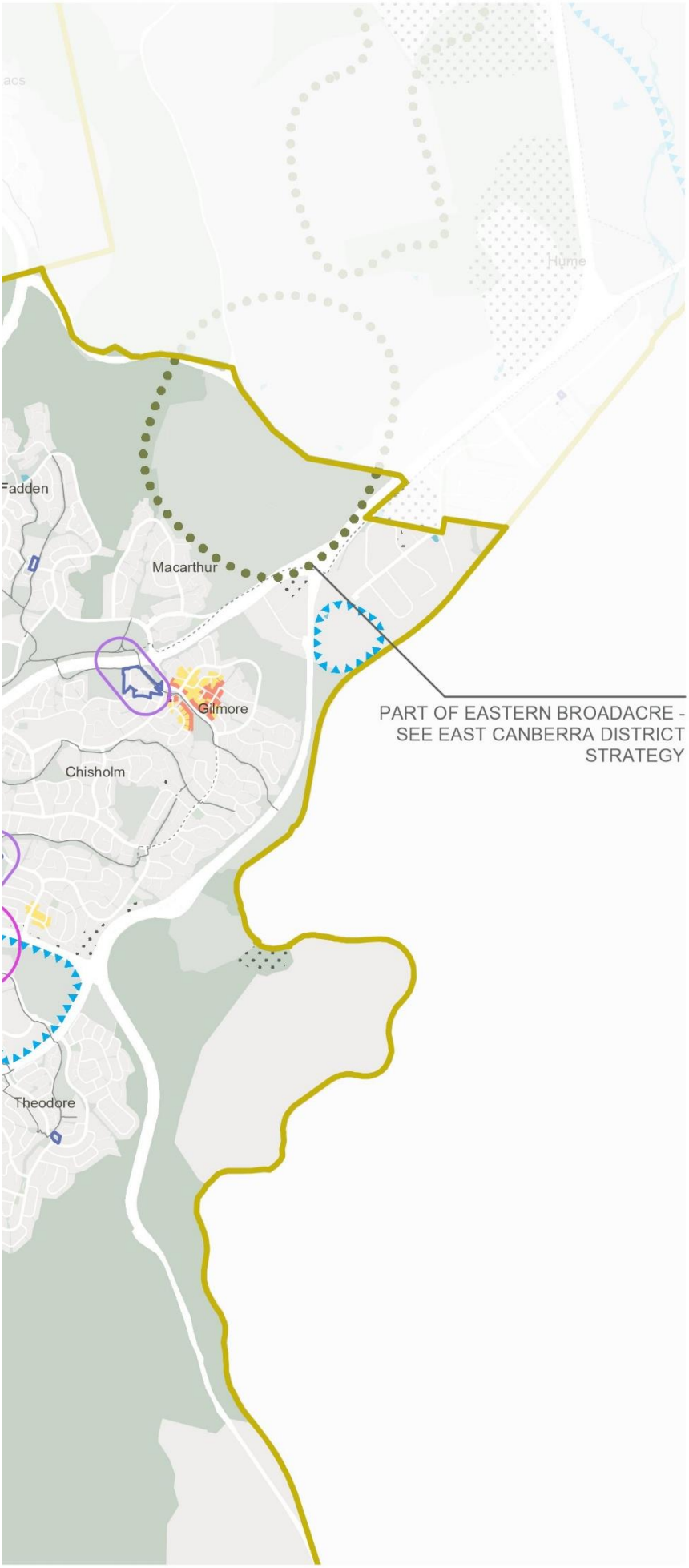
An important part of delivering sustainable neighbourhoods will be addressing housing affordability. Planning and land release can contribute to addressing affordability by planning for a diversity of housing types and land supply to meet different needs and budgets. The continued delivery of actions under the ACT Housing Strategy will support future development in Tuggeranong.

Table 13: Tuggeranong initiatives – Sustainable neighbourhoods

Initiatives	Implementation pathway	Timeframe
Further detailed analysis and modelling to identify future housing needs not able to be met by proposed, possible and potential change areas across the Tuggeranong District.	2	Short term
Detailed analysis and planning for Tuggeranong future investigation areas to accommodate future housing and facilitate desired urban character based on suitability and transect analysis (see Appendix 1) and opportunities in identified 200m/400m stop-to-centre connection areas (aligned with future light rail).	2 3 8	Short term
Continue planning for the Tuggeranong town centre and Wanniassa group centre as key sites identified on the Tuggeranong District Strategy Plan accommodating residential development according to ideas and principles described below (see principles for selected key sites and change areas).	8 11	Ongoing
Identify and prioritise local-scale projects to promote active streets, celebrating existing leafy areas and local centres, in line with the implementation of the ACT Transport Strategy and integrating 'urban improvement' approaches.	4 8	Medium term
Achieve improved tree canopy cover, permeability and urban heat outcomes in development precincts when compared to similar past precincts.	3	Ongoing
All development precincts provide the infrastructure needed to deliver the zero carbon transition, with additional precinct-based initiatives to be encouraged.	9	Ongoing
Investigate planning and design provisions that encourage the supply of social and affordable housing, such as inclusionary zoning.	12	Short term

Figure 36: Tuggeranong – Sustainable neighbourhoods





LEGEND

Note: This is a common legend for all similar district plans and not all items listed will appear on this drawing

- District Boundary
- Open Space
- Nature Reserve
- Water Bodies
- Current Active Travel Community Network
- Proposed Active Travel Community Network

Rapid Transit Network

- Current Light Rail Corridor
- Proposed Light Rail Corridor
- Current Rapid Bus Corridor
- Proposed Rapid Bus Corridor
- Passenger Rail & Rail Freight

Urban Character - Transect Analysis

- General Urban
- Urban Centre
- Urban Core
- Service Trades Precinct

Key Sites and Change Areas

- Proposed
- Possible
- Potential

Centres

- Local/Town/Group Centres
- Rapid Stop to Local Centre 200m Connections
- Rapid Stop to Group Centre 400m Connections

Conservation Connectivity

- Heritage

Urban character types

The urban character types are not the same as and are not intended to replace the land use zones in the Territory Plan. Their application in each district and how they would inform changes to zoning requires further analysis, including a consideration of established character, the availability of infrastructure, heritage sites and values, environmentally sensitive areas, and natural hazards such as bushfire risk.

Scale at A4 1:50000

0 250 1000
100 500

N

Inclusive centres and communities

Parts of Tuggeranong, including some of the outermost suburbs, display lower than average socio-economic indicators (using composite measures such as the SEIFA index), compounded by lower accessibility to job opportunities. Centres in these and other areas require a special focus so they can support and enhance social and community life.

The Government's shopping centre upgrade program aims to create and protect local jobs and support local businesses. Many centres across the ACT have received upgrades since 2001, with the most recent upgrades occurring in 2020 (Fraser, Dunlop).

The revitalisation of local and centres does not solely rest with the Government undertaking Government-funded upgrades on public land or to public spaces and streets in these centres. Private lease holders own land and buildings in many of these centres and private upgrades may play a more significant role in leading revitalisation of a local or group centre than Government upgrading works. In addition, the planning system, planning agencies, and land development agencies can encourage revitalisation by private investment through land release and, where appropriate, re-zoning. They can also consider whether amendments are required to planning controls to allow additional uses in or around centres.

Planning and non-planning mechanisms will be investigated in a number of group and local centres, with initial possibilities for investigation illustrated in Figure 37. With Tuggeranong's large number of local centres, this consideration will need to include more analysis of how centres are performing, and how they are functioning as a network or system in places like Kambah, which has six local centres in addition to its group centre.

Further review of local and group centres (as part of the district strategy implementation) will confirm the priority centres where a program of planning and non-planning initiatives will be considered. The local and group centres review will consider aspects such as: retail and economic characteristics; community needs and access to services; housing opportunity; opportunity to capitalise on planned investments in and around the centre; proximity to current and future infrastructure and the Government's existing shopping centre improvement program objectives and criteria.

Tuggeranong already has many community and recreational facilities, including two libraries, Tuggeranong Arts Centre, Lakeside Leisure Centre and the Active Leisure Centre in Erindale. However, as illustrated in Figure 37, there is an existing spatial divide for the district in terms of accessibility to facilities, with the southern and eastern-most suburbs having generally poorer access compared to other districts, particularly to some facility types including Early Childhood Education and Care (ECEC – including child care). The spatial layout of Tuggeranong, including the concentration of higher order facilities in the town centre at the district's western edge, means the town centre doesn't easily service the whole district. The group centres identified for economic focus (Conder, Calwell and Chisholm) could be considered as locations for new facilities to help address this divide. The quality of the existing facilities also needs to be considered; many facilities are older assets based on provision models that were developed at the time the district was established and may no longer be fit for purpose for current community needs.

New facilities being planned or in the process of being delivered include a cemetery (Southern Memorial Park) to be sited, subject to investigation, near Mugga Lane. It will service other parts of the ACT as well as Tuggeranong. A proposal for a new ice sport and skating facility in the town centre is being considered by the ACT Government. Upgrades of public spaces around the Monash shops are being investigated by TCCS.

Analysis undertaken for Tuggeranong District has considered the growth of the population based on the potential housing demand and the existing provision of facilities in the district. This has indicated that further investigation will be needed into the demand and potential for new or expanded facilities including:

- community meeting spaces
- a second community arts centre
- residential aged care
- indoor sports facilities
- outdoor sports courts.

Early Childhood Education and Care (ECEC) will be a key component of education when considering the future community facility needs for the district.

Future planning for the group and local centres could consider opportunities for these types of uses to be delivered, noting that identifying potential locations for any new facilities will require further detailed analysis and due diligence, consultation with the community, and whole-of-government approaches to delivery. Responsibilities for different types of facilities rests with different directorates and agencies. The planning and delivery of community facilities needs to consider long-term factors, including who will fund and manage facilities over time, not just the initial capital costs involved or locating a suitable site. Ideally, facilities should be delivered in accessible locations and co-located with complementary uses in centres.

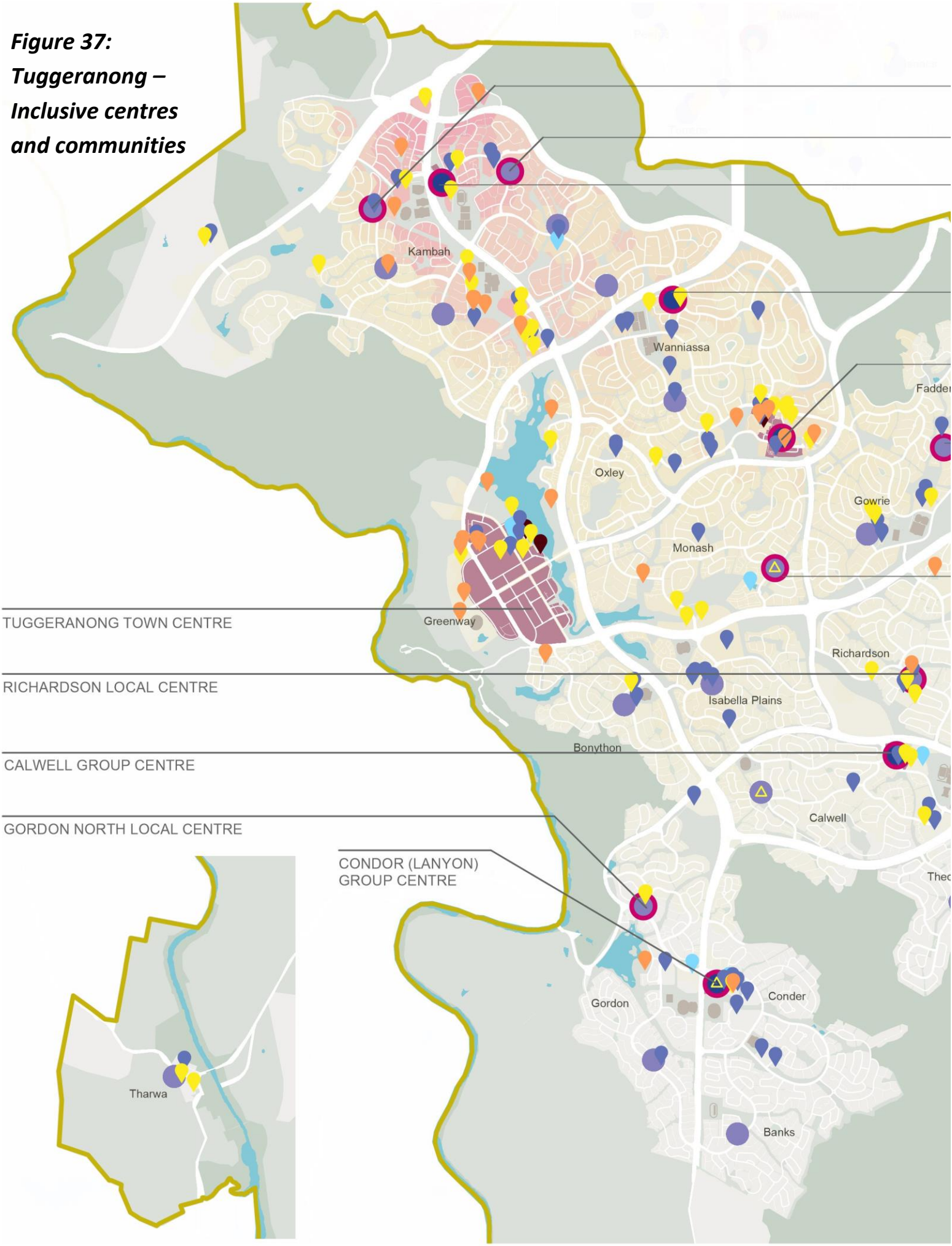


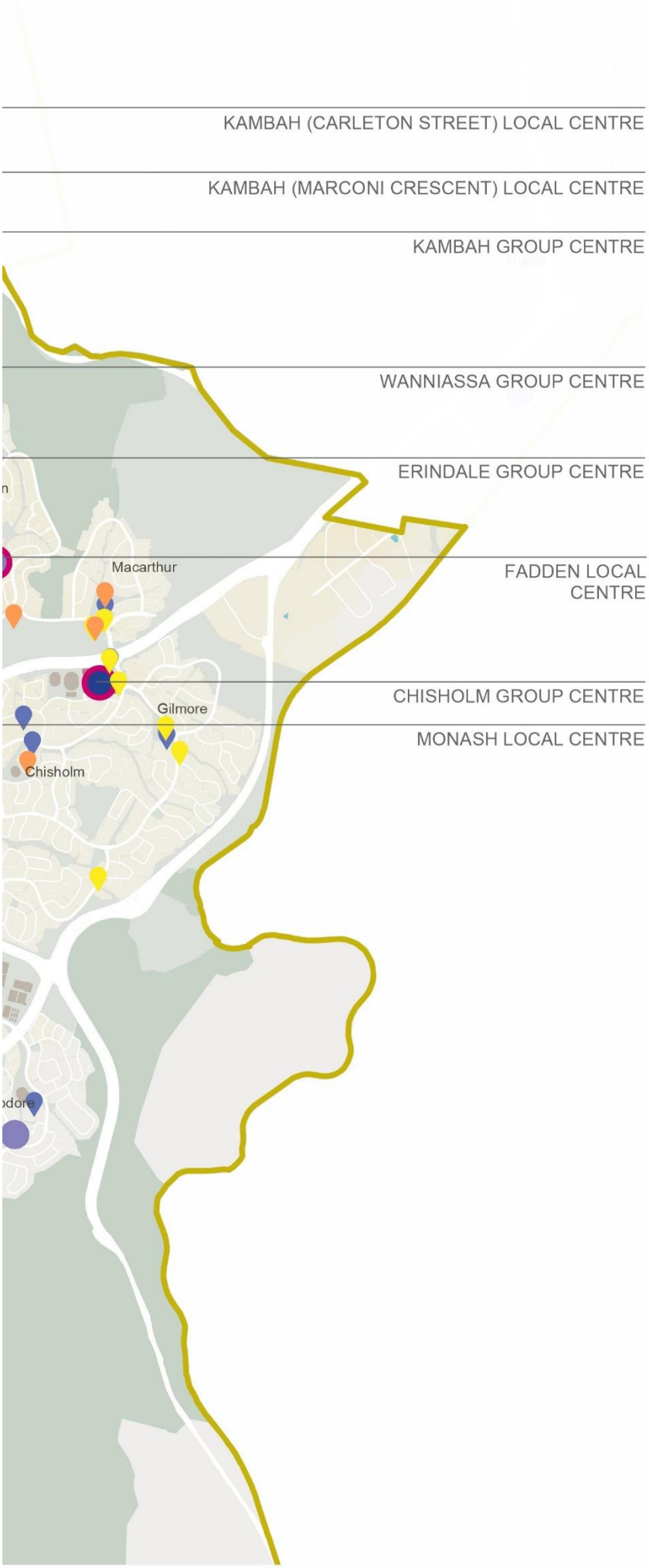
Photo credit: ACT Government.

Table 14: Tuggeranong initiatives – Inclusive centres and communities

Initiatives	Implementation pathway	Timeframe
Identify possible local and group centres for investigation of appropriate planning and non-planning initiatives to support their ongoing viability and role as a community meeting place. Initial possibilities: • Group centres: Calwell, Conder, Erindale, Kambah, Wanniassa and Chisholm • Local centres: Monash, Richardson, Fadden, Gordon (north) and Kambah (Carleton Street and Marconi Crescent).	5 7	Short term
Undertake detailed localised analysis to inform and confirm the need for new community and recreational facilities in Tuggeranong District, including consideration of upgrades and enhancements to existing facilities to service demand. This includes collaboration across government directorates and with the community.	2 10	Short term
Deliver planned new facilities and upgrades to local centres across the district, including upgrades to Monash shops.	10	Short term
Identify unleased/available sites within Tuggeranong District and assess their suitability for facilities for which there is identified demand, including opportunities for facilities to be located with Conder, Calwell and Chisholm group centres.	2 7 10	Ongoing
Make sure sufficent land is identified and preserved for social and community uses alongside residential growth to accompany areas of change and support economic development in further detailed planning for Tuggeranong District.	2 3	Medium term

Figure 37: Tuggeranong – Inclusive centres and communities





LEGEND

Note: This is a common legend for all similar district plans and not all items listed will appear on this drawing

- District Boundary
- Open Space
- Nature Reserve
- Water Bodies
- City/Town/Group/Local Centres
- Local Centre
- Group Centre
- Possible Centre Revitalisation Opportunity
- Shopping Centre Improvement Program Underway
- Airport

Existing Community Assets

- Arts and Cultural
  - *Art Gallery*
  - *Museum*
  - *Library*
- Health
  - *Aged Care*
  - *Hospital*
  - *Medical Centre*
- Education
  - *Early Childhood Education*
  - *Schools: Primary, Secondary, Tertiary*
- Community
  - *Community Centre*
  - *Community Hall*
  - *Community Gardens*
  - *Place of Worship*
- Recreation and Sport
  - *Indoor/Outdoor Sports*
  - *Skate Parks*
  - *Basketball Courts*
  - *Dog Parks*
  - *Aquatic Facilities*
- Sportsfields
- Proposed New Community Asset Locations

Relative Access to Existing Community Facilities

High — Low

Scale at A4 1:50000

0 250 1000
100 500

N

Planning for selected key sites and change areas

The district strategy plan identifies proposed, possible and potential key sites and change areas which may be suitable for a range of residential and non-residential uses (including consideration of education, health and recreation facilities). Key principles to guide future planning for a selection of these sites are provided below. This is conceptual only at this stage and put forward as early ideas for discussion. The planning for these sites is subject to further investigations and consultation.

Tuggeranong town centre

Any future development at this site should contribute to making a positive built frontage and address to Athllon Drive and Anketell Street, upgrading of the centre, local area walkability and liveliness associated with light rail/rapid transit stops. Tuggeranong will be a high amenity centre, with street life and new mixed-use blocks replacing inefficient surface carparks. A full investigation of planning, environmental and infrastructure issues should be undertaken with reference to the following principles:

- Rapid transit/light rail boulevard as a high quality multimodal link – part of a city wide rapid transit network.
- Renewed streets clarify built edges in the centre, expand urban tree canopy and street-based car parking.
- Walkable street grid with clear sight lines and more walkable access locally, which add canopy trees and create regular urban blocks of one hectare or less.
- Parks/plazas which add canopy trees, WSUD and play opportunities.
- Community and retail facilities located prominently to create a destination and activity.
- Public activity hubs at key lakeside locations for recreation, cafes and amenities.
- Continuous foreshore connections for pedestrians and cyclists – part of a city-wide blue-green network.

Figure 38: Principles for Tuggeranong town centre

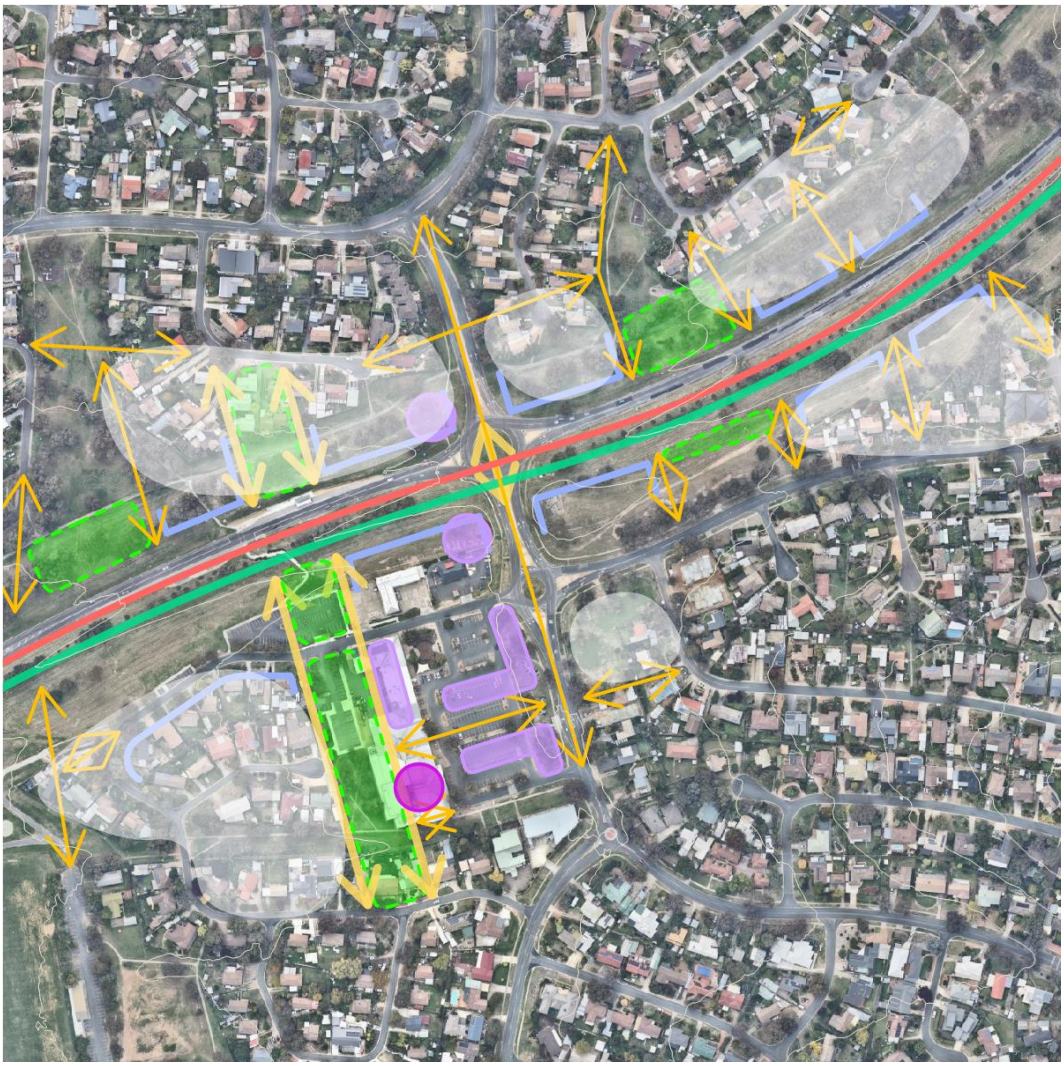


Wanniassa group centre

Any future development at this site should contribute to making a positive built frontage and address to Athllon Drive, connect Kambah to Wanniassa and upgrade the group centre. Wanniassa will be a high amenity centre, with street life and new mixed-use blocks replacing inefficient surface carparks. A full investigation of planning, environmental and infrastructure issues (including change areas shown in white) should be undertaken, with reference to the following principles:

- Rapid transit/light rail boulevard as a high quality multimodal link – part of a city-wide rapid transit network.
- A new connecting street to link Kambah and Wanniassa to rapid transit stops and each other.
- Walkable street grid with clear sight lines and more walkable access locally, and which adds canopy trees and creates regular urban blocks of one hectare or less.
- Parks which add canopy trees, WSUD and play opportunities.
- Community and retail facilities located prominently to create a destination and activity.
- Public activity hubs at key locations including community, services, amenities and cafes.
- Built frontage contributing to street identity, spatial definition and oversight of new public links.
- Re-naturalised creekline for local area amenity and ecology – part of a city-wide blue-green network.

Figure 39: Principles for Wanniassa group centre



Tharwa village

Tharwa village is one of five rural villages within the ACT. Tharwa village is the gateway to the Namadgi National Park and Tidbinbilla Nature Reserve.

The area around Tharwa is significant to the Ngambri and Ngunnawal peoples as an important crossing point along a cultural pathway connecting the plains to the high country.

The village settlement is Canberra's oldest officially recognised European settlement. The village sits beside the Murrumbidgee River and at the foot of Mount Tennent. It is 3.5 kilometres north of the Namadgi National Park Visitors Centre and approximately five kilometres south-west of the suburban edge of Tuggeranong and the facilities and schools in Banks, Condor and Gordon.

The Tharwa Village Plan 2018 incorporates planning investigations and community engagement to inform the future vision and implementation actions for the village. The village's vision is:

Tharwa Village is a welcoming and inclusive meeting place for the community where people can get closer to nature and experience the special qualities of a rural village lifestyle.

The Tharwa Village Plan identifies the following five planning principles to guide future development.

Planning principles

1. Retain and enhance the existing rural village character and identity.
2. Provide locally based economic, tourism and recreation opportunities for the benefit of the community.
3. Make sure Tharwa is accessible and well connected.
4. Protect and conserve the environmental value of Tharwa's natural heritage.
5. Promote sustainability in the built and natural environments.

Tharwa is not expected to see substantial growth, with actions instead focussed on public domain improvements, road safety upgrades, economic development opportunities, heritage and land conservation. Five blocks of Territory Land were identified as suitable for residential development and sold in 2020. Development will be single-storey only in keeping with the village character. The wider area to which the Tharwa Village Plan applies lies within the Murrumbidgee River corridor and Lanyon Bowl Area, subject to special requirements under the National Capital Plan, which will guide any future development.

As the gateway between Canberra's urban area and Namadgi National Park, Tharwa continues to be a hub for recreational walking, cycling, equestrian and driving trips. Upgrades to community facilities will provide opportunities to better accommodate these active visitors. Promotion of the arts and cultural community around the Cuppacumbalong Homestead Precinct will be central to encouraging more visits and interaction from the wider Canberra community.

Many of Tharwa's community facilities have been listed on the ACT Heritage Register as examples of rural village character and early European settlement or as sites of Aboriginal significance. Key opportunities will be for adaptive reuse and redevelopment of vacant or underutilised community facilities to improve recreation and support future commercial enterprises.

Economic diversification could be focussed on farm and recreation-based tourism, urban food production, arts and crafts, and cultural education. Tharwa has the potential to establish a reputation as a showcase community for best practice 'off-grid' technologies and sustainability measures.

Figure 40: Tharwa village spatial framework



Source: EPSDD, 2018.

Supporting infrastructure required

Tuggeranong's connection with the surrounding transport, utility and blue-green networks is central to planning for the district's civil infrastructure.

Existing infrastructure is built around the central waterways and surrounding hills, ridges and buffer zones. The majority of the pit, pipe, cable and road network in Tuggeranong was constructed in the 1970s and 1980s. Most existing infrastructure is operating within capacity.

To support the future needs of the district, a range of infrastructure initiatives and maintenance upgrades will need to be provided, including in the road and path network, WSUD, stormwater, sewer, water supply and electricity. Several projects are already planned or underway – shown in

Table 15. Further infrastructure capacity and augmentation feasibility studies will be required for the district to identify where existing infrastructure requires upgrading to support the delivery of this strategy and the district strategy plan. There are infrastructure capacity studies being undertaken across the ACT to provide comprehensive capacity analysis of urban renewal opportunities consistent with the ACT Planning Strategy 2018.

Road and path networks

Strategic transport modelling indicates that key routes in Tuggeranong will operate within their capacity. Traffic congestion in other districts, vehicle operating costs and environmental drivers will need users to shift to other more sustainable transport modes. Transport infrastructure projects will need to prioritise modal shifts and enhance connectivity, road user safety and amenity. When mode shifts are achieved, infrastructure projects will focus on improved network operations. Large scale road network augmentation projects are therefore not anticipated.

Water sensitive urban design (WSUD)

WSUD and stormwater infrastructure have many broader social, recreation and environmental benefits in addition to their importance as civil infrastructure. There are many areas where WSUD and riparian corridors will supply a multitude of outcomes, including as drainage lines and flood flows, catering for wildlife habitat and connectivity, active travel, and public access for passive recreation, as well as contributing to the amenity and aesthetics of the public realm.

The limited water quality network is due to the age of most stormwater infrastructure in the district. Network scale improvements have been investigated within the ACT Healthy Waterways project; the project has been progressively improving stormwater quality in ACT catchments in recent years. Projects in Tuggeranong have included new sites for wetland ponds and some retrofitting of measures at or close to existing ponds and Lake Tuggeranong.

Water quality monitoring in the major lakes has been a key measure, with a focus on Lake Tuggeranong due to in-lake water quality issues and limited existing treatment facilities upstream of the lake within the catchment. Urban intensification will require additional development-scale WSUD measures to be implemented across the district.

Current projects include implementing a stormwater harvesting and reuse scheme for several irrigated playing fields and the introduction of rain gardens within existing

swales. Investigations into how to improve the water quality within Lake Tuggeranong are ongoing.

Stormwater

The ACT's stormwater network is based on pit and pipe infrastructure in local catchments for minor flows. Major flows are conveyed in road reserves, urban floodways and drainage channels to the surrounding creeks, rivers and lake networks. Rainfall estimates, design methods and design philosophies have changed since the majority of the stormwater network was designed, including allowances for the impacts of climate change.

Climate change increases the demand on the stormwater network and the flooding hazard to the community. Urban intensification adjacent to waterways and overland flow paths will require ongoing assessment of public safety risks. Risk assessment will need to consider opportunities to retain water in the landscape through the use of permeable surfaces and WSUD to both manage water flows and allow water penetration to sustain vegetation and allow ground water recharge.

Tuggeranong has a low to moderate level of stormwater network constraints and pipe flow capacity. Some sections of Tuggeranong are subject to localised flooding that may require drainage improvements and surface level changes to be able to support urban intensification.

Wastewater

Icon Water manages the wastewater network. Trunk capacity constraints are predicted for the medium term, subject to population projections and proposed urban intensification around the town centre. Challenges are also identified with local networks related to urban intensification and will require minor network upgrades.

Water supply

Icon Water manages the potable water supply network. Modelling indicates there are currently no major capacity constraints. However, population projections will be critical for long term infrastructure planning due to the long lead time required for establishing new reservoirs. In relation to Tharwa, it is the responsibility of individual landowners to provide their own water to suit their needs at their property.

Electricity

Evoenergy owns and operates the electricity distribution networks within the ACT. Electrification of the energy system will continue with the phasing out of natural gas and internal combustion engine passenger vehicles. Significant changes in the electricity market include embedded generation networks and the ACT Government's legislated target of achieving net zero emissions by 2045. Sites need to be reserved for utility-scale battery storage facilities connected to the electricity transmission (Evoenergy) nodes.

Additional zone substation demand is expected as a result of the significant changes in the electricity network and urban intensification. Within Tuggeranong, capacity is available between the Wanniassa and Theodore Zone substations in the medium term. Significant projects include electric bus depot supply. A new zone substation in Molonglo Valley is proposed which will alleviate demand on the Wanniassa Zone substation. A third transformer is planned for the Gilmore Zone Substation to support commercial and industrial growth in Hume such as planned data centres.

Installation of battery storage systems may become a business-as-usual part of the electricity network for major redevelopment areas over time.

Planned infrastructure upgrades

The ACT Government is committed to providing the infrastructure needs of a growing city. A summary of key planned procurement activities required to deliver budget-funded capital works programs is summarised in Table 15. This infrastructure pipeline will continue to evolve in response to district needs, government policy and budget allocation.

Table 15: Planned infrastructure upgrades for Tuggeranong

Sector	Project	Development agency
Transport	Monaro Highway upgrade	TCCS
Transport	Athllon Drive duplication	TCCS
Stormwater	ACT Health Waterways stage 2 upgrades (various)	EPSDD lead MPC
Wastewater	Tuggeranong sewer augmentation	Icon Water



Photo credit: ACT Government.

Appendices

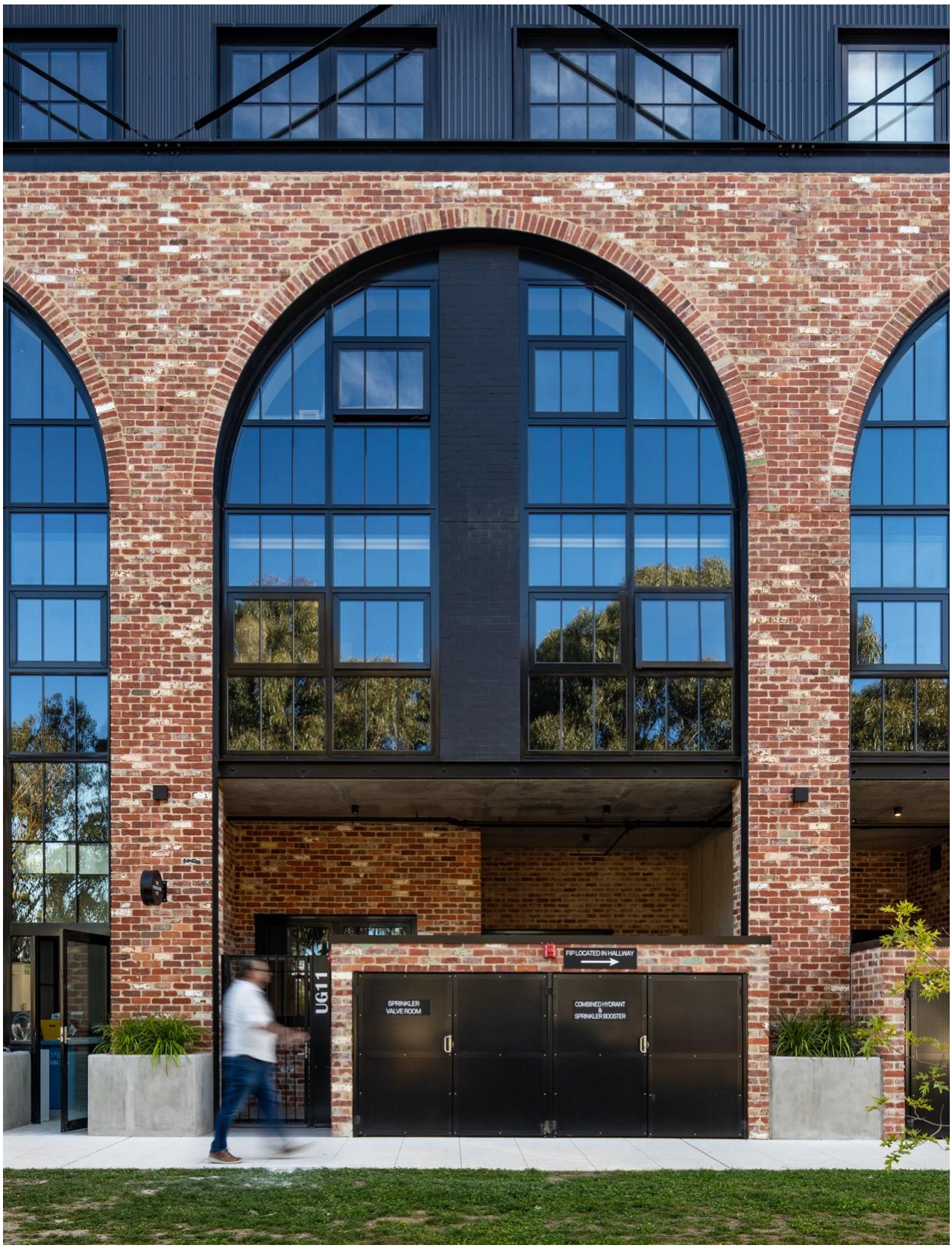


Photo credit: ACT Government.

Appendix 1: Urban transect analysis and urban character types

Transect thinking

The district strategies apply a proven methodology for assessing opportunities for growth, based on enhancing urban character. This methodology is based on 'transect thinking' and integrates and complements the objectives developed for each of the five big drivers.

Transect thinking considers the different environments in which we live in a holistic way. It focusses on appropriate housing types, open spaces, parks, streets, amenities, facilities and services.

When applied in urban planning and design, a transect is a line or section though a city showing changes in types of urban environments. Transect thinking helps to address the different ways people like to live, providing different urban environments appropriate to their location and the people who live in them.

Transect thinking stems from the study of natural ecosystems. The natural transect describes the change in different natural zones and habitats, showing varying characteristics through different zones such as shores, wetlands, plain and uplands. It helps study the many elements that contribute to habitats where certain plants and animals thrive in symbiotic relationship to the minerals and microclimate.

An **urban transect** is generally at its most compact and dense in the City Centre and steps down through the built form as it moves further to the urban fringe. Typically, transect methodology supports a relatively smooth transition in built form; however, examples of juxtaposition of different heights and built forms provide appropriate contrast in certain environments.

Figure 41 highlights some examples of planning documents depicting these transect types or zones. The rural-to-urban transect is divided into six zones which vary by the level of intensity of their physical and social character (SmartCode Version 9.2, 2008, The Town Paper Publisher). **The six urban character zones of the rural-to-urban transect are typically described as:**

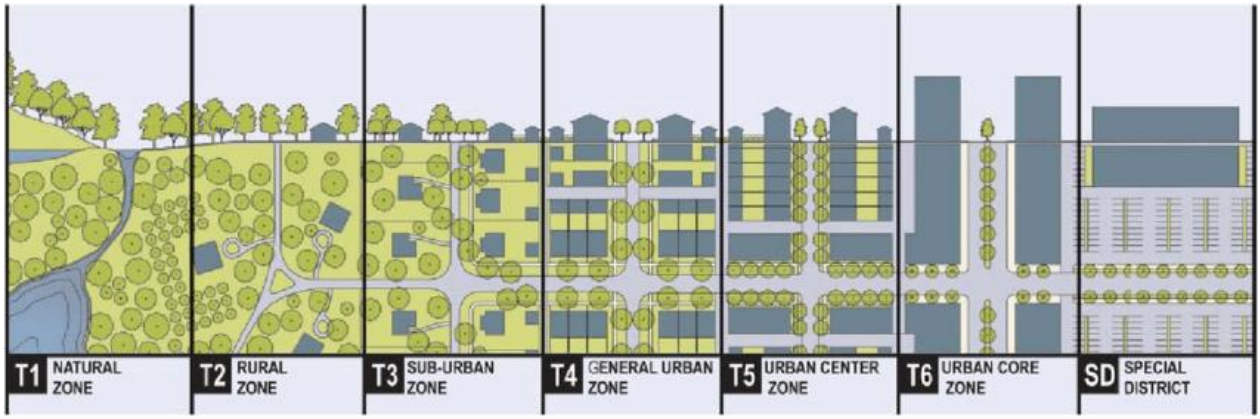
- T1 Natural, defined by a wilderness condition including lands unsuitable for settlement.
- T2 Rural, defined by sparse settlement, cultivation and agricultural lands with supportive buildings.
- T3 Suburban, defined by low-density residential areas with naturalistic planting.
- T4 General Urban, defined by a mixed-use but primarily residential urban fabric.
- T5 Urban Centre, defined by higher density mixed-use buildings.
- T6 Urban Core, defined by highest density and height with the greatest variety of uses.

The district strategies utilise the framework of the **urban Transect – the four urban character types from T3 to T6** – to describe the anticipated urban environment in each district.

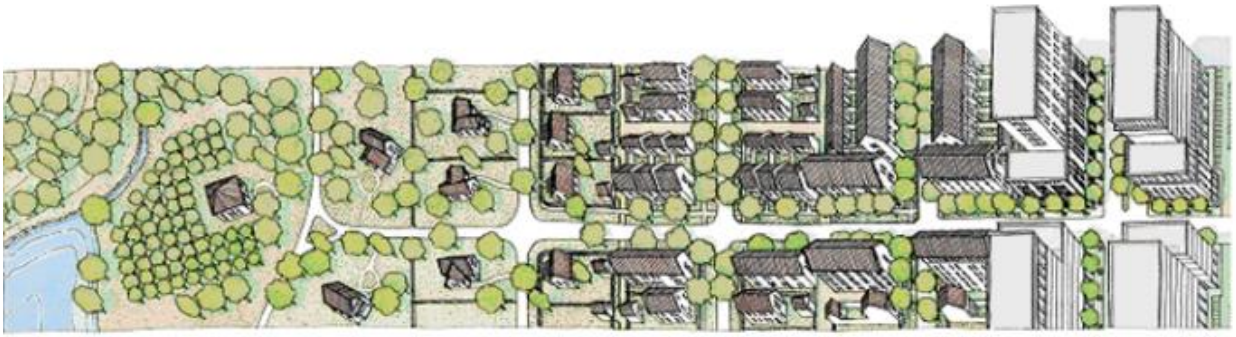
Note: The **urban character types** are not the same as and are not intended to replace the land use zones in the Territory Plan. Their application in each district and how they would inform changes to zoning requires further analysis, including established character, heritage sites and values, environmentally sensitive areas, and natural hazards such as bushfire risk.

The correlation between these urban character types and the current ACT Territory Plan zones is shown in Figure 42. It suggests that the current RZ2 Suburban Core Zone doesn't have a 'match' with the suggested urban character types which should underpin planning for renewal and development in the ACT.

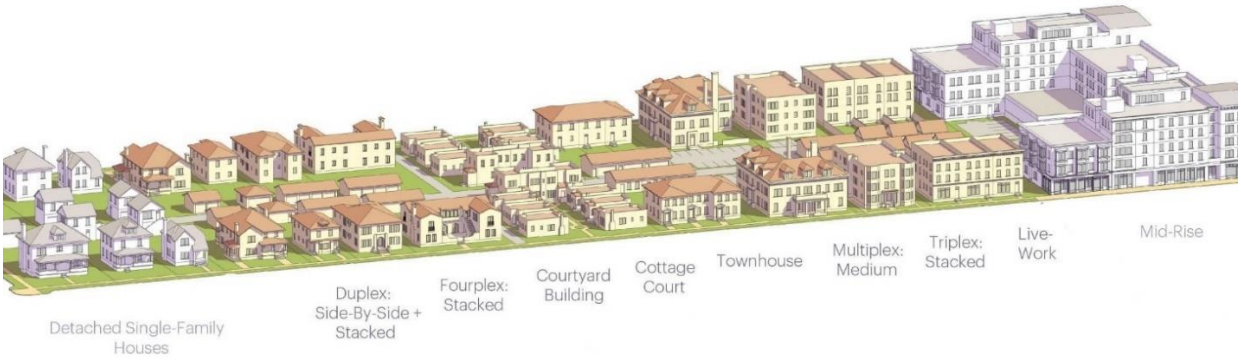
Figure 41: Examples of transect zones



Source: SmartCode Version 9.2, 2008, The Town Paper Publisher.



Souce: City of Miami Planning and Zoning Department.



Source: Missing Middle Housing, Opticos Design, Inc.

Figure 42: Urban character types and correlation to current ACT Territory Plan zones

<table>
<tr><td>URBAN TRANSECT CHARACTER</td><td colspan="2">T3
Suburban Zone
Low density residential areas with naturalistic planting, characterized by large setbacks and irregular roads.</td><td>T4
General Urban Zone
Mixed use but primarily residential urban fabric, wide range of housing types.</td><td>T5
Urban Centre Zone
Higher density mixed use buildings, tight network of streets, shallow building setbacks.</td><td>T6
Urban Core Centre
Highest density and height with the greatest variety of uses.</td></tr>
<tr><td rowspan="4">TERRITORY PLAN CHARACTER</td><td>RZ1
Suburban Zone
Housing is low rise and predominantly single dwelling and low density.</td><td>RZ2
Suburban Core Zone
Housing is low rise and contains a mix of single dwelling and multi-unit development that is low to medium density.</td><td>RZ3
Urban Residential Zone
Housing is low rise and predominantly medium density, particularly in areas that have good access to facilities and services and/or frequent public transport services.</td><td>RZ4
Medium Density
Residential Zone Housing is medium rise and predominantly medium density, particularly in areas that have very good access to facilities and services and/ or frequent public transport services.</td><td>RZ5
High Density Residential Zone
Housing is generally high density, particularly in areas that have very good access to facilities and services and/ or frequent public transport services.</td></tr>
<tr><td colspan="2" rowspan="3"></td><td>CZ4
Local Centres Zone
Convenient shopping and community and business services to meet the daily needs of local residents.</td><td>CZ2
Business Zone
Provide for office and business sites that are accessible to public transport and convenience retailing and services.</td><td>CZ1
Core Zone
Mix of predominantly commercial land uses.</td></tr>
<tr><td colspan="3">CZ5
Mixed Use Zone
Diversity of living, working and recreation, with higher density residential development.</td></tr>
<tr><td></td><td colspan="2">CZ3
Service Zone
Conveniently located services and lower rent commercial activities, retail uses or entertainment facilities requiring larger sites.</td></tr>
</table>

Source: Tait Network, 2022.

Urban character types – urban design elements and principles

A series of urban design principles for each of the four urban character types are identified in the following pages for each of the urban design elements in Table 9. These were adapted to suit the different urban contexts of Canberra.

The principles and imagery provided for each of the four urban character types guides the development types, character and public domain qualities that will be expected in the areas where they are shown in each of the district strategy plans. This will inform the future requirements and desired outcomes that may be applied through the Territory Plan.

Table 9: Urban design elements

Context and character	Built form and housing diversity	Interface	Landscape and open space amenity	Sustainability amenity	Placement
Building types that enhance the identity of adjacent sites, streetscapes and the surrounding neighbourhood.	A bulk, scale and height appropriate to the desired future character, providing a diverse urban form that supports housing choice through a mix of scales for different needs and budgets.	Typologies that enhance the identity of adjacent sites, streetscapes and the surrounding neighbourhood.	A bulk, scale and height appropriate to the desired future character, providing a diverse urban form that supports housing choice through a mix of scales for different needs and budgets.	Typologies that enhance the identity of adjacent sites, streetscapes and the surrounding neighbourhood.	A bulk, scale and height appropriate to the desired future character, providing a diverse urban form that supports housing choice through a mix of scales for different needs and budgets.

Source: Tait Network, 2022.

T3 SUBURBAN

URBAN DESIGN PRINCIPLES					
Context and Character	Built form and housing diversity	Interface	Landscape and open space amenity	Sustainability and amenity	Placement
Low-density suburban context complementary to the existing character. Low rise one and two storey dwellings. Detached housing with building separation to retain privacy and private open space. Deep soil canopy trees provided on block.	Deep setbacks to retain garden city character. Articulated massing that creates unique dwellings and defined sense of arrival. Diversity of block sizes to create housing choice. On block canopy trees and block permeability through private open space.	Residential interface. Separation from the street through hedges and courtyard walls to retain privacy. Dwellings accessed through private entrances.	Characterised by landscaped gardens surrounding detached dwellings. Naturalistic planted verges in keeping with the bush character of the suburbs. Mix of public parks, ovals and green links.	Passive solar design and cross ventilation that reduces operation costs. Deep soil zones for groundwater recharge and vegetation that contributes to urban cooling. Active travel connections that link to wider networks and support pedestrian access services and amenities for short trips.	Existing and proposed suburban residential areas outside the local, group or town centre radius. Best adjacency to T2 Rural and T4 General Urban Zones.












T4 GENERAL URBAN

URBAN DESIGN PRINCIPLES					
Context and Character	Built form and housing diversity	Interface	Landscape and open space amenity	Sustainability and amenity	Placement
Medium-density built context with a balance between landscaping and built form Medium rise of up to 3 storey apartment buildings. Compact buildings with private balconies and terraces.	Shallow to medium setbacks to begin to address the public realm. Buildings are more compact with apartment typologies but remain detached from neighbours. Articulated massing creates visual interest and defines the streetscape.	Mixed-use interfaces around Local Centres with ground floor commercial uses. Separation from the street through commercial spaces or courtyard walls. Dwellings accessed through shared common entrances.	Characterised by landscaped communal spaces and street interfaces. Private courtyard gardens and balconies Mix of public parks, ovals and green links.	Good solar access and cross ventilation that reduces operation costs. Living infrastructure and water collection provided through roof top gardens and green walls. Deep rooted canopy trees that contribute to urban cooling provided in shared spaces. Active travel connections that link to wider networks support pedestrian access to services and amenities for short trips.	Applied to the full radius of the local centre plus a 400m catchment to promote walkable neighbourhoods. Best adjacency to T3 Suburban and T5 Urban Centre Zone.













T5 URBAN CENTRE

URBAN DESIGN PRINCIPLES					
Context and Character	Built form and housing diversity	Interface	Landscape and open space amenity	Sustainability and Amenity	Placement
Medium to high-density-built context consisting predominantly of built form. Medium to high rise up to 6 storey including mixed-use buildings to support vibrant amenity. Compact buildings with private balconies and terraces and commercial ground floor.	Shallow front setbacks directly addressing the public realm. Attached buildings oriented to the street with aligned frontages to define a consistent streetscape. Ground floors consist of commercial functions that engage with the street and create a vibrant pedestrian experience.	Balconies and planted facades create privacy from the street. Separation from the street through commercial spaces or courtyard walls. Dwellings accessed through shared common entrances.	Characterised by landscaped communal spaces and street interfaces. Mix of neighbourhood parks, public plazas and green links.	Good solar access and cross ventilation that reduces operation costs. Living infrastructure and water collection provided through roof top gardens and green walls. Deep rooted canopy trees that contribute to urban cooling provided in shared spaces. Active travel connections that link to wider networks support pedestrian access to services and amenities for short trips.	Applied to full radius of the group centre plus a 200m catchment to promote strong urbanity in mixed-use precincts. Best adjacency to T4 General Urban Zone and T6 Urban Core Zone.










T5 URBAN CENTRE URBAN DESIGN PRINCIPLES

Context and Character	Built form and housing diversity	Interface	Landscape and open space amenity	Sustainability and Amenity	Placement
High-density built context with landscape subservient to the built form. High rise buildings greater than 6 storey consisting of mixed-use with provision of entertainment, civic and cultural uses.	No front setbacks with direct engagement with the public realm. Attached buildings oriented to the street with aligned frontages to define street walls.	Integration of building and public domain Ground floor commercial uses or public forecourts. Dwellings accessed through shared common entrances.	Characterised by public plazas with both public and private activity.	Good solar access, cross ventilation and shared amenities that reduces operation costs. Living infrastructure and water collection provided through roof top gardens and green walls. Deep rooted canopy trees that contribute to urban cooling provided in shared spaces. Active travel connections that link to wider networks support pedestrian access to services and amenities for short trips.	Applied to town centres Best adjacency to T5 Urban Centre Zone.










Appendix 2: City making and 'urban improvement'

Four types of 'urban improvement' and the contexts in which they should be applied are described below. They include a series of specific initiatives and treatments. These will not necessarily be applied in all circumstances or all districts, but the aim is for new development in Canberra to allow for diversity while also contributing wider benefits to the community.

1. Achieving multimodal boulevards

This type of 'urban improvement' can apply where rapid transit or light rail is planned:

- Design the corridor as a multimodal boulevard, including linear cycleways and pedestrian paths. Maximise urban tree canopy to moderate urban heat. Locate light rail or bus stops at intersections with blue-green network crossings in preference to busy traffic intersections.
- Introduce crossings to improve cycle and pedestrian safety and access to stations / stops. Improve connection between centres, schools, universities, hospitals and parks with light rail / transit stops.
- Incorporate public frontage and include ground floor activation in new buildings.
- Provide public frontage and oversight of passengers at stations / stops and the boulevard.

Desired outcome – Make traffic-dominated parkways suitable for rapid transit



Remodelling of Paseo de St Joan, Barcelona, prioritises pedestrian movement and makes a green urban corridor.
Design credit – Lola Domènech. Photo credit – Metalocus
https://www.metalocus.es/en/news/redevelopment-passeig-de-sant-joan-phase-2



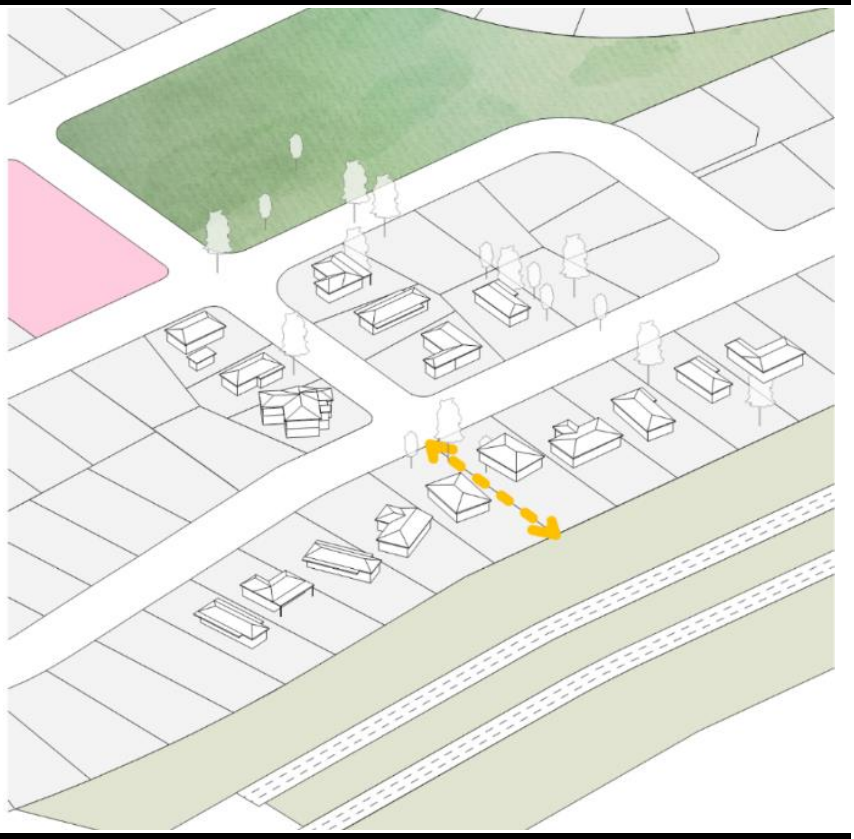
Boulevards re-balance the needs of varied uses and prioritise pedestrian movement.

Existing state

Some of Canberra's transport corridors are physically alienated from the neighbourhoods they need to serve.

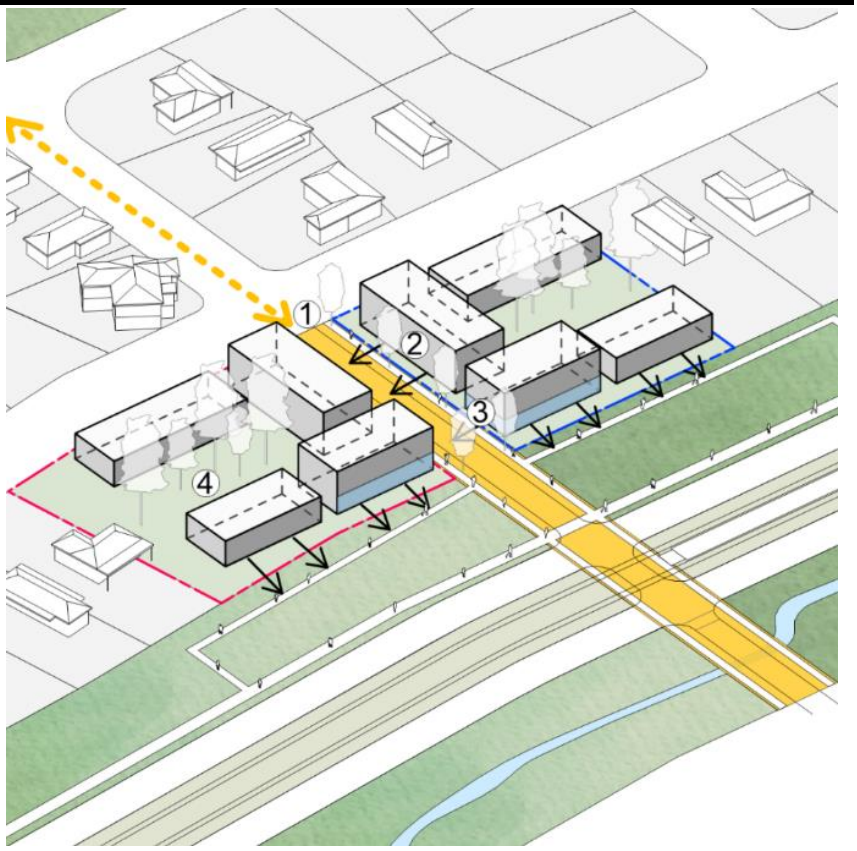
Large urban sections discourage neighbourhood walking, predisposing people to using a car for local trips to centres, schools, universities, hospitals, parks and neighbours in other streets.

The Australian Heart Foundation and health authorities promote walkable neighbourhoods to help reduce preventable disease.



'Urban improvement' approach

1. Locate new connections to align with the existing street pattern.
2. Redevelop the adjoining sites with buildings that face on to the street.
3. Provide generous ground floor heights (4.2m or more, floor to floor) to accommodate commercial activities that attract people to the street.
4. Consolidate deep soil landscapes in the centre of urban sections and along public frontages.



2. Realising lively centres

This type of 'urban improvement' can apply where development is planned in an existing centre:

- Provide a new square for the community
- Relocate surface parking to perimeter streets
- Include a mix of uses with ground floor activation.

Group and local centres close to light rail and rapid transit stops are identified in the relevant district strategy plan (designated as stop-to-centre connections). Such centres are particularly suited to these improvements.

Areas between the centre and rapid transit stop are particularly suited to redevelopment with additional housing.

Desired outcome – Build on the liveliness associated with activities located together, in and near centres



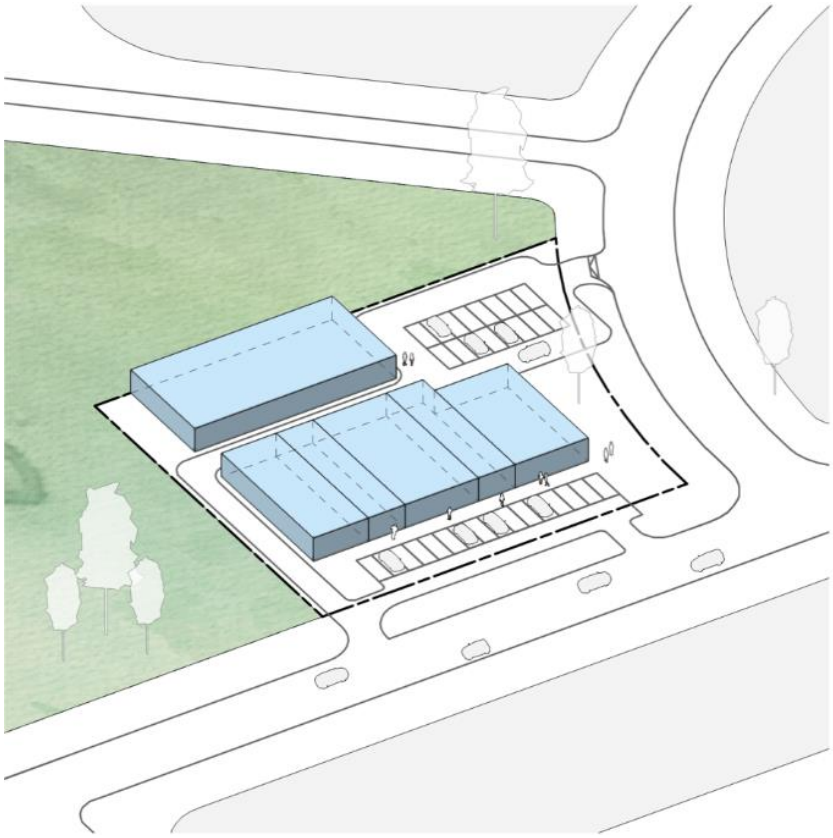
Green Square Kingston group centre. Photo credit https://www.tripadvisor.co.uk/LocationPhotoDirectLink-g255057-d3846046-i371883212-Bittersweet-Canberra_Australian_Capital_Territory.html.

Existing state

Centres with buildings set back from their public edges or presenting loading docks, service areas, rubbish bins and the like, diminish the centre's presentation, character and identity in the locale.

Large areas of paving for the exclusive use of vehicles for parking and circulation lowers urban value, denying liveliness to nearby uses.

Centres which are zoned for or dominated by single use retail or commercial centres will be denied the liveliness associated with centres where a mix of shops, community facilities, small businesses and housing are located together or next to each other.



'Urban improvement' approach

1. Provide a public street or lane frontage to all centre boundaries.
2. Upgrade local streets to support increased density, including footpaths, cycleways, canopy trees, water treatment beds and the like.
3. Make a new community plaza and upgrade adjacent public space to include play, shelters, BBQs and space for events.
4. Relocate car parking to upgraded edge streets.
5. Provide varied building height up to 4.5 storeys, with generous ground floor heights (4.2m or more floor to floor) to accommodate street activating uses.



3. Shorten or reduce the area of urban sections to make a more walkable Canberra

This type of 'urban improvement' can apply if development is planned in an urban section longer than 180 metres or more than 1.2 hectares in area:

- Incorporate a new public through-block connection, 6–9 metres wide
- Provide public frontage / 'address' to the street to provide oversight of the space
- Locate to improve walking access to all centres, schools, universities, hospitals, light rail / transit stops and parks.

Desired outcome – Link community benefit to development uplift



In contrast to this example, development needs to contribute to the walkability of a place with through block connections. These should extend public connections from existing streets.

Consolidated deep soil landscape would admit urban tree canopy, improve on-site and neighbourhood amenity and counter urban heat.

Photo Credit – ACTMapi



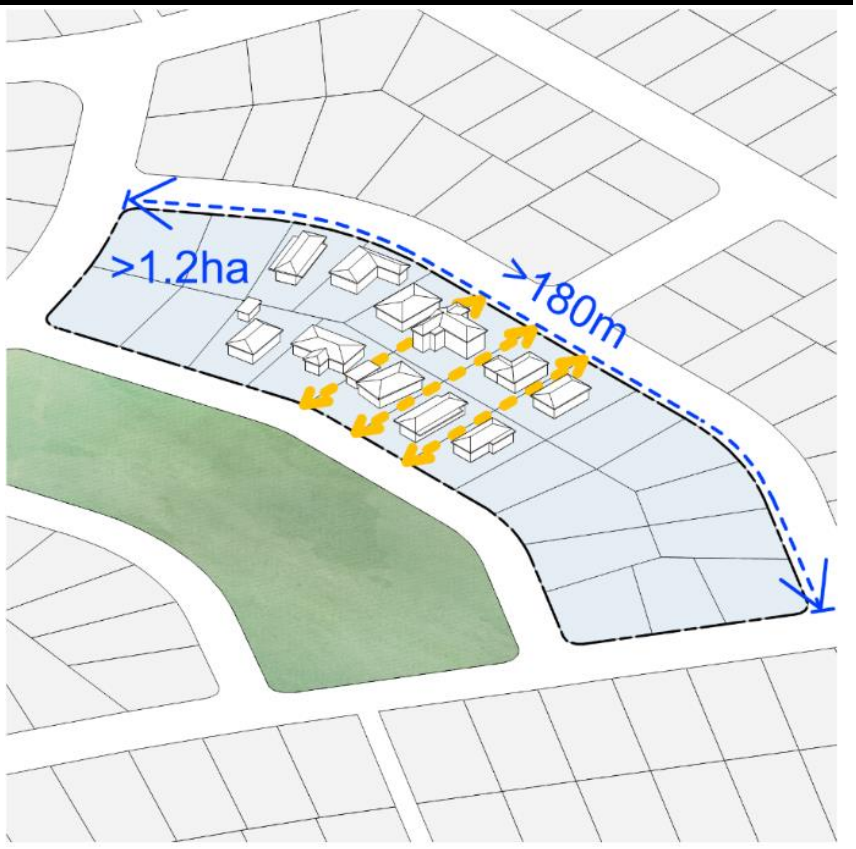
Through block connections encourage walking. Narrow links lack public frontage and oversight. Wider connections add to the diversity of the public space network and improve public safety.

Photo credit – Surry Hills Sydney, Hill Thalis photo library.

Existing state

Large urban sections discourage neighbourhood walking, predisposing people to using a car for local trips to centres, schools, universities, hospitals, parks and neighbours in other streets.

The Australian Heart Foundation and health authorities promote walkable neighbourhoods to help reduce preventable disease.



'Urban improvement' approach

1. Make a new link close to an existing street:
   - 3m wide for a section with public frontage up to 15m wide.
   - 4.5m wide for a section with public frontage greater than 15m wide.
2. Provide a new footpath and dedicate the new link as public land.
3. Provide built address to public frontages with a range of building types up to 3.5 storeys in height.
4. Consolidate deep soil landscapes in the centre of the urban block and along public frontages.
5. Redevelop opposite – on the other side of the new link – with the same criteria above to complete a 6m–9m wide link over time; provide tree planting and or swales in the widened link, as appropriate, and expand the public dedication of the link.



4. Accessing Canberra's green network

This type of 'urban improvement' can apply if development is planned beside a park (public open space):

- Introduce new public links to expand barrier free access to parks
- Incorporate a second public frontage/built address to provide oversight of the park.

Desired outcome – Barrier free access to public space, and safety in public space

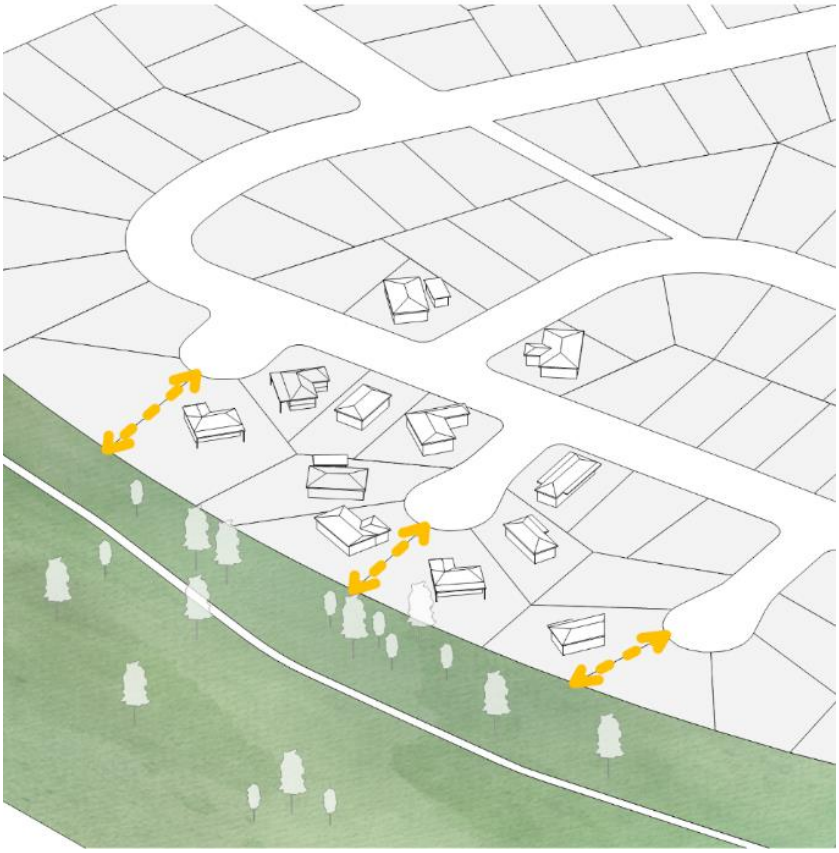


Built form overlooking Hassett Park, Campbell. Design Credit – Jane Irwin Landscape Architecture and Hill Thalis. Photo credit – Dianna Snape

Existing state

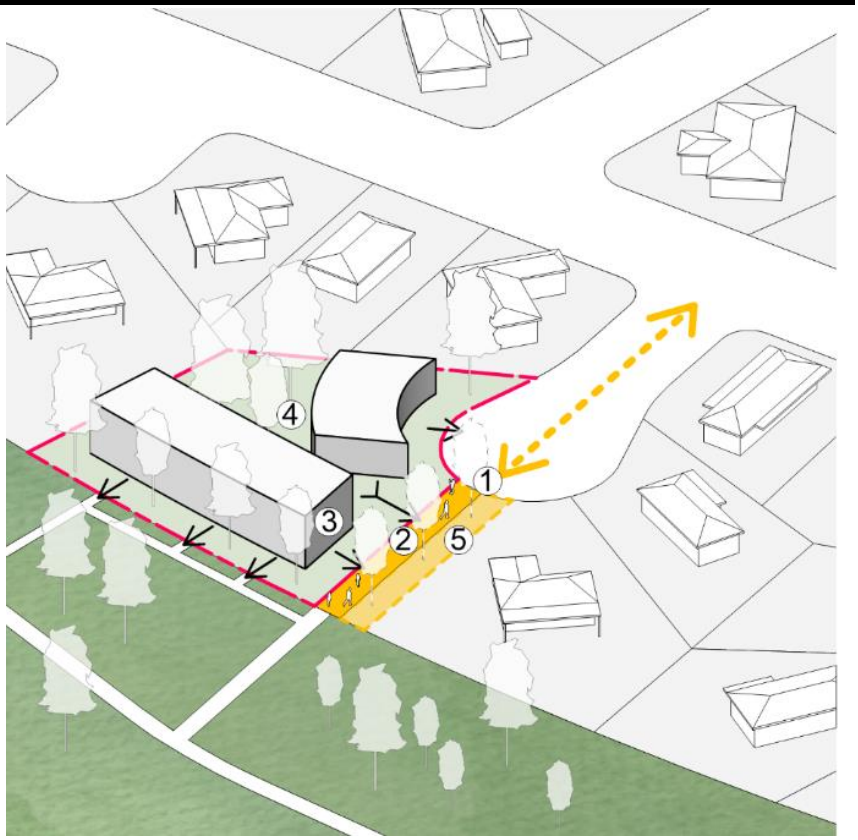
Some parks in Canberra are poorly connected to the local neighbourhood they are intended to serve.

Some parks are edged by back fences, making them less safe.



'Urban improvement' approach

1. Make a new link close to an existing street:
   - 3m wide for a section with public frontage up to 15m wide.
   - 4.5m wide for a block with public frontage greater than 15m wide.
2. Provide a new footpath and dedicate the new link as public land.
3. Provide built address to public frontages with a range of building heights and up to 6 storeys on park frontages.
4. Consolidate deep soil landscapes in the centre of the urban block and along public frontages.
5. Redevelop on the other side of the new link with the same criteria above to complete a 6m–9m wide link over time; provide tree planting and or swales in the widened link, as appropriate, and expand the public dedication of the link.



Appendix 3: District strategy implementation plan

This District Strategy was released in 2023. The Planning Act 2023 requires that the Executive must, at least once every 5 years after making a district strategy, consider whether the strategy should be reviewed.

The District Strategy is guided by this implementation plan to track and monitor progress and guide the delivery of actions, programs and projects. The district strategy is comprised of five 'big drivers' and underpinned by a range of targets and 12 implementation pathways and actions that span the full continuum of metropolitan and district planning. The numbering of the implementation pathways is not a reflection of an order of priority.

Implementing the district strategies involves a whole-of-government effort. Directorates are working together to deliver the actions, programs and projects and monitor and report on progress and outcomes under the implementation plan.

The implementation plan is in two parts:

1. Common to all districts (city-wide) priority actions, programs and projects for the 12 implementation pathways
2. District-focussed initiatives for the 5 big drivers.

Timeframes and definitions:

- Short-term: next 5 years (2023 – 2028)
- Medium-term: next 10 years (2023 – 2033)
- Long-term: next 20 years (2023 – 2043)
- Longer term: 20+ years (2043+)
- Ongoing: action has commenced and is progressing as part of a rolling or continuing commitment.

Indicators are measures of success named and quantified (where possible).

Not all of the initiatives in the implementation plan are formal commitments or have budget funding. Items in the implementation plan may require consultation, government decisions and budget processes.

City-wide implementation pathways and actions

IMPLEMENTATION PATHWAYS AND ACTIONS	TIMEFRAME	DIRECTORATE RESPONSIBLE	INDICATOR
1 Blue-green network preservation and expansion: Enhancing and filling gaps in the blue-green network, delivering initiatives set out in environmental policies and legislation, and enhancing blue-green features through new development.			
Continue to collaborate with the Dhawura Ngunnawal Caring for Country Committee (DNCCC) on opportunities to provide input on knowledge, culture and traditions.	Short term	EPSDD	Ongoing engagement with DNCCC.
2 Detailed planning for future housing and employment: Further analysis, research and investigations to inform more detailed planning for future employment floorspace and housing.			
Investigate the RZ2 Suburban Core Zone to determine why the existing built form does not demonstrate the intended variation of housing typologies between RZ1 and RZ2 zone.	Short term	EPSDD	ACT RZ2 Suburban Core Zone Study completed.
Undertake further detailed analysis and modelling to identify future housing needs not able to be met by change areas across districts.	Short term	EPSDD	Indicative Land Release Program
Undertake further detailed analysis of transect work for future investigation areas.	Short term	EPSDD	Future housing needs met.
3 Territory Plan – applying urban character and design principles: Changes through the statutory planning system and Territory Plan, such as rezoning or implementation by district policies or zone policies.			
Prepare district policies for each district in the Territory Plan.	Short-term	EPSDD	District policies completed.
4 Transport and land use in integration: Integration of land uses in planning for infrastructure projects like light rail and transport network development.			
Undertake planning to inform the design of the future light rail corridors.	Ongoing	EPSDD TCCS MPC	Planning for light rail corridors completed.
5 Employment and economic focus areas: Selected centres will be a focus for enhanced economic development and employment outcomes through targeted planning and investments and policy initiatives. **7 Selected group and local centres revitalisation:** Targeted support and interventions to address declining local centres particularly those where socio-economic indicators are below the Canberra average.			
Undertake a detailed investigation of ACT local centres and retail planning. This study related to the above ACT RZ2 Suburban Core Zone Study, since many of the RZ2 zones surround local centres and would benefit from their intensification.	Short term	EPSDD lead TCCS CMTEDD	ACT Local Centres and Retail Planning Study completed.
6 Establish new innovation precincts: Enhance the economic contribution of geographic areas where high value industry, research, health and education institutions and elite institutions are clustered together by enhancing physical and networking connections through targeted planning, investment and coordination initiatives.			
Undertake targeted planning, investment and coordination initiatives to establish new innovation precincts.	Ongoing	CMTEDD – Economic Development	New innovation precincts established.
8 City making and urban improvement: Development in key precincts contributes to remaking the city through 'urban improvement' – including improvements to streets and public domain.			
Undertake more work on the concept of a new 'urbanising agent' or governance models to facilitate significant redevelopment and urban improvement.	Short term	EPSDD	Urban improvement projects facilitated.
9 Precinct-based zero carbon initiatives: Precincts and larger scale development sites should test the scope for precinct-based initiatives that contribute to the ACT's 2045 Net Zero Emissions target, as well as broader resilience outcomes.			
Provide the infrastructure needed to deliver the zero-carbon transition, as well as supporting and encouraging building owners and development proponents to transition.	Ongoing	EPSDD	2045 Net Zero Emissions target met.
10 Integrated infrastructure planning: Integrated planning and delivery of infrastructure to support growth, including civil infrastructure, environmental upgrades and management, and community and recreational facilities.			
Undertake a broader assessment of community, sport and recreation facilities of needs across the ACT to help fill the gaps identified in the district strategies.	Short term	EPSDD TCCS	ACT Community, Sport and Recreation Facilities Needs Assessment completed.
Undertake a study to develop planning and design parameters for Yarra Glenn and any other complex strategic sites in the light rail corridor from the City Centre to Woden.	Short term	EPSDD	Planning for light rail corridors completed.
11 Governance for comprehensive redevelopment: New 'urbanising agent' or governance models to facilitate significant redevelopment and urban improvement.			
Undertake more work on a governance model for consideration by Government.	Short term	EPSDD	New 'urbanising agent' or governance model.
12 Social and affordable housing contributions: Investigation of future initiatives to support increase social and affordable housing in Canberra, including inclusionary zoning.			
Investigate planning and design provisions that encourage the supply of affordable housing, such as inclusionary zoning.	Medium term	EPSDD	ACT Housing Strategy implemented.

Tuggeranong District implementation plan – big drivers and initiatives

BIG DRIVERS AND INITIATIVES	PATHWAY	TIMEFRAME	DIRECTORATE RESPONSIBLE	INDICATOR
1 Blue-green network				
Conserve, restore and reconnect priority grassland, woodland and riparian habitat corridors and catchments throughout the district, including around Lake Tuggeranong, the Murrumbidgee River and Tuggeranong Creek, and maintaining appropriate buffers between nature reserves and any new development.	1	Ongoing	EPSDD TCCS SLA	Grassland, woodland and riparian corridors protected and restored.
Enhance the existing open space network to fill gaps and enhance useability for residents through urban design interventions, including around Lake Tuggeranong.	1, 8	Medium term	EPSDD TCCS	Open space network enhanced.
Utilise and enhance the green network as areas are developed to provide greater amenity including enhanced canopy coverage for new path networks, and address existing gaps in connectivity within and between suburbs.	1	Ongoing	EPSDD TCCS SLA	Green network enhanced.
Implement initiatives to improve biodiversity outcomes including potential for new wetlands and water quality initiatives across the district.	1	Medium term	EPSDD TCCS	Biodiversity outcomes improved.
Implement enhanced WSUD as part of all future development proposals in the district.	3	Short term	EPSDD	Territory Plan updated.
Make sure future development of Tharwa is consistent with principles and actions set out in the Tharwa Village Plan to protect and enhance the natural environment, maintain heritage and promote sustainability.	1, 3	Ongoing	EPSDD	Tharwa Village Plan implemented.
2 Economic access and opportunity across the city				
Undertake place planning for the Tuggeranong town centre in light of potential future light rail, including development of a commercial office strategy and identification of opportunities to redevelop strategic sites within the town centre while retaining service trades function.	2, 5	Short term	EPSDD	Tuggeranong town centre master plan refreshed.
Aligned with planning for potential future light rail, investigate opportunities for, and the suitability of, nodes of small enterprise opportunities along the Athllon Driver corridor at the Wanniassa group centre and Drakeford Drive intersection linking into the town centre.	4, 5	Long term	EPSDD TCCS	Economic nodes along Athllon Drive corridor investigated.
Undertake analysis of all group centres to understand their economic function and capacity for more employment floorspace, with a particular focus on Conder, Calwell and Chisholm, and enhance opportunities for accessible employment for residents in nearby suburbs.	2, 5	Short term	EPSDD TCCS	Group centre analysis undertaken.
Investigate strategies to attract additional tertiary education to the town centre, building on the existing Tuggeranong CIT presence and other community facilities.	5, 10	Medium term	EPSDD CMTEDD ED	Studies on tertiary education completed.
3 Strategic movement to support city growth				
Further investigation and future delivery of the light rail network to Tuggeranong town centre, including potential for economic corridor and enterprise activity nodes at Wanniassa group centre and Drakeford Drive intersection along Athllon Drive.	4	Longer term	EPSDD TCCS MPC	Future delivery of light rail network to Tuggeranong town centre completed.
Investigate potential for an additional rapid transport connection between the town centre, Chisholm group centre and Hume in the context of enhancing employment access for residents.	4	Medium term	TCCS	Rapid connection investigated.
Expand the micro-mobility network across the district and other initiatives to facilitate an enhanced multimodal network in line with implementation of the ACT Transport Strategy.	4	Short term	TCCS	Micro-mobility network expanded.

BIG DRIVERS AND INITIATIVES	PATHWAY	TIMEFRAME	DIRECTORATE RESPONSIBLE	INDICATOR
Implement upgrades to priority active travel routes and other initiatives as identified in the implementation of the ACT Transport Strategy, including shared path and pedestrian crossing upgrades in the town centre and along Drakeford and Sulwood Drives.	4	Short term	TCCS	Priority active travel routes implemented.
4 Sustainable neighbourhoods				
Further detailed analysis and modelling to identify future housing needs not able to be met by proposed, possible and potential change areas across the Tuggeranong District.	2	Short term	EPSDD	Future housing needs met.
Detailed analysis and planning for Tuggeranong future investigation areas to accommodate future housing and facilitate desired urban character based on suitability and transect analysis (see Appendix 1) and opportunities in identified 200m/400m stop-to-centre connection areas (aligned with future light rail).	2, 3, 8	Short term	EPSDD	Future housing needs met.
Continue planning for the Tuggeranong town centre and Wanniassa group centre as key sites identified on the Tuggeranong District Strategy Plan accommodating residential development according to ideas and principles described below (see principles for selected key sites and change areas).	8, 11	Ongoing	EPSDD	Future housing needs met.
Identify and prioritise local-scale projects to promote active streets, celebrating existing leafy areas and local centres, in line with the implementation of the ACT Transport Strategy and integrating 'urban improvement' approaches.	4, 8	Medium term	EPSDD TCCS	Active street projects identified and prioritised.
Achieve improved tree canopy cover, permeability and urban heat outcomes in development precincts when compared to similar past precincts.	3	Ongoing	EPSDD	Tree canopy cover improved.
All development precincts provide the infrastructure needed to deliver the zero carbon transition, with additional precinct-based initiatives to be encouraged.	9	Ongoing	EPSDD TCCS	Zero carbon initiatives included in development precincts.
Investigate planning and design provisions that encourage the supply of social and affordable housing, such as inclusionary zoning.	12	Short term	EPSDD	Future housing needs met.
5 Inclusive centres and communities				
Identify possible local and group centres for investigation of appropriate planning and non-planning initiatives to support their ongoing viability and role as a community meeting place. Initial possibilities: • Group centres: Calwell, Conder, Erindale, Kambah, Wanniassa and Chisholm • Local centres: Monash, Richardson, Fadden, Gordon (north) and Kambah (Carleton Street and Marconi Crescent).	5, 7	Short term	EPSDD TCCS	Centres selected for revitalisation program.
Undertake detailed localised analysis to inform and confirm the need for new community and recreational facilities in Tuggeranong District, including consideration of upgrades and enhancements to existing facilities to service demand. This includes collaboration across government directorates and with the community.	2, 10	Short term	EPSDD	Community and recreational facilities identified.
Deliver planned new facilities and upgrades to local centres across the district, including upgrades to Monash shops.	10	Short term	EPSDD TCCS	Local centres upgraded.
Identify unleased/available sites within Tuggeranong District and assess their suitability for facilities for which there is identified demand, including opportunities for facilities to be located with Conder, Calwell and Chisholm group centres.	2, 7, 10	Ongoing	EPSDD CMTEDD CSD ED	Suitable sites identified for community and recreation.

BIG DRIVERS AND INITIATIVES	PATHWAY	TIMEFRAME	DIRECTORATE RESPONSIBLE	INDICATOR
Make sure sufficient land is identified and preserved for social and community uses alongside residential growth to accompany areas of change and support economic development in further detailed planning for Tuggeranong District.	2, 3	Medium term	EPSDD	Social and community facility needs met.

Appendix 4: References

The following key data sources, plans, policies and strategies have informed the preparation of the District Strategies, as well as more detailed technical studies.

- ABS Census of Population and Housing, 2011, 2016 and 2021
- ACT Climate Change Strategy 2019-25
- ACT Infrastructure Plan: planning for the Future 2019
- ACT Planning Strategy 2018
- ACT Strategic Bushfire Management Plan 2019-2024
- ACT Sustainable Energy Policy 2020-25
- ACT Transport Strategy 2020
- ACT's Transition to Zero Emissions Vehicles Action Plan 2018-21
- Australian Capital Territory Indicative Land Release Program 2022-23 to 2026-27
- Canberra's Living Infrastructure Plan: Cooling the City 2019
- CBR Switched On – ACT's Economic Development Priorities 2022-2025
- City Plan 2014
- Community engagement on District Strategies, Listening Reports and Engagement Outcome Report 2021
- Entertainment Action Plan 2019
- *National Capital Plan*
- Nature Conservation Strategy 2012-2023
- *Territory Plan*
- Town and Group Centre master plans.

Glossary of terms

Activate: Improve the quality of places to attract more people to visit, gather and participate in activities there.

Active travel: Includes physical activity undertaken as a means of transport and not purely as a form of recreation. Active travel can include walking, cycling, skating, scootering, skateboarding and the use of mobility aids. Active travel also includes using any of these forms as incidental activity associated with the use of public transport.

Active travel network: The system of interconnected pathways used for cycling and walking.

ACT Planning Strategy: The strategy produced by the Environment, Planning and Sustainable Development Directorate titled ACT Planning Strategy 2018. The overarching strategic planning document that reflects and integrates the vision and directions of the community and other ACT Government strategies, particularly housing, transport and climate change. It provides a clear, robust and contemporary urban planning framework to guide our growth and prosperity into the future. It details five themes that will deliver on a vision for a sustainable, competitive and equitable Canberra:

1. compact and efficient
2. diverse
3. sustainable and resilient
4. liveable
5. accessible

ACT planning system: Legislation, policies, rules, plans and strategies that guide and inform planning and development in the ACT.

Adaptable housing: Housing that complies with Australian Standard AS4299 Class C Adaptable Housing and is designed to cater for people of all ages and abilities. Adaptable housing provides greater housing choices and means it is easier for people to 'age in place' where they feel comfortable, for example a home that is wheelchair accessible

Affordable housing: Housing that is appropriate for the needs of a range of very low to moderate income households, and priced (whether mortgage repayments or rent) so these households are able to meet their other essential basic living costs. It differs to social housing which is provided and/or managed by the government (public housing) or by a not-for-profit organisation (community housing).

Amenity: Desirable or useful features of a place that provide convenience, comfort or enjoyment.

Area planning: Planning at a district level to bridge the gap between ACT-wide and local area planning to provide an opportunity to build on existing and emerging government policies, plans and strategies.

Baseline: A minimum or starting point for comparison. The District Strategies include baseline employment forecasts in each district.

Biodiversity: The variety of life in all its forms and at all levels of organisation, as well as the ecological and evolutionary processes through which genes, species and ecosystems interact with one another and with their environment.

Blocks and sections: Are how areas of land are identified in the ACT. The city is divided into divisions, suburbs, sections and blocks. The Territory Plan zoning determines what activities/uses can occur on the blocks. Blocks are usually leased to one entity.

Blue-green landscape/infrastructure/network: 'Blue' refers to waterways including creeks and wetlands within the landscape. 'Green' refers to the trees, urban forests, gardens, parks and open space.

Boulevard: A broad avenue with rows of street trees.

Brownfield: An area of land that has previously been used for residential, industrial or commercial purposes.

Built environment: The structures and places in which we live, work and play, all of which are integral to improving the health, wellbeing and quality of life of our community as a whole.

Built form: Relates to the buildings, associated structures and surrounding public spaces.

Capital works: The provision of site infrastructure associated with and integral to a development, such as a new electrical sub-station, new water main, new road, bridge or main sewer line.

Carbon neutral city: A carbon neutral city or activity emits no net greenhouse gases. This can be achieved by reducing carbon emissions from city-related activities and/or by offsetting emissions with changes in activities unrelated to the city.

Character: Character makes an area distinctive and contributes to the identity of the place.

City Centre: Characterised by an established commercial core with a full range of services, taller buildings and a network of retail and commercial streets with active frontages. It serves as the primary centre for local government, commerce and entertainment, while providing opportunities for office development and residential intensification. Town centres provide the main commercial and community focus for the district populations (that is, Belconnen, Gungahlin, Tuggeranong and Woden/Weston Creek).

Climate change adaptation: Actions taken to help communities and ecosystems adjust to changing climate conditions and their effects.

Climate change mitigation: The reduction of greenhouse gas emissions to achieve stabilisation of greenhouse gas concentrations in the atmosphere and subsequently a cessation of further warming.

Collector roads: These roads collect and distribute traffic within residential, industrial and commercial areas.

Design principles: A set of design ideas that enable the consistent consideration of a range of design-related issues including at a broader city, neighbourhood or site-specific scale.

Desired outcome: A statement describing the intent of planning provisions and the planning policy outcomes intended to be achieved.

Development application (DA): A formal application, including supporting documents, lodged with the planning and land authority to enable an assessment of a proposed development against the requirements of the Territory Plan and the Planning Act.

Development assessment: The processes through which development applications are assessed and considered. They are either approved, refused or required to resubmit with further detail.

District planning: Planning at a district level to bridge the gap between ACT-wide and local area planning to provide an opportunity to build on existing and emerging government policies, plans and strategies.

Ecosystem: A dynamic combination of plant, animal and microorganism community and their non-living environment (e.g. soil, water and the climatic regime) interacting as a functional unit.

Employment land: Land that is zoned in the Territory Plan for commercial and industrial purposes.

Fine grain: Smaller scale development which stimulates the street level experience of places through the articulation of activities, design and materials.

Future-proof: The process of anticipating the future and developing methods of minimising the effects of shocks and stresses of future events.

Greenfield: Undeveloped land often located on the edge of existing urban areas. Greenfield development requires full assessment of environmental, infrastructure and planning issues to determine future use and suitability for expansion of the city. Typically, this will involve an additional process of applying for a subdivision design application before submission of a subdivision development application for a new estate.

Greenhouse gas emissions: Any of the gases whose absorption of solar radiation is responsible for the greenhouse effect including carbon dioxide, methane, nitrous oxide and the fluorocarbons.

Gross floor area (GFA): The sum of the area of all floors of the building, measured from the external faces of the exterior walls.

Group centre: Centres that service several nearby suburbs and provide easy access to major services, retailing and other commercial and community uses that meet the weekly needs of its catchment population.

Guidelines: Documents that provide guidance on how to implement official advice but do not include specific development controls.

Housing diversity: A range of housing types to choose from; for example, single dwellings, town houses and apartments.

Human scale: Reflects a sympathetic proportional relationship between the built form and human dimensions where people are not overwhelmed by the built form. Human scale contributes to a person's perception of buildings or other features in the public domain. It is typically referred to when discussing the bulk and scale of development.

Indicative land release program (ILRP): An annual program that sets out the Government's intended land releases for sale over four years of residential, mixed-use, commercial, industrial, community and non-urban land**.** It also contributes to the financial, social and environmental objectives of the Territory i.e. affordable housing, green space and government revenue.

Industry: The use of land for the principal purpose of manufacturing, assembling, altering, repairing, renovating, ornamenting, finishing, cleaning, washing, winning of minerals, dismantling, processing, or adapting of any goods or any articles**.**

Infill: Development of unused or underutilised land in existing urban areas. It involves increasing the capacity of our existing urban area to support growth.

Innovation precinct: A group of industry, research and education activities within an area.

Knowledge industries: Are based on knowledge-intensive activities that contribute to an accelerated pace of technical and scientific advancement. They have a greater reliance on intellectual capabilities than on physical inputs or natural resources.

Land capability: Use of land according to its capacity to sustain such use, without long-term degradation.

Land use: The way in which a piece of land is used which includes the activities that are undertaken on it such as residential, industrial, community facility, recreational and commercial.

Land use zones: Are allocated by the Territory Plan to all Territory land within the ACT. They define what land uses can or cannot occur on a piece of land.

Last kilometre: Term used in supply chain management to refer to the last leg of a journey to move people or goods to a final destination.

Liveability: This is a measure of city resident's quality of life and is used to benchmark cities around the world. It includes socioeconomic, environmental, transport and recreational measures.

Living infrastructure: Refers to all the interconnected ecosystems within an urban catchment, including the 'green infrastructure' of trees, gardens, green walls and roofs, parks, reserves and open spaces, and the 'blue infrastructure' of our waterbodies including lakes, wetlands and waterways.

Local centre: Smaller shopping centres that provide convenience retailing and community and business services that meet the daily needs of the local population.

Location quotient: A measure of relative industry specialisation of a local economy compared to a larger area.

Micro-mobility: For of transport using methods such as e-scooters and e-bikes.

Missing middle housing: Can be defined in many ways, primarily referring to low rise medium-density housing types that fall in-between smaller apartments and larger freestanding homes. Missing middle housing includes duplexes (two attached or semi-attached dwellings), townhouses (dwellings in a multi-unit complex), terrace houses (dwellings built in a continuous row), dual occupancies (two dwellings on one block of land), and manor homes (comprise 3-4 small low-rise dwellings).

Mixed-use: An umbrella term that means a block that requires development for residential and one or more commercial uses.

Mixed-use development: Involves a mix of complementary land uses, such as residential, small offices or convenience stores. This can include horizontal and vertical mixes.

Multimodal: Many different types of transport within a network, including walking, bikes, e-scooters, cars, buses, light rail, heavy rail, freight and others.

Multi-unit housing: The use of land for more than one dwelling and includes, but is not limited to, dual occupancy housing.

Natural resources: These resources include soil, water and marine resources; geological features and landscapes; native vegetation; native animals and other native organisms; and ecosystems.

Non-single residential: Relating to a Crown Lease for block types commonly referred to as commercial, industrial, englobo, multi-unit, mixed use and/or community.

Orbital roads: Roads that travel around the outside of an urban area.

Outcomes-focussed planning: A system that focuses on the substantive matters to be addressed without specifying in detail how that will be achieved. It is one that is centred on the quality, results and performance of planning system outcomes, rather than rule compliance.

Overlays: Territory Plan overlays are a set of planning instructions that apply to areas which have

Place making: A multi-faceted approach to the planning, design and management of public spaces. Place making encourages broad community and business involvement in the design, experience, place management and progressive enhancement of the public realm through engagement and participation.

Planning: Also called urban or regional planning, is the process of making decisions to guide future action and is specifically concerned with shaping cities, towns and regions by managing development, infrastructure and services to improve social, economic and environmental outcomes.

Planning Act 2023 (the Act): The legislation which provides the framework for the ACT planning system.

Policy outcome: The planning or policy outcome subsequent provisions of the Territory Plan are endeavouring to achieve.

Public domain: Refers to spaces that belong to or are available to the public, including parks, streets and other public spaces such as plazas, courtyards and open spaces.

Residential redevelopment: Development that involves:

- substantial or total demolition of an existing dwelling on land previously used for residential purposes and replacement with one or more new dwellings
- establishment of one or more new dwellings on land previously used for residential purposes in addition to an existing dwelling
- substantial alterations to an existing dwelling that would result in a significant change to the scale and/ or character of the dwelling.

Resilience: The capacity of individuals, communities, businesses and systems in a region to survive, adapt and thrive, no matter what chronic stresses and acute shocks they experience.

Section: An area of land comprising of a logical grouping of individual blocks identified as a Section pursuant to the Districts Act 2002.

Setback: Distance between block boundary and the outside face of a building or structure.

Shared-use path: A path that is restricted to non-motorised transport, with the exception of motorised wheelchairs and power assisted pedal cycles. Both pedestrians and cyclists share these paths.

Shared zone (or shared spaces): A road or place where the road space is shared safely by vehicles, cyclists and pedestrians. A shared zone may include the removal of traffic lights, pedestrian barriers, road markings and kerbs to give equal priority to all users and require negotiation between users.

Single dwelling housing: The use of land for residential purposes for a single dwelling only.

Site: A block, lease or other lawful occupation of land, or adjoining blocks, leases or lawful occupancies in the event of these being used for a single undertaking or operation, but excludes the area of any access driveway or right-of-way.

Social infrastructure: Encompasses all the facilities, services and networks that help families, groups and communities to meet their social, health, education, cultural and community needs.

Solar access: The ability of a building or public space to receive sunlight without obstruction from other buildings.

Spatial planning: Planning that places a greater emphasis on strategic planning and physical direction of the Territory at different scales, from the city level to the local-area and site levels of planning, as well as improved planning and built form outcomes.

Spatial context: Of a site is where something is located within an area of a city.

Stakeholder: Any person, institution, organisation, agency, department, authority, club, association or the like which is directly involved in the planning process.

Strategic planning: The long-term strategic or policy objectives that describe the purpose and direction of the planning system.

Suburbs: Small residential communities located on the periphery of a city centre. Suburbs close to the city centre typically consist of medium to high-density dwellings, with suburbs on the outskirts of the city typically consisting of medium to low-density dwellings. Suburbs are usually serviced by a local or group centre.

Sustainable development: Forms of development that meet the needs of the present without compromising the ability of future generations to meet their needs.

Surveillance (or passive surveillance): The 'eyes on the street' from residents and people going about their daily activities to create a sense of safety on streets and public spaces.

Town centre: A town centre offers a wide range of facilities and services to serve the community and visitors from the surrounding district. Typically, a town centre offers employment opportunities and provides higher order retail facilities, offices and consulting rooms; cultural, community and public administration; entertainment, educational, religious and residential facilities. Generally, most urban districts in the ACT have a town centre providing access to goods and services bought less frequently.

Territory Plan: The key statutory planning document in the ACT. It is a statutory document that guides planning and development in the ACT to provide the people of the ACT with an attractive, safe and efficient environment in which to live, work and play. The Territory plan is used to:

- to manage development, in particular land use and the built environment
- to assess development applications
- to guide the development of new estate areas (future urban land) and the management of public land.

The Territory Plan contains:

- a statement of strategic directions
- a map, including zones and overlays
- Policy outcomes and land use tables of assessable developments for each zone
- a range of controls including Assessment requirements, assessment outcomes and development compliance provisions.
- The Territory Plan also relies upon a range of supporting documents including Design Guides and Technical Specifications to assist in applying some of the Territory Plan provisions. Supporting documents are to be made available on the Authority's website.

Transit corridors: Transit corridors are generally linear in form and are designed for mass transport. Transit corridors offer one or more modes of transport, such as car lanes, cycle lanes, bus lanes, light rail and footpaths. Development often occurs along transit corridors due to the ease of transport. Northbourne Avenue is an example of a transit corridor

Typology: Refers to housing or building typologies, which are sets of buildings that are similar in their function or building form – for example, low-density housing is one example of a typology that would be characterised by 1-2 storey single dwellings.

Transit-oriented development: The creation of compact, walkable communities located around high-quality public transit systems.

Unit title: A type of property ownership where home owners own a defined part of a building such as an apartment, generally known as a unit. They also have shared ownership, as tenants in common, of common areas such as lifts, lobbies or driveways. These areas are known as common property. Each unit may also have additional land or building called unit subsidiaries, such as car spaces and balconies.

Urban density: The number of people living in an area of a city or part of a city.

Urban design: The collaborative and multi-disciplinary process of shaping the physical setting for life in cities and towns. It involves the design of buildings, groups of buildings, spaces and landscapes, and the establishment of frameworks and processes that facilitate successful development.

Urban footprint: The geographic extent of the existing urban area.

Urban grain: The street pattern, size and distribution of blocks, scale of buildings and their relationship to each other. Urban grain includes the hierarchy of street, the pedestrian connections, public places and linkages to public transport

Urban infill: Development of unused or underutilised land in existing urban areas. It involves increasing the capacity of our existing urban area to support growth.

Urban intensification areas: Targeted areas where development and redevelopment are directed and aligned with supporting infrastructure and provide the opportunity for renewal and investment.

Urban renewal: This is the process of improving the economic, social and environmental sustainability of a particular urban area through redevelopment of underutilised urban areas. It typically involves urban redesign, infrastructure renewal and investment, and identifying precincts and land for mixed use.

Urban improvement: This means improving streets and public domain with more connections and greenery to encourage walking and enhance local liveability.

Urban services: A collection of industries that enable the city to develop and its businesses and residents to operate. These industries are often in industrial and employment zones and have land use, floorspace, operational and accessibility requirements that mean they need to locate in special areas and away from non-compatible uses – such as utilities providers, mechanics, and light manufacturing uses.

Urban transect: A line or section though a city representing changes in types of urban environments, generally most compact and dense in the city centre and stepping down in height, built form and density to the urban fringe.

Water sensitive urban design (WSUD): Is the planning, design or construction of the built environment to minimise water runoff and make sure any runoff causes the least amount of damage. It is also about wise use of that water to improve our urban environment.