ACT Government

BELCONNEN TOWN CENTRE

MASTER PLAN

SEPTEMBER 2016





Environment and Planning Directorate

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DEFINITIONS

Active frontages occur when people can interact between the buildings and the streets and public spaces, such as shop fronts, building entrances and transparent building facades.

Active travel is travel that involves physical activity such as walking, cycling, using a wheelchair or other personal mobility device, whether for general transport or recreational purposes. Use of public transport generally includes an active travel component.

Active uses are uses that generate activity at the ground floor. Active uses include cafes, shop fronts and building entrances.

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

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

GFA or Gross Floor Area means the sum of the area of all floors of the building, measured from the external faces of the exterior walls.

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.

Land use zones are allocated by the Territory Plan to all land within the ACT. They define what land uses can or cannot occur on a piece of land. See more about the zoning system at www.legislation.act.gov.au/ni/2008-27

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.

Podium or building base refers to the lower storeys of a building which includes active frontages. It is designed to present an appropriate human scale to the streets and public spaces. Podiums can be used to transition down to lower-scale buildings, and minimise the impact of parking and servicing areas.

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.

Shared-use path is 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) is 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.

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

Spatial framework sets out the long term structure of the centre. It shows how land use, public domain and connections could be arranged and delivered.

Surveillance (or passive surveillance) is 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.

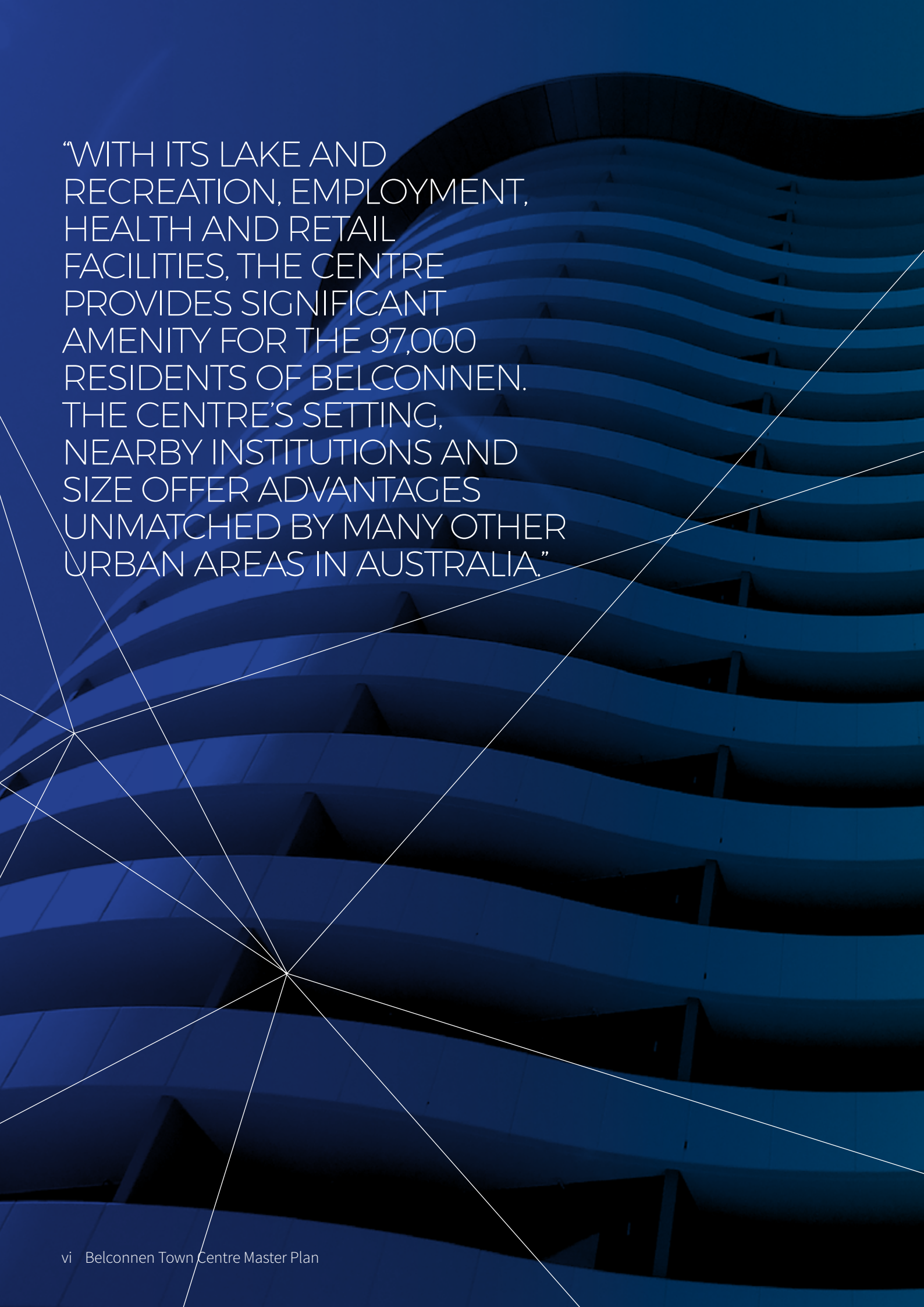
Transit-oriented development is the creation of compact, walkable communities located around high quality public transit systems.

Urban grain is 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.

Visual cues are elements in the public domain that contribute to a person's understanding of a place. For example, higher or unique elements provide an understanding that you are approaching a major centre.

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

Wind shear refers to the potential for down draughts from taller buildings or accelerated winds from tunnelling between buildings onto public spaces.



"WITH ITS LAKE AND RECREATION, EMPLOYMENT, HEALTH AND RETAIL FACILITIES, THE CENTRE PROVIDES SIGNIFICANT AMENITY FOR THE 97,000 RESIDENTS OF BELCONNEN. THE CENTRE'S SETTING, NEARBY INSTITUTIONS AND SIZE OFFER ADVANTAGES UNMATCHED BY MANY OTHER URBAN AREAS IN AUSTRALIA."



EXECUTIVE SUMMARY

THE BELCONNEN TOWN CENTRE MASTER PLAN PROVIDES THE LONG-TERM VISION, PLANNING STRATEGIES AND POLICIES TO GUIDE THE FUTURE DEVELOPMENT AND CHARACTER OF THE TOWN CENTRE. THIS MASTER PLAN AIMS TO STRENGTHEN THE BELCONNEN TOWN CENTRE'S (THE CENTRE'S) UNIQUE QUALITIES BY RECOGNISING ITS ADVANTAGES AND OPPORTUNITIES FOR IMPROVEMENT AND GROWTH.

The master plan has been informed by the comments and suggestions provided during community engagement and a review of previous master plans, including the 2001 Belconnen Town Centre Master Plan. It responds to a range of broader strategic planning policies for the ACT and the issues identified during background analysis studies of the centre.

Two stages of community engagement were undertaken, providing an opportunity for Belconnen residents, local businesses, key stakeholders and ACT Government agencies to detail their concerns and aspirations for the centre. Feedback was very useful in the development of the plan. This consultation was greatly assisted by the Belconnen Community Council.

While a range of concerns were identified, community feedback confirmed the public is generally happy with how the centre is developing. With its lake and recreation, employment, health and retail facilities, the centre provides significant amenity for the 97,000 residents of Belconnen. The centre's setting, nearby institutions and size offer advantages unmatched by many other urban areas in Australia.

These advantages should be strengthened and capitalised on to ensure the centre improves and grows, small business can thrive, natural areas are enhanced and the centre becomes an even better place for the Belconnen community to visit, work and live. Growth and improvement will contribute to meeting key ACT Government priorities for sustainable economic growth, environmental improvements, climate change adaptation, urban renewal and transport improvements.

While the centre has great opportunities, it also faces considerable challenges. The ACT Government has prepared this master plan to guide how these challenges and opportunities can be met.

The master plan provides an opportunity to improve the public domain and increase the 'liveability' of the centre to make it a place where people want to visit or live. A range of strategies have been developed to guide and improve the future development of the centre, which include:

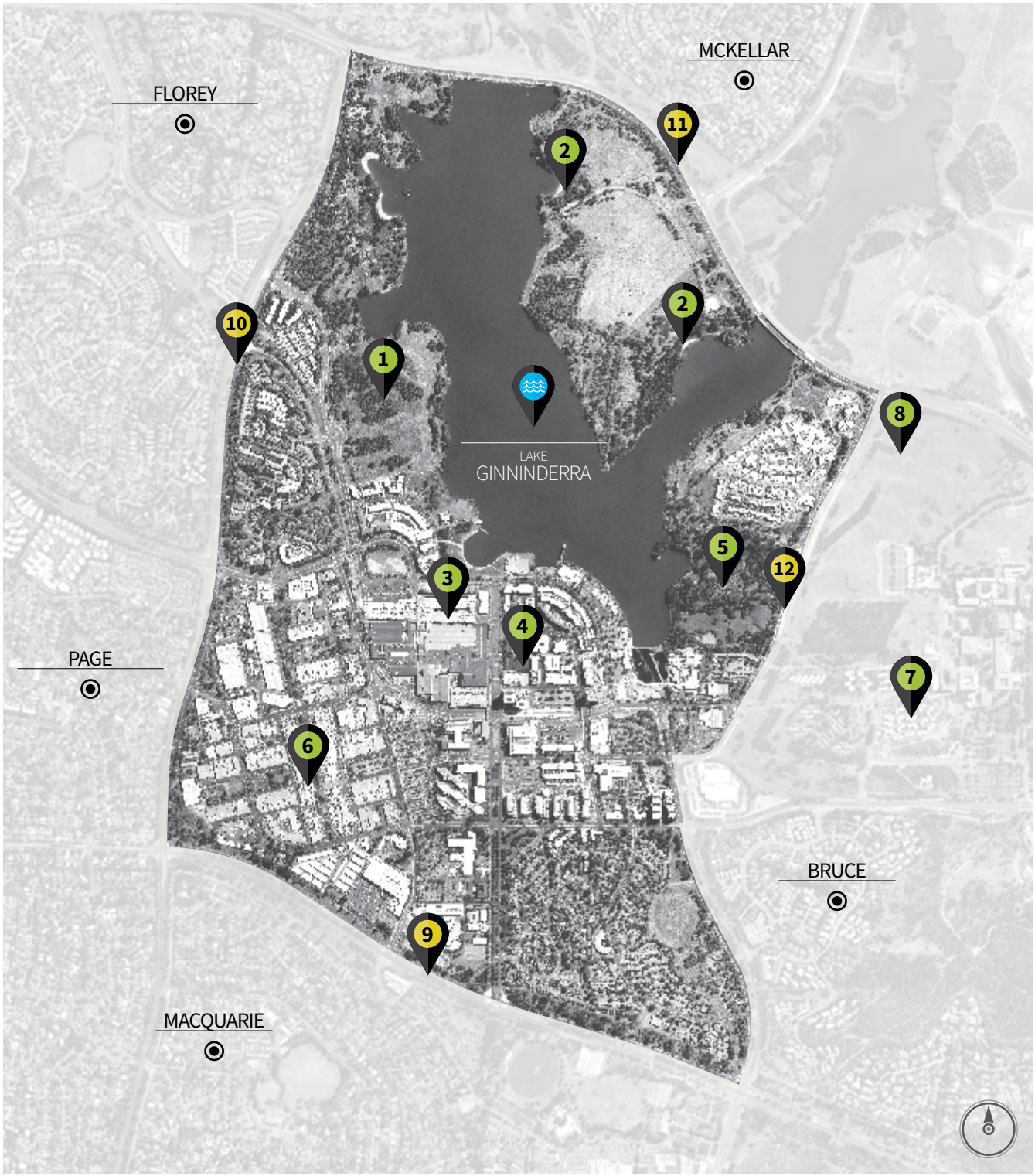
- introducing incentives for developers to provide public domain improvements, better design outcomes, more sustainable buildings and to enable more active destinations to grow
- identifying locations where lively destinations for the community could be provided
- maintaining and improving areas that provide a choice of unique services
- a recommendation to provide improvements and consistency to the public domain, including the provision of large street trees
- improving cycle and pedestrian connections and infrastructure to help change the focus from cars to healthier alternatives of walking and cycling
- introducing measures to adapt to the impacts of climate change and reduce our large ecological footprint
- introducing a better strategy for parking to ensure supply meets demand
- improving employment diversity, and
- providing clear building height requirements and design guidelines to provide certainty for the community, developers and government.

The master plan provides a new vision for Belconnen town centre:

BELCONNEN TOWN CENTRE'S FEATURES AND POTENTIAL SET IT APART FROM OTHER PLACES. THE LAKE, OPEN SPACES, LAYOUT AND NEARBY INSTITUTIONS PROVIDE UNIQUE ECONOMIC AND ENVIRONMENTAL ADVANTAGES. THESE WILL BE IMPROVED AND STRENGTHENED TO ENSURE THE TOWN CENTRE IS AN ATTRACTIVE, ACCESSIBLE AND DESIRABLE PLACE FOR PEOPLE TO LIVE, WORK AND ENJOY.

BELCONNEN TOWN CENTRE MASTER PLAN

Map 1: Master plan study area



PLACES

1. *Western Foreshores*
2. *Diddams Close Park*
3. *Westfield Belconnen*
4. *Belconnen Town Centre*
5. *John Knight Memorial Park*
6. *Services Trades*
7. *University of Canberra*
8. *University of Canberra Public Hospital*

ROADS

9. *Belconnen Way*
10. *Coulter Drive*
11. *Ginninderra Drive*
12. *Aikman Drive*

1. INTRODUCTION

IN 2001, THE ACT GOVERNMENT RELEASED A MASTER PLAN FOR THE BELCONNEN TOWN CENTRE (THE CENTRE) THAT ANALYSED A SERIES OF PLANNING CONSIDERATIONS AND MADE RECOMMENDATIONS TO GUIDE THE FUTURE GROWTH OF THE CENTRE. THE CENTRE'S DEVELOPMENT HAS BEEN GUIDED BY SEVERAL MASTER PLANS, EACH BUILDING ON EARLIER PLANNING. THE 2001 BELCONNEN TOWN CENTRE MASTER PLAN PROVIDED VALUABLE STRUCTURAL CHANGES, INCLUDING ROAD EXTENSIONS AND CHANGES TO BUS INFRASTRUCTURE AND SERVICES.

Since then, the centre has experienced considerable growth, with developers showing strong confidence in the centre through significant investments. The ACT Government has also provided substantial improvements including a new community health facility, police station and public transport infrastructure, as well as rebuilding lakeside recreational areas. These improvements provide the centre with the amenity to support continued growth.

Over the past few years, key strategic planning documents for the ACT were introduced including the Minister for Planning and Land Management's Statement of Planning Intent (2015), the ACT Planning Strategy (2012), Transport for Canberra (2012), the Active Travel Framework (2015), the Business Development Strategy (2015) and AP2: A New Climate Change Strategy and Action Plan for the ACT (2012). The ACT Planning Strategy encourages a more compact city by focusing urban intensification in town centres, around group centres and along major public transport routes. A review of the 2001 Belconnen Town Centre Master Plan was identified as a key outcome of the ACT Planning Strategy.

Work on this master plan started in November 2014 with a series of engagement events to gain an understanding of the community's concerns and aspirations for the centre. Community feedback was valuable and provided direction for the future of the centre.

This master plan has considered these community comments, together with background studies. It recommends a series of planning strategies that set a framework for how the centre should grow and improve into the future while retaining the unique Belconnen character.

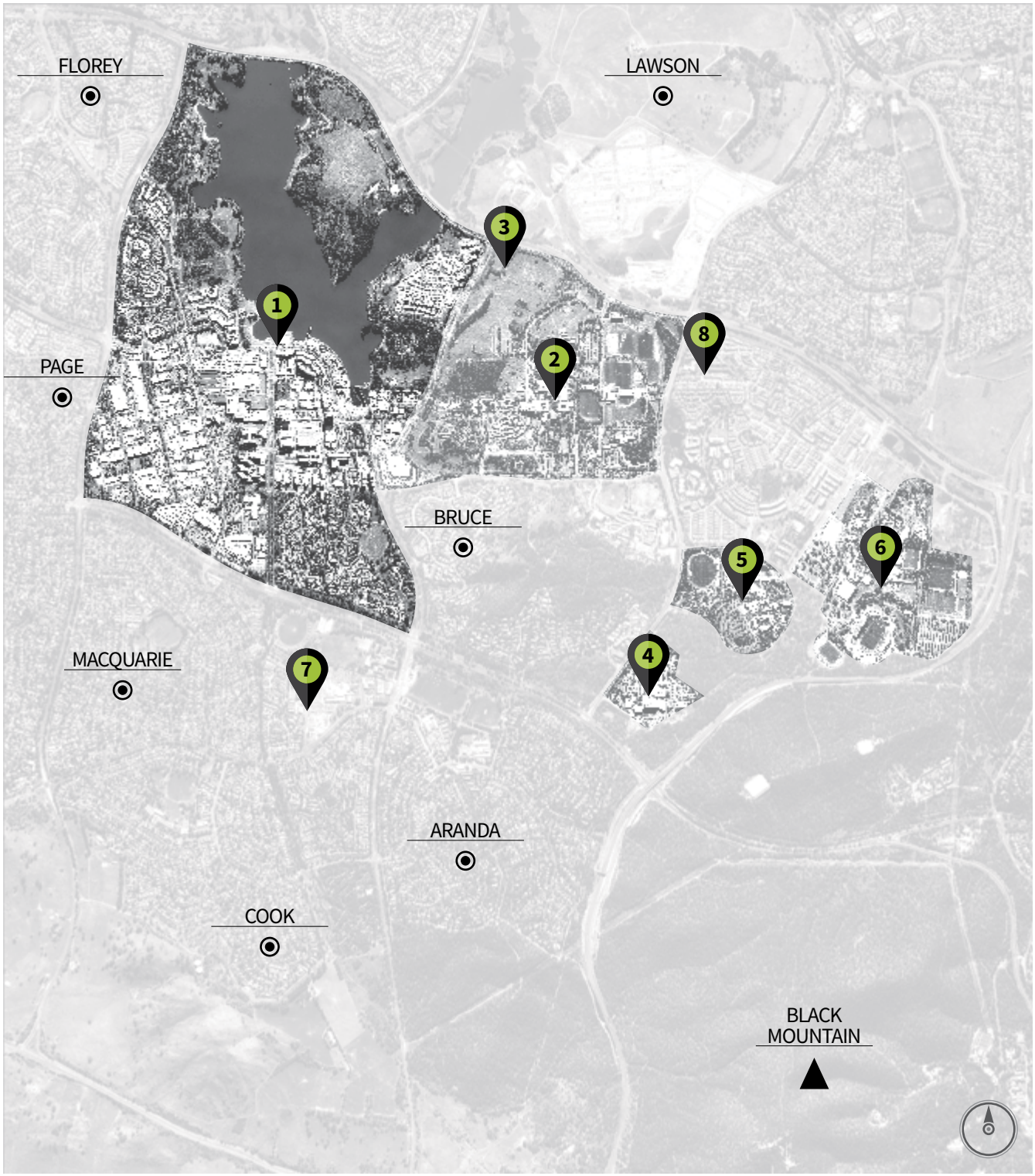
In 2014, the Organisation for Economic Co-operation and Development (OECD) ranked Canberra as the best place in the world to live due to a range of reasons including employment, housing and environment. It is vital to keep and improve these advantages.

The centre reflects a lot of what is good about Canberra, as well as what needs to be improved. While the centre has good amenity and potential, it also faces challenges that this master plan seeks to address.

The ACT Government would like to acknowledge the organisations that helped raise community awareness of the master plan, particularly the Belconnen Community Council and Pedal Power.

The policies and strategies detailed in this master plan will inform the review of the Belconnen Precinct Code, which will form part of the Territory Plan and provide the rules and criteria to guide development in the centre.

Map 2: Master plan study area and surrounds



PLACES

1. *Belconnen*
2. *University of Canberra*
3. *University of Canberra Public Hospital*
4. *Calvary Hospital*
5. *Canberra Institute of Technology*
6. *Australian Institute of Sport*
7. *Jamison Centre*
8. *Public Hospital*

1.1 MASTER PLAN STUDY AREA

The study area for the review of the 2001 Belconnen Town Centre Master Plan is illustrated by the white line in **Map 1**. The study area is located in the suburb of Belconnen and bound by Belconnen Way, Coulter Drive, Ginninderra Drive, Aikman Drive and Eastern Valley Way.

The study area includes the core centre area, the Belconnen service trades area, Emu Ridge and Totterdell Street residential areas, Emu Bank and Lake Ginninderra and surrounds.

While focused on the suburb of Belconnen, the master plan also considers the centre's important relationship with the University of Canberra, other institutions including Calvary Hospital, the Canberra Institute of Technology (CIT) and the Australian Institute of Sport (AIS), and the surrounding suburbs, as indicated in **Map 2**.

The centre has diverse uses, with large areas of open space and recreational areas surrounding Lake Ginninderra, a distinct service trades area, Australian Government office area, medium-density housing, Westfield Belconnen and the higher density residential area emerging towards the east of the centre.

1.2 BLOCK AND SECTION MAP

Under the Territory Plan, Canberra is divided into divisions, suburbs, sections and blocks, with blocks usually leased to one entity. Blocks and sections are referred to in this document. **Map 3** provides a quick reference to help the reader identify blocks and sections within the master plan area.

1.3 WHAT A MASTER PLAN DOES

A master plan defines what is important about a place and identifies opportunities for preserving and enhancing the quality of that place. A master plan offers a town or group centre a long-term planning framework for urban renewal. It is guided by key actions and strategies identified in the ACT Planning Strategy for a more compact and efficient city by focusing urban intensification in these areas.

This master plan provides a vision, a spatial framework and strategies to guide the development of the Belconnen town centre over the next 20+ years.

A master plan is a non-statutory planning document that can recommend the following:

1.3.1 PLANNING POLICIES

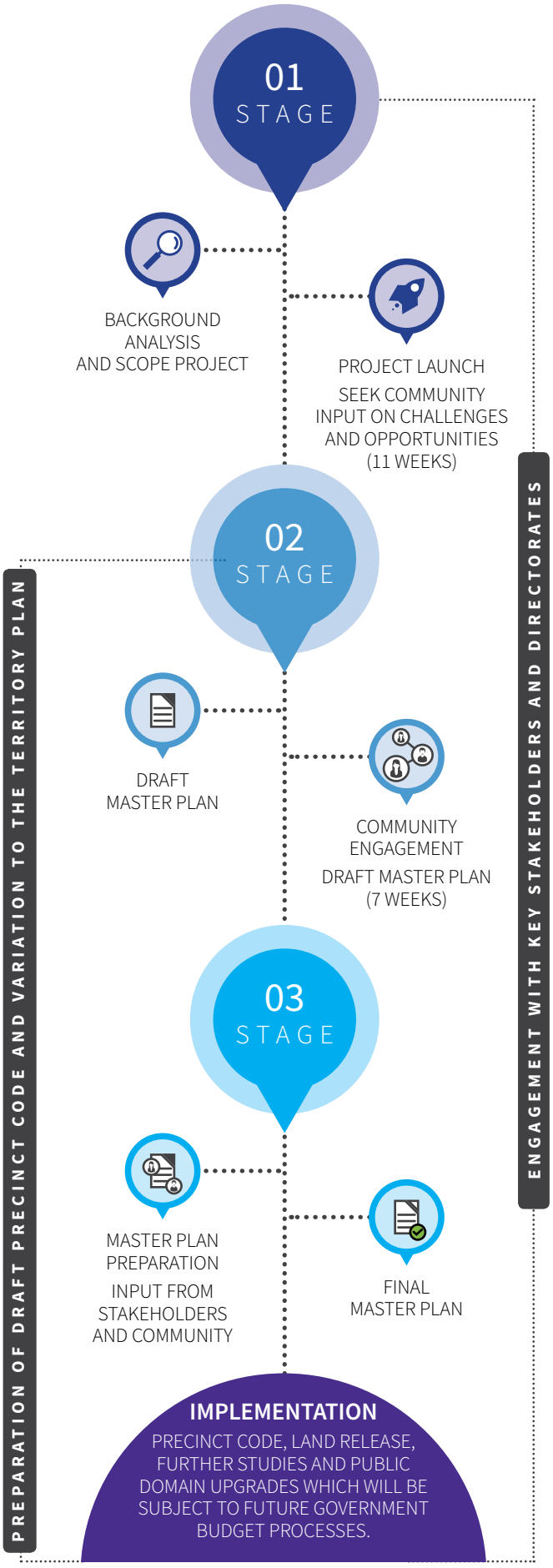
The Territory Plan is the key ACT statutory planning document that provides the policy framework for the administration of land use and planning in the ACT. It specifies what can and cannot happen on each block of land. Potential changes and inclusions in the Territory Plan take the form of a new precinct code. A precinct code sits within the Territory Plan and provides place-specific planning controls. This master plan is informed by community feedback and makes recommendations for a new precinct code for the Belconnen town centre that considers appropriate land use, building heights, building setbacks and location of active frontages.

1.3.2 OPPORTUNITIES FOR LAND RELEASE

Land release is the sale of Territory-owned land. The supply and release of land in the ACT considers factors such as forecast population changes, household changes, demand for land and the capacity to cost effectively deliver key infrastructure and services.

1.3.3 PUBLIC DOMAIN UPGRADES

Infrastructure and public space improvements are required to realise the vision and some of the strategies of this master plan. There are opportunities for the private sector to contribute to the public domain through partnerships with the government or as part of off-site works. Works undertaken by the ACT Government will



involve further investigations by various government agencies and funding consideration through future government budget processes. Public domain upgrades undertaken by the ACT Government are based on a number of considerations including population growth, the age of existing assets and infrastructure and the wider budget context within the Territory.

1.3.4 FURTHER STUDIES

These may be required to progress some strategies that are either outside of what a master plan can achieve or may take more time to investigate.

The Belconnen Town Centre Master Plan responds to broader strategic planning policies for the ACT and background analysis on issues and opportunities in the centre. Community and stakeholder engagement played an important role in the development of the master plan, with the Environment and Planning Directorate consulting with Belconnen residents, local businesses, community groups, other ACT Government agencies and private interest groups. Background analysis and community engagement processes helped identify priorities for improving the centre, which informed this master plan.

1.4 MASTER PLAN PROCESS

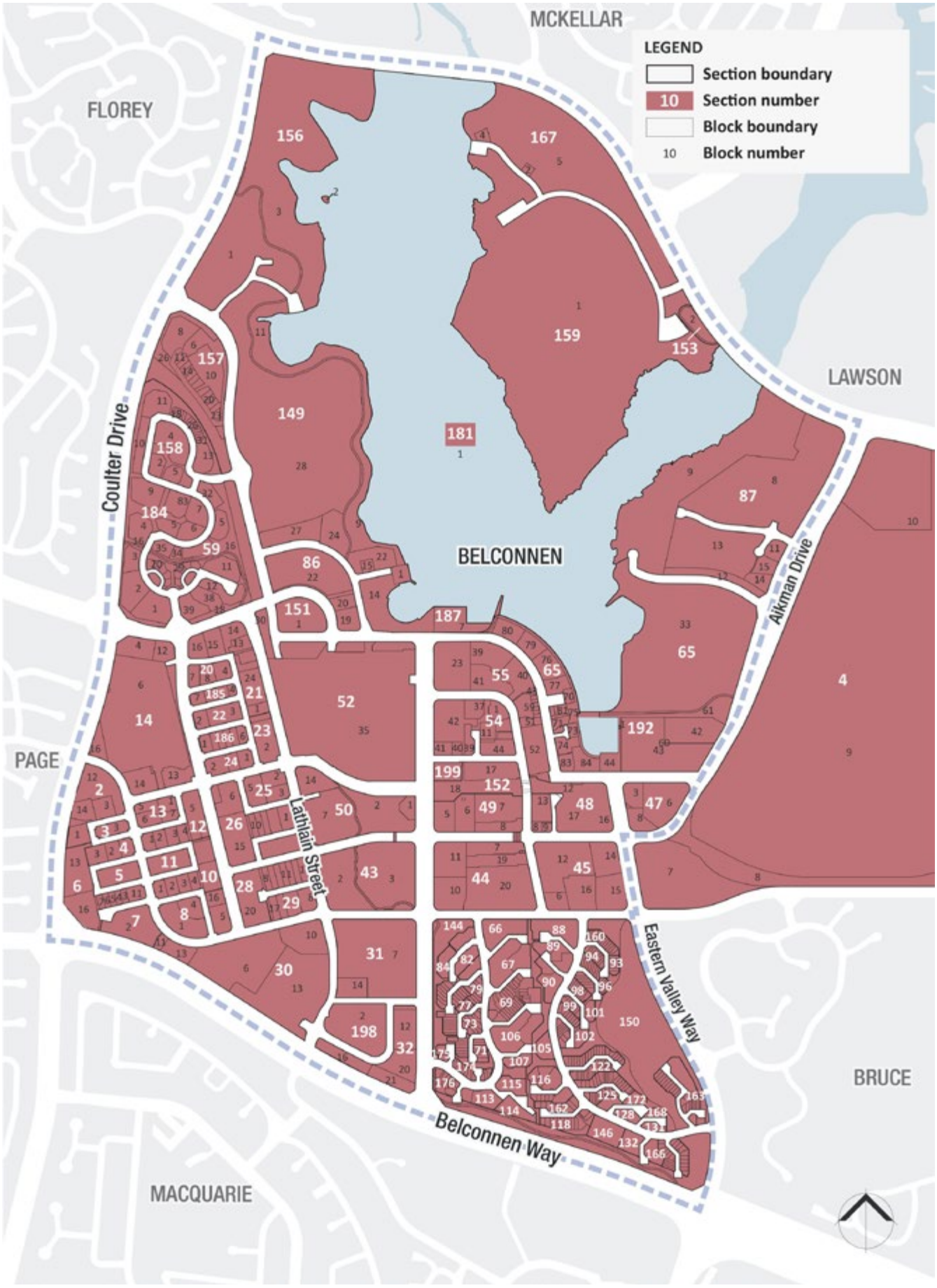
The master plan process includes three main stages as illustrated in **Figure 1**, with opportunities for stakeholders and the public to provide input in stages 1 and 2.

The process commenced with Stage 1, the gathering and analysis of information, including community engagement, to help inform the preparation of the draft master plan.

The draft master plan represented Stage 2 of the process. Feedback received from stakeholders and community during the seven week engagement period informed Stage 3, the development of the final master plan. The implementation of the master plan may include new planning controls in the form of a precinct code in the Territory Plan, potential land release, capital works recommendations and potential further studies.

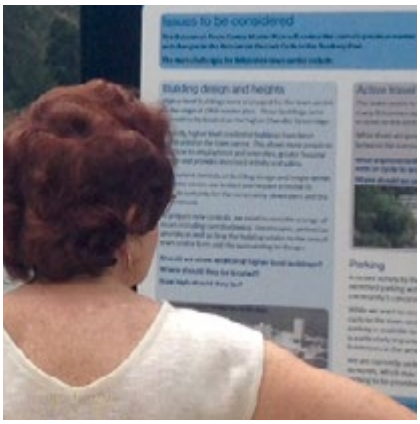
Figure 1: Master plan process

Map 3: Block and section map











1.4.1 COMMUNITY ENGAGEMENT

Community engagement forms a critical part of the analysis in the early stages of the master planning process and in refining the recommendations provided in the draft master plan.

The background and analysis section of this master plan and the Stage 1 and 2 community engagement reports provide details of how community engagement has been undertaken and a summary of messages received from each stage of community engagement. The engagement reports can be found at http://haveyoursay.planning.act.gov.au/belconnen.

2. PLANNING CONTEXT

2.1 STRATEGIC PLANNING

The Belconnen Town Centre Master Plan is a strategic policy document that seeks to translate the ACT Government's broader metropolitan policies at a local level.

The following section outlines the policy context that applies to the centre.

2.1.1 THE STATEMENT OF PLANNING INTENT

The Minister for Planning and Land Management released his Statement of Planning Intent in 2015. The statement sets out the key planning priorities for the ACT Government for the next three to five years.

The statement establishes four key planning priorities and associated actions:

- Creating sustainable, compact and liveable neighbourhoods with better transport choices
- Delivering high quality public spaces and streets through placemaking
- Delivering an outcome-focused planning system to reward design excellence and innovation, and
- Engaging with the community, business and research sectors to optimise planning outcomes

The Belconnen Town Centre Master Plan incorporates and progresses the detail of these priorities.

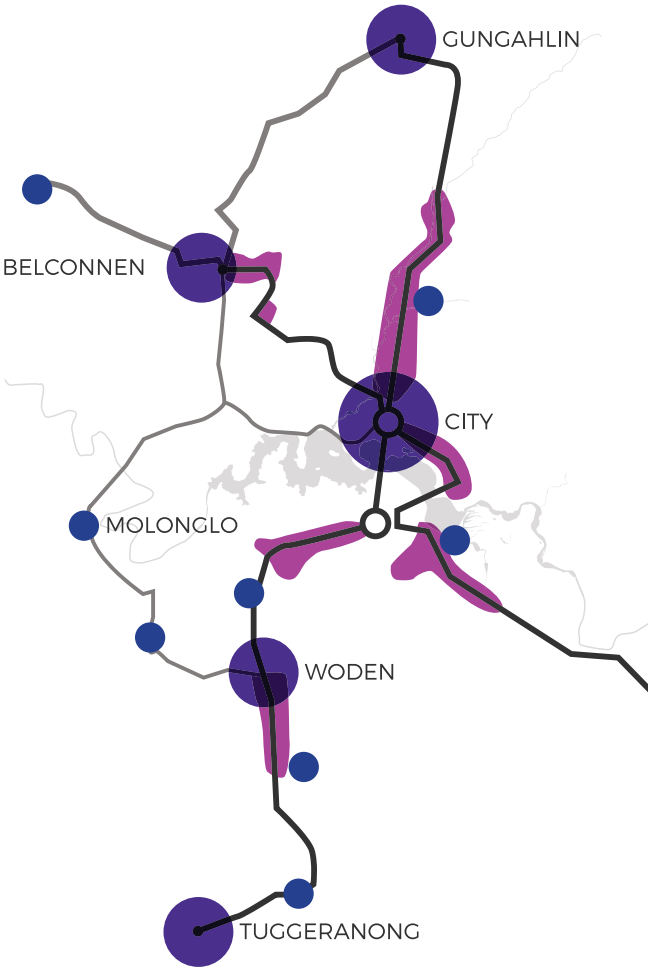
2.1.2 ACT PLANNING STRATEGY

The ACT Planning Strategy (2012) responds to changes in the ACT's economic, demographic and environmental circumstances that have occurred since the release of the Canberra Spatial Plan in 2004. The strategy outlines a series of strategies that will create a more sustainable city including:

- focusing urban intensification in town centres and group centres supported by public transport to improve the vitality of centres
- improving the urban quality and liveability of Canberra
- managing the land and natural resources of the area to conserve where appropriate and to manage growth to ensure a prosperous region, and
- supporting convenient access to a range of facilities, services and opportunities for social interaction by reinforcing the role of group centres as community hubs.

The ACT Planning Strategy's first strategy is of particular relevance to this process and promotes a more compact and efficient city by focusing urban growth in town centres, around group centres and along main transit corridors, as illustrated in **Figure 2**.

Figure 2: ACT Planning Strategy focuses urban intensification in town centres, around group centres and along transport corridors.



2.1.3 TRANSPORT FOR CANBERRA

Transport for Canberra (2012) is a companion policy to the ACT Planning Strategy (2012). It seeks to integrate urban planning and transport to improve services in Canberra over the next 20 years. Its key policy directions include:

- integrating land use and transport through the Frequent Network of public transit corridors
- making walking and cycling the easiest travel options to encourage active travel, and
- strategically managing the road network and parking.

In addition, the importance of building an integrated transport network will help to improve the efficiency and effectiveness of Canberra's transport network. Integrated transport networks generate economic opportunities and jobs. They are also a catalyst for creating active and attractive urban environments.

2.1.4 CLIMATE CHANGE ACTION PLAN

AP2: A New Climate Change Strategy and Action Plan for the ACT (2012) is the ACT Government's strategic policy on climate change. AP2 guides the Territory's strategy to reduce greenhouse gas emissions by 40% of 1990 levels by 2020 and to transition the ACT to zero net emissions by 2060.

AP2 provides a pathway to achieve emission reductions through energy efficiency and increased use of renewable energy. It also identifies opportunities for improved environmental performance of buildings and infrastructure.

The projections for the ACT and region are for an increasingly hotter and drier climate with more extreme weather events. Since 2009, the ACT Government has been taking mitigation actions and assisting the community to increase its resilience.

Examples of significant mitigation measures are:

- legislating emission reduction targets for the ACT in 2010: zero by 2060; 80% by 2050; 40% by 2020 (based on 1990 levels)
- investing in renewable energy sources (solar and wind) to meet the ACT's renewable energy target of 100% by 2020 (announced in 2015)
- introducing the Energy Efficiency Improvement Scheme obliging ACT electricity retailers to help customers save energy
- adopting the Carbon Neutral ACT Government Framework with its target of zero net operational emissions by 2020, and
- investing in public transport, including light rail, and improving the cycle and pedestrian networks.

2.1.5 ACT WATER STRATEGY

The ACT Water Strategy 2014–44: Striking the Balance was endorsed by the ACT Government in July 2014. The strategy incorporates three themes and a detailed implementation plan. It will guide the management of the Territory's water supply, water resources and catchment practices over the next 30 years. It builds on the original ACT Water Strategy, Think Water, Act Water. While the emphasis on the original strategy was on water security following the 2003 bushfires and the Millennium Drought, the new strategy also focuses on improved water quality in lakes and streams and greater community participation in a number of key components, such as improving catchment health.

2.1.6 THE ACT BUSINESS DEVELOPMENT STRATEGY

The ACT Business Development Strategy, Confident & Business Ready: Building on our strengths (2015), aims to provide a strong, sustainable economy and jobs growth through an important range of strategies that build on Canberra's competitive strengths and opportunities.

Key strategies relevant to the Belconnen town centre include progressing opportunities presented by the University of Canberra to grow and develop its campus, as well as focusing on strengthening the relationships between the university and adjacent sports and health institutions. The development of a Sports Technology Cluster and Health Innovation Cluster will provide research, education and community facilities, as well as diversifying employment opportunities and supporting a 'knowledge economy'.

2.2 STATUTORY PLANNING

2.2.1 NATIONAL CAPITAL PLAN

The National Capital Plan is the strategic plan for the ACT that is managed by the National Capital Authority (NCA). It ensures Canberra and the Territory are planned and developed in accordance with their national significance.

The National Capital Plan includes 'designated' areas, which are areas considered to be of national importance and include the central national area, national institutions, diplomatic areas, Lake Burley Griffin, approach routes to the city and hills, ridges, and buffers.

The National Capital Plan also includes areas that are considered 'National Land' due to the use of these sites for Australian Government offices. Several of these sites are in the Belconnen town centre.

The NCA prepares development control plans (DCPs) to guide the future development of sites on National Land and assesses all development proposals. Where a DCP applies to land under control of the ACT Government, development proposals are assessed by the Environment and Planning Directorate and must be in accordance with the DCP.

DCPs identify a range of issues that new development must comply with, including building height, landscaping, pedestrian and vehicular access points. Building heights are currently limited to RL 613.7 metres, which equates to between five and eight storeys for a commercial office development.

2.2.2 TERRITORY PLAN

The Territory Plan is the ACT Government's key statutory planning document, providing the policy framework for the administration of land use and planning in the ACT. The purpose of the Territory Plan is to manage land use change in a manner consistent with strategic directions set by the ACT Government, Legislative Assembly and the community.

The Territory Plan provides the controls that govern development outcomes. It provides direction on the use of certain locations and requirements for specific development types.

The Belconnen town centre is mostly zoned for commercial land uses, as shown in **Map 4**, however there are also large areas of land zoned as residential and urban open space.

While some land is under NCA control, it is also zoned under the Territory Plan and must comply with aspects of the Territory Plan.

A variation to the Territory Plan is a likely outcome of the master plan when land uses or substantial changes to development controls are proposed. The variation will implement a new precinct code into the Territory Plan to update the current Belconnen Precinct Code.

2.2.3 THE BELCONNEN PRECINCT CODE

A precinct code outlines place-specific planning controls such as land use, building heights, building design elements, building setbacks and where active frontages should be located. Precinct codes generally take precedence over other codes.

Development applications for development in the centre are submitted and assessed against the Belconnen Precinct Code and other general codes of the Territory Plan, including the parking code.

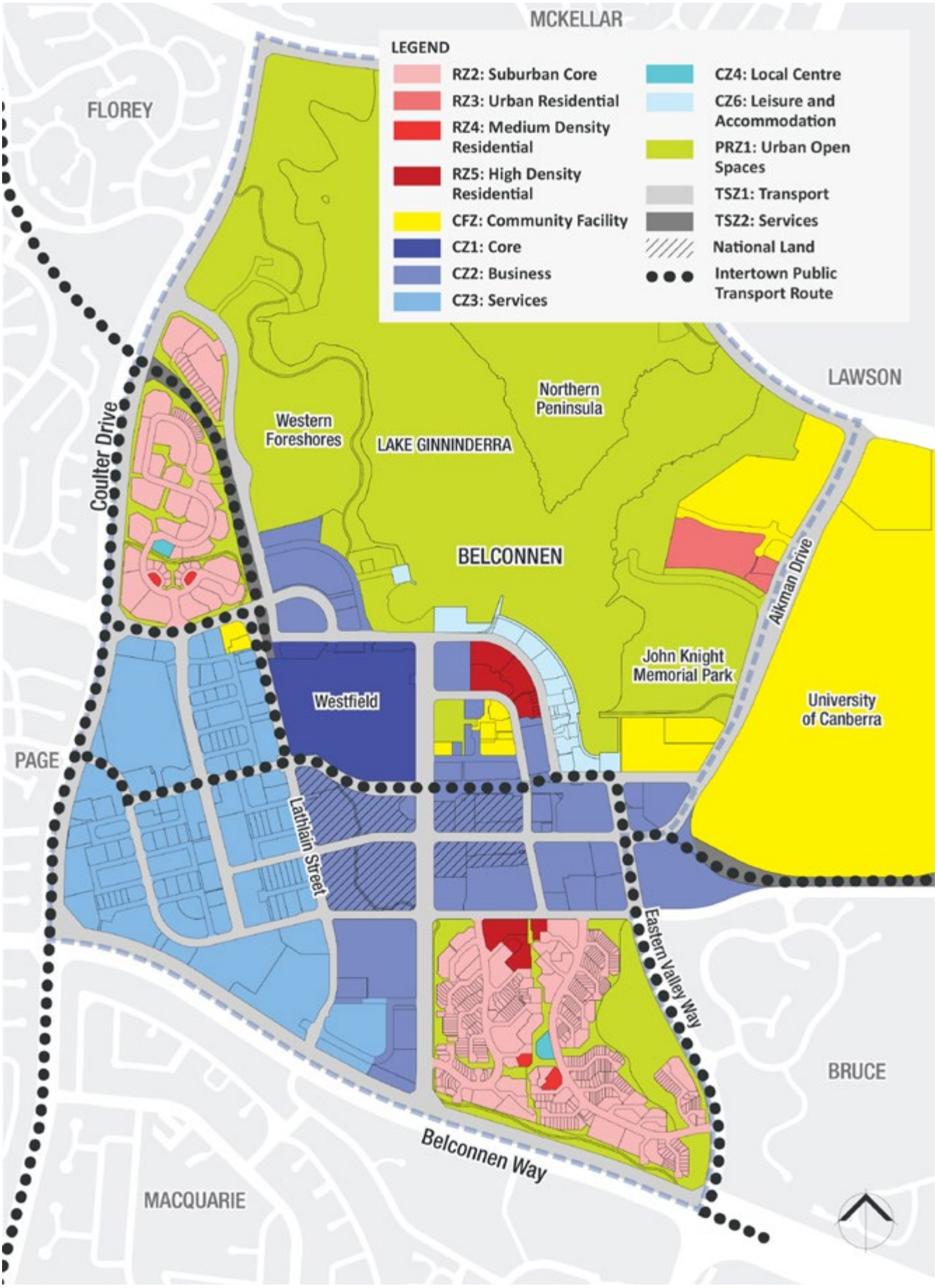
The Belconnen Precinct Code (2012) contains 13 rules and criteria for the centre, providing direction on additional uses, active frontages, heights and setbacks.

The 2001 Belconnen Town Centre Master Plan proposed good aspirational qualities for the centre, but these were not all able to be translated into the precinct code, which is reliant on quantifiable measures such as building heights or setbacks.

Recent development applications have revealed the limitations of the current precinct code, particularly in regards to building heights and the interpretation of the term 'desired future character'. Other aspects of the code, such as the extent of required active frontage, could be dispersing uses such as retail too broadly across the centre.

A review of the Belconnen Precinct Code, informed by this master plan, is expected to provide better outcomes and increased certainty to the community, developers and the government.

Map 4: Territory Plan land use zones



2.3 SPATIAL CONTEXT

The need to accommodate Canberra's growth was carefully considered during the early 1960s by the National Capital Development Commission (NCDC) through the Metropolitan Plan for Canberra.

Belconnen was one of several districts identified for development. Each district was separated by open space and linked by arterial roads, and planned with a hierarchy of commercial centres comprising town, group and local centres. Town centres serve their wider district as the main commercial focus with employment, recreation and retail services. Group centres provide shops and services for a group of surrounding suburbs and local centres typically cater for a single suburb or precinct. This structure helped to develop strong communities that had good access to services and jobs, and reinforced Canberra's relationship with its setting. This decentralised approach provides transport efficiencies and has been adopted by other cities, including Perth and Brisbane.

The Belconnen Town Centre is located towards the middle of the Belconnen District and is separated from Inner North Canberra and the Molonglo area by the bushland of the O'Connor and Bruce ridges to the east and The Pinnacle/Mt Painter to the south. The topography of the centre is varied with slopes down to Benjamin Way and Eastern Valley Way, and a ridge centred on Chandler Street. The land to the north is relatively flat providing backdrop views to One Tree Hill. The centre's perimeter arterial roads provide good connections to the city centre while avoiding separating sections of the town centre.

As a retail and employment destination, the centre is a significant attractor for people throughout Belconnen and beyond the district. The centre also provides a significant level of cultural, recreational, entertainment, educational and health services to the wider district. The ACT Planning Strategy supports the centres hierarchy approach and encourages a more compact city by focusing urban intensification in town centres, around group centres and along the major public transport corridors.

2.4 PLANNING HISTORY

The creeks, grassland, woodland and forest areas surrounding the Ginninderra Plain area, where much of Belconnen is now located, falls within the boundaries of the traditional lands of the Ngunnawal people. Evidence of Aboriginal occupation and links with the land remain, with several artefact sites located close to the town centre.

The name 'Belconnen' resulted from an early explorer asking a local Aboriginal what the name of the land was. They replied 'Belconen', translated as 'I don't know'.[1] The name was given to land granted to Captain Charles Sturt in 1837 and subsequently the district.

The first European settlers were graziers, who were granted large areas of land during the 1830s. The *Free Selection Act 1861* encouraged the settlement of remaining land and establishment of local farming communities. This land was largely divided into square mile lots, influencing the location of the tracks, some of which carry through to current road locations.

The community was centred on the Weetangera School, built in 1875, and the post office. By 1881 the area had a population of 554 (half the population of Queanbeyan at the time). The Belconnen Naval Transmitting Station Village at Lawson was established in 1938 and demolished in the 1980s.

Canberra's increasing population and office space requirements led the NCDC to expand the plan for Canberra in 1959 to include the Belconnen and Woden districts. The site for the Belconnen town centre was selected due to its central location and proximity to watercourses, arterial roads and topographical features that could 'provide interesting urban and landscape design opportunities'.[2]

Prior to development, the site was occupied by Ginninderra Station, with the station's Emu Bank homestead on the ridge close to where the Belconnen Library now stands. A remaining elm tree and plaque mark the homestead site. Creek lines either side of the ridge were piped under Benjamin Way and Eastern Valley Way.

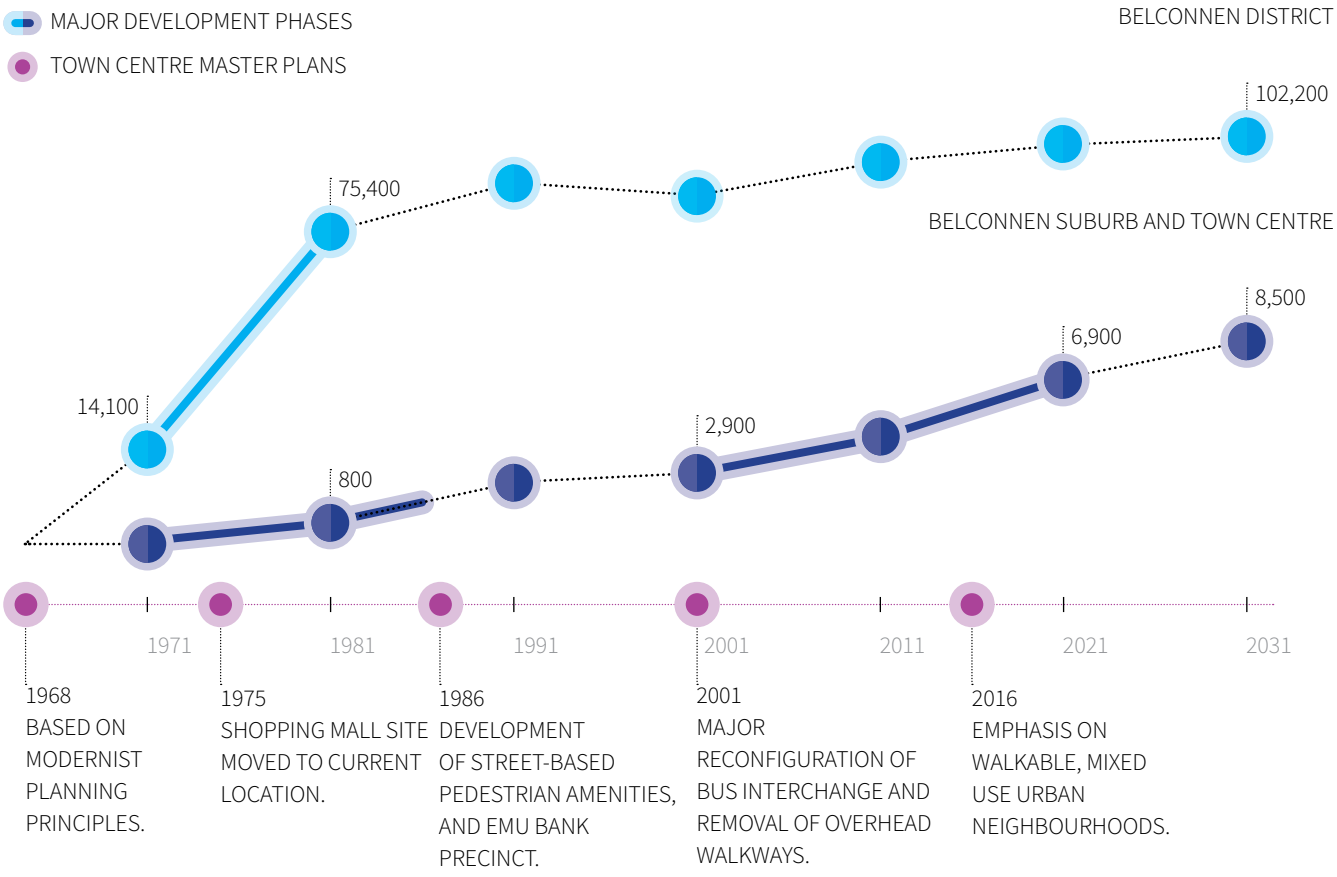


Figure 3: Belconnen population growth and town centre master plans

2.4.1 EARLY PLANNING REPORTS

The first master plan for the centre, as indicated in **Figure 4**, was developed by the NCDC and endorsed in 1968. Roger Johnson, who designed the Canberra College of Advanced Education campus (now the University of Canberra), was a key contributor to the master plan.

The 1968 master plan sought to reinforce the site's characteristics by locating taller buildings and the core area along the main Emu Bank ridge line with parking, lower buildings and open space located in the valleys. The lake was seen as an integral part of the centre and was not to become a 'lake in a park'.

The core area was based on an upper-level pedestrian spine along Chandler Street. This linked the residential area of Emu Ridge, offices, the bus interchange and retail mall to cultural and entertainment facilities at the lake edge.

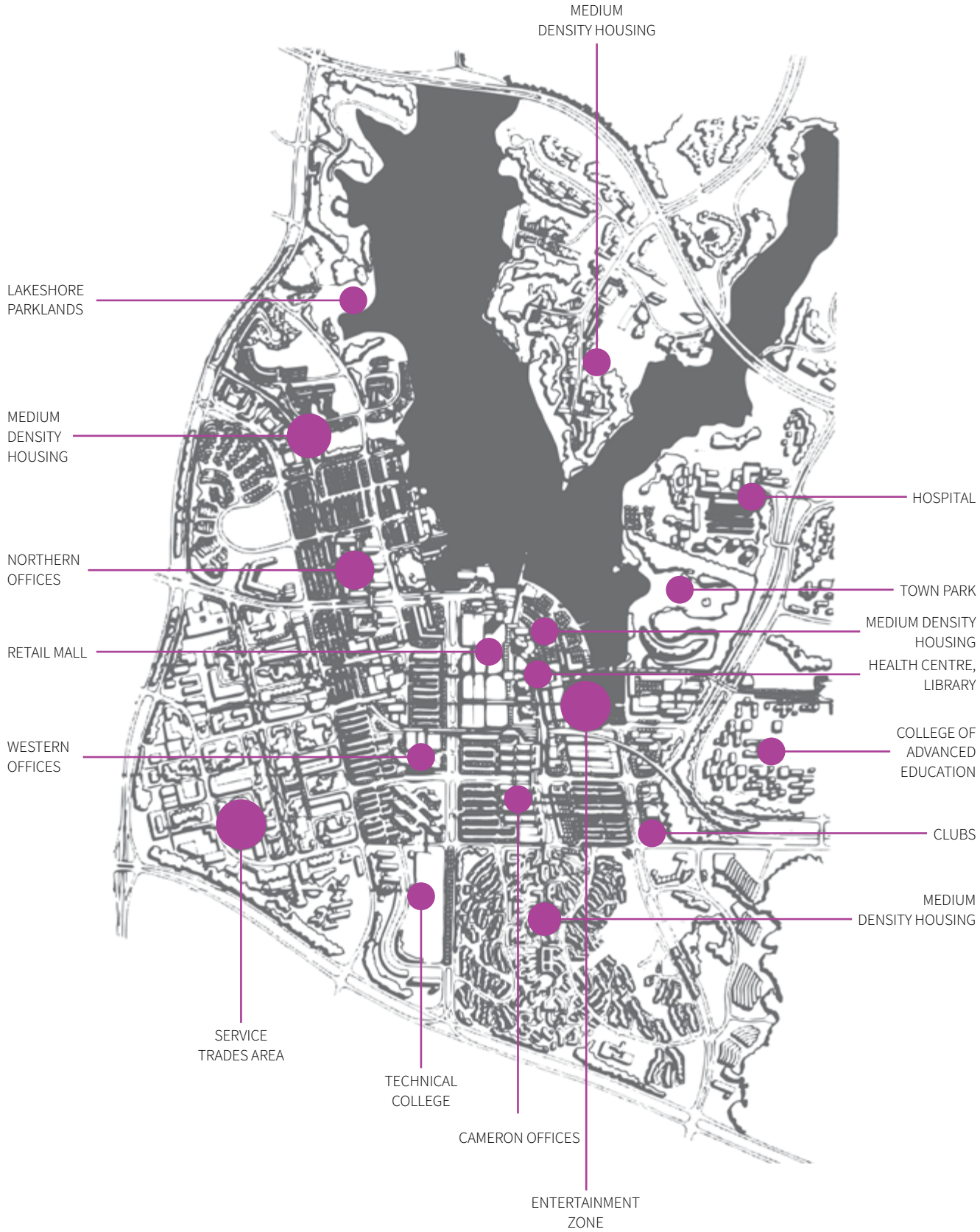
Landscaping was integral to the early plan, with a distinctive Australian character providing a unifying element in the town centre. This was strengthened through plantings of eucalypts to the perimeter of the centre and around the lake.

While the 1968 plan identified towers up to 20 storeys, a key feature was large floor area office buildings surrounded by large surface carparks. Combined with the scale of the town centre, this resulted in streets that provided little pedestrian amenity. Another key feature was the intention to develop the areas to the north and west of the lake as residential areas.

A review in 1975 recommended the mall be relocated from the Margaret Timpson Park area due to topography limitations. This enabled a larger building, but diluted the initial core area planning.

A further review in 1986 directed future development to provide better pedestrian amenity and relationships to the street. It also clarified the intention to develop the Emu Bank area, which had been halted due to concerns from a community group. This was at a time when the centre was expanding and the intended uses such as restaurants opened in the service trades area instead. A summary of development of the town centre over time is provided in **Figure 3**.

Figure 4: 1968 Belconnen Town Centre Master Plan



2.4.2 2001 BELCONNEN TOWN CENTRE MASTER PLAN

The 2001 Belconnen Town Centre Master Plan enabled significant changes to the structure of the centre and will have an enduring benefit to the town centre.

The 2001 master plan's key goal was to 'protect and strengthen the town centre's role as a diverse, vital and viable place' through better use of existing infrastructure, better links between areas of the centre and opportunities for development.

The master plan included strategies to:

- improve road connections
- provide an active frontage to the mall
- make Benjamin Way the 'Main Street'
- enliven Margaret Timpson Park
- improve the southern lake foreshore
- relocate the bus interchange
- change the character of Lathlain Street
- construct wetlands beside Eastern Valley Way
- place recreation areas on the western side of the lake
- develop the eastern side of the lake, and
- establish a location for an indoor swimming pool.

While the issue of heights and building design was considered in detail, maximum heights were generally not specified. Instead, the plan detailed principles that should be considered on individual sites when assessing heights. A key component of the 2001 master plan was the implementation schedule, which detailed the timing and funding mechanism for each initiative. Key intents of the master plan were adopted into the Territory Plan through the Town Centres Land Use Policies. This was converted into a rule and criteria format in 2008, before being converted into place-specific precinct codes in 2012.

While the plan has been successful in achieving significant change within the centre, many of the detailed requirements were not translated into enforceable rules within the precinct code.

Planning controls in the Territory Plan were evaluated as part of this master plan review, which may result in changes to the existing Belconnen Precinct Code and Map.

"KEY INTENTS OF THE MASTER PLAN WERE ADOPTED INTO THE TERRITORY PLAN..."

3. BACKGROUND AND ANALYSIS

THIS SECTION PROVIDES AN OUTLINE OF A BROAD RANGE OF ISSUES WHICH INFLUENCE THE FUTURE PLANNING OF THE BELCONNEN TOWN CENTRE. IT IS INFORMED BY A VARIETY OF SOURCES, INCLUDING COMMUNITY ENGAGEMENT, ANALYSIS UNDERTAKEN BY CONSULTANTS AND PREVIOUS MASTER PLANS. ISSUES IDENTIFIED IN THIS SECTION ARE ADDRESSED THROUGH THE PLANNING STRATEGIES DETAILED IN SECTION 5, THE MASTER PLAN.

3.1 COMMUNITY ENGAGEMENT

Consultation for the Belconnen Town Centre Master Plan included two main stages. Each stage informed the master plan as it evolved.

3.1.1 STAGE 1 – ISSUES STAGE

The first stage of community engagement was undertaken from 10 November 2014 until 30 January 2015. It identified the key issues from the community and stakeholders to inform development of the draft master plan.

Postcards outlining the project were sent to Belconnen district residents and displays were held at Belconnen and Kippax libraries, the University of Canberra, Westfield Belconnen and the Belconnen Fresh Food Markets. Meetings with key stakeholders, several 'meet the planners' sessions and a community design workshop were held. Approximately 640 people participated in discussions or provided comments on the project.

Local community groups publicised the project widely. In particular, the Belconnen Community Council undertook a survey, public display and a joint event with the Belconnen Arts Centre and Belconnen Community Service. Pedal Power also undertook a survey. Their efforts are appreciated and greatly assisted in ensuring the wider Belconnen community was able to contribute to this stage of the project.

The community provided 92 submissions and hundreds of individual comments, detailing a range of issues. The key messages included:

- the centre's public domain and amenity requires improvement, particularly street trees, children's play areas and remaining open space
- people want to cycle into the centre, but the cycle paths are not continuous and lack legibility
- parking provision requires improvement, particularly for commuters
- general support for increased residential development, with a need to clarify building heights and improve design quality
- destinations need to be enhanced, particularly at Emu Bank, to take better advantage of its location as a quality dining precinct, and
- the usability of Margaret Timpson Park needs to improve.

Further information on feedback from the engagement can be found in the Stage 1 community engagement report available at http://haveyoursay.planning.act.gov.au. Where appropriate, key messages and relevant background information has informed the development of this master plan.

3.1.2 STAGE 2 – DRAFT MASTER PLAN

The second stage of community engagement sought feedback on the initiatives suggested in the draft master plan. Postcards were sent to all Belconnen district residents and businesses in the centre notifying the community engagement period. Letters were also sent to the lessees of commercial blocks in the centre.

The engagement ran for seven weeks during October and November 2015, and included poster displays at the Belconnen Town Centre Library and Westfield Belconnen. Two 'meet the planners' sessions and numerous meetings with the community and other stakeholders were held.

Comments provided on the draft master plan were generally positive with 38 emailed submissions and 117 responses to either the online survey or through written feedback forms.

Key messages included:

- general support for the overall draft master plan and with how the centre is developing
- strong support for creating a more active destination precinct at Emu Bank; however there was some concern that parking needs to be adequately addressed

- strong support for the suggested redevelopment of the Territory-owned sites fronting Lathlain Street; however there were concerns with the height of 18 storeys
- strong support for the proposed cycle network for the centre, with suggestions to improve the network design, and
- a wide range of opinion on maximum building heights; however there was support to provide incentives to ensure better outcomes.

Further information on community feedback from the engagement can be found in the Community Engagement Report — Stage 2 available at http://haveyoursay.planning.act.gov.au. Where appropriate, these key messages informed the development of this master plan.

3.1.3 FURTHER ENGAGEMENT

Community engagement will also be undertaken on a variation to the Territory Plan, including a precinct code, through a separate consultation process.

3.2 CHARACTER AND HERITAGE

Following the adoption of the 1968 master plan, development began in 1970 with construction of the Cameron Offices. The NCDC's original intentions for the site were five 15-storey buildings; however the architect, John Andrews, provided an alternative solution of nine 4-storey wings, which were more responsive to the site.

The Cameron Offices were innovative with column free floor space, floor to ceiling windows and a cooling system that used lake water. The system's pump station remains on Emu Bank. Themed courtyards provided an attractive outlook in what was a bare town centre.

While compromised by the demolition of six wings in 2007, the Cameron Offices is one of only ten Australian buildings listed on the International Union of Architects' World Register of Significant Twentieth Century Architecture. It is also listed on the Commonwealth Heritage list.

The use of off-form concrete in the Cameron Offices set a precedent for the use of the material in the centre. Most major buildings constructed in following years utilised concrete, which provided a distinct, unifying character to the centre. Concrete has been used in recent construction, such as the *Linq* apartments and the Belconnen Community Health Centre, reflecting the architectural style and character of earlier buildings.

The centre's large area, topography, wide roads and planning, which segregated uses, has established areas of distinct character, including:

- the service trades area to the west of Lathlain Street
- the mid-rise retail and office core centred on Benjamin Way
- the 'municipal' area of Margaret Timpson Park
- the medium-density residential areas of Emu Ridge and Totterdell Streets.
- the lake and surrounds
- the lakeside strip along Emu Bank, and
- the emerging high-density residential area of College and Chandler Streets.

The heritage significance of several sites within the centre was previously considered; however, John Knight Memorial Park is the only place in the suburb of Belconnen listed on the ACT Heritage Register.

3.2.1 POTENTIAL NEW HERITAGE PLACES OR OBJECTS

A heritage assessment of buildings, places, objects and artwork was undertaken to assess the potential for additional items of heritage significance within the centre.

The Belconnen Town Centre Library and Tumbling Cubes at Margaret Timpson Park were considered to have sufficient qualities to meet the assessment requirements of the ACT Heritage Act. While the English Elm is a heritage item, being an individual tree it can only be listed on the ACT Tree Register.

These places and objects have not been nominated to the ACT Heritage Register and require further assessment to determine if they are of heritage value. It is recommended these items undergo further investigation for heritage significance and be nominated to the ACT heritage and tree registers.

3.2.2 PLACES OF ABORIGINAL HERITAGE SIGNIFICANCE

A preliminary Aboriginal heritage assessment was undertaken to identify locations in the centre that may be significant. While there are no recorded Aboriginal sites in the centre area, there are sites in the surrounding area including Bruce.

Three areas have been identified as being relatively undisturbed by construction activity and have moderate potential for archaeological deposits to occur. These areas are in public open space, close to the lake and are unlikely to be developed.

It is recommended that if any ground-breaking or development work is proposed for these areas, an archaeological survey and heritage assessment be undertaken to identify the need for any further heritage investigation of these areas.

3.3 DEMOGRAPHICS

3.3.1 POPULATION

The 1968 Belconnen Town Centre Master Plan indicates the district of Belconnen was planned to support a community of 120,000 people with 10,700 residents living in the centre. In June 2015 the estimated population of the Belconnen district was 96,600 with 6000 people living in the centre.

Population growth in Belconnen town centre is currently much higher than in the wider Belconnen district. Most growth in the district is concentrated within the centre.

The centre was also intended to be an important employment hub for Canberra, supporting 20,000 employees. In 2015 an estimated 13,550 people worked in the centre.

As summarised in **Figure 5**, Canberra's population is estimated to grow from 390,706 in 2015 to a projected population of 493,500 by 2031. The centre is projected to grow to 8450[3] during the same period. This growth will require additional retailing, housing and employment locations. The 2012 ACT Planning Strategy provides clear strategies to accommodate this growth, reduce urban sprawl and increase sustainability. A key outcome is to focus urban intensification in town centres.

The population of the Belconnen district is estimated to grow to 114,000 by 2031[3], including the future development of West Belconnen.

The centre's age profile is skewed towards 20–34 year olds, with 50% of the population within this age bracket compared to 25% for the rest of the ACT. However, Belconnen has a lower proportion of people under 20, with 14% of the population within this age group compared a Canberra average of 25%.[4]

It is estimated around 12% of apartments[3] within the centre core house children; however, neither the apartment complexes nor the centre core provide play

Figure 5: Snapshot of Belconnen town centre

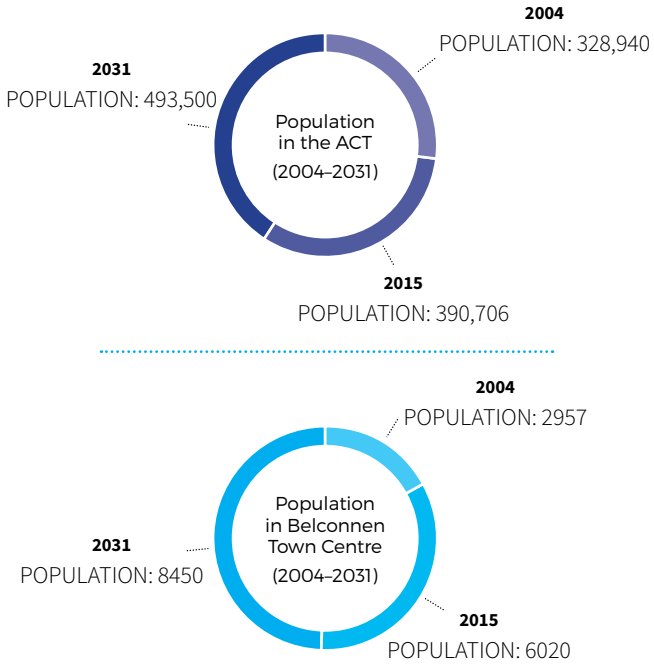


Figure 6: Median age

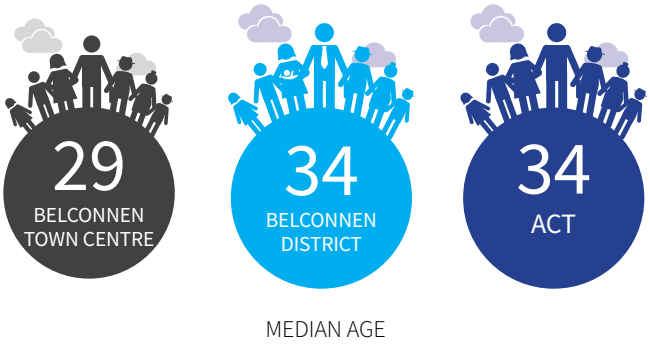


Figure 7: Household composition and dwellings

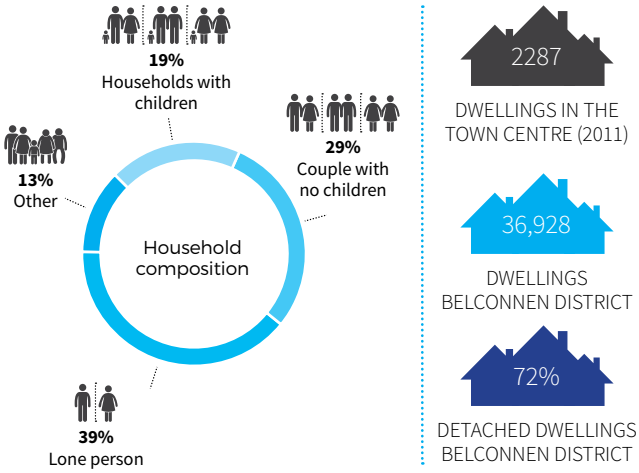


Figure 8: Employment in Belconnen town centre (2015)

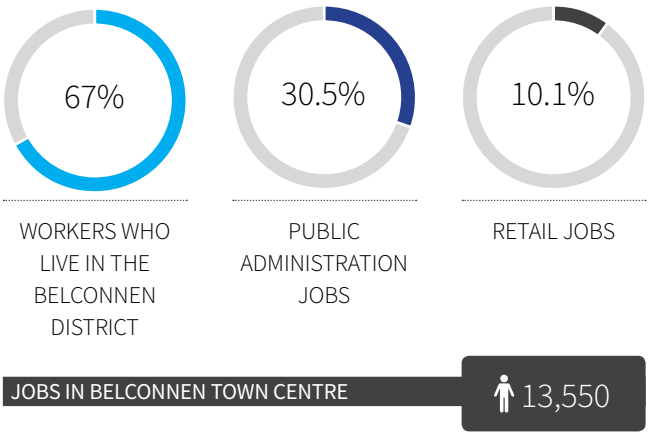


Figure 9: Mode of transport used by Belconnen district residents to get to work

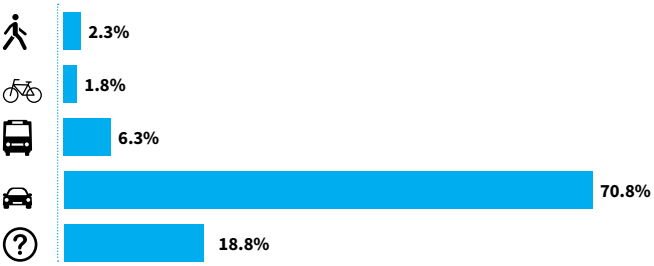


Figure 10: Mode of transport used by workers to Belconnen town centre



"...ADDITIONAL EMPLOYMENT LIES IN STRENGTHENING BELCONNEN'S EXISTING ADVANTAGES."

spaces or facilities specifically for children. A large number of children visit the centre when families go shopping or when visiting people who live there (**Figure 7**).

Around 11% of the population in both the Belconnen district and centre are aged over 65[4], and this proportion is increasing. The centre should be easy to move around and feel safe for people of all ages.

Another group requiring consideration is young people. Young people need to have space that is safe and that meets their needs.

3.3.2 EMPLOYMENT

The centre is an important employment location. In 2015, the Belconnen town centre employed an estimated 13,550[3] people, around 6.1% of the ACT's total workforce of 227,300. The main employers are retail and the Australian Government, particularly the Department of Immigration and Border Protection (3600 employees), and the Australian Bureau of Statistics (ABS) (1468 employees).[5]

Providing employment within the town centres was a key early planning principle. This employment helps support local businesses, decentralises traffic congestion across Canberra and improves property values. As indicated in **Figure 8**, a large number of people who work in the centre also live in the Belconnen District.

Canberra has experienced an economic downturn during 2014 and 2015, largely attributed to uncertainty caused by the reductions in Australian Government employment. This resulted in a high office vacancy rate, low retail growth, and stagnating wages. Canberra's unemployment rate was predicted to grow from 3.6% in 2014 to 6.7% in 2017.[13] However, while unemployment grew, it fell back to 3.6% in June 2016, which was the lowest in Australia.

The threat of the Department of Immigration and Border Protection relocating out of the centre was a significant issue during 2015. Employment by the department equates to almost 25% of jobs in the centre and any movement of jobs away from the centre will have a significant impact on the local economy. A decision was made to retain the Department in the centre, however it is understood there may be long-term plans to relocate elsewhere. This highlights the need for Belconnen to diversify its employment base and reduce the reliance on the Australian Government to provide jobs.

Part of the opportunity for additional employment lies in strengthening Belconnen's existing advantages. The proximity of the centre to the University of Canberra, Calvary Hospital and AIS, along with the new University of Canberra Public Hospital, provides Belconnen with strong potential for employment growth.

Rather than developing these facilities in isolation, they should be integrated, enabling relationships and new jobs to grow. Integration of planning for the centre with the university will ensure these benefits are realised; that services, transport and amenities are effectively provided; and the area becomes a competitive and attractive location for investment. The University of Canberra has recognised these benefits and is actively working towards integration with the centre.

The economic and employment opportunities of this area have been recognised by the ACT Government's Business Development Strategy, released in June 2015. This strategy promotes the development of a sports technology cluster based on the AIS, Australian Sports Commission and University of Canberra, as well as a health innovation cluster recognising the relationship between the health faculty at the university, Calvary Hospital and the new University of Canberra Public Hospital.

There is some community concern that the sale of Territory-owned sites within the centre may compromise the ability to provide for future employment. The area is considered to have sufficient capacity for additional employment purposes well into the future.

If the Australian Government does relocate jobs out of Belconnen, there is likely to be pressure to enable the residential development of vacant office buildings. The retention of these sites for employment is fundamental to keeping the diversity of uses in the centre.

3.4 LAND USE

3.4.1 LAND USE ZONES

Land uses were generally segregated in the centre's initial planning, resulting in distinct areas that lacked diversity. This has changed over time, with most areas developing a broader range of uses and increased activity. As indicated in **Map 4**, allowable uses are determined by the Territory Plan's land use zones, which specify the type of development that can occur. While allowable uses are listed for each zone, these are often further limited by individual leases.

The Core Zone (CZ1) requires commercial uses that contribute to a diverse and active character. This area is largely taken up by Westfield Belconnen.

The Business Zone (CZ2) is mainly office areas; however this is expanding to include a mix of uses including clubs and high-density residential. The Services Zone (CZ3) is generally west of Lathlain Street and is intended for lower rent commercial uses. Residential uses are allowed, despite possible conflict with other uses.

There are other zones supporting specific uses, including Leisure and Accommodation Zone (CZ6) at Emu Bank, Community Facility Zones (CFZ) to support uses such as schools and churches; and two CZ4 areas intended for local shops.

The centre has three large areas of medium-density housing developed during the 1980s and 1990s, mainly zoned Suburban Core Zone (RZ2). The planning and density of these areas are now considered more appropriate to a suburban area than a town centre. Future redevelopment of these areas to a more appropriate density will be difficult due to restrictive block and road layouts and separate leases.

Residential use is permitted in all commercial land use zones in the centre.

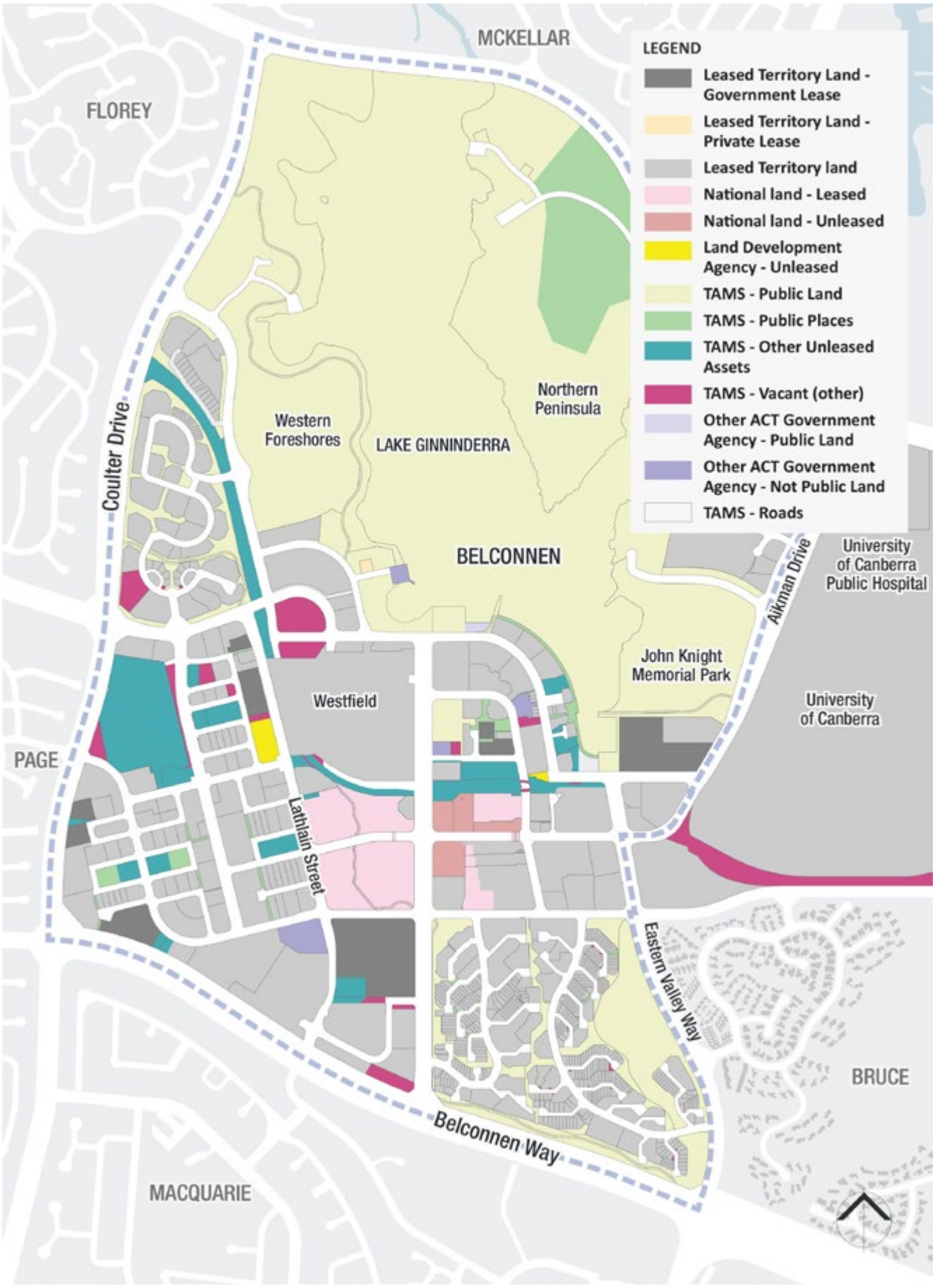
Most sites in the centre are now privately leased, as illustrated on **Map 5**. While there are comparatively few vacant sites or carparks still owned by the ACT Government, there are several sites including the Belconnen Bus Depot and the Winchester Centre that may be suitable for distant future redevelopment. Any redevelopment of these sites would be dependent on any need of the current facilities to relocate or reduce their size in the centre, which is unlikely for some time.

3.4.2 RESIDENTIAL DEVELOPMENT

With an estimated 6020 people living in the centre in 2015 and an estimated population of 8450 in 2031, the centre will accommodate growth of around 2430 additional people by 2031.[3] A high proportion of single and group households choose to live in the centre, reflecting its diverse housing options and proximity to employment and the University of Canberra.

The centre has sufficient capacity to house additional residents without the need to increase the development potential of the majority of the service trades area, the residential areas at Totterdell Street and Emu Ridge, or public open space near the lake.

Map 5: Land custodianship in the centre



Comments were received during community consultation indicating the need to provide more medium-density housing rather than apartments in the centre. While there is demand for this housing type, it already forms 30% of the developed area of the centre.

Taller residential buildings assist to reduce urban sprawl and have the advantage of being close to services, employment and public transport. The town centres and city centre are considered appropriate locations to provide the housing choice offered by taller buildings. These developments were initially thought to mainly attract investors and students, but are attracting a wide variety of people including those wanting to downsize but stay in the area. Discussions with residents indicate that strong communities are also forming within taller buildings.

3.4.3 COMMERCIAL AND RETAIL

Belconnen has an estimated 221,000 m^2 of retail and services floor area and an estimated 184,000 m^2 of commercial office space. The biggest source of retail floor space is Westfield Belconnen with 290 retailers and 94,700 m^2 floor area.

Westfield Belconnen was Australia's biggest shopping centre when it opened as the Belconnen Mall in 1978. It underwent significant expansion in 2012, providing a bus waiting lounge and active frontage to Lathlain Street.

The developing high-density residential precinct between Benjamin Way and Eastern Valley Way will possibly accommodate an additional 5500 residents (more than the current population in the suburbs of Macquarie and Cook), which may support additional retail uses in this area, such as a small supermarket.

Canberra experienced its highest ever office vacancy rate in January 2015, calculated at 15.4%.[6] The ACT's retail sector was also Australia's weakest performing in 2014, with turnover growth of 0.1% compared to NSW's growth of 6.7%.[7]

Many small businesses have found the recent period of economic down turn difficult. The threatened relocation of the Department of Immigration and Border Prtotection out of the centre would have further impact the viability of these businesses. Other concerns with commercial and retail activity in the centre include parking capacity and the long-term development plans of the University of Canberra. Recent changes will enable an extensive range of uses to be developed at the university, which may compete with existing centre businesses.

However, the ABS indicates the ACT economy grew by 3.1% during the June 2015 quarter, which was the strongest in the country.[14] This indicates the ACT economy has become more resilient and diversified.

The centre is in a good position to become the preferred location for shopping and business in Canberra.

3.4.4 COMMUNITY FACILITIES

The centre supports a range of community facilities for the wider district including:

- five churches
- five childcare centres
- the Belconnen Senior Citizens Club
- the Belconnen Labor Club
- medical facilities, including the new Belconnen Community Health Centre
- Lake Ginninderra College
- Lake Ginninderra Sea Scouts
- Belconnen Police Station
- Kangara Waters aged care facility and residences
- the Belconnen Arts Centre
- the Belconnen Library, and
- the Canberra International Sports and Aquatic Centre (CISAC).

The location of community facilities is indicated in **Map 6**. While Belconnen has a broad range of community facilities there is a comparatively low amount of land zoned as Community Facility Zone (CFZ).
An increase in the residential population of the centre may increase the demand for community facilities, however there are currently no plans for additional community facilities in the centre.

The Belconnen Community Service and Belconnen Library are both seeking relocation to a new site fronting onto Lathlain Street, due to issues with convenient access and running costs. These facilities provide services for the wider Belconnen district. If this relocation proceeds, close consideration will be required to ensure the new space provided for these uses is suitable for the long term growth of the Belconnen district, not just growth within the town centre.

SPORT AND RECREATION FACILITIES

The centre is fortunate to be close to a range of quality sporting and recreation facilities. Lake Ginninderra provides an attractive background to many of these

Map 6: Community, sport and recreation facilities



uses, including the shared pedestrian and cycle path, play areas, off-lead dog park, and swimming and sailing opportunities.

Other facilities such as CISAC, ten pin bowling, multi-use courts at the community centre and Lake Ginninderra College, cinemas, facilities at the Labor Club, the Canberra City Gymnastics Club and the basketball centre have significantly improved the range of facilities in the centre. The Belconnen Skate Park is rated by skating organisations as one of Australia's best.

While not in the centre, the Jamison enclosed oval, tennis courts and Big Splash Water Park are all within walking distance. Some AIS and the University of Canberra facilities are also available to the public.

Apart from the proposed expansion of the basketball centre, there are currently no plans for additional sports facilities in the centre.

BELCONNEN COMMUNITY SERVICE

Belconnen Community Service (BCS) provides a large number of services including youth, disability, and children's support and recreation programs. BCS also operates the Belconnen Community Centre, providing space for theatre events, community classes and child care.

BCS has a limited budget and is seeking ways to reduce operating costs, which may involve relocation to the Lathlain Street redevelopment area.

BELCONNEN ARTS CENTRE

The Belconnen Arts Centre opened in 2009 and has helped change the character of Belconnen through an increased opportunity for access to art, cultural and community activities and workshops. The facility offers a range of live performance and visual art exhibitions, events, classes and workshops, adding to the diversity and activation of this area during the day and night.

Expansion of the arts centre was approved in 2015, with funding for the construction of this second stage being sought at the time of preparation of this master plan. The second stage of the centre is designed to enable it to become a full multi-arts facility with a multipurpose auditorium. High quality external spaces and facilities are also planned to extend the range of community and cultural activities. Critical to the success of this project will be a landscape design that integrates the extended building with the surrounding site, the lake foreshore and the broader town centre and completes the missing link in the Lake Ginninderra foreshore promenade.

EMERGENCY SERVICES

The emergency services group were some of the first buildings constructed in Belconnen. The group comprises the former Belconnen Police Station, remand centre, ambulance station and fire station. With the opening of the Alexander Maconochie Centre in 2009, the remand centre became redundant, as did the police station in 2012 when the new Belconnen Police Station was constructed. Construction of a new emergency services facility in Aranda to house ambulance and fire services is anticipated to be completed in 2016. The relocation of services out of Lathlain Street will enable this area to be redeveloped.

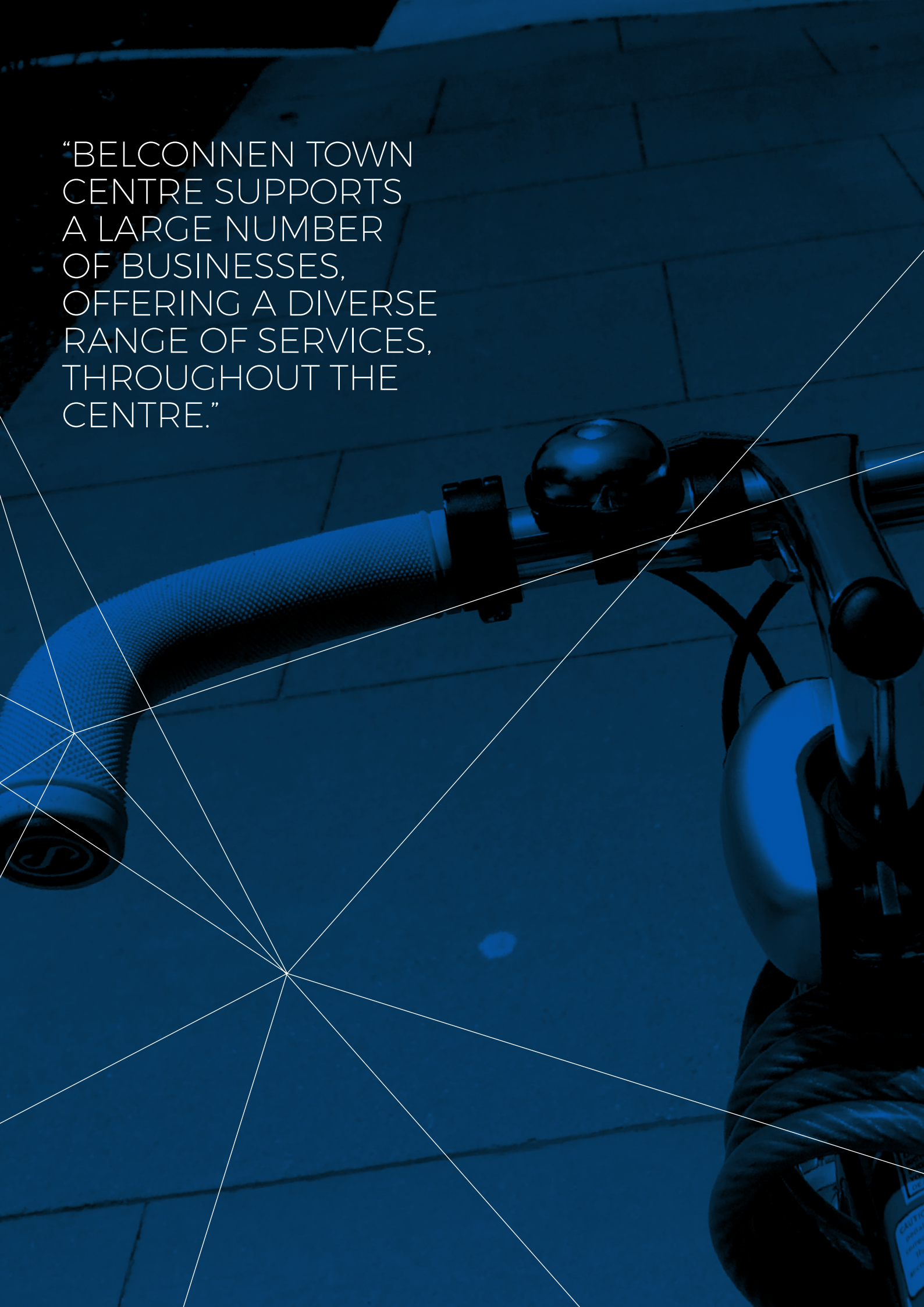
3.4.5 UNIVERSITY OF CANBERRA

The University of Canberra opened as the Canberra College of Advanced Education (CCAE) in 1970. In 2016 the University of Canberra had 17,500 students, including 4500 international students, and provided accommodation for 2400 people.

The higher education and research sector, including the university, are significant contributors to the ACT's economy, adding $2.75 billion each year and providing significant employment.[15]International students are recognised as the ACT's biggest single export earner.

The ACT Government has recognised the significant opportunity for growth at the University of Canberra by amending the *University of Canberra Act 1989*, to encourage further development of the campus and partnerships with private research-based businesses. An improved relationship between the centre and the university will provide new employment opportunities and a unified, efficient and cohesive urban environment.

The 2014 University of Canberra Urban Plan sets a clear path for future development of the campus. Future revisions of the urban plan to better align with the opportunities provided by this master plan should focus on achieving a much greater integration of the university and the centre. In particular, consideration should be given to the opportunities to locate more business and enterprise focused uses close to or within the centre, and to introducing road connections and a formal entrance to the university campus from the centre.



"BELCONNEN TOWN CENTRE SUPPORTS A LARGE NUMBER OF BUSINESSES, OFFERING A DIVERSE RANGE OF SERVICES, THROUGHOUT THE CENTRE."

Planning for the AIS, CIT and Calvary Hospital did not provide main frontages to Haydon Drive, and now require an additional local bus service instead of utilising the adjacent rapid service. Convenient access to rapid public transport services should be a key consideration of the new University of Canberra Public Hospital.

The successful redevelopment of the Childers Street area in the City has enabled the Australian National University (ANU) to effectively integrate with the city centre. A similar future integration of the University of Canberra and the centre will ensure Belconnen becomes a 'university town'.

3.4.6 CANBERRA INSTITUTE OF TECHNOLOGY (CIT)

Although outside of the core study area, the CIT Bruce campus is an important institution in the area and requires consideration. The campus is relatively large and is located away from the rapid transport route. Changing student and teaching requirements, together with increasing operation and maintenance costs, may lead the ACT Government to consider more cost-effective alternatives to the current facility over time.

These alternatives may involve relocation to the town centre core in a smaller and more efficient building close to public transport, or combining the campus with other similar community or education uses.

3.4.7 ENTERTAINMENT

Belconnen town centre has a range of bars, restaurants, cinemas, clubs and theatres. However, they are dispersed throughout the centre and lack a clear destination or 'brand'. Restaurant patrons often have little incentive to stay in the centre after a meal, with no obvious connection between activities or venues in many locations.

A large group of taverns and bars opened in Weedon Close during the 1980s. While lacking character, the grouping attracted people and the area became a popular destination. The last of these—The Pot Belly—remains a popular live music venue.

The Canberra Labor Club opened in Chandler Street in 1979 and has provided an important venue for the Belconnen community. The club was popular for concerts and its 'singles party nights' during the 1980s and 90s. Being close to the growing higher density residential area, the potential conflict between uses at the club and adjacent residential uses needs to be recognised to ensure the club can continue to provide a range of services and grow.

People from Belconnen go to places such as Manuka, Bunda Street and Kingston because they are recognised as offering choice and activity in one area. As a centre serving almost 97,000 people, Belconnen should be able to offer a similar destination that provides choice, is competitive, busy, attractive and desirable.

3.4.8 SERVICE TRADES AREA

Belconnen town centre supports a large number of businesses, offering a diverse range of services, throughout the centre. These businesses are often locally owned and provide significant employment and activity in the centre.

Many of these businesses are located in the service trades area, an area intended for lower rent uses and those with noise and odour issues. The area supports a successful group of car dealers along Josephson Street, providing a competitive destination for car buyers.

Maintaining suitable and convenient areas for these kinds of businesses is important. Development controls currently allow residential uses and permit buildings higher than two storeys. If residential development occurs, it could conflict with surrounding uses.

The service trades area is divided by Cohen Street, with the southern areas of Oatley Court and Weedon Close having greater activity and identity than the area to the north. The area to the north, dominated by the bus depot and emergency services, is less active due to limited access.

Comments from small business owners include a range of concerns that require consideration including:

- a lack of suitable short-term parking adjacent to their business; many spaces are used by office workers and car dealers or repairers
- a lack of parking enforcement, with parking at the rear of businesses preventing deliveries
- a lack of overall amenity; the area has around 180 businesses but lacks toilets, bike racks and street trees and has poor paving
- a lack of identity or 'brand' association to the area
- a lack of controls to prevent large franchised business moving in and forcing out long-term, locally-owned businesses, and
- concern about regulation and limiting aspects such as signage and outdoor seating.

3.4.9 FORESHORE PRECINCT

The Foreshore precinct has a good mix of areas and uses including the Belconnen Arts Centre, retail and commercial uses, restaurants, the skate park, Lake Ginninderra College, a bowling centre, a church, residential areas and Emu Inlet Park. The mix of activities, together with the shared path linking John Knight Memorial Park and the University of Canberra, attract a large range of people during the day and night.

As detailed earlier, the area adjacent to the lake was always intended as an entertainment precinct and is zoned Leisure and Accommodation (CZ6). The precinct code also has an allowable use of residential, an option not taken up until recently.

Community engagement revealed both a strong desire to encourage more uses that take advantage of the location, and dissatisfaction with building design and sites being dominated by parking.

The buildings are generally located close to the lake to maximise parking areas. This has resulted in limited opportunities for outdoor dining. The fast food drive-throughs are considered unattractive and a poor use of the location. However, the fast food outlets are popular and add to the area's diversity.

Given the location and mix of uses, this area has potential to be a key destination for Canberra. It should be more attractive and busy.

3.5 TRANSPORT AND MOVEMENT

The centre's transport system has a sound structure, with perimeter arterial roads and a clear central public transport spine. It generally lacks the congestion or division by arterial roads that many urban centres experience.

As indicated in **Map 7**, the reconfiguration of bus routes to service three main stops has enabled better access to public transport across the centre, and the future possibility of light rail to the town centre could further improve this.

The centre's transport system will need to support a number of large new developments in the near future.

The proposed University of Canberra Public Hospital near Aikman Drive and new apartment buildings near Eastern Valley Way may increase traffic as well as parking and public transport demand.

3.5.1 PUBLIC TRANSPORT

The 2001 Belconnen Town Centre Master Plan recommended changes to the bus operations in the centre, including removing the existing bus interchange and relocating the buses to on-street bus stops. This proposal has been realised and enabled the re-development of the original interchange and the creation of new stops on Lathlain Street and Cohen Street. These changes have led to improved pedestrian connections between bus stops, shopping areas and new mixed-use developments. They have improved street verges, making the centre a more attractive place for pedestrians.

Some bus stops in the centre may come under increasing demand in coming years, particularly the existing stops on Eastern Valley Way between Aikman Drive and Emu Bank and the Westfield bus station, which is almost at capacity.

LIGHT RAIL NETWORK

The ACT Government is currently investigating the potential for the expansion of a light rail network across Canberra. The outcomes of the investigation will inform future decision making about extensions to stage 1 of light rail (between the city centre and Gungahlin). The light rail network builds on work already undertaken on integrated land use and transport planning, and delivers on ACT Government policies, including Transport for Canberra and the ACT Planning Strategy.

Map 7: Public transport



3.5.2 ACTIVE TRAVEL

The Active Travel Framework, prepared in 2015 as part of the ACT Government's integrated transport planning strategy, recognises walking and cycling as essential parts of Canberra's transport system and outlines initiatives to increase participation. Active travel provides a range of benefits including health, economic, environmental and social benefits. The Active Travel Framework aims to increase the number of people walking and cycling to work in Canberra to 7% by 2016. It includes objectives which are directly relevant to this master plan:

- Work within a clear hierarchy of planning:
  - > Integrate land use and transport planning and relevant funding decisions.
  - > Identify main walking and cycling routes that are consistent with ACT planning and transport strategies.
- Design networks of continuous, convenient connections:
  - > Enable short walking, cycling and riding trips for transport purposes.
  - > Improve access to and within major centres of employment, education, retail and community facilities, focusing on '20-minute catchments' (the equivalent of walking 2 kilometres or cycling 5 kilometres).
- Facilitate active, vibrant communities:
  - > Develop places with a range of activities such as cafes, shops and playgrounds that attract people to visit, play and stay and are connected to surrounding neighbourhoods and paths.

During consultation to inform the Minister for Planning and Land Management's Statement of Planning Intent (2015), the community and stakeholders emphasised the need to focus on pedestrians first, cyclists second, public transport third then private vehicles when planning, designing and managing public spaces and development.

"ACTIVE TRAVEL PROVIDES A RANGE OF BENEFITS..."

WALKING

While the 2011 Census indicates 14.2% of people living in the town centre used walking as the only method to get to work, only 1.8% of Weetangera residents and 3.1% of Page residents walked to work.

Analysis and comments received during consultation revealed a number of factors which may influence people's choice to walk:

- Several footpaths are perceived as unsafe; for example, underpasses without lighting or areas which are secluded with no passive surveillance.
- Key pedestrian routes are often unclear, with a variety of surfaces and the quickest routes not obvious.
- Footpaths are lacking in some places or the quality is poor, with changing materials, or are obstructed by signage or lighting.
- There is a lack of clear directional signage for pedestrians.
- Footpaths should be attractive and easy to use.

Map 8 indicates the existing pedestrian network. Given one in five Australians has a disability, the centre should be accessible and usable by everyone.

CYCLING

Canberra has the nation's highest cycle usage rate. However, as indicated on **Figure 9**, the 2011 Census indicates only 1.8% of employed people living in the Belconnen district chose to ride to work, despite being close to employment.

Cycling infrastructure improvements attracted the highest number of consultation comments. This was reinforced by the survey of cycling issues in the town centre provided by Pedal Power, which revealed 73% of respondents considered cycling to the centre was easy, but only 29% considered cycling within the centre easy.

Analysis of the area's cycle infrastructure, as indicated in **Map 9**, reveals some key issues:

- A lack of cycle infrastructure on Belconnen Way, west of Coulter Drive means cyclists must use a busy car lane or the footpath and risk cars reversing out of driveways.
- Some on-road cycle lanes terminate without an off-road alternative.

Map 8: Existing Pedestrian Network



- A lack of clear connections linking the centre to the University of Canberra, Calvary Hospital, CIT, the AIS and Radford College.
- A need for better links to the centre from the north-west, including Florey and Evatt.
- A lack of suitable cycle lanes on Lathlain Street that could link Westfield Belconnen with the Belconnen Fresh Food Markets and Jamison.
- A possible shortage of secure bicycle parking at key destinations.
- A 'bike hub' that provides bike parking, change facilities and repair services would be valued.
- Some shared paths are too narrow to accommodate the demand, particularly the shared path on the Ginninderra Drive Bridge and some sections around Lake Ginninderra. Several people suggested separating cyclists from pedestrians on the lake shared path.
- A lack of cycle connections within the centre. Cycle lanes and shared paths terminate at the edge of the centre, requiring cyclists to use footpaths or ride on the road.
- Paths within the centre are often narrow and obstructed with street lights, bollards or traffic signals, making it difficult for cyclists to travel on.

Safe, connected and legible cycle infrastructure that links to key destinations is important. The centre is ideally suited to cycling, with wide roads, dispersed destinations, good topography and a population who enjoy cycling.

Cycling has a range of benefits including improved health, reduced traffic congestion and reduced pollution. A study by the Heart Foundation[8] has highlighted the economic benefits of cycling, with each car parking space generating $6 per hour for local businesses, compared to $31 per hour for bicycle parking.

The centre has tremendous potential to improve the rate of cycling, increasing health and economic benefits and improving sustainability and social equity.

3.5.3 ROAD NETWORK AND TRAFFIC

Traffic movement into and around the centre has been aided by the extension of a number of roads identified in the 2001 Belconnen Town Centre Master Plan. However, cars searching for spaces to park still create congestion on several streets, including Lathlain Street at peak times.

The growth of the centre has created additional strain on many of its entry roads. Luxton Street suffers some peak hour congestion between Josephson Street and Coulter Drive, as does Joynton Smith Drive between Morrell Close and Beissel Street. The duplication of Aikman Drive will reduce its current peak hour congestion and enable it to accommodate additional traffic from the new suburb of Lawson and the new University of Canberra Public Hospital.

Some arterial roads around the edge of the centre are also congested in peak periods. This includes stretches of Ginninderra Drive and Belconnen Way between Coulter Drive and Lathlain Street. This slows traffic entering the centre and traffic to other destinations.

Lathlain Street between Belconnen Way and Market Street suffers high levels of congestion during the afternoon peak period and weekend mornings. Suggestions were made during consultation to remove on-street parking along other areas of Lathlain Street to improve traffic flow and speed. This parking is valuable for local businesses and helps make the centre a lower speed and safer area.

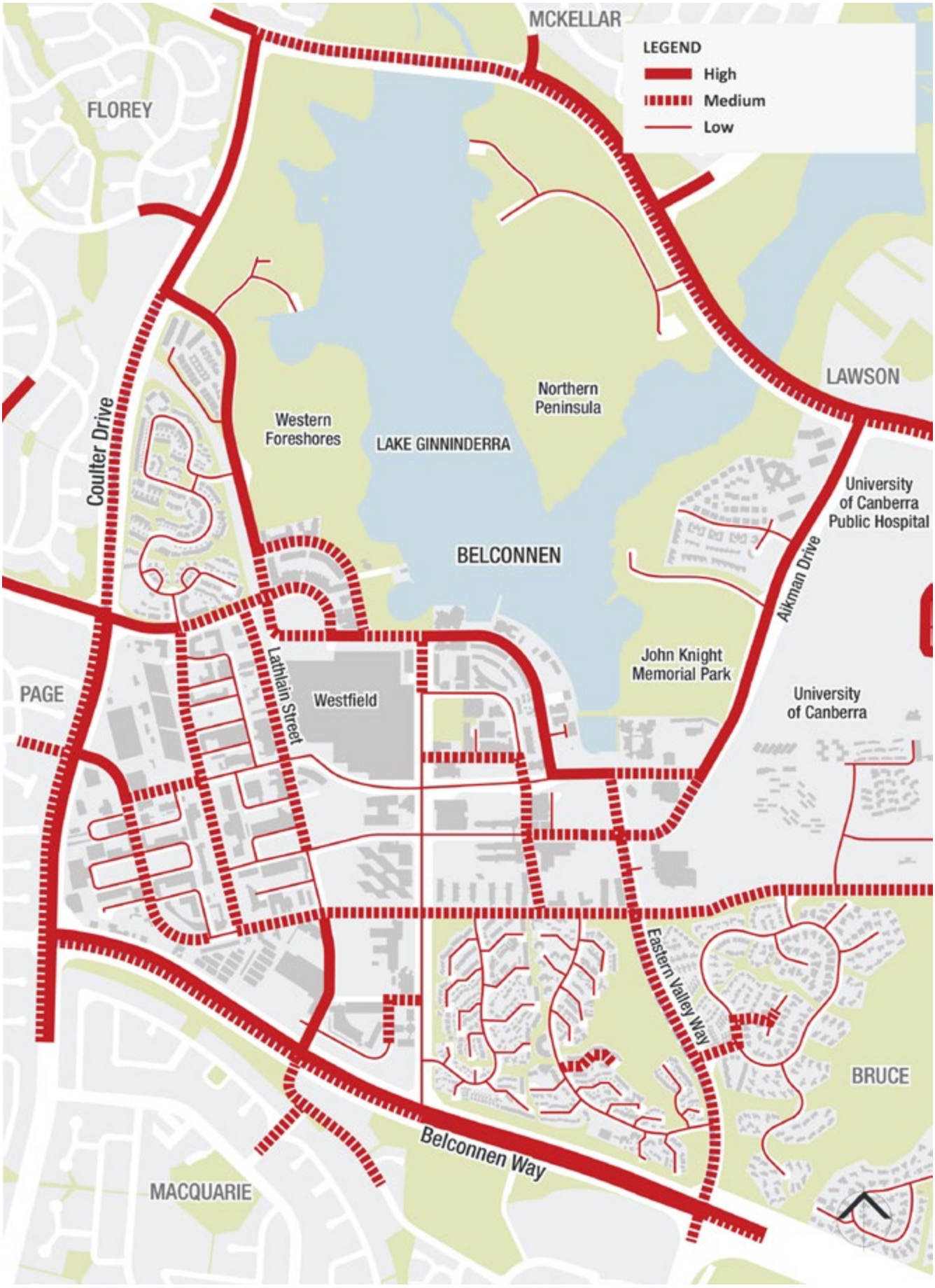
Map 10 indicates the existing traffic volumes on the centre road network during the morning peak hour.

The volume and speed of traffic on Emu Bank presents some safety concerns. While the extension of Aikman Drive to meet Eastern Valley Way has reduced the amount of traffic, many drivers still use Emu Bank to access Westfield Belconnen from Aikman Drive. Consideration could be given to providing a continuous link for traffic from Emu Bank to Cohen Street. This would allow private vehicles to use the community bus station roadway, which is currently limited to buses and not gazetted as a road. This would enable a direct link to the Westfield carparks and increase surveillance of the bus station.

Map 9: Existing cycle network



Map 10: Existing peak traffic volume during morning peak hour



3.5.4 PARKING

Background analysis and community engagement on parking in the centre found:

- Small businesses in the service trades area are reliant on short-stay spaces near their businesses for customer parking. These are often used for all day parking by commuters or by other businesses.
- There is a perception there is insufficient parking provided to meet peak demands.
- Developments approved without providing on-site parking are now reliant on adjacent carparks for their long-term needs.

The 2001 Belconnen Town Centre Master Plan considered parking was adequate, with supply considered to exceed 10,000 spaces and peak demand at 6000 spaces. The current supply is estimated to be around 12,100 spaces and peak demand at 10,400 spaces. The location of current carparks is indicated on **Map 11**.

A survey and analysis of parking was undertaken throughout the day and evening on the peak days of Thursday and Saturday, as outlined in **Table 1**.
Key findings:

- Parking at Westfield Belconnen is often nearing capacity (98%) at peak times on Saturdays.
- The undersupply of all day car spaces for offices in the central area is encouraging commuters to use short-stay spaces in the service trades area or park in other areas.

A 90% utilisation rate is considered to be the capacity of a carpark. Although the total peak demand of the centre is 86%, there are several large public carparks where the demand for spaces is at 95% or greater.

The Parking and Vehicular Access General Code includes two key provisions for the Belconnen town centre that require review:

- Office developments in the CZ2 zone in the city centre are required to provide two spaces per 100 m^2 GFA, whereas Belconnen is only required to provide one space per 100 m^2 GFA.
- There is no requirement to provide parking for residential uses in the town centres or the city centre.

Other aspects that require consideration when determining parking requirements:

- Transport for Canberra aims to increase people walking, cycling or using buses to get to work from 15.4% in 2006 to 30% in 2026.
- The ACT Government's Parking Action Plan (2015) provides a policy for the provision of parking to ensure it is more effectively and fairly provided.
- The ACT Government is considering implementing 'smart parking'. Smart parking provides real-time information to drivers on parking availability via a smart phone app and LED signage.
- Apartment buildings provide carparks for each dwelling, however not every dwelling requires the car space. Currently the public are unable to use these vacant spaces.
- The possible relocation or expansion of Australian Government departments will have a significant impact on parking. An expansion will require additional parking to meet the demands of 1500 additional employees.
- 'Park and Ride' car parks are provided at Walder Street and adjacent to the community bus station, allowing free all-day parking for people catching buses to other locations. These spaces would be better used to meet the parking demand by people working or shopping in the centre. A study is required to assess if the alternative 'Park and Ride' facility at College Street is sufficient or if additional spaces are required at a more suitable location.
- The lack of suitable short-stay parking for motor homes and people towing caravans was raised during consultation on the draft master plan. Providing convenient spaces for these—and tourist buses—will help attract additional business to the centre.

"...RELOCATION OR EXPANSION OF AUSTRALIAN GOVERNMENT DEPARTMENTS WILL HAVE A SIGNIFICANT IMPACT ON PARKING."

Map 11: Existing parking areas

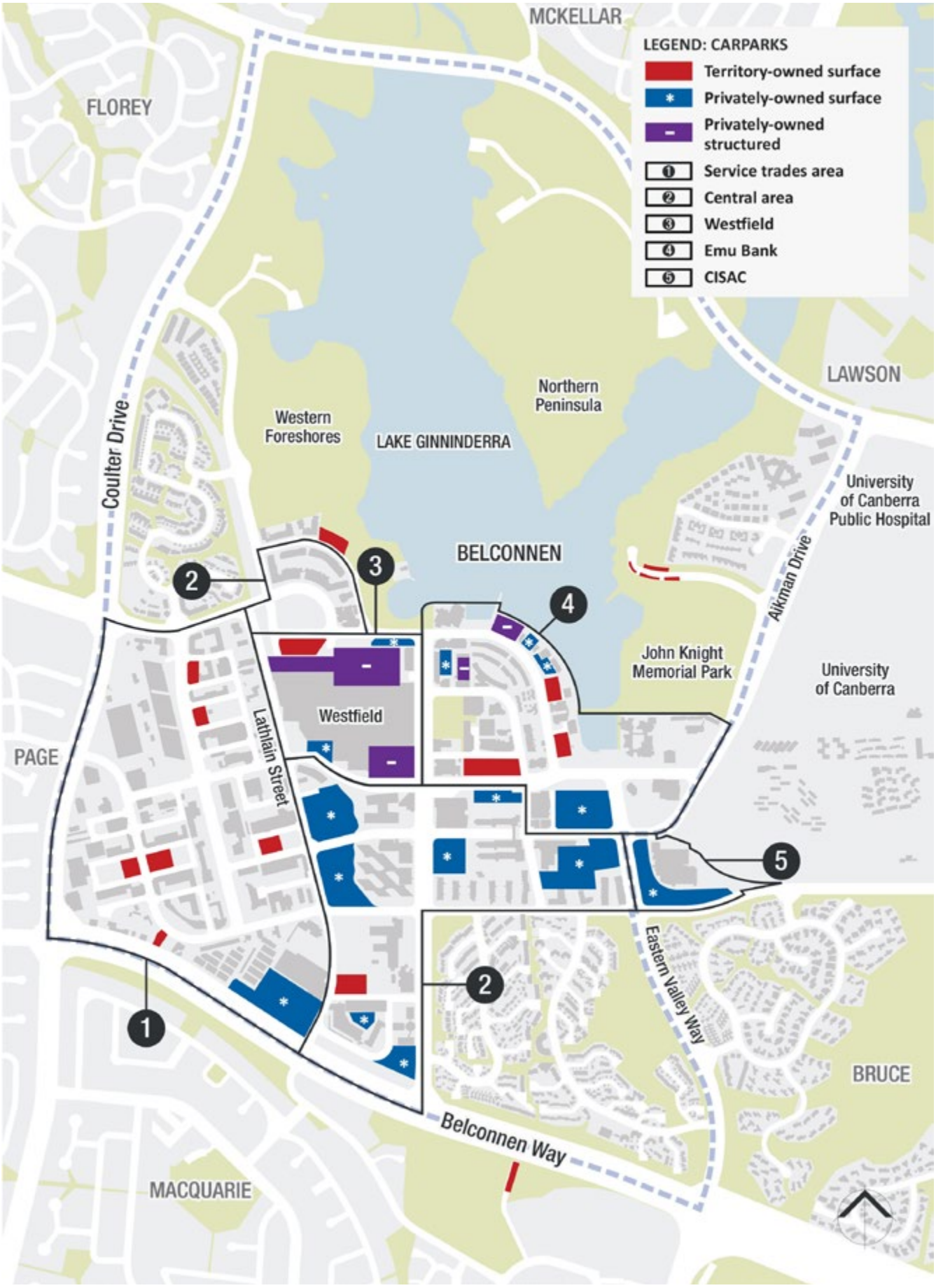


Table 1: Current parking demand in the town centre

PARKING RESTRICTION AND CAPACITY	PEAK WEEKDAY DEMAND*	PEAK SATURDAY DEMAND*
SERVICE TRADES AREA		
Less than 1 hour: 126	75%: 95	70%: 89
1–2 hours**:** 1243	91%: 1126	84%: 1041
3–6 hours: 94	89%: 84	86%: 81
6–9 hours: 394	94%: 372	79%: 313
Unrestricted: 144	85%: 123	78%: 113
Park & Ride: 27	96%: 26	89%: 24
Private / permit: 2174	71%: 1545	67%: 1456
Disability parking: 24	62%: 15	75%: 18
TOTAL: 4226	**80%: 3386**	**74%: 3135**
EMU BANK AREA		
Less than 1 hour: 64	51%: 33	50%: 32
1–2 hours**:** 426	82%: 349	85%: 363
3–6 hours: 65	85%: 55	90%: 59
6–9 hours: 596	83%: 496	88%: 524
Unrestricted: 266	64%: 171	26%: 70
Private / permit: 464	72%: 334	22%: 102
Disability parking: 31	61%: 19	75%: 17
TOTAL: 1912	**76%: 1457**	**61%: 1166**
CENTRAL AREA		
Less than 1 hour: 22	100%: 22	25%: 4
6–9 hours: 1281	100%: 1281	32%: 418
Unrestricted: 55	80%: 44	98%: 54
Private / permit: 1169	95%: 1113	15%: 175
Disability parking: 6	100%: 6	16%: 1
Westfield: 2785	85%: 2367	98%: 2730
TOTAL: 5318	**91%: 4833**	**63%: 3382**
CISAC		
Paved spaces: 486	41%: 200	90%: 404
Gravel overflow: 120	0%: 0	22%: 27
TOTAL: 606	**33%: 200**	**71%: 431**
PARKING IN SUBURBAN STREETS		
Assumed to be going to central area	500	
TOTAL: 12,062	**86%: 10,376**	**69%: 8322**

* 2PM Thursday 26 June and Saturday 28 June 2014.

The areas above are indicated on **Map 11**.

Map 12: Open space network



3.6 PUBLIC DOMAIN

The centre's key public spaces, including streets and parks, should be of a high quality and reflect Belconnen's character as the district's principal community and commercial area.

During consultation, the community said the improvement of the public domain was a significant issue. Retaining existing open spaces, improving maintenance and establishing a community garden were suggestions requiring consideration.

3.6.1 KEY AREAS OF PUBLIC LIFE

Belconnen's early planning resulted in buildings having little relationship to surrounding streets. Main destinations such as the Belconnen Fresh Food Markets, the library, Westfield Belconnen and the University of Canberra were widely spaced, had narrow connecting footpaths and no activity along the way, resulting in people driving to these destinations.

Providing a better quality public domain in busy areas encourages district precincts and more efficient allocation of construction and maintenance funding.

The current precinct code identifies an extensive 'main pedestrian area' where active frontages are required. Given the limited capacity for additional active frontage in the centre this is leading to vacant commercial space and dispersed uses.

A better outcome could be to reduce the active frontage requirement to key areas and increase flexibility for alternative outcomes, depending on market demands (refer **Map 23**). For example the ground floor units of *Altitude* are largely commercially adaptable, enabling both the current residential and future commercial uses.

3.6.2 PARKS AND OPEN SPACE

The centre has a high proportion of open space, mostly located around Lake Ginninderra. As indicated on **Map 12**, land zoned as Urban Open Space (PRZ1) in the core area is limited to Margaret Timpson Park.

The 'court' areas at Oatley Court, Weedon Close and Walder Street were intended as open space, but have now been largely replaced by carparks. The remaining open space areas in these locations offer poor amenity and are under-utilised. These blocks are zoned as CZ3 Services Zone, which may enable them to be sold in the future.

Consultation revealed open space within the centre is highly valued by the community. However, there was some concern with the maintenance of open space and the extent of litter, particularly around the lake. The Government will continue to work proactively to address these concerns in line with community expectations.



Shared path at Emu Bank

MARGARET TIMPSON PARK

Margaret Timpson Park provides the municipal core area of the centre, emphasised by its formal, symmetrical set out, distinctive landscaping and surrounding uses. The park provides Belconnen town centre with a formal space for important or district focused events.

Providing more activity in the park was an issue in the 2001 Belconnen Town Centre Master Plan, which suggested new cafes and a new road to the east as a solution. Many people still consider the park to be underused and lacking facilities.

LAKE GINNINDERRA

Since its establishment in 1974, Lake Ginninderra has become intrinsic to Belconnen's character. It is highly valued by the community, providing space for recreation and contemplation.

Many consider it more attractive than Lake Burley Griffin, with better water quality. The variety of spaces and landscapes, combined with high quality recreation areas, is partly what makes the lake special. These are also important in providing an outlook to and from the centre.

From its initial planning, the lake was intended to have an urban edge to the centre. This edge was to provide a high level of quality and variety; however, the contrast between the landscape and built form of the centre was to be maintained and strengthened by retaining land at the north and west of the lake as open space.

The recreation areas at John Knight Memorial Park, Diddams Close and Macdermott Place are high quality and well maintained. While demand for these areas is often high, additional maintained areas are not currently required. An issue is the need for additional parking at John Knight Memorial Park, which has no capacity for overflow parking.

Fishing, swimming and sailing has declined since the 1980s; however, there is growing demand for access to the lake from groups including the Sea Scouts and Girl Guides. Consideration is required as to how these groups can be accommodated.

The northern peninsula provides a valuable landscape outlook from the centre and has ecological and possibly archaeological value. It also has potential for vegetation restoration and improved canopy connections (**Map 14**). This area is zoned Urban Open Space (PRZ1), with the central area identified as 'not public land' in the existing precinct code, reflecting the grazing which is undertaken there, partly to maintain it.

The western side of the lake has landscape, ecological and possibly archaeological value. This area was originally intended for development; however, it was decided it should remain as open space and planned roads were degazetted. This area is close to developed areas and offers potential for other uses including community gardens and vegetation restoration.

Work completed at Emu Inlet in 2011 extended the recreational space and reconfigured the lakeshore to improve water circulation. Plans have been prepared for a second stage of work that would complete the recreational infrastructure and enable the open space to be far more useable.

For discussion on the ecological and water quality aspects of Lake Ginninderra, see section 3.9.

3.6.3 COMMUNITY GARDENS

Community gardens provide a range of benefits; they encourage more food to be grown locally and provide an opportunity for communities to form. They are valuable for people without garden space, such as those living in apartments. The closest community gardens to the centre are currently at Charnwood and behind Cook.

Establishing a community garden within the centre will increase the liveability and sense of community of the centre. While suggestions have been made for locating a community garden at Margaret Timpson Park and the service trades area, there are possibly better locations such as the western side of the lake.



Figure 11: Walder Street

3.6.4 STREET TREES

The centre was intended to have a 'distinctively Australian landscape character'[9], with mass plantings of eucalypts around the perimeter of the centre and native trees used as street trees throughout. While some have been successful, including the casuarinas on Josephson Street, many failed and were not replaced. The intended character was also diluted by later plantings of elms and plane trees.

As shown in **Figure 11**, many streets now do not have trees or the trees are on privately leased blocks and could be removed.

Analysis of the area's street trees was provided in a 2008 report[10] which listed all tree species and provided recommendations for replacements. Many of the recorded tree species were found to be in poor health, stunted and providing limited canopy cover.

The elms planted along Benjamin Way provide an attractive formal entry to the centre. Ideally these plantings would have continued to Emu Bank; however, this has been prevented by five 1.8 metre diameter stormwater pipes in the northern median of Benjamin Way. A key focus of future public domain improvements should be the provision of large canopied street trees. These provide character, improve amenity for pedestrians and cyclists and value of areas and can significantly reduce the impact of heat on urban areas.

3.6.5 PAVING, LIGHTING AND STREET FURNITURE

The paving and street furniture of the centre is largely uncoordinated, having been provided over an extended period of time. Paving in particular is varied, with combinations of asphalt, stencilled concrete, various paver types and concrete. Segmented pavers have generally proved unsuccessful as they are lifted by tree roots and cracked by vehicles.

Currently, off-site works associated with residential developments generally follow the requirements of the Canberra Central Design Manual. The manual was developed for use in the city centre and has proved very successful, providing a consistent approach to paving, street trees, lighting and street furniture. A key issue is whether this manual should be adopted for general use in the Belconnen town centre or a new one developed.

3.6.6 PUBLIC ART

Public art lifts an area beyond the basic requirements. It builds character and allows artists to respond to a location. While at times controversial, an artwork can become a loved and intrinsic part of an area. For many years the public art in Belconnen town centre was limited to two sculptures:

- *Tumbling Cubes* by Bert Flugelman (1979)
- *Optical Galaxy* by Gerald Gladstone

As the centre developed, additional public art was installed, including:

- *About Face* by Wellspring (2001)
- *Running Lights* by Thylacine Art Projects (2006)
- *Ark in the Ark and Beyond* by Wataru Hamasaka (2009)
- *Dancers on a Lakefront* by Konstantin Dimopoulos (2010)
- *The Ability to Imagine* by Peter Tilley (2010)
- *Winds of Light* by Peter Blizzard (2011)
- *Owl* by Bruce Armstrong (2011)



Street art at Belconnen Skate Park

The Belconnen Arts Centre provides an important opportunity for a wide range of art, including dance, to be available and promoted to the wider Belconnen community. It helps ensure art is perceived as an integral part of the centre.

The provision of new street furniture, including seating, provides an opportunity for additional public art. A legal graffiti wall is provided under the Ginninderra Drive Bridge; however, consideration could be given to creating an additional wall as part of any future upgrades of the Belconnen Skate Park to allow local street artists to continue to contribute to the emerging character of Belconnen.

"...AN ARTWORK CAN BECOME A LOVED AND INTRINSIC PART OF AN AREA."

3.6.7 NATIONAL CAPITAL AUTHORITY CONTROLLED LAND

There is a concern that some redevelopment on NCA-controlled land has not produced the public domain outcomes expected in the centre. Footpaths have not been provided in some areas and requirements for building frontage to key streets have not been enforced. This has resulted in dirt tracks and unused areas.

The current height limit of RL 613.7 metres on the NCA-controlled land is partly to ensure no buildings will be above the Cameron Offices (RL 614.0 metres). Due to the existing topography, this will result in building heights ranging between five and eight storeys. Given the recommended higher building heights on adjacent sites through this master plan, it would be appropriate to work with the NCA to review the RL 613.7 metres requirement to ensure height controls remain relevant.

3.7 BUILDING DESIGN AND HEIGHT

3.7.1 HISTORY

The initial development of Cameron Offices, Benjamin Offices and Westfield Belconnen provided the centre with a low scale, dispersed character. This was at odds with the original intention of a dense, active core area.

Construction of the service trades area began in 1974. Development within this area was tightly regulated with consistent building design and materials. This consistency provided unity but limited variety and features such as effective awnings.

The residential areas of Emu Ridge and Totterdell Street, developed during the late 1980s, were generally limited to two storeys. The Emu Ridge townhouses were notable as an interpretation of historic Sydney terraces; however, the area's layout has resulted in a poor streetscape.

The centre's development trajectory can be described in four main phases:

DEVELOPMENT PHASE	MASTER PLANS
• **1970–1980:** first period of major development within the centre, guided by the 1968 and 1975 master plans • **1980–2005:** catchment population stabilises and development in the centre slows • **2005–2015:** second major phase of development in the centre, including large-scale residential apartment developments and the expansion of Westfield Belconnen • **2016–2021:** new phase of human scale urban development and continued expansion of the new residential and commercial role of the centre	• **1968 master plan:** according to distinctly modernist planning principles. Use-based precincts, large arterial boulevards with limited local access, overhead pedestrian walkways connecting buildings, central bus interchange and busway, large-scale commercial office development, large areas of surface car parking • **1975 master plan:** retail mall proposed in current location • **1986 master plan:** proposed improved street-based pedestrian amenity and development of the Emu Bank area. • **2001 master plan:** proposed major reconfiguration of the bus interchange and removal of the pedestrian overhead walkways. Some changes proposed to primary road network within the centre, within the 'superblock' structure • **2016 master plan:** encouraging integrated, walkable precincts, active destination areas, better cycle connections and integration with the University of Canberra.

3.7.2 TALLER BUILDINGS

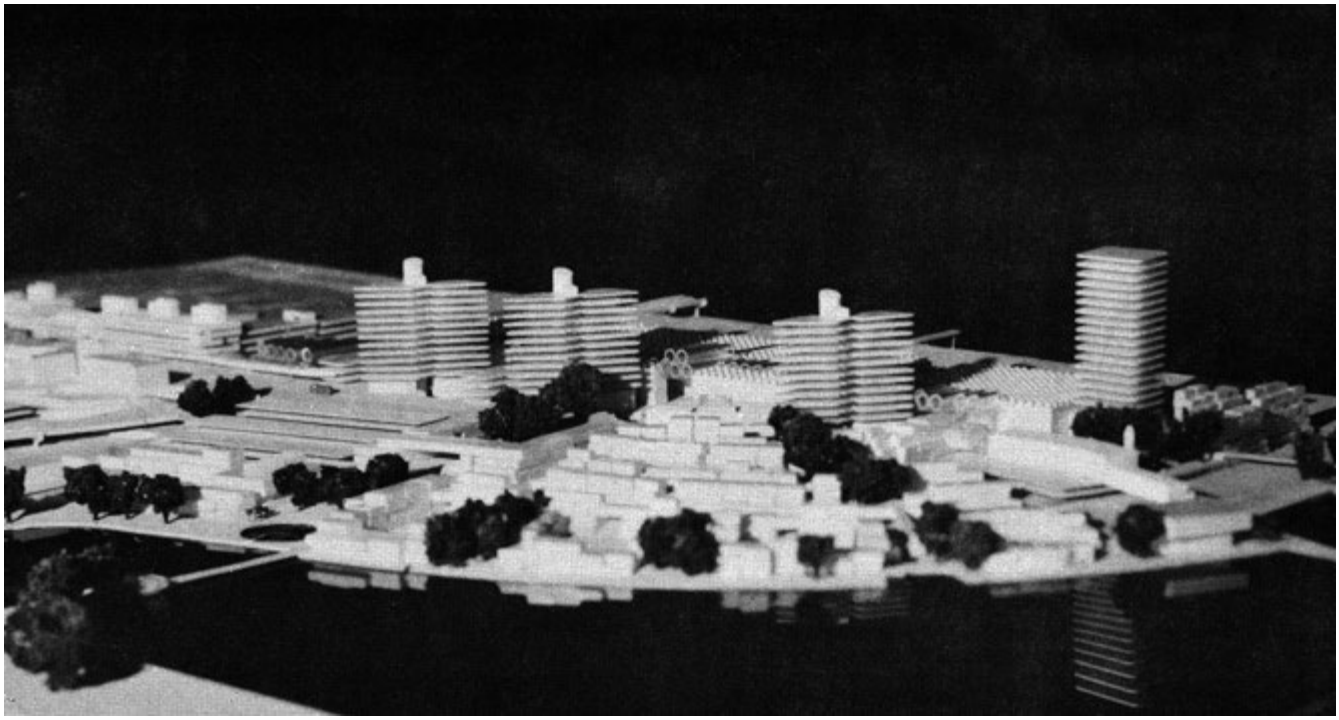


Figure 12: 1974 Model indicating towers in the core area

The centre was always intended to have a variety of building heights and forms. The core area and taller buildings were intended to be located along the central ridge, adjacent to Chandler Street, with large floor area offices and carparks in the valleys. This emphasised the area's topography and gave prominence to the central core.

Modelling of the centre undertaken in 1974 indicated four towers ranging in height from 13 to 20 storeys (**Figure 12**).

Ensuring the landscape remained the dominant visual factor was a key consideration of the NCDC. The 1964 book *The Future Canberra* states 'The districts would be built in adjoining valleys and the intervening hilltops and ridges would be preserved in their natural state. This would give every resident of Canberra a view of tree-clad hills'.

"THE CENTRE WAS ALWAYS INTENDED TO HAVE A VARIETY OF BUILDING HEIGHTS AND FORMS."

The 1975 policy document, A Land Use Plan for the ACT, identified the landscape qualities of Canberra and included the statement 'the strongest impression of Canberra is that of a set of buildings rising from the trees and silhouetted against the distant range'.

Submissions to the 2001 Belconnen Town Centre Draft Master Plan recommended towers be constructed to mark the centre and make it 'feel' like a town centre. The 2001 Belconnen Town Centre Master Plan suggested several locations where 'higher development is encouraged' but remained silent on maximum heights beyond development being 'to desired future character' and limiting overshadowing impacts.

The first taller residential building, *Altitude*, was completed in 2013. At 18 storeys, and in the area originally intended for taller buildings, it is considered a good example of higher density residential development. It provides a high quality verge and street trees, increased surveillance of the skate park and Chandler Street and included an upgrade to the adjacent public open space.

Existing building heights are shown in **Map 13** and include *Altitude* (18 storeys) and the *Sentinel* Apartments (20 storeys). Other approved development includes the Belconnen Fresh Food Markets (up to 16 storeys), Westfield Belconnen (up to 24 storeys) and the *Wayfarer* (27 storeys). These developments are dispersed and several are in positions which are considered 'marker' buildings.

Taller residential buildings are a substantial investment and indicate confidence in the future of the centre. They have increased the number of residents in the centre and improved the public domain and perception of safety within the centre. They provide employment during construction and ongoing benefits to local businesses. While these buildings have resulted in some overshadowing, the impact is considered minor.

When determining heights, a range of factors has been considered, including previous policy, sites suitable for additional taller development, the long-term demand for additional residential development, overshadowing impacts, the desired streetscape and the view of the centre from surrounding areas. A key consideration is how taller buildings in the centre relate to the surrounding landscape and topography, as detailed in the visual impact analysis in **Figure 13**.

During the first stage of community engagement on issues to inform development of the draft Belconnen Town Centre Master Plan, a variety of opinion on building heights was received, including general acceptance of the height of buildings already constructed (*Altitude* and *Sentinel*). The draft master plan provided maximum heights for all sites in the centre, up to a maximum of 27 storeys on some sites. Consultation on the draft master plan resulted in an even split, with approximately a third of respondents considering the suggested heights were too high, a third considering them about right and another third considering them to be too low. There were also requests for a consideration of height increases on particular sites, which were carefully considered.

Given community opinion, the capacity for additional development within the centre and the visual analysis, it was decided to generally retain the height limits suggested in the draft master plan.

Bridge on main path from the University of Canberra



Map 13: Existing building heights



VISUAL IMPACT OF EXISTING TALLER BUILDINGS

MT PAINTER LOOKING NORTH (A)

As indicated in **Figure 13**, the centre core sits in a slight valley, with higher land to the east, south and west. While the taller buildings are visible from the south and west, they sit within the wider landscape and are not prominent.

BAINTON PLACE, MELBA, LOOKING SOUTH (B)

Views of the centre from the north and east are generally only available from higher areas or open space. The view from the side of Mt Rogers at Melba indicates current heights sit below the Aranda / Cook ridgeline and are dominated by adjacent hills and the Brindabellas beyond.

CRISP CIRCUIT, BRUCE, LOOKING WEST (C)

Where taller buildings are visible from the east, such as the side of Gossan Hill, they are more prominent. However current heights are at about the same level as Mt Rogers and the Brindabellas.

GINNINDERRA DRIVE, LOOKING SOUTH (D)

Views of the centre are most prominent at Ginninderra Drive Bridge. Although Mt Painter provides a prominent backdrop, taller buildings tend to dominate this view.

These images demonstrate the current heights are generally contained by the surrounding landscape. If heights were doubled, for example, buildings would break through the landscape horizon and dominate the view.

Key heights in the centre are:

- the *Altitude* apartments—18 storeys, RL 648.5 metres
- the *Sentinel* apartments—20 storeys, RL 642.6 metres
- the *Wayfarer* apartments—27 storeys, RL 664.35 metres

Mount Painter is at RL 741 metres and Mount Rogers is at RL 704 metres. The prescribed airspace for Canberra Airport above the centre is at 720 metres.

The location of suitable sites for new higher level development is constrained when the issues of existing development, NCA requirements and minimising overshadowing is taken into account.

Apart from the sites where higher level development has already been approved, future higher level development within the town centre is generally limited to:

- Block 17, Section 152
- Block 1, Section 200 (48)
- Block 15, Section 45
- Block 16, Section 45.

Other sites where redevelopment may occur but height is considered constrained by the relationship to surrounding buildings include:

- Block 1, Section 151
- Section 23, fronting onto Lathlain Street
- Blocks 43 – 49, Section 55.

3.7.3 BUILDING DESIGN

The centre contains a few examples of exceptional or innovative architecture, and has a good representation of architectural styles of the past 40 years. Retaining these layers of history adds character and will be important as the centre grows. Recent buildings such as the *Linq* apartments and ABS House have a considered design and material choice, adding character and high quality design outcomes to the centre.

This master plan seeks to address some key issues in terms of building height and design:

- The Territory Plan provides for minimum acceptable outcomes, rather than encouraging best practice design. Consideration should be given to more explicit controls and providing incentives to encourage design quality.
- The *Altitude* apartments provide a high quality streetscape to Chandler Street and *library walk* between Chandler Street and Emu Bank, which improve the appearance and value of the development, benefiting the whole community. Future developments should be encouraged to provide similar public domain improvements.
- Podiums are now the preferred method of providing carparks, but need to be well designed and provide surveillance to main pedestrian routes.
- Other aspects requiring clarity through the precinct code include pedestrian shelter, active frontages and the relationship with surrounding buildings.

Figure 13: Analysis of town centre's form in the landscape



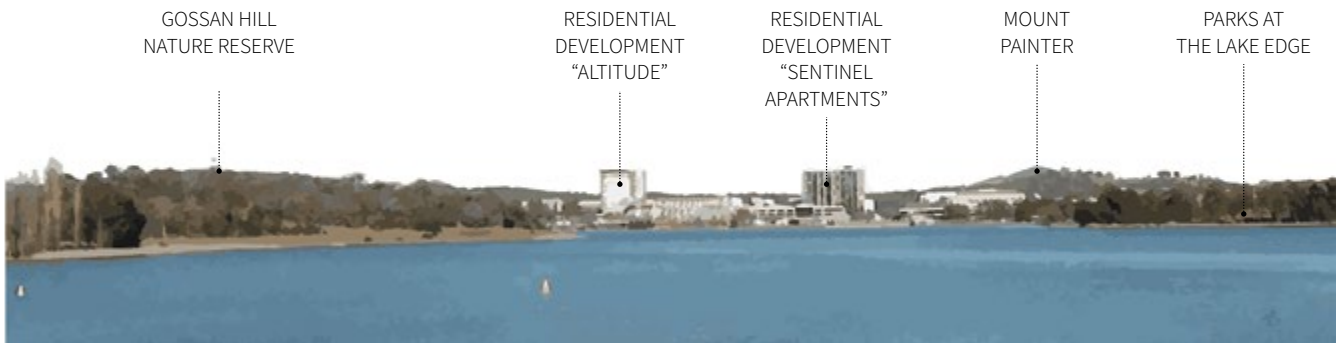
Mt Painter looking north (A)



Bainton Place, Melba, looking south (B)



Crisp Circuit, Bruce, looking west (C)



Ginninderra Drive, looking south (D)

3.8 PUBLIC SAFETY

A perception that a place is unsafe leads to areas becoming inactive and can encourage people to drive rather than walk or cycle. ACT Policing consider the perception of public safety could be improved, despite their figures showing a low level of incidents reported within the centre.

The closure of the Belconnen bus interchange in 2009 is considered to have significantly reduced the number of crime-related incidents in the centre. Most incidents are now considered by the ACT Policing to be between people who know each other.

The adoption of Crime Prevention Through Environmental Design principles when designing areas can greatly improve the perception of safety. For example, the Belconnen Skate Park combines a good facility and lighting, adjacent active uses and passive surveillance from nearby apartments and traffic. This has resulted in an area that young people feel safe using until well after dark.

During consultation on issues to inform the master plan, the community raised concerns about the safety at night of several specific areas in the centre. Many of these concerns are also related to improving the walkability of the town centre:

- People felt unsafe when crossing from the lake pedestrian bridge to the library, and when walking along the lake at Emu Bank and John Knight Memorial Park.
- The lack of lighting to underpasses, such as under Coulter Drive to Page, deters people from using them.
- A lack of activity and passive surveillance to key areas, such as the lake side of Emu Bank and Margaret Timpson Park, deters use of these areas.

Table 2 compares crime statistics between the city centre and Belconnen town centre.

Table 2: Crime statistics - ACT Policing

INCIDENT	BELCONNEN 2010	BELCONNEN 2016	CITY 2016
Homicide	0	0	0
Sexual assault	0	2	7
Burglary	26	20	13
Theft	180	141	144
Property damage	74	50	37
Assault	40	21	87
Offence against a person	1	24	6
Robbery	4	3	2
Motor vehicle theft	16	4	7
Other	157	139	238
Traffic infringement	173	107	108

"...THE EMU INLET AND EASTERN VALLEY WAY INLET HAS IMPROVED THE QUALITY OF WATER FLOWING INTO THE LAKE."

3.9 ENVIRONMENT AND ECOLOGY

3.9.1 AREAS OF ECOLOGICAL SIGNIFICANCE

While there are no major biodiversity constraints within the area, there are remnant patches of endangered Box-Gum Woodland (listed as critically endangered nationally) and endangered Natural Temperate Grassland. These areas are potential habitat of three threatened animal species, the Perunga Grasshopper, Golden Sun Moth and Striped Legless Lizard. **Map 14** indicates where these species have been recorded, along with threatened plant and bird locations.

LAKE GINNINDERRA

The shrubs and trees around Lake Ginninderra are utilised by the Crested Shrike-tit and White Winged Triller, while Iron-bark plantings at Weedon Close and the AIS provide a food resource to the nationally threatened Superb Parrot and Regent Honeyeater. Superb Parrots have also been sighted in trees along Benjamin Way and Belconnen Way.

Recent work at the Emu Inlet and Eastern Valley Way Inlet has improved the quality of water flowing into the lake. Further work could be considered, including improving the run-off from the service trades area to the lake.

The lake is formed by damming the Ginninderra Creek, which flows from Gungahlin and connects with the Murrumbidgee River. Two minor creek lines feed into the lake from the south along with stormwater from several surrounding suburbs.

The 2001 Belconnen Town Centre Master Plan recommended a water quality control pond and a new gross pollutant trap be constructed on the disused Eastern Valley Way oval, however this has not been constructed due to the Eastern Valley Way Inlet and wetland being considered a better alternative. Depending on the success of the new wetland, the Eastern Valley Way water quality control pond and new gross pollutant trap could be given further consideration. The current gross pollutant trap on Eastern Valley Way is difficult and expensive to clean, with a new facility further upstream potentially providing significant savings.

3.9.2 HABITAT CONNECTIVITY

The ACT Nature Conservation Strategy 2013–23 aims to enhance the resilience of natural areas on a broad scale. This strategy proposes a range of measures to enhance habitat connectivity and ecosystem function and the biodiversity value of urban areas. Mapping has been undertaken to identify areas of significance. **Map 14** illustrates the priority restoration areas and areas of ecological value close to Lake Ginninderra.

Map 14: Ecological value



3.10 ENVIRONMENTAL SUSTAINABILITY

Sustainability is critical to the landscaped and built environment. ACT Government policies and strategies provide guidance for integrating sustainability measures into our urban environment.

The following are key environmental sustainability principles to be considered in the Belconnen Town Centre Master Plan and its implementation.

- **Climate change**

  Responding to climate change takes two forms:

  > Mitigation—reduce greenhouse gas emissions by minimising use of fossil fuels for heating, cooling and transport, and increase the efficiency of energy use.

  > Adaptation—adapt the urban environment to be resilient to the risk of a changing climate.

- **Resources consumption**

  > Reduce the amount of land used for the growing city with urban renewal and intensification.

  > Reduce the amount of energy and water used in urban environments and invest in living (green) infrastructure.

  > Respect and conserve natural and cultural heritage.

  > Respect and conserve the significant landscapes and its features.

  > Enhance biodiversity with habitat connectivity.

- **Buildings**

  > Improve the design and construction of buildings.

  > Increase choice in housing to meet diverse needs.

- **Urban planning and design**

  > Reduce reliance on private vehicles.

  > Create opportunities for social interactions.

  > Integrate passive solar design principles into building and site design.

  > Reduce the heat island effect in urban areas and improve microclimate through landscape design.

Master plans provide opportunities to address climate change adaptation at a place-specific scale. The projections for the ACT and region are for an increasingly hotter and drier climate with more extreme weather events. The place-based risks to people and assets from a hotter and drier climate are heat, severe storms (flash flooding) and bushfire.

To address these risks, the interventions may include:

1. Reduce city heat and increase amenity in outdoor spaces for healthy living

   > Increase shade trees to roadways and carparks.

   > Use light coloured pavements.

   > Increase shade to pathways and parklands for human comfort and wellbeing.

   > Include seats and drinking fountains with water bottle recharge taps.

   > Increase use of vegetation.

2. Reduce city heat and achieve cooler buildings

   > Design buildings, streets and parks to be 'climate wise'. This means improving the design and choice of materials for the built environment to lessen the effects of climate change.

   > Use solar passive design.

   > Use light coloured materials.

   > Introduce green infrastructure such as green roofs and walls.

3. Intense rain events

   > Reduce runoff from impermeable surfaces within the sub-catchment.

   > Capture and use rainwater/stormwater in redevelopment projects.

   > Retrofit roadside kerb and gutter systems using water sensitive urban design (WSUD).

4. Reduce the risk of bushfire in urban areas

   > Initiate an asset protection zone.

   > Ensure no continuity of fuel from the ground to the crown of the tree.

   > Plan for emergency service access.

The following opportunities were identified to incorporate environmental sustainability measures in the master plan.

"A DISTRICT ENERGY SYSTEM IN THE BELCONNEN TOWN CENTRE COULD PROVIDE AN ALTERNATIVE CLEANER ENERGY FOR THE CENTRE AND CONTRIBUTE TO A SUSTAINABLE FUTURE."

3.10.1 ENERGY

The stated objectives of the ACT Sustainable Energy Policy 2011–20 are to achieve reliable and affordable energy, smarter use of energy, cleaner energy and growth in the clean economy.

A district energy system could contribute to achieving these objectives and be commercially viable with a commercial/residential development or expansion. District energy systems produce electrical energy locally and use 'waste heat' from electricity generation to heat and cool buildings.

Electricity and/or thermal energy is generated close to where it is used. Energy systems such as cogeneration (electricity and heat) or trigeneration (electricity, heat and cooling) need the combination of commercial and residential uses to be efficient, as the peak load for commercial is during the day and the peak load for residential is generally out of hours. The use of such energy systems can achieve social, economic and environmental benefits.

A district energy system in the Belconnen town centre could provide an alternative cleaner energy for the centre and contribute to a sustainable future. Further investigations would be required to determine if a district energy system would be viable, how it could be delivered and in context of future budgets.

3.10.2 WATER

Water is an important natural resource that is under significant pressure from population growth and climatic conditions. There is also a need to reduce broader social, economic and environmental costs associated with potable water distribution.

The irrigation for a number of playing fields in the ACT has been switched off due to water restrictions for potable water.

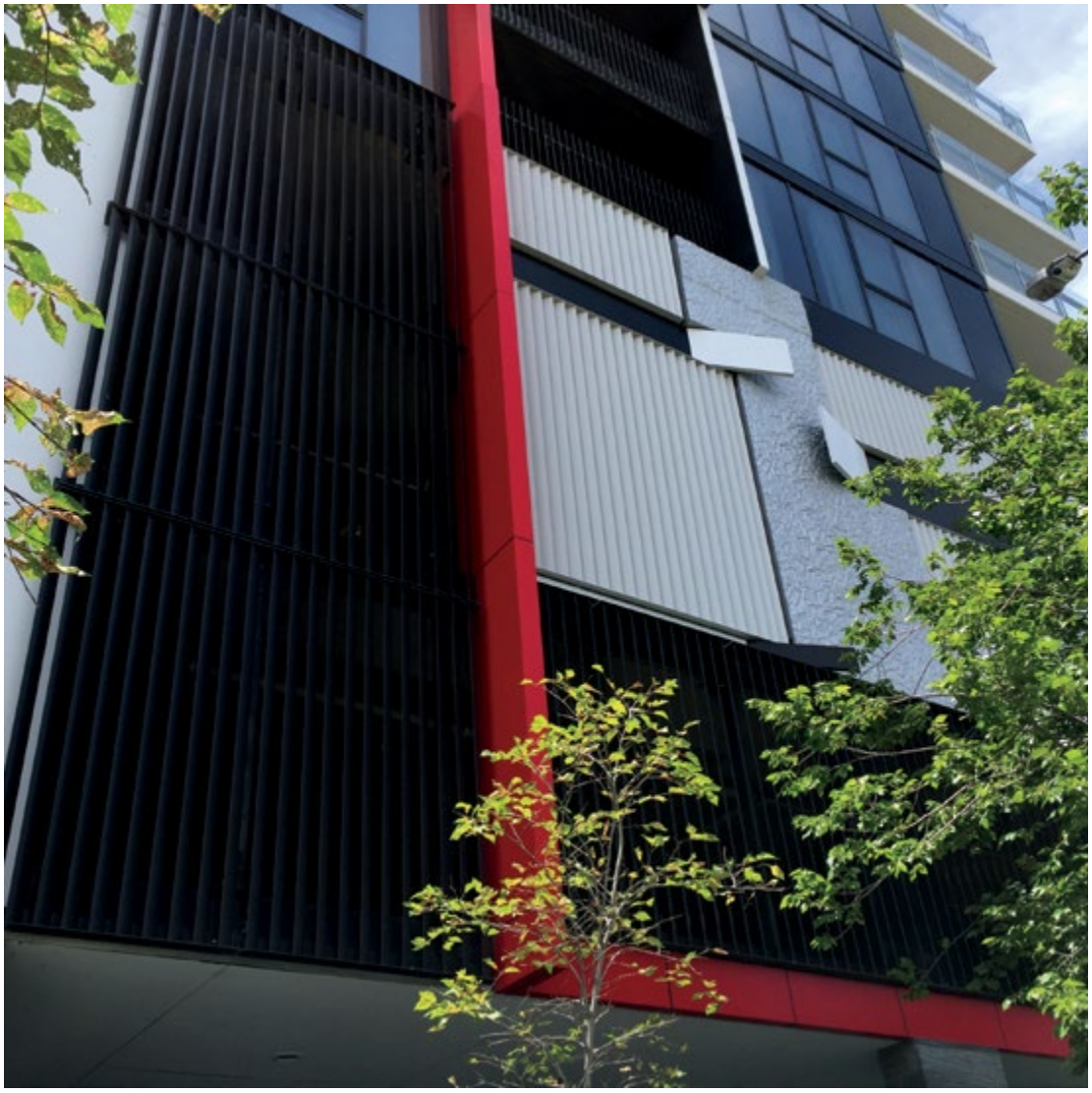
Potable water consumption for domestic or commercial use could be minimised if other solutions were investigated, such as using stormwater.

3.10.3 HEAT ISLAND EFFECT

An urban heat island is a metropolitan area which is significantly warmer than its surrounding areas. The main cause of the heat island effect is the materials that store and radiate heat to surrounding areas such as concrete and bitumen.

Thermal comfort can significantly change the way we use outdoor areas. Urban environments, such as the Belconnen town centre, contain significant areas of concrete and asphalt in the roads and footpaths. Higher temperatures may be acceptable in the cooler months, but some urban environments can become uncomfortable in summer.

The built environment can be designed to reduce the urban heat island effect with the use of lighter building materials, permeable paving materials and by increasing shade for summer with shading structures and trees on main pedestrian routes and public places.



3.11 INFRASTRUCTURE

An infrastructure capacity study was undertaken to determine if the existing services were able to support the additional residential development proposed in the centre. Study outcomes indicate there are no immediate constraints to development, although future improvements are proposed to sewer, stormwater, electricity and gas in the town centre area.

The ACT Government recently introduced free Wi-Fi along Emu Bank and the Belconnen Skate Park, providing a significant benefit to people using the area and in turn local businesses. A further improvement to infrastructure which will also bring important advantages for business in the centre will be the introduction of the National Broadband Network (NBN).

4. CHALLENGES AND OPPORTUNITIES

THE MAIN CHALLENGES AND OPPORTUNITIES IDENTIFIED FOR THE BELCONNEN TOWN CENTRE ARE OUTLINED BELOW AND INDICATED IN MAP 15 AND MAP 16. THIS LIST HAS BEEN INFORMED BY ISSUES RAISED DURING COMMUNITY CONSULTATION AND BACKGROUND STUDIES. WHILE NOT EXHAUSTIVE, IT PROVIDES THE BASIS FOR DEVELOPING THIS MASTER PLAN AND SUBSEQUENT REVISION TO THE BELCONNEN PRECINCT CODE.

4.1 CHALLENGES

4.1.1 TOWN CENTRE EMPLOYMENT

Any future relocation of the Australian Government employment out of the centre could have a critical impact on businesses in the town centre. A reduced employment base is currently a challenge faced by other town centres in Canberra and highlights the need to diversify employment opportunities. Belconnen is in a good position to meet this challenge with significant adjacent institutions, and space for additional development.

4.1.2 POOR CONNECTIONS WITH THE UNIVERSITY OF CANBERRA

Despite being within walking distance, the centre and the university are connected by only two formal footpaths. To effectively achieve the economic and employment potential offered by this relationship, the town centre and the university need to be much better integrated. Recent legislative changes will enable the university to develop a wide range of uses, including commercial and residential. It is important these uses are planned to integrate with the centre.

4.1.3 PARKING NEARING CAPACITY

Parking issues were raised by the community during both stages of consultation and through the Belconnen Community Council's survey. While it is important to ensure sufficient parking for people who need it, a more balanced approach is required to the provision of parking.

As the centre matures, the ability to provide large amounts of low-cost parking is reducing. Providing parking is a significant cost for developers and property purchasers, and influences the viability of development proposals.

Significant parking issues include ensuring sufficient provision of both long and short-stay spaces and managing peak demands at Westfield Belconnen. The demand for long-stay carparks currently exceeds the available capacity, resulting in commuters using short-stay service trades spaces and residential streets. This reduces the parking available for local businesses. Suitable sites for structured long-stay carparks need to be identified.

While the Emu Bank area has sufficient parking, it dominates the area and the current parking requirements restrict possible redevelopment. Sufficient parking choices must be provided to ensure the on-going viability of the area. One option is to relocate parking to an off-site structure to enable redevelopment, however there is a lack of suitable ACT Government-owned sites where this could be the required use.

Westfield Belconnen's peak demand can reach 98% of capacity. However, large carparks nearby at Lathlain Street are at only 21% of capacity at this time. Better knowledge of these would be assisted by a 'smart parking' initiative.

Map 15: Challenges



4.1.4 LIMITED OR POOR QUALITY PUBLIC OPEN SPACE IN THE CORE AREA

The centre has a large amount of open space around the lake and through Emu Ridge, which provides a valuable resource for the community. However, zoned open space within the core area is limited to Margaret Timpson Park.

Areas of open space in Oatley Court and Walder Street are on blocks which may be sold for development. Similarly, open space on the Belconnen Way and Coulter Drive perimeter is zoned for transport use and may be required for additional roadworks. Ensuring remaining opportunities for open space are retained will become increasingly important as the centre continues to grow.

Margaret Timpson Park is Belconnen's 'municipal' space, but suffers from a lack of use. The park will become increasingly important as more people live in the centre, including children. The central town centre area currently provides no children's play areas or equipment. Margaret Timpson Park is an ideal place to provide children's play areas, possibly incorporating water play, which would also attract people from outside the area.

The public domain in the centre is generally characterised by fragmented built form and poorly defined public spaces. Large open carpark areas, wide roads, and large disconnected buildings dominate the public domain in many parts of the centre. The service trades areas, with a finer grain and street-oriented buildings, offers better elements for well-defined street-based public domain, but this is not realised due to poor pedestrian infrastructure. This presents a major challenge to the creation of attractive and active public spaces.

4.1.5 A POOR PERCEPTION OF BELCONNEN AS A DESTINATION

Belconnen town centre has good restaurants, bars and locations, yet lacks a clear destination and an inviting urban quality. The centre requires the brand recognition that other places have—such as New Acton or Braddon—if it is to compete with these locations.

4.1.6 A LACK OF FEATURES TO REDUCE CLIMATE CHANGE IMPACTS

Canberra's climate is predicted to become warmer and drier into the future, with less frequent but more severe rainfall events. The centre must have the resilience to respond to the impact of these conditions. Ensuring the centre is cool and attractive during hot periods will reduce possible health problems and increase the centre's appeal.

4.1.7 TRAFFIC CONGESTION

The centre's entry and exit points become congested during the morning and afternoon peak periods, particularly along Ginninderra Drive, Aikman Drive, Luxton Street and Joynton Smith Drive. A number of intersections within a relatively short distance are beginning to create issues for traffic on Nettlefold Street between Coulter Drive and Cohen Street, as well as for several areas of Lathlain Street, particularly near Belconnen Way.

"THE CENTRE HAS A LARGE AMOUNT OF OPEN SPACE AROUND THE LAKE AND THROUGH EMU RIDGE, WHICH PROVIDES A VALUABLE RESOURCE FOR THE COMMUNITY."

4.2 OPPORTUNITIES

4.2.1 ATTRACT MORE PEOPLE TO LIVE IN THE TOWN CENTRE

The residential population of the centre is predicted to grow from 6020 in 2015 to 8450 by 2031. Targeting growth within town centres reduces redevelopment demands within the suburbs, prevents further urban sprawl and allows people easy access to employment, retail, transport and other services. The ACT Planning Strategy recognises these advantages and includes the policy for 50% of new housing to be delivered through urban intensification. Growth within the centre provides greater housing choice and additional services, which benefits the greater Belconnen district.

4.2.2 IMPROVE CYCLING AND PEDESTRIAN LINKS INTO THE TOWN CENTRE

Constructing clear and safe cycle and pedestrian links across the centre and cycle facilities will encourage more people to walk or cycle to the centre, meeting healthy living and sustainable development policy goals of the ACT Government. Better connections received significant support during both stages of consultation, including utilising the former Joynton Smith busway as a cycle path. As indicated in **Map 26**, this could provide a clear cycle path linking the Florey shops to Westfield Belconnen, the bus station, the Belconnen Fresh Food Markets and Jamison. This also has potential to create a 'place' rather than just a thoroughfare by considered design and landscaping.

There is potential to create a clear cycle connection between the suburb of Macquarie and the lake along Benjamin Way through either separated, one-way cycle lanes or utilising the wide median. A two-way cycle path between the median trees would provide a memorable cycling experience.

Improved cycling access along College Street and through the University of Canberra would provide a safe east–west connection through the centre from the university, Radford College, Fern Hill and the AIS. Cycle paths exist along some sections of College Street but end abruptly, creating unsafe conditions for cyclists when navigating vehicular traffic.

Pedestrian connections into the centre require improvement in places, particularly from the University of Canberra. Consideration is required of aspects such as pedestrian desire lines, the amenity of main routes including shade and weather protection, passive surveillance of main routes and safety, particularly lighting. The legibility of main routes requires improvement; main paths should be clear and wide, unlike several of the current paths, which are often narrow with a variety of surfaces and damage, and where driveways take priority.

Better consideration is required of the quality of paving within the centre; narrow paths with thin grass verges are no longer a suitable outcome for a town centre.

4.2.3 EXPAND THE PUBLIC TRANSPORT NETWORK

The growth of the centre will provide opportunities to expand the local public transport network. This includes the possible connection of light rail from the city centre to Belconnen and Kippax. Feasibility and alignment studies will inform how and where light rail will travel through the centre if it is deemed feasible.

Improved bus facilities are also likely to be required on the eastern side of the centre to cater for the increasing numbers of residents.

4.2.4 ENCOURAGE WELL-DESIGNED BUILDINGS AND PUBLIC DOMAIN

Well-designed buildings and public domain will attract more people and further investment in the centre, as well as providing lasting benefits to the wider community.

BUILDINGS

While taller buildings are generally accepted by the community in the centre, this is qualified by a need to ensure good design quality. Recent buildings generally achieve a high design quality; however, the Territory Plan currently provides for the minimum acceptable outcome and has few incentives to encourage or reward better quality design.

It is preferable to limit the amount of prescriptive controls to ensure innovation is achieved, although clarifying expected outcomes for new buildings can help achieve a better result.

Aspects which require consideration include:

- the appearance of taller buildings and how they relate to the street level
- encouraging a range of apartment buildings and dwelling types to encourage a broader range of households and incomes
- the design of balconies, podiums and communal open space
- clarifying height and setback controls and assessing potential overshadowing impacts
- active frontage requirements and the design of ground floor apartments
- encouraging sustainability features beyond standard requirements, such as on-site power generation, green walls, communal car schemes and reduced water use, and
- a variety of building heights on sites where several taller buildings are possible.

PUBLIC DOMAIN

A clear hierarchy of public domain areas is required to ensure public domain improvements can be prioritised. Upgraded areas of open space should be coordinated with the main pedestrian routes and new developments into the future.

Places that people enjoy visiting often have similar key characteristics that should be incorporated into the centre to ensure its public domain becomes a place where people want to be:

- Places are memorable, not just functional. Strengthen the area's existing character and provide opportunities for surprise and delight.
- Streets are enclosed with buildings and trees at a scale which feels comfortable.
- Places are provided for people to gather and socialise.
- Active shopfronts are more closely spaced in locations that are busy and attractive to customers.
- Awnings or colonnades that are consistent and connected are provided in main pedestrian areas.
- Key areas and streets have wider footpaths.
- Spaces feel safe with good lighting, surveillance and no entrapment spaces.
- Areas are legible—views are reinforced and way-finding features are provided, including signage or public art.
- Lighting is interesting, incorporating up-lighting into trees or lighting to artwork.
- Podium carparks are wrapped with offices or residential dwellings where they front onto key public spaces. Main footpaths and open space are overlooked by building users.
- Successful places are capable of holding events. The public domain should be able to have concerts, markets and community barbecues.
- There are no unused or left over areas.

4.2.5 DEVELOP SOLUTIONS FOR PARKING

The possible introduction of 'smart parking' measures will allow more efficient use of existing parking spaces. Real-time signage detailing the number of parking spaces available could help reduce congestion within carparks and on surrounding roads.

There are other opportunities to make better use of under-utilised parking spaces, such as those to the rear of CISAC. The future provision of parking in the centre will largely be through the development of structured carparks run as viable commercial operations utilising the proposed 'smart parking' initiative.

The centre still has some opportunities to locate viable structured carparks, as identified on **Map 27**. It is important the use of these sites for public carparks, combined with other uses, is given serious consideration.

4.2.6 PRESERVE THE QUALITY OF LAKE GINNINDERRA

Lake Ginninderra and its surrounds are highly valued by the community and provide an attractive point of difference over other urban areas. The qualities and diversity of areas around the lake need to be preserved and strengthened to maintain the lake's attractiveness, recreation facilities, habitat potential and business viability. Providing better pedestrian and cycle connections to the lake will enable better utilisation of the lake's features.

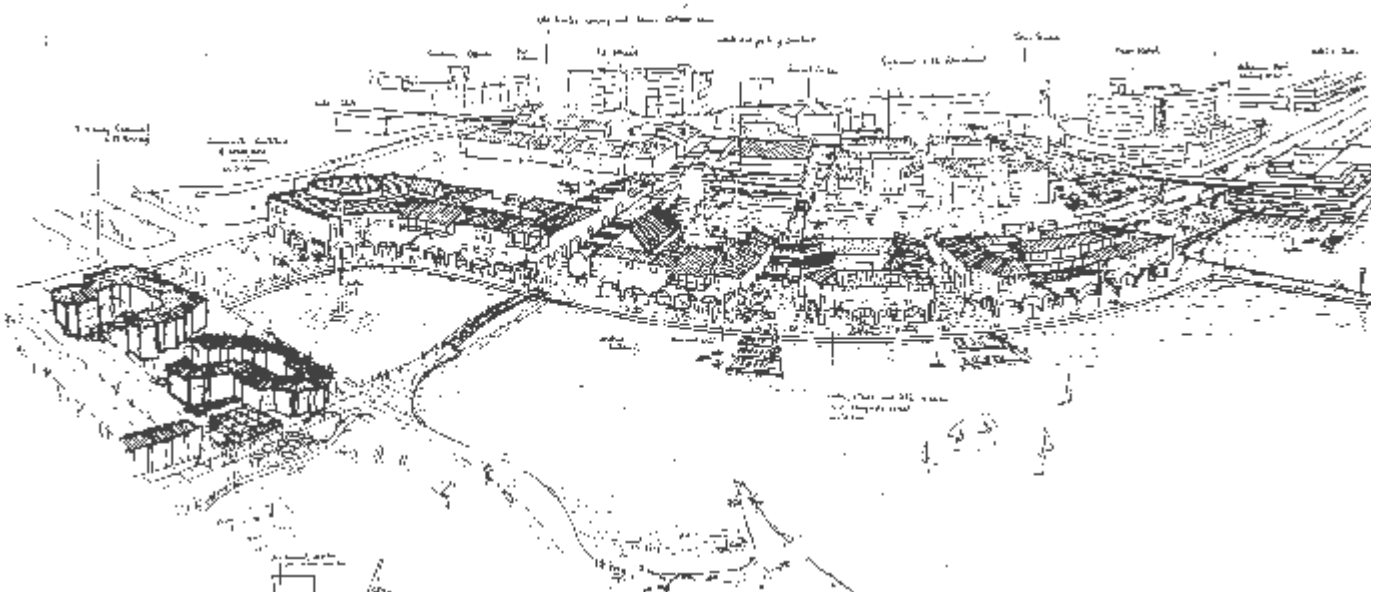


Figure 14: Emu Bank, 1983 Roger Johnson sketch (courtesy of Neil Renfree)

4.2.7 WIDE STREETS

Streets in the centre are wide, often with median strips. This provides a great opportunity for separated cycle lanes, onroad parking and attractive landscaping within the street. This reduces the need to impact on narrow verges, which may also require the relocation of services.

Wide streets are also better able to accommodate taller buildings while still feeling comfortable.

4.2.8 CONFIDENCE IS ENCOURAGING INVESTMENT

The level of investment in the centre by both government and private developers indicates a clear confidence in the future of the centre. People are choosing to live in the centre over competing locations because of the attractive outlook and amenities provided within Belconnen. This is also reflected in the feedback provided by the community, with a number of respondents commenting they are pleased with how the town centre is developing.

This places the centre in a good position to attract further investment.

4.2.9 ENABLING ATTRACTIVE DESTINATIONS

To meet the challenge of a lack of clear 'brand' or destination, opportunities presented by existing locations in Belconnen should be strengthened and utilised more effectively. There are two areas indicated in **Map 16** that have significant potential to become better destinations:

EMU BANK

The Foreshore precinct, including Emu Bank, presents a clear opportunity to add to the existing venues and utilise the attractive outlook to provide a quality outdoor dining precinct that could attract patrons from across Canberra.

Emu Bank was always intended as a busy entertainment area. Sketches prepared in 1983 by Roger Johnson were used to show how the area should develop (**Figure 14**). These indicate three storey buildings containing clubs, offices and residences, as well as a parking structure.

TCCS have completed the first stage of improvements to Emu Inlet, reconfiguring the shoreline and providing new landscaping. The second stage of improvements will complement work proposed by artsACT to provide a shared path on the lake side of the Arts Centre and the proposal by the Land Development Agency to sell the former water police site on Block 1 Section 149.

Map 16: Opportunities



Issues with the design of the Emu Bank commercial precinct are covered at section 3.4.8. These issues require close consideration to ensure any changes result in an attractive and viable destination.

LATHLAIN STREET

The development of the bus station and more active frontages at Westfield Belconnen, along with the new community health centre, has shifted the core area of activity in the centre from Benjamin Way to Lathlain Street.

The future redevelopment of the former Belconnen Police Station and remand centre and the proposed relocation and redevelopment of the ambulance and fire brigade sites present an opportunity for Lathlain Street to develop as a more traditional main shopping street for Belconnen, providing benefits for the wider area. This would not replace Benjamin Way as the centre's most important street.

The Belconnen Community Service and Belconnen Library are both seeking relocation due to issues with convenient access and running costs. The library in particular has poor access to car parking and public transport. Redevelopment at Lathlain Street could facilitate the relocation of these uses, bringing community services closer to the main shopping area, public transport and parking. This area may also be suitable for a distant future relocation of the CIT from its Bruce campus.

Together with the long-term reconfiguration or redevelopment of the bus depot, the area's proximity to public transport, retail and services will enable it to support a much broader range of uses and buildings than currently provided.

5. THE MASTER PLAN

5.1 MASTER PLAN STRUCTURE

The master plan structure in **Figure 15** indicates how the planning strategies and policies support achievement of the vision and principles. **Figure 16** indicates some of the key master plan assumptions that were used to develop the principles and planning strategies.

5.2 VISION

The vision for the Belconnen town centre has been developed with feedback from the community. It captures what is valued about the centre and sets out what the centre could be in the future.

BELCONNEN TOWN CENTRE'S FEATURES AND POTENTIAL SET IT APART FROM OTHER PLACES. THE LAKE, OPEN SPACES, LAYOUT AND NEARBY INSTITUTIONS PROVIDE UNIQUE ECONOMIC AND ENVIRONMENTAL ADVANTAGES. THESE WILL BE IMPROVED AND STRENGTHENED TO ENSURE THE TOWN CENTRE IS AN ATTRACTIVE, ACCESSIBLE AND DESIRABLE PLACE FOR PEOPLE TO LIVE, WORK AND ENJOY.

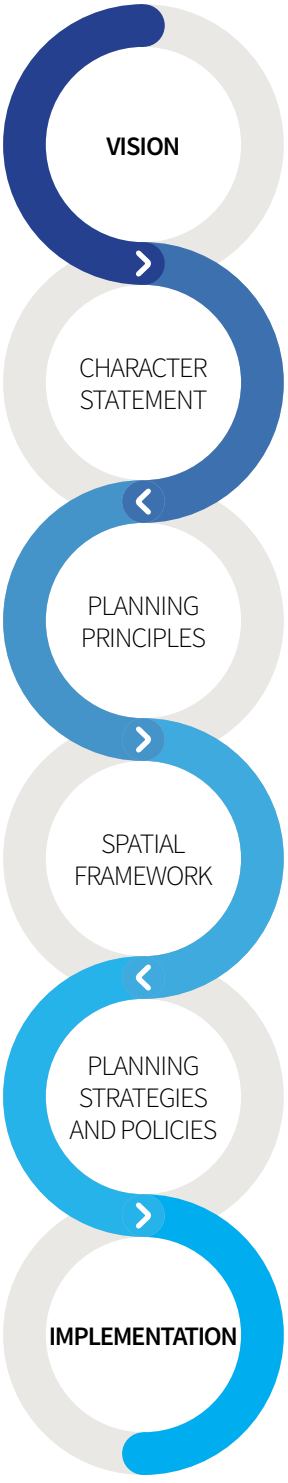
5.3 CHARACTER STATEMENT

Belconnen town centre's character has grown strongly and resiliently over the years. The centre has evolved into a place of choice, culture and variety. The arts centre, library, gymnasiums, ten pin bowling alley, skaters, restaurants, meetings, parks, cinemas, shops, clubs, workers, basketball stadium, Lake, dog walkers and artwork are helping make the centre a place people now want to live in, as well as work or visit.

The centre's evolving character is partly due to more diverse uses developing in areas that were previously only carparks or offices. Several clear precincts are emerging, as shown in **Map 17**, based on the established land use zones. These are described below.

- **Cameron Avenue precinct**—will undergo significant change from largely surface carparks to an area dominated by well designed taller residential development. This also offers an opportunity to provide better integration with the University of Canberra.
- **Retail and Office precinct**—will continue to provide important shopping and employment facilities, particularly with Westfield Belconnen, the Belconnen Fresh Food Markets and Australian Government offices. Employment demands may result in the construction of additional office buildings to front onto Lathlain Street.

Figure 15: Master plan structure

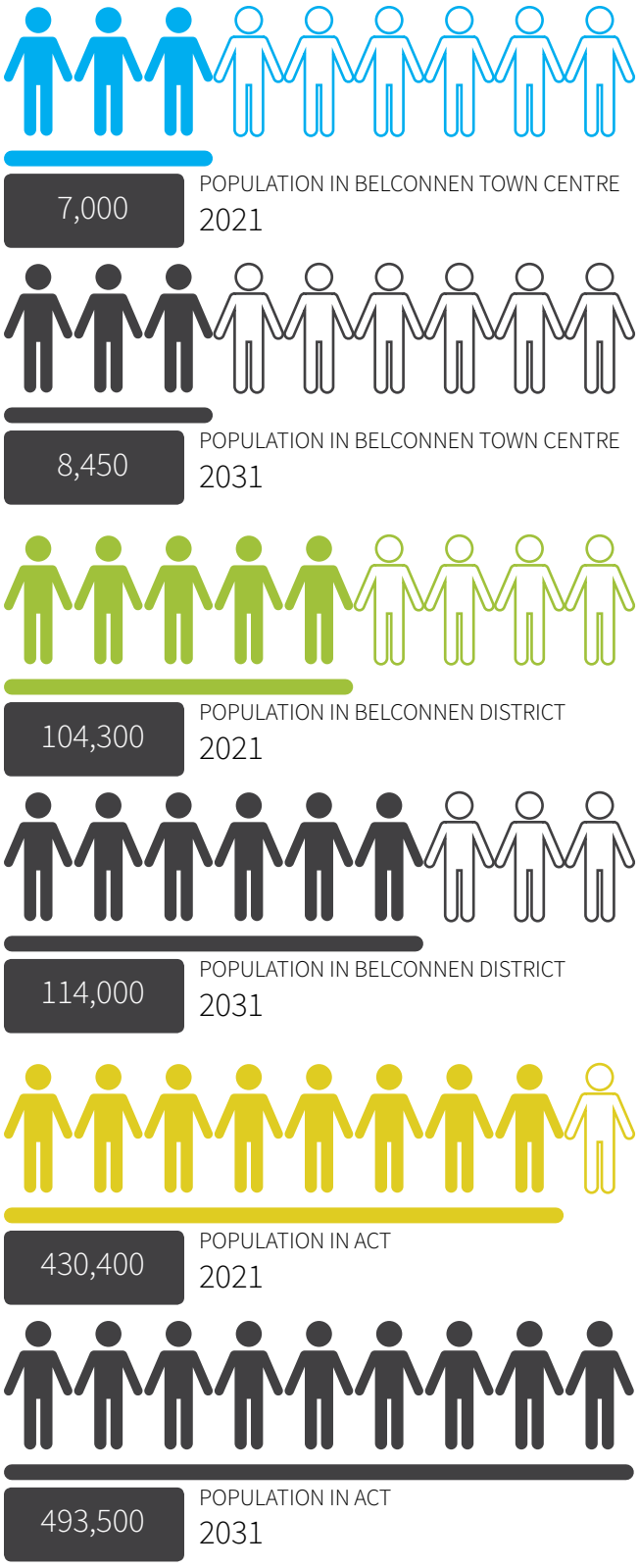


- **Foreshore precinct**—the opportunities provided by its northern outlook over the lake and existing diverse mix of uses, together with further improvements to the arts centre and Emu Inlet Park, will make this area become a key destination for Canberra. While stronger links to Margaret Timpson Park, the higher density residential area and the existing lakeside shared path will allow more people to enjoy the precinct, planning controls will require careful consideration.
- **Service trades precinct**—this will improve and should be promoted as the key location for small business, service trades and live music venues. Residential development may conflict with established uses and should be avoided for the time being.
- **Residential living precincts**—these will continue to provide a choice of medium density and aged care housing, and will benefit from being close to the increasing benefits and amenity of the town centre.
- **Community recreation and parkland precinct**—will remain as a district level environmental and recreational resource.
- **Margaret Timpson precinct**—will remain the formal core area of the centre with a wide mix of facilities. The use of the park will increase as it becomes the 'front yard' for the higher density residential area, with improved facilities and play areas. Additional residential uses will overlook the park and provide after-hours activity, making it safer.
- **Lathlain Street precinct**—will become an active area of the centre with an increased mix of business, community and residential uses following future comprehensive urban renewal.
- **University of Canberra precinct**—the integration of the University of Canberra with the town centre will ensure a more efficient, active and attractive town centre.

"BELCONNEN TOWN CENTRE'S CHARACTER HAS GROWN STRONGLY AND RESILIENTLY OVER THE YEARS."

Figure 16: Table of assumptions

POPULATION

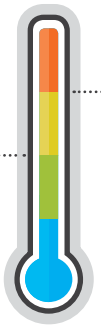


ENVIRONMENT

-40%

REDUCE GREENHOUSE GAS EMISSIONS 40% FROM 1990 LEVELS, BY 2020

SOURCE: AP2 (2012)



+0.7%

0.7% INCREASE IN TEMPERATURE IN THE NEAR FUTURE (2020–2039)

SOURCE: ACT CLIMATE CHANGE SNAPSHOT (2014)

RETAIL

EMPLOYMENT IN THE ACT/QUEANBEYAN



2021
260,000

2031
280,000

OFFICE FLOOR SPACE (GFA) - BELCONNEN TOWN CENTRE



2021
161,000 m^2

2031
185,000 m^2

RETAIL FLOOR SPACE (GFA) - BELCONNEN TOWN CENTRE



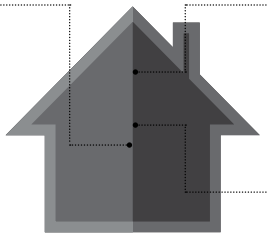
2021
221,000 m^2

2031
283,000 m^2

DWELLINGS

20%–25%

CANBERRA'S HOUSING DEMAND FROM CITY AND TOWN CENTRES



3000

AVERAGE DWELLINGS PER YEAR 2011–2031

100–150

DWELLINGS PER YEAR IN BELCONNEN TOWN CENTRE TO 2031

5.4 PLANNING PRINCIPLES

The following planning principles are applied to guide the implementation of this master plan, its vision and strategies. The principles reflect the future desired outcomes for the centre. **Table 3** shows how the planning principles are supported by the planning strategies.

5.4.1 ENCOURAGE A MIX OF RESIDENTIAL, EMPLOYMENT AND OTHER OPPORTUNITIES

The most active and successful urban places are those which are attractive, accessible and safe. They offer a choice and variety of complementary activities and land uses, which together generate street life throughout the day and week, encourage multi-purpose trips, and provide the economies of scale that support business activity. People want to visit or live in such places. More people in these places makes them more active and safer, and will further improve the area's character.

Belconnen town centre's advantages of location, amenities and a large surrounding population should be utilised to provide active destinations, particularly at Emu Bank. These will be supported by an improved public domain through features such as street furniture, paving, lighting and street trees.

Supporting a strong local community is a key factor in ensuring the 'liveability' of the centre. Taller residential developments are often criticised for a lack of 'community'; however, factors such as places to meet, gardens and community-run events can strengthen a community and help integrate new and existing residents.

The possibility of the centre losing a substantial part of its employment base highlighted the need to reinforce and diversify employment opportunities. Its relationship with the University of Canberra and other institutions provides significant economic advantages that have not been fully realised. Integrating the university and new University of Canberra Public Hospital with the centre will create opportunities for new employment and should be a priority.

A large number of businesses outside Westfield Belconnen provide substantial employment in the centre. However, these businesses lack a unified identity and marketing focus that could promote the area and allow it to compete more effectively. Other initiatives, such as establishing low-rent office space for business start-ups that are connected to high speed broadband, should be considered.

Map 17: Character precincts



Consideration of how and when development occurs on remaining vacant sites is important to ensure active destinations and enhance economic returns. This extends to considering the future of current office employment sites if Australian Government departments relocate.

5.4.2 TRANSITION TOWARDS A HUMAN SCALE AND INVITING PUBLIC DOMAIN

A central design principle for lively urban centres is that they are designed to respond to the 'human scale' and have an inviting and attractive public domain. Human scale refers to an urban environment that is sensitive and responsive to the proportions and sensory characteristics of human beings. For example, the most popular urban spaces are typically no wider than the distance at which human facial expressions are differentiable (about 20 metres). Aspects of the built environment that should respond to the human scale are dimensions of roads and public spaces, building heights and designs, distances people are required to walk to undertake their activities and streetscapes. Treatment at street level should contribute to the liveability and quality of the public domain.

The centre has a legacy of planning based on the requirements of cars, resulting in only a few human scale and inviting places within the centre. The master plan recommends strategies that promote this type of public space design to transition towards a more attractive and lively town centre.

5.4.3 GROW THE SHARE OF SUSTAINABLE TRANSPORT AND PROVIDE BETTER PARKING MANAGEMENT

Growth in sustainable transport, including walking, cycling and bus travel, presents major opportunities for the centre, increases liveability and reduces the environmental impacts of transport. Sustainable transport is well-suited for access to the centre due to its efficiencies, low emissions and positive relationship to public life. Sustainable transport has diverse individual and public benefits including health and lifestyle benefits.

Sustainable transport requires a concerted effort, including support through land use and building design, traffic infrastructure, pedestrian and cycle infrastructure, public transport service levels, and marketing and promotion. This could help improve cycling rates to the centre. At present, although a large number of people work in the centre and live within cycling distance, less than 2% cycle to work.

Safer roads, improved operation of some intersections and a refined public transport system that accommodates increased demand and the future possible provision of light rail are needed. Ensuring more efficient provision and usage of parking supply through measures including identifying locations for parking stations and implementing 'smart parking' can help create a safer and easier-to-navigate centre.

5.4.4 ENCOURAGE BUILT FORM THAT CONTRIBUTES POSITIVELY TO THE TOWN CENTRE.

The relationship of buildings to streets and open space is important to consider in the development of attractive and safe streetscapes. Buildings define urban spaces and add to their character, amenity and level of activity. Some recent buildings have successfully contributed to the centre; however, there should be better guidance to ensure better quality design and more coordinated outcomes.

Consideration of issues such as building heights, form, scale, setbacks, provision of awnings or colonnades, innovative building design and defining where active frontages are required would help ensure better quality built form and public spaces. In particular, a buildings' first six floors should serve to activate and provide passive surveillance of the public realm by means of residential balconies, occupied office space or other features. Other important considerations are the impact that taller buildings may have on wind tunnelling, overshadowing and their relationship with the surrounding landscape.

5.4.5 ENABLE AN ENVIRONMENTALLY RESPONSIBLE AND RESILIENT TOWN CENTRE

Belconnen town centre provides an opportunity to help reduce Canberra's large ecological footprint and achieve a better environment.

The quality of stormwater flowing to the lake can be improved and areas around the lake enhanced for wildlife habitat and connectivity. The use of open space for activities, including community gardens, will be considered, and the community encouraged to take ownership of rehabilitation, maintenance and revegetation projects.

The construction of more energy-efficient buildings will be encouraged and planting of street trees will ensure the streets will be pleasant places on warmer days. Better infrastructure encourages more people to walk or cycle to work, and enables more efficient water use.

Map 18: Spatial framework



5.5 SPATIAL FRAMEWORK

The spatial framework (**Map 18**) sets out how the broad structure of the centre could be arranged in the long term. The spatial framework shows how land use, public domain and connections could be arranged and delivered.

The spatial framework recognises the challenges in the centre and brings together the opportunities, vision and planning principles to illustrate how the Belconnen town centre could change over the lifetime of this master plan.

Table 3: Summary of principles and strategies

PRINCIPLE	STRATEGY
Encourage a mix of residential, employment and other opportunities	Encourage the development and renewal of active destinations Encourage town centre living Improve the relationship with the University of Canberra and other institutions Provide improved amenity for business activity in the service trades area precinct Retain sites for employment
Transition towards a human scale and inviting public domain	Improve quality and use of open space areas Improve the public domain Ensure buildings enable active streets
Grow the share of sustainable transport and provide better parking management	Improve conditions for walking and cycling Encourage greater use of public transport Manage parking Encourage safer roads
Encourage built form that contributes positively to the town centre	Encourage appropriate building height, bulk and setbacks Encourage innovation in building design Ensure buildings enable active streets
Enable an environmentally responsible and resilient town centre	Enhance ecological value of green spaces and living infrastructure

The spatial framework comprises the following main structural elements:

- Key activity areas and streets:
  - > Westfield Belconnen, fronting Lathlain Street and Benjamin Way
  - > Emu Bank and the Lake Ginninderra foreshore
  - > The higher density residential area of Cameron Avenue, including the proposed mixed use development on Section 48
  - > The Belconnen Fresh Food Markets
  - > Clear road connections into the University of Canberra
  - > Oatley Court and redevelopment at Lathlain Street.
- Large sites either side of Cameron Avenue offer opportunities for future mixed-use development supported by a network of mid-block streets and laneways. This will transform Cameron Avenue into a lively east–west oriented street through the main residential and commercial parts of the town centre.
- Benjamin Way, with its avenue of elm trees in the wide median, serves as both a strong 'ceremonial' boulevard and a high activity street adjacent to Westfield.



Figure 17: Artist's impression showing buildings along Emu Bank

- Lake Ginninderra, which provides a natural setting for the northern edge to the town centre, gives the centre a strong regional character.
- The service trades area offers a fine grain structure, however many links are pedestrian only. Buildings in this area are limited to two storeys, with a wide variety of uses.
- Perimeter arterial roads bypass the centre and provide the centre's major arrival points. They present barriers to local pedestrian access from surrounding neighbourhoods.
- Emu Bank and Lathlain Street are identified for mixed use urban renewal. Each can support substantially increased development and offer more active destinations.
- A number of urban parks and public spaces, including Margaret Timpson Park, Lathlain Street, Oatley Court, Emu Bank, Library Place and Short Close.
- The three medium-density residential areas which will benefit from a more walkable and lively town centre.
- The sloping topography, which adds character and interest while presenting challenging development conditions in some locations.

5.6 PLANNING STRATEGIES

The planning strategies are informed by the vision and planning principles in the previous section. They provide direction and guidance for the future development of the centre over the long term, considering the broad range of issues identified in Chapter 3: Background and analysis. These strategies include:

1. Encourage the development and renewal of active destinations
2. Encourage appropriate building height, bulk and setbacks
3. Encourage innovation in building design
4. Ensure that buildings enable active streets
5. Encourage town centre living
6. Provide improved amenity for business activity in the service trades area precinct
7. Retain sites for employment
8. Improve the relationship with the University of Canberra and other institutions

9. Improve the public domain
10. Improve the quality and use of open space areas
11. Improve conditions for walking and cycling
12. Encourage greater use of public transport
13. Manage parking
14. Encourage safer roads
15. Enhance ecological value of green spaces and living infrastructure

The planning strategies will be achieved through private sector investment, provisions to be included in the Territory Plan, land releases, public domain upgrades (which will be subject to consideration by the ACT Government through future budget processes) and completion of further studies.

5.6.1 ENCOURAGE THE DEVELOPMENT AND RENEWAL OF ACTIVE DESTINATIONS

There is a desire by the community to see attractive and active locations established within the centre, particularly for night-time use. Rather than dispersing activity across the centre, it is preferable to concentrate it in key areas. Emu Bank and Lathlain Street are two locations where more active destinations could be viable.

A key issue will be to ensure conflict between new and existing uses is minimised; for example, existing uses such as service trades, music venues and restaurants should not be forced to close due to complaints from new residents. Likewise, existing residential areas should not suffer from noise created by new uses.



Figure 18: Artist's impression showing Emu Bank Foreshore

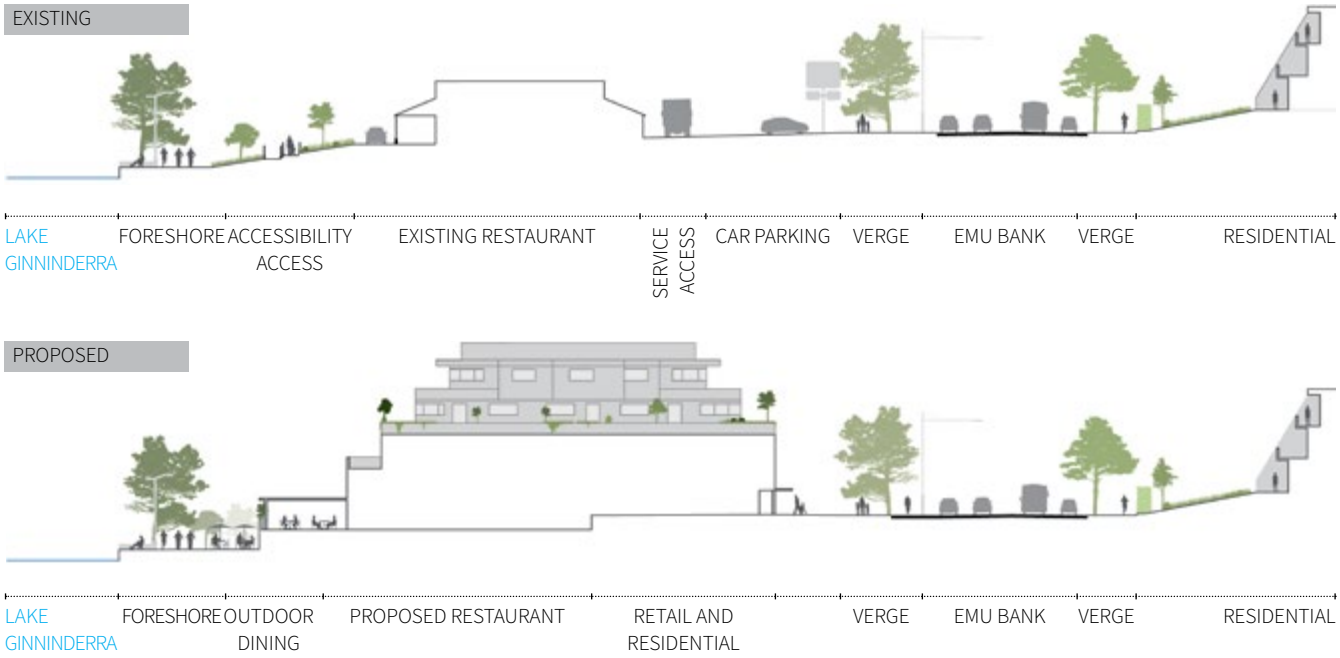


Figure 19: Emu Bank cross section

GENERAL

RECOMMENDED PLANNING POLICIES

The Territory Plan requires the impacts of noise to be reduced, for example when sites are redeveloped to accommodate potential noise sources or when new residential development is near existing noise sources. To ensure these noise requirements are effective and that developers consider the issue of noise early in the planning of new development, it is recommended:

- Identify zones where noise may be an issue and new residential developments will be required to comply with the noise attenuation requirements of the multi-unit housing development code. This will address noise from existing noise sources including the Belconnen Skate Park, bus stations, service trade uses and entertainment venues.
- When a noise management plan is required, identify existing noise levels by monitoring of the noise source and address the higher noise level of either the code or what was recorded.
- Suggest methods to reduce the possible impact of noise that could be considered during early stages of design, including the orientation of bedrooms and balconies away from the noise source or incorporating 'wintergarden balconies', which provide an additional noise barrier.
- Where new noise sources are proposed near to existing or proposed residential areas, require the noise management plan to meet maximum noise levels on the noise source block, rather than at the boundary of impacted (residential) blocks.

The expansion of Westfield Belconnen to provide an active frontage to Lathlain Street has been very successful. Providing a similar active frontage to Westfield's Benjamin Way frontage will open up the centre to Margaret Timpson Park:

- Consider measures that may assist Westfield Belconnen to provide a range of uses along its frontage to Benjamin Way that provide after-hours activity and help engage the centre with Margaret Timpson Park.
- As part of measures to improve pedestrian and cycle routes in the town centre, additional verge space may be possible adjacent to Westfield Belconnen.

"THE TERRITORY PLAN REQUIRES THE IMPACTS OF NOISE TO BE REDUCED,"

Map 19: Emu Bank lakeside promenade



FORESHORE PRECINCT

A key attraction of Emu Bank is the wide diversity of uses, including Ginninderra College, the Belconnen Skate Park and Belconnen Arts Centre and the connections to John Knight Memorial Park and the University of Canberra. This diversity must be encouraged to attract a wide range of people at different times. For example, complaints about noise from future residents should not limit the skate park's current operating times.

The approved expansion of the arts centre, together with the proposed extended lakeside shared path to the north of the centre, will provide an opportunity for better integration of cultural and community events with the area. The land to the east of the centre has potential for a range of commercial and community uses, which would link the arts centre to other uses on Emu Bank. Close consideration of the best use of this land is required, which would maintain a relationship with the lake and town centre.

The Belconnen Skate Park is highly rated but needs a plan of management to ensure continued improvement. For example, additional shade, drinking fountains and rubbish/recycling bins could be considered.

As detailed under section 4.2 Opportunities, this precinct has strong potential to better utilise its lakeside aspect and become a more attractive destination. The community strongly supported this. A lakeside dining promenade would form the core of this precinct, with larger, better quality outdoor dining areas facing the lake, a greater choice of venues that includes takeaway facilities as well as higher-end restaurants and a more attractive presentation to both the lake and the street at Emu Bank.

The strategy to achieve this includes a limited increase in building heights to stimulate redevelopment of existing sites, requirements for building set-backs and orientation to provide active edges to the street and lake foreshore, improved pedestrian links and public domain upgrades. Building height increases are recommended for four blocks to increase the allowable height from two to four storeys, as indicated on **Map 19**. The four-storey components will be positioned to enable views from the Mirimar apartments opposite.

The current parking requirements have impeded redevelopment in this area and have resulted in the visual dominance of surface car parking. Reconsidering the on-site parking requirements could provide an incentive for redevelopment and better outcomes.

The suggestion to construct an additional structured carpark at Emu Bank was identified in the draft master plan, however this is now unlikely to proceed. It is considered a better outcome will be achieved by requiring the future parking demand to be met by a combination of on-site parking and better awareness and utilisation of existing carparks. Adjacent carparks, including Westfield Belconnen, the rear of Nature Conservation House and future structured carparks on sections 48 and 152 currently have significant after-hours capacity.

Future possible views of Emu Bank are provided at **Figure 17** and **Figure 18**, and a possible future section is at **Figure 19**.

RECOMMENDED PLANNING POLICIES

On blocks 76, 79 and 80 of Section 65:

- Buildings will be permitted up to four storeys on 60% of the four-storey zones indicated on **Map 19**, provided the buildings are set back a minimum 6 metres from side boundaries and are orientated to retain some existing views to the lake from the apartments opposite and avoid a four-storey 'wall' to either the lake or Emu Bank.
- Consider adjusting existing car parking controls for the area to ensure redevelopment is a viable outcome.
- Adopting the 'smart parking' initiative will enable the more efficient use of nearby carparks and avoid the need to construct additional structured car parks.
- Require a minimum 10 metre setback from the lakeside block boundary to the building line of redevelopment sites to encourage landscaped outdoor eating areas at the same level as the shared path.
- Require a minimum 3 metre wide pedestrian easement on each side boundary, apart from the north-west boundary of Block 80, Section 65 to maintain pedestrian connections from Emu Bank to the lake.



Westfield Belconnen Bus Station

On sections 65, 149 and 187

- Provide a precinct code control that over-rides the current rule requiring a 6 metres setback to all block boundaries. This currently makes redevelopment unachievable on small blocks.

RECOMMENDED PUBLIC DOMAIN UPGRADES

- Improve the visibility and way finding of the path connecting Chandler Street to Emu Bank, on the north side of Padthaway Gardens apartments. Providing an additional raised pedestrian crossing on Emu Bank to align with this path will increase safety and will connect Emu Bank to additional car parking along Chandler Street.
- Improve the lakeside shared path beside Section 65. This paving has become unstable and requires replacement or repair.
- Consider constructing a timber boardwalk adjacent to the existing Emu Bank lakeside shared path. This could be at the level of the path and would accommodate increased numbers of pedestrians and cyclists. This was suggested by several people during consultation and was indicated in the Belconnen Lakeshore Master Plan (1998) but has not progressed.
- Enhance the lighting of main pedestrian areas, particularly along the shared lakeside path, from the Belconnen Arts Centre to John Knight Memorial Park to provide a greater level of safety and amenity to these areas.
- Support TCCS in progressing the second stage of improvements to Emu Inlet. The first stage has provided substantial changes to this key area, however completion of the second stage will greatly improve the usability of the area.

OPPORTUNITIES FOR LAND RELEASE

- Investigate the future potential for redevelopment of Padthaway Gardens apartments on Section 55 as a combined carpark and residential development. This may enable better development outcomes on Section 65, fronting onto to the lake.
- ArtsACT is progressing the construction of a shared path next to the lake, beside the Belconnen Arts Centre. However the future use of the land created needs to be determined. While sale of this land may assist in funding projects such as the second stage of the Belconnen Arts Centre, retention as community space associated with the Belconnen Arts Centre could be more appropriate.

RECOMMENDED FUTURE STUDIES

- Together with TCCS, Sport and Recreation Services and users, develop a management strategy for the Belconnen Skate Park to ensure its ongoing improvement and maintenance.



Figure 20: Lathlain Street precinct – artist's impression looking south west

LATHLAIN STREET PRECINCT

Renewal of the Lathlain Street precinct, led by redevelopment of several large Territory-owned sites, presents an opportunity for Lathlain Street to become the main shopping street of the town centre, as indicated in **Map 20** and **Figure 20** and **21**. Given the proximity to existing amenities, including the bus station and Westfield, this area has considerable potential to support a much greater level of activity through the development of medium-rise buildings and an increased range of uses, including residential, commercial, retail and community uses.

As outlined at section 5.6.3, both the Belconnen Library and Community Centre want to relocate to this area.

Following consultation on the draft master plan, the layout and proposed height limits of some blocks in this area have been amended to provide a more comfortable scale and relationship between Lathlain and Rae Streets.

A focal point for the precinct will be the proposed urban park next to Lathlain Street at Walder Street, which will provide an important setting for community facilities and enjoying public life and outdoor dining. The urban park will provide an entry point to the precinct from Lathlain Street and Westfield, as indicated in **Figure 20**. A proposed shared traffic zone at Rae Street will allow the urban park to transition into a large open forecourt to future development on land between Walder Street and Purdue Street.

Walder Street is proposed to be extended to connect through to Lathlain Street to support increased activity and circulation within the precinct. Together with a pedestrian pathway terminating Purdue Street, connections between activity on Lathlain Street and any possible future redevelopment of the bus depot will be easy and clear.

Redevelopment of sites fronting onto Walder Street and Purdue Street for upper level residential development will take advantage of increased activity and close proximity to the bus station. To encourage greater flexibility and the possible development of additional small office space, it is proposed to restrict residential uses from the first floor level. It is recommended that the zoning of these areas be changed to 'Business Zone' (CZ2).

Map 20: Lathlain Street precinct map

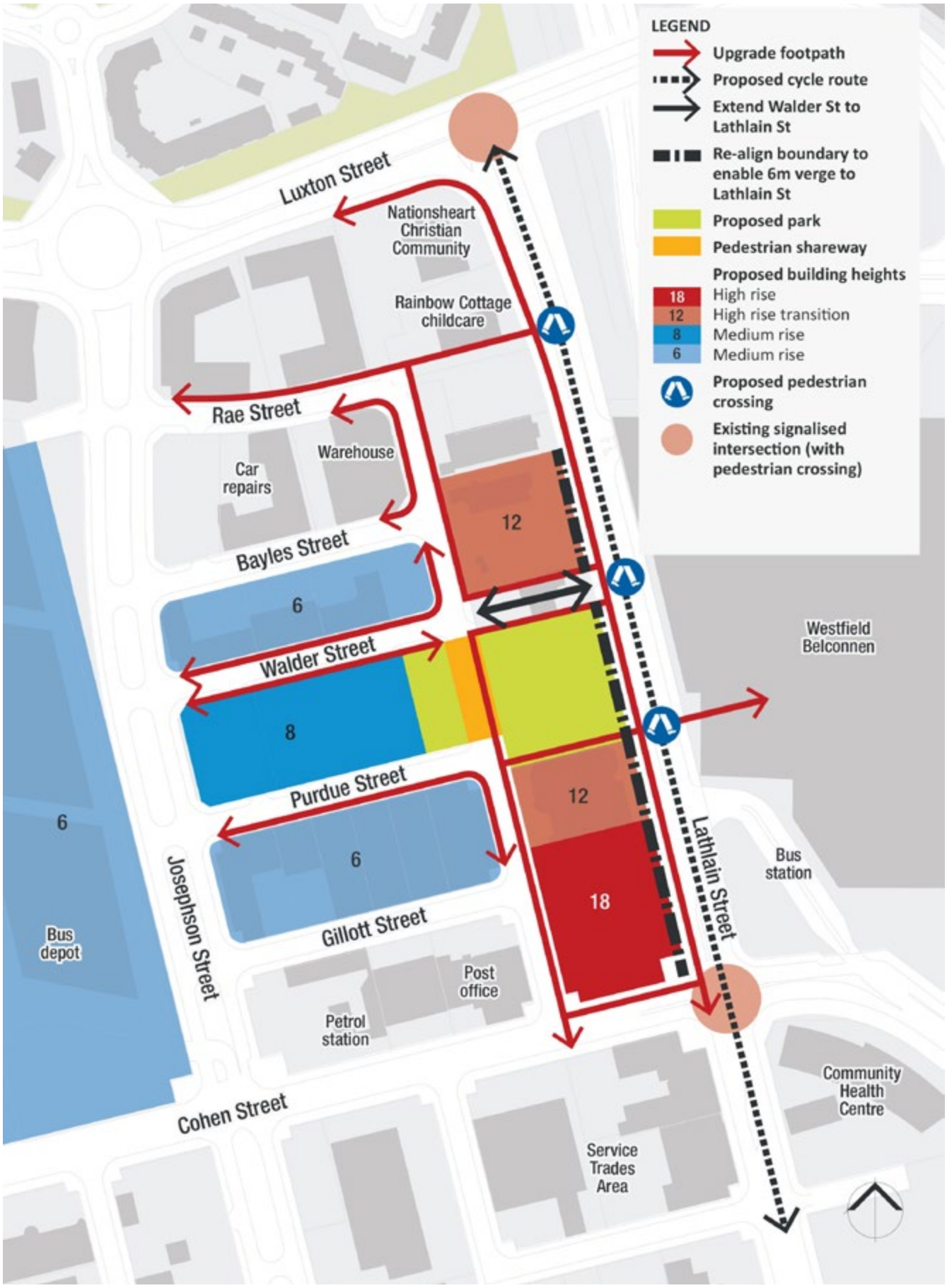
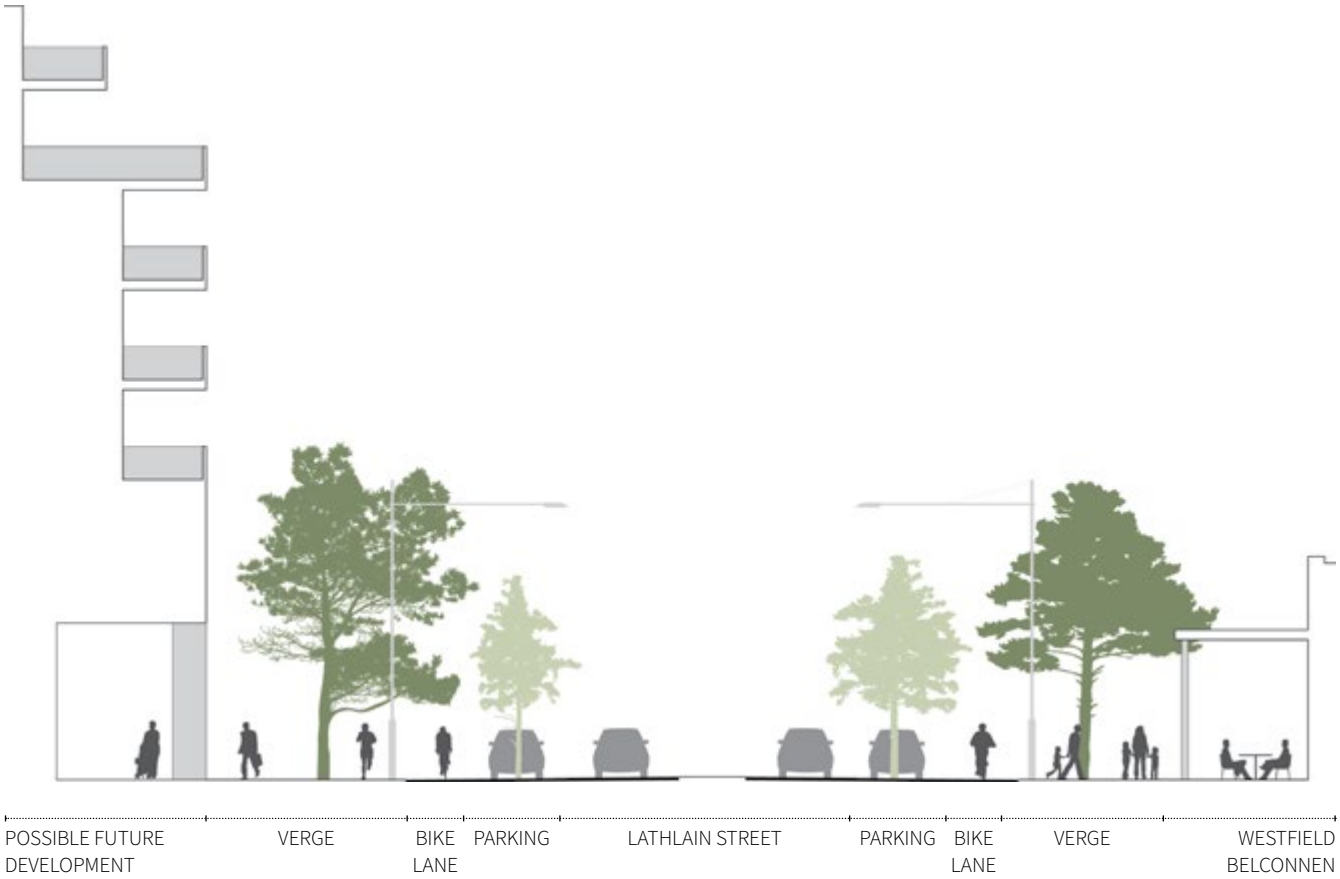


Figure 21: Lathlain Street cross section



Blocks 22 and 23, Section 21, which front onto Lathlain Street, currently contain a car wash and motor vehicle repairer. The draft master plan indicated a possible increase in allowable height to enable mixed-use development. Given the need to retain successful service trades uses and the capacity of the adjoining area to accommodate additional mixed use development, it has been decided to retain the current two-storey height limit and Service Trades (CZ3) zoning.

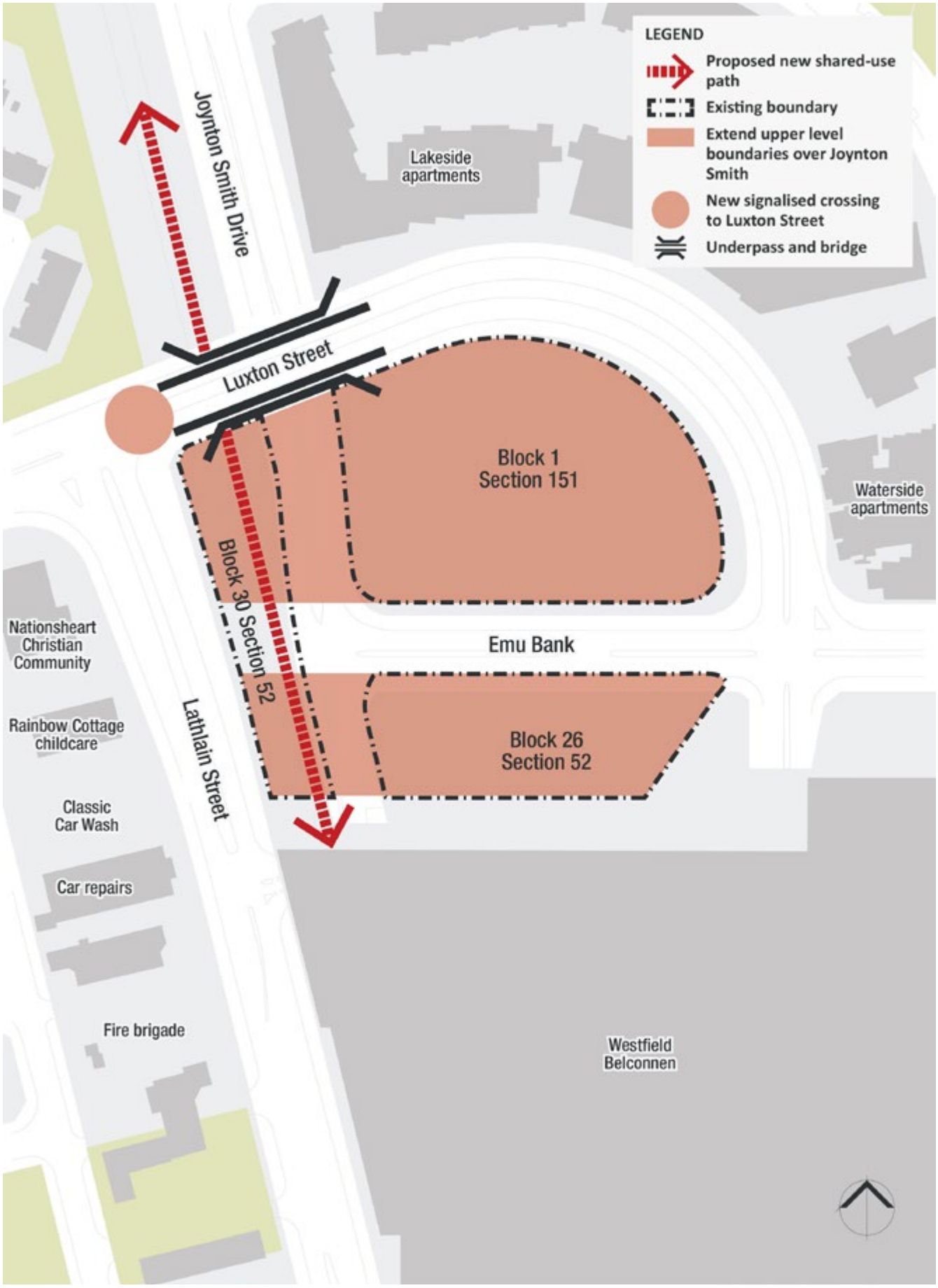
Block 30, Section 52 fronts onto Lathlain Street and, at the lower level, Joynton Smith Drive. This block is narrow and difficult to develop, with the lower level backing onto a retaining wall. A better outcome may be to connect this block with Block 1, Section 151 and with Block 26, Section 52 at an upper level, as indicated in **Map 21**. This will enable Block 1, Section 151 to be 30% larger and Block 26, Section 52 to be 36% larger. This will require Block 30, Section 52 to be rezoned from Transport Zone to either Core Zone (CZ1) or Business Zone (CZ2)

These changes would have multiple benefits: buildings would front onto Lathlain Street, the Joynton Smith busway could be preserved as a cycle way and Joynton Smith Drive would remain.

Development of these two blocks should facilitate activation of the abutting east–west section of Emu Bank. Given the size of Block 1, development should include the creation of a publicly accessible and usable open space, including the creation of a high quality and convenient pedestrian connection between Lathlain Street and Emu Bank. Block 1, Section 151 is also a suitable location for a public car parking structure (**Map 27**).

"...IT IS PROPOSED TO RESTRICT RESIDENTIAL USES FROM THE FIRST FLOOR LEVEL."

Map 21: Detail of proposed block configuration at Lathlain Street renewal precinct





Cameron Offices

RECOMMENDED PLANNING POLICIES

- Establish controls to limit building heights in accordance with **Map 20**:
  - > Sections 185 and 186 up to six storeys
  - > Sections 22 up to eight storeys
  - > Block 2, Section 23 up to 18 storeys including a six storey podium
  - > Part Block 24, Section 21 up to 12 storeys including a six-storey podium
  - > Section 151, block 1 and Section 52, block 26, up to 12 storeys including a structured carpark, subject to a development master plan.
- Restrict subdivision of land that could compromise the ability to achieve the development outcomes or land use intensity envisaged for the precinct.
- Consolidate blocks 2 and 3, Section 22 to enable mixed-use development with active uses at ground floor, as indicated on **Map 20**. This site could be suitable for use as a structured carpark, however if the primary use is residential, the first floor is to be used as commercial, to provide additional small office space.
- Set back development on Section 22 to 20 metres from the Rae Street site boundary to enable a landscaped park area, which will form a visual extension of the new park proposed to front onto Lathlain Street.
  The construction and maintenance of the park on Section 22 will be the responsibility of the block lessee.
- Sections 22,23, 185, 186 and part 21 are to be rezoned from Services Zone (CZ3) to Business Zone (CZ2).
- Rezone Block 4 Section 22 from CZ3 to road reserve to enable a wider verge to Josephson Street.
- Sections 185 and 186 are to have active frontage to Purdue or Walder streets at ground level and commercial space at first floor, with residential uses permitted above. The first floor commercial is intended to provide space for small offices and provide a buffer between residential uses and possibly noisy ground floor uses.
- Maintain space for community uses with a substantial ground floor presence.
- Reconfigure blocks 1 and 24, Section 21 and Block 3, Section 21 into new blocks to enable the construction of a public park between Rae Street and Lathlain Street, an extension of Walder Street through to Lathlain Street, and the construction of a maximum 12-storey building on the northern portion.
- Form a left in / left out intersection where the proposed Walder street extension meets Lathlain Street.
- Rezone the proposed new Walder Street Park from Services Zone (CZ3) to Urban Open Space (PRZ1).
- Rezone the extension of Walder Street and associated verges from CZ3 to road reserve. Rezone the northern portion of existing Block 24, Section 21 from CZ3 to Business Zone (CZ2).
- Rezone Block 2, Section 21 and Sections 185 and 186 from CZ3 to Business Zone (CZ2).
- Given the existing 4.4 metre width is not sufficient, adjust the Lathlain Street boundaries of Blocks 1 and 24, Section 21 and Block 3, Section 21 to provide a minimum verge width (from the gutter to the block boundary) of 6 metres to ensure the verge provides suitable space for pedestrians and large canopied street trees.

RECOMMENDED PUBLIC DOMAIN UPGRADES

- Upgrade streetscapes on Walder Street and Purdue Street frontages of Sections 185 and 186 to meet usage requirements in this location.
- Extend Walder Street through to Lathlain Street. This should continue with footpaths and street tree planting to provide a clear link between Rae Street and Lathlain Street as indicated in **Map 20**. This could be provided as part of off-site works for redevelopment of adjacent blocks.
- Require all redevelopment in the area to provide awnings or continuous colonnades where buildings front a public footpath. Awnings are to be a minimum 3 metres wide and 3–4 metres high.

RECOMMENDED FUTURE STUDIES

Investigate the feasibility of subdividing, consolidating and enabling air rights over Joynton Smith Drive to Block 26 and 30, section 53 and Block 1, Section 151.

Block 3, Section 23 provides an overland flow path. Investigate how this can be retained and incorporated into the proposed new Walder Street Park as a water sensitive urban design feature. The redundant underpass will be filled to provide a pedestrian link between Purdue Street and Lathlain Street.

Determine the feasibility of changing Purdue Street and Walder Streets to one-way streets to enable greater amounts of on-street parking.

5.6.2 ENCOURAGE APPROPRIATE BUILDING HEIGHT, BULK AND SETBACKS

As detailed in section 3.7.2, the community is generally supportive of the suggested range of maximum building heights, up to a maximum of 27 storeys. However, this was largely conditional on achieving a higher design quality.

In determining the maximum allowable heights, basic principles were developed in addition to considering the potential capacity, sites where redevelopment is likely to take place and how the character of precincts should develop. Key principles include:

- The centre should be contained below the surrounding ridgelines to allow the landscape to remain dominant when the centre is viewed from a distance.

"...THE CENTRE SHOULD BE CONTAINED BELOW THE SURROUNDING RIDGELINES TO ALLOW THE LANDSCAPE TO REMAIN DOMINANT WHEN THE CENTRE IS VIEWED FROM A DISTANCE."

- Higher level buildings are generally graduated back from the lake front to allow for northern views and solar access.
- To reinforce the boulevard of Benjamin Way, a consistent height that relates to the current NCA height was generally adopted.
- The existing residential areas at Emu Ridge and Totterdell Street will retain the current generally two storey limit and RZ2 zoning, apart from a site fronting College Street, where the height limit and zoning will be changed to better relate to the higher development opposite.
- Higher level buildings to be generally limited to the Cameron Avenue Precinct.

To achieve a high design quality, along with other aspects such as public domain improvements, it is recommended to offer developers incentives, in the form of height increases, through a revision to the precinct code. To gain additional building height, developers will need to meet a range of criteria. The suggested criteria and assessment method are outlined at section 5.6.3, 'Encourage innovation in building design'.

Map 22: Proposed maximum building height limits



RECOMMENDED PLANNING POLICIES

- Revise the Belconnen Precinct Code to specify a range of maximum height limits for all areas of the centre. The following maximum heights are dependent on satisfying a number of the criteria outlined in section 5.6.3:

Table 4: Building heights

HEADINGS	BUILDING HEIGHT IN STOREYS			
Maximum base height allowed on site	4	9	14	21
Potential additional storeys subject to meeting at least 5 of the 7 criteria outlined in section 5.6.3.	2	3	4	6
Resultant maximum height, as indicated in **Map 22**.	6	12	18	27

- Large blocks that can support several taller buildings are required to provide a clear variety in building heights, rather than several buildings all at or near the maximum height limit.
- Incorporate a clear base, middle and top for taller buildings (12 storeys or above) unless demonstrating exceptional design quality. Buildings must provide a strong relationship with the public domain and avoid towers that continue to the ground.
  - > Building bases or podiums will define entrances and provide attractive and active frontages to main pedestrian areas.
  - > The middle of taller buildings will be set back in accordance with **Table 5**.
  - > The top of taller buildings will provide an appropriate finish to the building form and be designed to integrate or conceal plant rooms.

RECOMMENDED FURTHER STUDIES

- Continue to work with the National Capital Authority to determine any requirement to adjust the current Development Control Plans for the Belconnen Town Centre to ensure they remain consistent with this master plan.

BUILDING SETBACK

- The proposed general minimum setback controls for sites with no site-specific setback requirements are provided in **Table 5**.
- Where a zero setback to the front property boundary is required by **Table 5**, additional setbacks are allowed where active uses, entrances and landscaping are provided.

Table 5: Setbacks

HEIGHT	SETBACK
Podium up to 6 storeys	0 metres
Towers from 7 to 12 storeys	3 metres
Tower from 12 storeys and above	6 metres

5.6.3 ENCOURAGE INNOVATION IN BUILDING DESIGN

The current Territory Plan controls generally do not provide building height limits or incentives to encourage better development outcomes in the centre. Recent larger residential developments, such as *Linq* and *Altitude*, demonstrate that high quality design, increased building sustainability features or substantial improvements to the public domain are achievable. These outcomes will be encouraged with all new development in the centre through the proposed range of height increases outlined at section 5.6.2.

Buildings or items that have exceptional design or have become part of the centre's history need to be recognised and retained where possible. The Belconnen Library and the Tumbling Cubes sculpture have been recognised through a preliminary study as having possible value for inclusion on the Heritage Register.

The possible relocation of the library and community centre to a new site at Lathlain Street is strongly supported by the management and many users of these facilities. This is an opportunity to construct an innovative, accessible and efficient facility to meet the future needs of the Belconnen district. It is vital that a community facilities needs assessment is undertaken to determine if additional community facilities are required and the actual floor area that should be provided in a new library and community centre building.

Further to this, a more detailed consideration is required of how the existing library and community centre buildings should be used or developed into the future. This is important given the possible heritage significance of the elm tree and library building, key pedestrian routes and significant level changes.

RECOMMENDED PLANNING POLICIES

- Establish development controls that provide incentives for good development outcomes on sites where the base maximum allowed height is four storeys or higher. To achieve additional storeys in accordance with **Table 4**, it is recommended that a number of the following criteria will be required to be met. This provides flexibility for site or design constraints:
  - > The developer provides a clear demonstration of how the development exceeds the minimum statutory requirements for environmentally sustainable development (e.g., energy rating, Water Sensitive Urban Design, solar access). Residential buildings should be designed to optimise solar access, energy efficiency and cross ventilation.
  - > The development contributes to the public domain through providing a suitable amount of street trees, street furniture and/or paving either on adjoining verge areas or elsewhere in the centre.
  - > The design contributes to the character of the centre, through consideration of building form, materials, the relationship to main pedestrian routes, the streetscape and nearby development.
  - > The number of required adaptable units is increased.
  - > The development contributes towards active travel or active living infrastructure.
  - > The development provides a good mix of apartments with 1, 2 and 3 or more bedrooms.
  - > The development provides an innovative and a diverse choice of apartment design/layout such as dual key, double height spaces, dual aspect and winter garden balconies to support the diverse lifestyles of residents.
  - > The development minimises its impact on the centre's micro climate, including minimising overshadowing of main public spaces and residential buildings, providing clear measures to reduce wind shear, and introducing measures to reduce heat gain, such as living (green) infrastructure.

RECOMMENDED PUBLIC DOMAIN UPGRADES

- Continue with the improvements to public areas and amenities in Belconnen town centre to ensure it remains an attractive and desirable place to live. Simple improvements such as trolley collection bays in the higher density housing area could encourage people to walk rather than drive to supermarkets.
- Site planning for large sections, such as Section 98 or Section 45 must provide for public access across the site.

RECOMMENDED FURTHER STUDIES

- Undertake further heritage assessments of the Belconnen Library and 'Tumbling Cubes' sculpture to determine their heritage value and potential nomination for inclusion on the ACT Heritage Register.
- Undertake a community facility needs assessment.

5.6.4 ENSURE BUILDINGS ENABLE ACTIVE STREETS

Buildings are a significant contributor to active and interesting streets and public space due to their design, function and land use. To help ensure key areas are active and to avoid vacant shopfronts, the requirements for either primary or secondary active frontages have been identified in **Map 23**.

Primary active building frontages are intended to ensure areas of activity are concentrated and identifiable. This requires the ground floor of buildings to have shop windows and a minimum number of tenancies directly accessible from the street that can support retail or similar uses. These areas are to avoid blank walls or large office spaces at the ground floor. At upper floors, residential or commercial uses with opportunities to overlook the street will be required.

Map 23: Active frontages



Secondary active frontages are intended to provide flexibility to accommodate future active uses. This could take the form of commercially adaptable residential units, or frontages that can be easily altered to provide shop fronts. Note these requirements will not prevent active uses being established in areas not identified.

People are more comfortable and streets are more active where the surrounding buildings have a human scale. This can be achieved by ensuring buildings fronting onto active streets are generally six storeys or less, there are opportunities for balconies and other spaces that overlook the street, and there are a variety of uses in the buildings.

RECOMMENDED PLANNING POLICIES

- Ensure all buildings within the centre provide at least one primary street frontage, articulated by street-oriented entrances, glazing, shelter for public space, etc.
- Where primary active frontage is indicated on **Map 23**, the building be designed to support retail, commercial or community uses, with the primary frontage incorporating shop front style glazing, a minimum number of tenancy entries and higher ceiling levels. This frontage should avoid large areas of blank walls and supports residential or commercial uses at upper floor levels that overlook the street.
- Avoid locating entrances to carparks and service areas on primary active frontages.
- Avoid arcades which provide dual frontages to shops. These often result in the street frontage being closed off.
- Where secondary active frontage is indicated in **Map 23**, the building will be required to be adaptable to support future active uses, including higher ceiling levels at ground floor. Where permitted, this could include ground floor residential apartments with separation from public space provided through either courtyards or a maximum 1 metre height difference. Use of small office/home office ('SOHO') adaptable apartments may be suitable in these situations. Other examples are offices or workshops that could be altered to provide multiple tenancies and entrances.
- Structured car parks are not to be located on areas identified as primary or secondary active frontage unless they provide ground floors that can support active use. Structured carparks fronting primary active frontage areas must also provide a 'skin' of offices or residential at upper level areas where overlooking main pedestrian routes.
- Ensure ground floor apartments and commercial tenancies have individual entries from public space.
- Design communal entrances, lobby and lift areas to be clearly visible from external public spaces.

5.6.5 ENCOURAGE TOWN CENTRE LIVING

Living in the centre has a range of benefits, including being close to employment, public transport, retail, entertainment, community and recreation facilities. The centre supports large areas of medium-density development and recent apartment construction has broadened the choice of dwelling types. These are proving to be attractive for young professionals, students and people wanting to downsize while remaining close to their local community.

The emerging high-density residential area near Eastern Valley Way will accommodate a significant population in a comparatively small area. The public domain must have the quality and capacity to accommodate this population and the facilities must be able to meet the demand. In this regard it is considered necessary to revise the current floor space limitations on retail uses in this area to enable the development of a small convenience style supermarket and other uses.

Placemaking and community building initiatives should seek to establish strong communities to further enhance the centre as a desirable place to live. Community groups can take a lead in organising events, rehabilitation initiatives and maintenance projects that promote ownership and pride in the area.

The Territory Plan rule that apartment developments in the centre are not required to provide parking for residents should be retained. Currently apartment developments provide car spaces for each apartment, whether they are required or not. This increases the purchase price of apartments and results in unused carparks which are not accessible to the public. A better outcome would be to encourage the construction of parking stations at the base of apartment buildings where residents can lease carparks, rather than buy one associated with an apartment. This would reduce the cost of apartments and free-up unused residential spaces for public use.

RECOMMENDED PLANNING POLICIES

- Encourage a range of apartment building types within the centre. Alternatives such as SoHo or shop-top housing should be provided. This could be facilitated by redevelopment in certain areas.
- Support increased building heights to stimulate residential development within the town centre. For building heights see section 5.6.2.
- Review the precinct code rule limiting the floor area of 'shop' to 200 m^2 to enable the development of convenience supermarkets up to 1500 m^2 to better serve the high-density residential area.

RECOMMENDED PUBLIC DOMAIN UPGRADES

- Provide a variety of public facilities for families and children within the centre, including play spaces.
- Provide attractive and safe outdoor meeting places.

5.6.6 PROVIDE IMPROVED AMENITY FOR BUSINESS ACTIVITY IN THE SERVICE TRADES AREA PRECINCT

The service trades area supports a large number and range of small businesses. It is a valuable and accessible place for uses that may be unsuitable in other locations.

Despite supporting a comparatively large number of businesses and services, the area lacks pedestrian amenity, including weather protection, toilets and street furniture. Improving the amenity and walkability will ensure the area is competitive and attractive to customers.

The CZ3 Services zone currently permits residential use, which may result in conflict with noisy businesses and the possible closure of those businesses. It is recommended to remove residential as a permitted use, and to encourage a range of small businesses suited to this zone, including live music venues.

Consideration was given to increasing the current two-storey height rule, given the low level of ground floor vacancies and limited potential for new development. However, it is anticipated that additional development potential elsewhere in the centre will attract many of the non-trade uses from the area, which will free up space. Limiting the potential for redevelopment should also enable the lower rents of the area to be maintained. It is considered the two-storey rule, with a criteria that allows additional height, should be retained at present. Where redevelopment occurs, ground floor areas must be suitable to accommodate service trades uses, with high floor to ceiling heights and convenient rear access.

RECOMMENDED PLANNING POLICIES

- To minimise potential conflicts between land uses and ensuring service trades uses are protected and retained, remove the current provision allowing residential uses.
- Require all redevelopment in the area to provide awnings where buildings front a public footpath. Awnings are to be a minimum 3 metres wide and 3–4 metres high.
- Enable accommodation for service trades uses by providing a minimum 4 metre ground floor ceiling height and convenient rear access to new development.
- Subdivide and rezone part of sections 5 and 11 at Oatley Court from Services Zone (CZ3) to Urban Open Space (PRZ1) to ensure the existing open space and parking spaces are retained.
- Encourage local business to establish a united approach to promoting the area and ensure it becomes a recognisable destination. Events such as the Cohen Street waterslide attract large numbers of people and should be encouraged and supported by business in the area.
- The service trades area has strong potential to attract additional live music venues and become a popular night-time destination. Encouraging new uses that are potentially noisy to locate in the service trades area will avoid conflict with residential uses in other areas.

RECOMMENDED PUBLIC DOMAIN UPGRADES

- As part of a proposed streetscape master plan for the town centre, detailed at section 5.6.9, develop a comprehensive plan for improvements to the service trades area, including the park areas. This will determine the location for amenities including public toilets, lighting, signage, bike racks, seating and drinking water outlets. It will also detail a street tree planting plan, aimed at retaining existing eucalypts where possible, to ensure new large canopied trees are provided throughout the service trades area.
- Continue the use of asphalt paving to the service trades area and replace all damaged areas. Asphalt provides a cost effective and distinctive character to the service trades area.

5.6.7 RETAIN SITES FOR EMPLOYMENT

Providing a substantial base of employment was a key driver for establishing the town centre. Decentralised employment has provided significant benefits such as reduced road congestion, improved property values and reduced commuting time. Several large, centrally located sites provide unique strategic value for large floor area commercial office development. These sites are identified in **Map 16** Opportunities.

If the Australian Government relocates employment out of the centre, it may be difficult to attract other large employers into existing office buildings.

The lessees of these sites may seek to provide residential uses to retain profitability. Although these sites are under control of the National Capital Authority, it is vital that an area is reserved to provide substantial employment for the future.

RECOMMENDED PLANNING POLICIES

- The use of land currently considered 'National Land' on sections 43, 44, 49 and 50 is the responsibility of the NCA. However, any consideration of permitting residential uses on these sites as an alternative use to 'employment' should not be supported.
- Development on National Land is encouraged to consider the objectives and intent of the development requirements indicated in this master plan.

5.6.8 IMPROVE THE RELATIONSHIP WITH THE UNIVERSITY OF CANBERRA AND OTHER INSTITUTIONS

The centre has a unique advantage given its proximity to important health, educational and sport facilities. This relationship offers significant future employment and lifestyle opportunities and should be utilised to increase the diversity and resilience of Belconnen's employment base.

Integrating the town centre with the University of Canberra will help facilitate employment growth, increase opportunities for local business and increase the amenity and diversity of the whole area. Integration of the university with the town centre's facilities and amenity will provide a major marketing advantage for the university in an increasingly competitive environment for attracting interstate and overseas students.

Future revisions of the University of Canberra Urban Plan (2015) should focus on providing this integration, particularly through the location and uses of new development, the provision of new roads and improved pedestrian connections. Significant road entry gates are provided to College Street, Haydon Drive and Ginninderra Drive; however no road connection or even identifying signage is provided between the university and town centre. As indicated on **Map 24**, establishing clear road connections that link existing road networks, such as extending Emu Bank to Telita Street and Cameron Avenue through to Bimbimbie Street may enable better access to development sites and access between the centre and the university. Additionally, providing generous pedestrian and cycle paths and installing University of Canberra signage will assist with the integration.

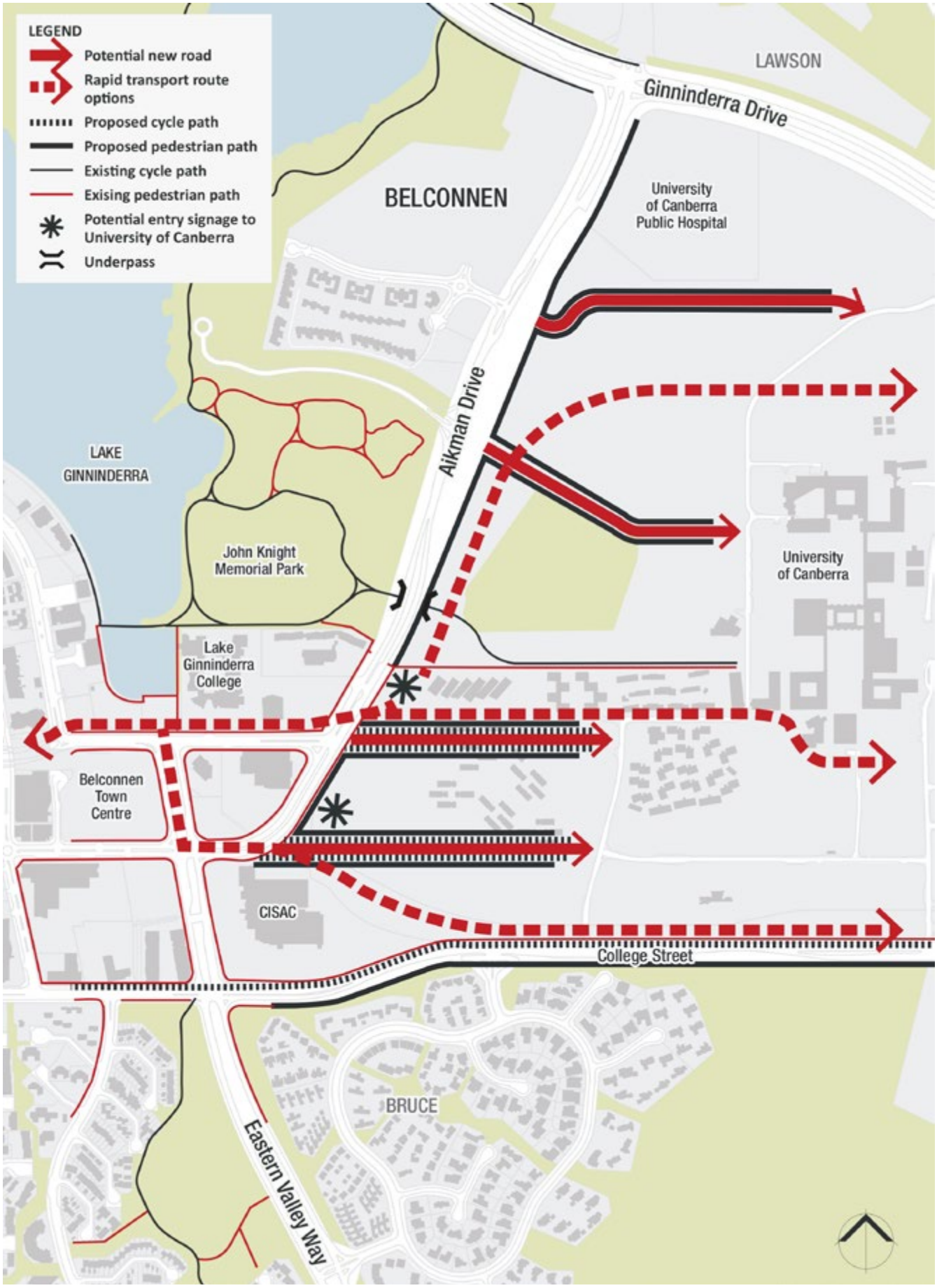
The new University of Canberra Public Hospital at the corner of Aikman and Ginninderra Drives will provide a significant facility for the Canberra community and increase employment opportunities. However the hospital's location is distant from the centre's amenities, including trunk public transport routes and retail outlets.

Recent changes will enable the University of Canberra to develop a wider range of uses, including private residential dwellings and larger areas of retail and commercial office space. It is important to ensure these uses complement rather than compete with the centre. The benefits offered by close proximity need to be maximised and inefficient duplication of uses in the town centre and the university avoided. It is vital that future revisions of the University of Canberra Urban Plan encourage integration with the town centre. For example the 'business and enterprise' precinct of the university could be better located on the west side of the campus where it may have a stronger relationship with uses in the centre.

RECOMMENDED PUBLIC DOMAIN UPGRADES

- Improve pedestrian and cycle connections through the university and on College Street to ensure they are legible and safe (refer section 5.6.11).

Map 24: Integrate the University of Canberra with the Town Centre



RECOMMEND PLANNING POLICIES

- Encourage development of additional student accommodation within the centre.
- Encourage use of the town centre by the University of Canberra and its affiliates for research, exhibitions, demonstration projects, etc.
- Work with the University of Canberra to ensure future revisions to its Urban Plan maximise the opportunities for integration of the two centres.

5.6.9 IMPROVE THE PUBLIC DOMAIN

As apartment living and active travel have become more important to the centre, the importance of a high quality public domain has similarly increased. People moving about or spending time within the centre should be able to enjoy an inviting and accommodating public domain. Clear requirements for improvements to the public domain will enhance each precinct's character and ensure improvements are provided effectively.

The Chandler Street verge of the *Altitude* apartments provides a good example of urban design outcomes that should be provided in conjunction with future developments.

There is currently little direction to ensure consistent character or design for the public domain, including elements such as paving and street furniture. The centre would benefit by adopting a modified version of the Canberra Central Design Manual, which was developed by the ACT Government following extensive work. The manual describes how public domain improvements should be undertaken in the city centre, and provides a consistent suite of materials. While there could be some adjustments, it is recommended the manual should form the basis for future works in the Belconnen town centre. It will be important to focus on 'placemaking' to ensure areas within the centre are active and attractive.

A consolidated streetscape master plan for the centre is required to implement the proposed public domain improvements. This will include a street tree planting program, location of street furniture and paving improvements, adjustments to on-street parking, improvements to park areas and where water sensitive urban design measures could be implemented. It should also outline programing to ensure improvements are focused on priority areas.

GENERAL

RECOMMENDED PLANNING POLICIES

- Establish development controls that provide incentives to contribute to the improvement of the centre's public domain (refer section 5.6.3).

RECOMMENDED FURTHER STUDIES

- Develop a streetscape master plan and tree planting program to provide green streetscapes throughout the centre.
- Review and adopt the Canberra Central Design Manual to guide public domain improvements in the centre. This could be done in conjunction with the streetscape master plan to provide one co-ordinated document.

FORESHORE PRECINCT

This precinct has potential to become a key destination for entertainment and dining. The quality of the public domain will be central to the success of the area. A high quality public domain should also reflect the character of the location. There are opportunities to improve the area's paving, lighting and landscaping as part of future redevelopment of sites.

As Emu Bank attracts more outdoor dining, public domain upgrades will be required to support the precinct's success. These upgrades should emphasise a uniform character along the promenade and strong links between Emu Bank and Westfield shopping centre. Integrating landscaping and outdoor dining areas will provide a 'point of difference' for the area, making it attractive and successful.

RECOMMENDED PLANNING POLICIES

- See section 5.6.1 for planning policies and public domain upgrades relating to the Foreshore precinct.

RETAIL AND OFFICE PRECINCT

Frontages to Lathlain Street and Benjamin Way have value as pedestrian connections, but suffer from narrow footpaths and a lack of weather protection.

The Belconnen Fresh Food Markets has approved plans for additional development. When constructed, the area will have a high standard of environmental sustainability and a diverse range of uses.

The verges in this precinct are narrow, particularly along Lathlain Street, where they are less than 2 metres in places. The verge to the emergency services group at Lathlain Street is approximately 4.4 metres, which is considered too narrow for a potentially busy area.

RECOMMENDED PUBLIC DOMAIN UPGRADES

- Provide public seating at well-considered locations to break up long walking distances.
- Identify ways to achieve consistent public domain outcomes from potential future development on National Land.
- Provide facilities such as planting, seating, litter bins, and other amenities consistent with activity levels.

CAMERON AVENUE PRECINCT

This precinct contains most of the existing taller residential buildings, sites where taller buildings have been approved for construction but have not yet been built, and a mix of other uses including the Labor Club and commercial offices.

As this area undergoes significant change and population growth, the public domain must be of a high standard.

RECOMMENDED PUBLIC DOMAIN UPGRADES

- Ensure public domain improvements in this area are co-ordinated to enable the area to become a recognisable precinct and cater for increased residential population. Redevelopment provides a good opportunity to improve the public domain.

5.6.10 IMPROVE THE QUALITY AND USE OF OPEN SPACE AREAS

LAKE GINNINDERRA

Urban open space around Lake Ginninderra provides an important recreational resource, holds ecological and possibly archaeological value, and has potential for vegetative restoration. Because the developed area of the centre has capacity to accommodate projected residential growth, there is currently no requirement to rezone open space adjacent to the lake to enable additional development.

There is currently no requirement for additional formal recreational areas around the lake; however, there is scope to improve parking, areas of the shared path and vegetation.

The central open space of Lake Ginninderra's northern peninsula has potential for a range of uses, including parkland and possibly low-scale development. Without a clear current demand for alternative use of this land, it is considered better to focus development in the town centre core. Any development will require rezoning of this land, so maintaining the current open space provisions will provide flexibility for the future. This will also help retain and emphasise the contrast between the lake's open space and the centre's built form.

Suitable space to meet the long-term requirements of groups that want to use the lake, such as the Lake Ginninderra Sea Scouts and future possible users, needs to be identified. The western side of the lake has potential for a range of uses that are compatible with the urban open space zoning, including community gardens and temporary uses such as circuses. While additional formal recreation space is not currently required, this area provides capacity for its future provision.

There is scope to continue improving the water quality of stormwater entering the lake, particularly runoff from the service trades area and possibly from the Cook / Aranda area.

RECOMMENDED PUBLIC DOMAIN UPGRADES

- Establish a budget bid to design and construct additional parking spaces at John Knight Memorial Park. There is potential for additional perpendicular parking spaces on the north side of Townsend Place.
- Develop a program of habitat rehabilitation for the northern and western areas of the lake. This work could be undertaken by local community groups, possibly through Australian Government funding.

- Stormwater from the service trades area currently flows directly into the lake. Construction of a small water quality control pond would improve the quality of water and provide a facility to contain spills from the service trade area.
- Support TCCS in completing stage 2 of the Emu Inlet public space upgrade to enable full use of its recreational and community event potential. Design work for this has been completed, with the design providing for community performances and events.
- Support the artsACT funding bid to complete the Belconnen Arts Centre foreshore path to connect Emu Inlet parkland to the west with the Emu Bank commercial area to the east.

RECOMMENDED FURTHER STUDIES

- Investigate measures to further improve stormwater quality, including the need for replacement of the Eastern Valley Way gross pollutant trap and construction of a new water quality control pond, and introduce measures such as rain gardens and ponds.
- Determine the demand from community groups, such as Rowing ACT and the Lake Ginninderra Sea Scouts, for space adjacent to the lake and how this space could be used most effectively. It is suggested areas adjacent to the former water police station would be most suitable for these uses.
- Investigate the development of a community garden on the western side of the lake, including assessing the level of community interest, the land required, access and management of the facility.

MARGARET TIMPSON PARK

Margaret Timpson Park is Belconnen's key 'municipal' space and currently the only park area within the town centre core. As outlined in section 4.1.4, the park has been considered underused for some time.

Rather than trying to attract activity through additional commercial uses, the focus should be on its function as a formal space and as a park for the surrounding residents, improved connections to nearby areas of high activity and a better relationship with the park from surrounding development. Revising the park design should incorporate additional facilities, such as barbecue facilities and tables, public toilets and a children's play space, possibly incorporating water play. Any changes should retain the existing palm trees and formal layout of the park, which help emphasise its municipal role; however the layout will need to be flexible to accommodate large community events.

The suggestion to demolish the former community health building and expand Margaret Timpson Park over the site and the adjacent vacant block has been considered; however, this is difficult to justify given the existing park's low usage and loss of income to the community from the possible sale of these blocks. While the ACT Health Directorate currently requires this building, a better outcome may be to encourage future redevelopment that overlooks and opens onto the park. To ensure a better relationship with the park and adjacent buildings, it is recommended to limit development on this site to four storeys.

While the adjacent office buildings provide daytime activity, they offer little after-hours activity or passive surveillance of the park. Enabling redevelopment of these buildings up to six storeys, with mandatory commercial uses at ground floor and first floor, may encourage residential uses. This would provide better after-hours use and passive surveillance of the park.

The possible relocation of the Belconnen Library and Belconnen Community Centre from this area to Lathlain Street will improve aspects including accessibility; however there is concern this will concentrate the diversity of uses at Lathlain Street, leading to less activity in the Margaret Timpson Park area. Despite this, the park will remain the town centre core's primary area of open space.

RECOMMENDED PLANNING POLICIES

- Allow maximum building heights for blocks 40 and 41 of Section 54 up to four storeys to ensure a viable redevelopment and better surveillance opportunities of the park and maintain existing views from the adjacent apartments.
- Consolidate blocks 40 and 41 Section 54 and rezone from Community Facilities Zone (CFZ) to Business Zone (CZ2).
- Increase the allowable building heights of blocks 37 and 39 of Section 54 to six storeys to enable upper-level residential development and surveillance of the park.
- Establish planning controls for the blocks fronting Margaret Timpson Park that encourage high quality buildings that contribute to a sense of liveliness and activity and enable contribution to the upgrade of the park.

"RATHER THAN TRYING TO ATTRACT ACTIVITY THROUGH ADDITIONAL COMMERCIAL USES, THE FOCUS SHOULD BE ON ITS FUNCTION AS A FORMAL SPACE AND AS A PARK FOR THE SURROUNDING RESIDENTS..."

RECOMMENDED PUBLIC DOMAIN UPGRADES

Establish a budget bid for the design and construction of a children's play area at Margaret Timpson Park, in conjunction with Transport Canberra and City Services (TCCS) Directorate. This could incorporate water play areas, barbecue facilities and public toilets.

WALDER STREET LOCAL PARK

The renewal of the Lathlain Street precinct (see Section 5.6.1) proposes to relocate most of the open space in this location to front on to Lathlain Street. This is intended to result in a more intensively used and accessible urban open space due to its close location to Westfield and the bus station. The proposed configuration includes around 3800 m^2 of open space to the east of Rae Street adjacent to the proposed extension of Walder Street, and 1000 m^2 to the west of Rae Street. Rezoning this land to PRZ1 will secure its use as public open space.

RECOMMENDED PLANNING POLICIES

- See section 5.6.1, the Lathlain Street precinct for recommended planning policies.

OATLEY COURT LOCAL PARKS

The carparks and open space areas at Oatley Court are currently zoned Service Zone (CZ3). Rezoning the areas of open space to urban open space (PRZ1) will provide valuable areas for both current users and the possible long-term redevelopment of the service trades area.

RECOMMENDED PLANNING POLICIES

- Rezone the areas of open space to Urban Open Space (PRZ1).

RECOMMENDED PUBLIC DOMAIN UPGRADES

- As a key part of the proposed streetscape master plan, redesign these areas of open space to ensure they are more usable. This could include a footpath from the carpark to the basketball centre, additional lighting, seating and vandal proof basketball hoops. Improvements to the southern area could include a barbecue and public seating. This would inform future bids for construction funding.

SHORT CLOSE LOCAL PARK

A section of open space located on the eastern side of Benjamin Way near Short Place has the potential to be a well-used local park; however, this area currently has no park furniture or improvements. The space has good visibility from Benjamin Way, is activated by several pedestrian walkways and the Benjamin Way shared path, has several established trees, and offers a potential location for residents of the Condell Street area. The land is about 1400 m^2 (20x70 metres) in size.

RECOMMENDED FURTHER STUDIES

- Support preparation of a feasibility study and potential subsequent budget consideration to assess the merit of providing upgrades to the proposed Short Close Park. Potential upgrades could include landscaping, play equipment, seating, barbeque facilities and picnic tables, and half-height fencing along Benjamin Way to allow children to play freely.

OTHER AREAS OF OPEN SPACE

Open space is well provided in the Emu Ridge and Totterdell Street areas; however, the safety of some areas could be improved, including an area of open space behind residential areas on Totterdell Street.

Map 25: Proposed pedestrian network



The draft master plan suggested rezoning Block 2, Section 184 from RZ2 (Suburban Core Zone) to PRZ1 (Urban Open Space) due to the number of trees on the block.

Is is now recommend to retain the RZ2 zoning to enable medium density residential development on this large block. This would be reliant on a full tree assessment of the site to ensure all valuable tress are retained.

Block 16, Section 14 fronts onto Coulter Drive and Nettlefold Street. The site is zoned CZ3 and has high visibility; however, vehicular access is very difficult. It is recommended that any change of use or development only occur in conjunction with future redevelopment of the bus depot site.

Although vegetated areas beside Belconnen Way have some visual and ecological value, the current Transport Zone (TSZ1) zoning provides flexibility for road widening while restricting other development. It is recommended the current zoning of this area be retained.

RECOMMENDED PUBLIC DOMAIN UPGRADES

- Investigate methods of rectifying the entrapment hazard in the open space on Section 184, behind Totterdell Street.

5.6.11 IMPROVE CONDITIONS FOR WALKING AND CYCLING

Providing significantly improved cycle and pedestrian connections from surrounding suburbs and within the centre is a central initiative of the master plan. Increased walking and cycling rates are supported by key policy objectives in areas of health, environment, transport and economic development, and are a clear desire of the community. Achieving these policy outcomes requires significant upgrades to pedestrian and cycling infrastructure.

A high quality pedestrian environment within the centre will encourage walking for short trips within the centre and will relieve pressure on car parking (**Map 25**). Cycle lanes should be safe, easy to use and well-connected in order to have universal appeal to cyclists, particularly children and those with less confidence.

While cycle connections to the centre are relatively good, connections within the centre are poor. Proposed cycle improvements within the centre will provide a finer grain network of cycle lanes to offer access throughout the centre, as indicated in **Map 26**.

The network should provide adequate separation from cars and appropriate lane widths in order to provide safety and accommodate anticipated volumes. Separation of cyclists from traffic and pedestrians is required to provide safety and ease of use. To ensure a basic network is able to be constructed, physical separation may be need to be staged over time. Allocating dedicated space for bicycle lanes and providing appropriate infrastructure is required to gain the full benefits of cycling in the centre.

There is a significant need for legible and safe connections for pedestrians and cyclists into and across the centre. Safe routes to the centre are required along College Street and Belconnen Way between Kingsford Smith and Coulter drives, as well as the conversion of the former busway near Joynton Smith Drive into a cycle path. These have the potential to encourage many more cyclists into the centre.

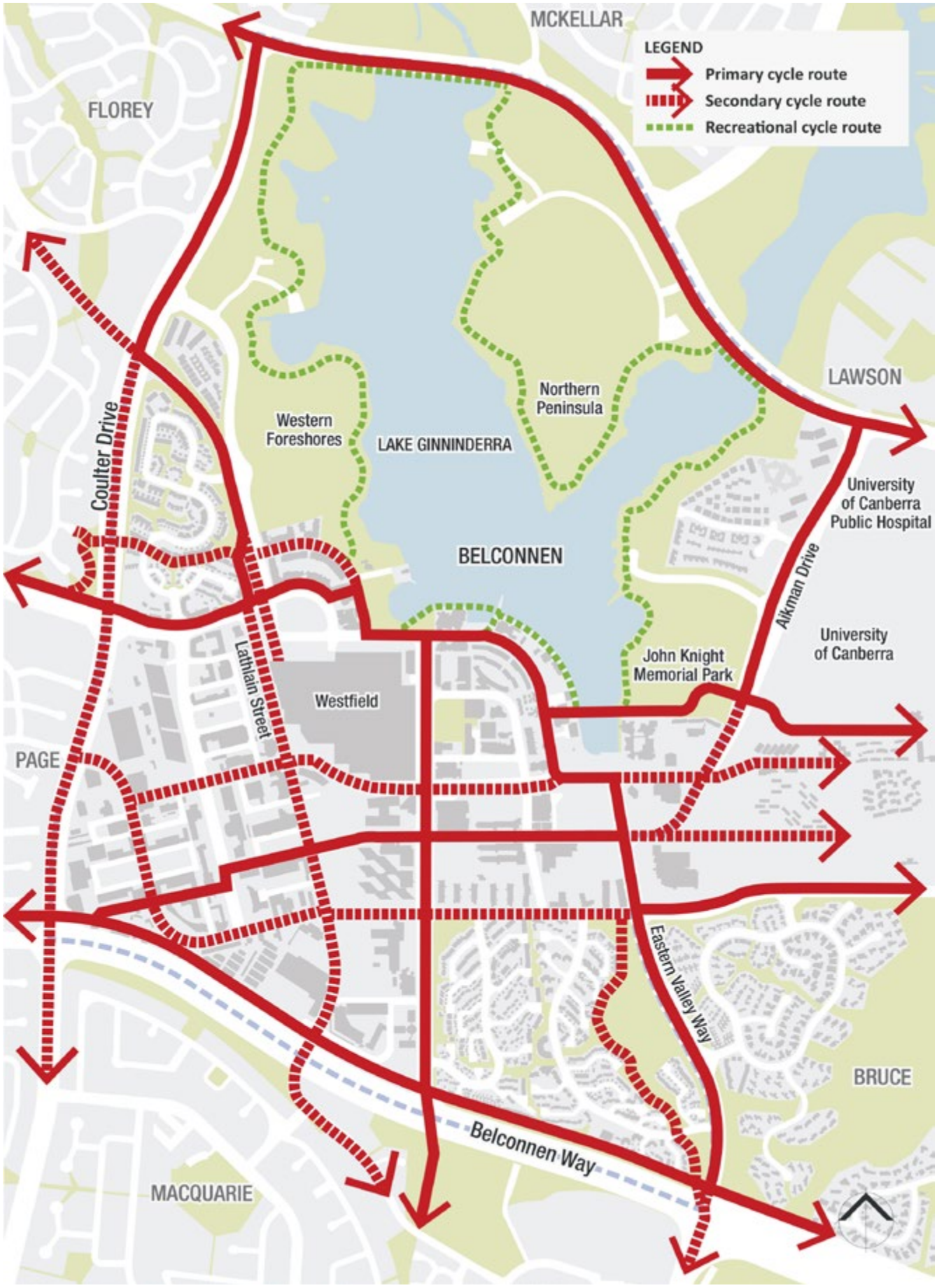
The community strongly support the use of the former Joynton Smith busway as a shared path. This area has also been considered for additional residential development; however, this option faces several constraints, particularly the limited vehicle access, the narrow site width and height restrictions to respect adjacent development. While the busway culvert could be utilised for basement parking, it is considered most of the area would not currently be economically viable to develop. The use of the busway as a shared path for cyclists and pedestrians will require additional infrastructure, including pedestrian signals on Coulter Drive and a cycle connection to the Florey Shops.

The Canberra Centenary Trail provides a significant recreational resource for the community, with 145 kilometres of walking and cycling paths around the ACT. While signage indicates the trail's route through the centre, additional signage providing information about the trail may encourage greater awareness and use of it.

RECOMMENDED PLANNING POLICIES

- Support cyclist- and pedestrian-oriented design of buildings, public places and the traffic system.
- Ensure the development of large sites provides a fine grain and permeable movement network that supports filtering of pedestrians through the centre, and supports the main pedestrian areas shown in **Map 25**.

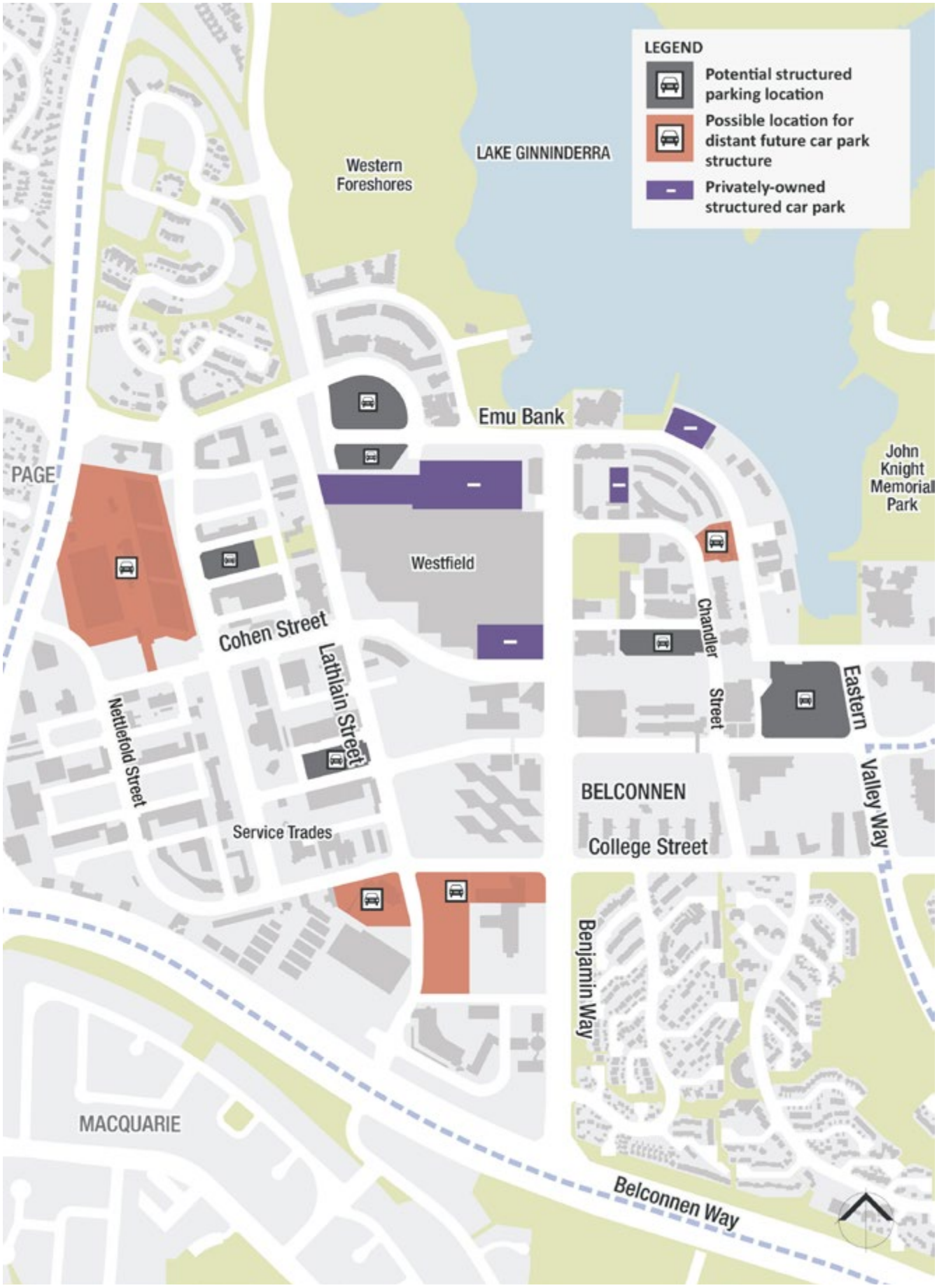
Map 26: Future cycle connections



RECOMMENDED PUBLIC DOMAIN UPGRADES

- Work closely with TCCS to establish a program of pedestrian infrastructure improvements. These improvements should focus on areas of greatest potential future activity, and where an increased level of safety is required. This could include:
  - > Provide footpaths to areas of the centre where they are missing and where dirt tracks have formed, for example beside the Oracle apartments on College Street.
  - > Ensure public pedestrian routes are compliant with design standards to provide disability access. This may require a study be undertaken as part of the work supporting the proposed streetscape master plan work.
  - > Provide lighting improvements to areas perceived as having safety issues, in particular to the Keene Place underpass and on the Emu Bank promenade.
  - > Make key pedestrian routes from surrounding suburbs obvious and easy to use. For example, the route from the Keene Place underpass to Cohen Street is not clear, with a range of surfaces and obstacles. Provide a consistent, wide pavement with shade and good lighting to key routes into the surrounding suburbs.
  - > Consider improvements to the pedestrian links between the university and the centre, such as a pedestrian bridge to replace the current signalised pedestrian crossing on Aikman Drive.
  - > Provide shared paths to both sides of College Street, linking Haydon Drive to Lathlain Street. This will complete the link from the AIS, CIT, Calvary Hospital and the University of Canberra to the centre.
  - > Ensure pedestrian improvements or traffic calming works consider impacts on cyclists, particularly works that reduce traffic lane widths without providing separated alternatives for cyclists.
  - > Consider pedestrian route improvements, including removing slip lanes, removing obstacles, providing paths and improving crossing signals at specific areas including:
    - > the link from Chandler Street to the community bus station
    - > a high quality pedestrian path between Edmonston Place and Emu Bank
    - > mid-block connections on large sites, including Sections 44 and 45, and
    - > Benjamin Way, Emu Bank, Lathlain Street and Cameron Avenue.
- Work closely with TCCS to establish a program of cycle infrastructure improvements to establish a clear and safe cycle network across the centre, as indicated in **Map 26**. In particular:
  - > Improve cycle links to Benjamin Way, initially north of College Street and subsequently to include south of College Street and connections across Belconnen Way. A future recreational path using the median of Benjamin Way may be a possibility.
  - > Progress a clear north–south trunk cycle route based on the former Joynton Smith busway and Lathlain Street. This will provide a direct link between Florey Shops, Westfield Belconnen, Lathlain Street bus station, the Belconnen Fresh Food Markets and the Jamison Centre.
  - > Improve cycle links on Eastern Valley Way, initially using the existing shared path south of College Street.
  - > Improve the connections between the University of Canberra and Westfield Belconnen, initially by improving visibility and missing links on the underpass-footbridge connection, subsequently using Emu Bank and College Street.
  - > Improve the legibility of the cycle connection from the centre through the University of Canberra to connect with Bruce Ridge shared paths.
  - > Provide cycle lanes on Luxton Street and Emu Bank.
  - > Support the TCCS proposal to provide a 3 metre wide shared path on the east side of Aikman Drive, as part of the duplication work for the road. This will provide a clear connection from the new University of Canberra Public Hospital to the centre.
  - > Improve cycle connections on Emu Bank and Cohen Street, including the Nettlefold Street connection to Coulter Drive.
  - > Improve cycle connections on College Street to Nettlefold Street.
  - > Provide separated cycle lanes along Belconnen Way, extending from Kingsford Smith Drive to Coulter Drive.
  - > Improve the issue on Ginninderra Drive Bridge, where the location of street lights obstructs pedestrians, with people often using the road to avoid on-coming cyclists. Consideration could be given to utilising the existing on-road cycle lane to overcome this issue.
  - > Widen the lake shared path in places where there is clear conflict between users or dirt tracks have developed. The suggested physical separation of cyclists and pedestrians is considered excessive at this time.

Map 27: Potential structured car parking locations



  - > Support the provision of a lake-side shared path around the Belconnen Arts Centre, proposed by artsACT.
  - > Consider the location of additional bike storage at specific locations.
- Undertake an investigation for a 'cycle hub', which would be close to employment and public transport, and include bike storage, repair and change facilities.
- Investigate the provision of additional signage to inform people about the Canberra Centenary Trail, which runs beside the lake.

5.6.12 ENCOURAGE GREATER USE OF PUBLIC TRANSPORT

The reconfiguration of bus routes and demolition of the former Belconnen Bus Interchange have improved access to buses and the safety of waiting areas. The rapid route between the Belconnen town centre and the city centre provides links to the University of Canberra, Radford College and Calvary Hospital. This is a convenient and cost-effective way of getting to the city, and is well used. The future possible provision of a light rail link between the City, Belconnen and Kippax offers further opportunity to encourage the use of public transport.

Several people have raised the need for a local loop bus service connecting the Belconnen Fresh Food Markets, the service trades area, Westfield Belconnen, Emu Bank and the university. This could be considered by ACTION as a new local route, or provided by local traders to encourage business.

The Westfield Belconnen bus station is nearing capacity and may require additional platforms to accommodate future growth. This should be addressed through a study of future public transport requirements in the centre, which could also consider the preferred route for any future light rail and the benefits of allowing private vehicles to travel from Emu Bank to Cohen Street through the community bus station.

RECOMMENDED PUBLIC DOMAIN UPGRADES

- Promote the use of the bike cage at the community bus station as part of an alternative transport solution for people both travelling to the Belconnen town centre and the city centre. This bike cage is currently underutilised and may encourage more people to cycle if promoted.

RECOMMENDED FURTHER STUDIES

- Undertake a study of future public transport requirements in the centre. This could include:
  - > the requirement and location of additional bus platforms at the Westfield bus station
  - > the impact of allowing private vehicles to use the community bus station to link Cohen Street and Emu Bank
  - > the consideration of additional local services in the centre, including a possible loop service, and
  - > the requirement for the 'Intertown Public Transport' route, which is indicated on the Territory Plan map. For example, reservations at College Street and the Joynton Smith Busway are indicated despite not currently being required.
- The preferred route of a future light rail system is to be determined. Reconfiguration of streets to accommodate on-road cycle lanes and street trees will need to take a future possible light rail route into account, and current public transport reservations may be required.

5.6.13 MANAGE PARKING

Many people consider parking to be a significant issue in the centre. Meeting future parking requirements will most effectively be addressed by commercially operated structured carparks. This will ensure a competitive, cost-effective and fair way of meeting parking needs. It may also enable commercial and residential buildings to be constructed without the added cost of providing parking spaces. The potential for such structured carparks is addressed in the ACT Parking Plan (2015). It is also assumed that increased rates of active travel will help reduce parking demand.

The design of several large private carparks is partly contributing to the congestion of access roads due to vehicles banking up within the carpark and spilling onto roads. Reconsidering the design of these carparks may assist to reduce congestion.

Suitable locations for additional structured carparks have been identified in this master plan and require reservation. These sites are considered convenient to areas of demand and large enough to be commercially viable. Other uses, including residential, should be incorporated into the buildings.


MAISON DE QUARTIER

RECOMMENDED PLANNING POLICIES

- Review the parking rate requirements specified in the Parking and Vehicular Access Code, to align with recommendations of the ACT Parking Action Plan.
- Investigate the feasibility of sites identified as suitable for structured carparks as indicated in **Map 27**. While several of these could be developed for parking in the short term, others will require relocation of existing uses, or may prove unsuitable.

RECOMMENDED PUBLIC DOMAIN UPGRADES

- If the current trial of smart parking is successful, implement the smart parking system to enable more efficient use of parking in the centre.
- To ensure the viability of parking structures, apply and enforce parking restrictions in the centre and surrounding suburbs.
- Encourage opportunities to establish commercially operated car sharing facilities or car hire in the centre. This may include identifying dedicated parking spaces close to apartment developments.
- Where possible, maintain or increase the provision of short-stay on-street parking.

RECOMMENDED FURTHER STUDIES

- Prepare a centre-wide parking management plan with the objectives to maximise efficiency of car parks.
- Determine the best location to provide short-stay parking for tourist buses and towed caravans, preferably in a location within walking distance to key attractions and local businesses.
- Encourage Bunnings and Westfield to undertake a design study of their carparks to identify ways of reducing the impact of queuing on the congestion of surrounding roads, particularly Lathlain Street.
- Investigate a 'Smart Travel Belconnen' or similar initiative to facilitate public awareness and bring forward mode shift towards active travel and public transport options.

5.6.14 ENCOURAGE SAFER ROADS

The adoption of a 40 km/h speed limit in the central area of the centre has been generally accepted as a positive outcome. An issue with the existing zone is that people do not appear to have a clear idea of its extent.

Numerous studies have shown that 40 km/h is the threshold speed below which the fatality rate for collisions involving pedestrians drops away significantly. Slower speeds in areas with higher pedestrian activity also enables pedestrian crossings and on-street parking to operate safely and provides a less car-focused character to the central area. With the possible introduction of additional on-road cycle lanes, it is important that roads and parking areas are safe for cyclists.

Although the provision of some traffic calming devices, including speed humps is sometimes unpopular, they send a clear signal that speeds need to be reduced.

The draft master plan suggested a larger 40 km/h zone to cover areas such as Emu Bank. Expanding the zone further to cover most of the centre will send a clear signal of the expected speed limit.

RECOMMENDED PUBLIC DOMAIN UPGRADES

- Investigate the expansion of the 40 km/h zone over time to cover areas of the centre with higher pedestrian activity and traffic complexity, as indicated in **Map 28**. This includes areas of Josephson Street, Beissel Street, Emu Bank, Benjamin Way, Lathlain Street and Nettlefold Street.
- Consider providing measures such as kerb build-outs and raised pedestrian crossings to demarcate the 40 km/h zone, rather than the current plastic speed humps. Ensure any traffic calming measures employ cyclist-oriented design and are consistent with the proposed cycling network. Most importantly avoid traffic calming that reduces lane width without providing cycling lanes, unless as part of a specially designed 'shared traffic zone' area.

5.6.15 ENHANCE ECOLOGICAL VALUE OF GREEN SPACES AND LIVING INFRASTRUCTURE

In 2010, Canberra's per capita greenhouse gas emissions were 18% above the national average while water usage was 17% above the national average. This contributed to an ecological footprint of 9.2 hectares per person compared to the Australian average of 6.4 hectares, the fourth highest in the world.[11] While the 2015 ACT State of the Environment Report[12] indicates a slight improvement, our ecological footprint remains at 14 times larger than the Territory's land area. Combined with the predicted effects of climate change, where Canberra will become hotter and drier, our

Map 28: Proposed future 40 km/h zones



buildings and public spaces must become more efficient and responsive to the changing environment

As outlined at section 3.6.4, the street trees throughout the centre have failed on many streets and have not been replaced, or are on blocks that may be subject to future development. To help mitigate the impacts of climate change, as well as making the centre a far more attractive place to visit or live, a comprehensive street tree planting program is required. This will ensure new large canopied trees are provided to achieve a minimum 50% shade coverage of the streets. This would initially require a planting plan be developed, which should form part of the proposed streetscape study.

Remaining native street trees are for the most part stunted and in poor health. They offer limited canopy cover and failed trees have typically not been replaced by TCCS. Part of the reason these plantings have failed are because existing site conditions are unsuitable for large to medium street trees, often planted in a restricted space and surrounded by impermeable pavement.
To achieve successful street trees and increase canopy cover within the centre, tree planting will be in accordance with current TCCS standards, including tree pits, structural soil cells, adequate soil volumes, reduced conflict with infrastructure and better access to water.

Narrow verges provide an additional challenge to providing large street trees, which can be assisted by providing car park blister areas between on-street carparks.

RECOMMENDED PLANNING POLICIES

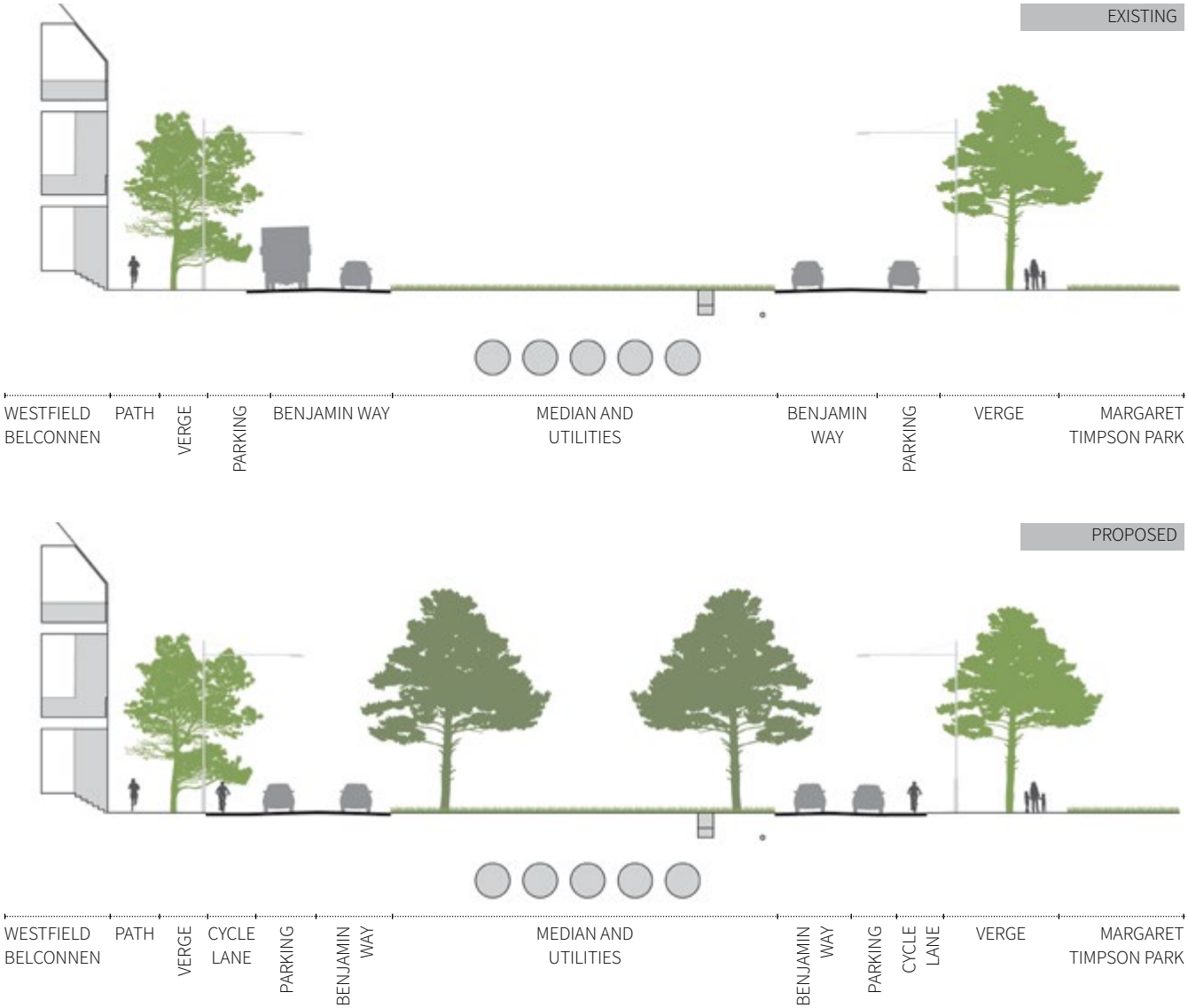
- Establish development controls that provide incentives to increase environmentally sustainable building outcomes. These should encourage best practice rather than a minimum acceptable result (refer 5.6.3).
- The elm tree outside the Belconnen Library has heritage value as the remaining link to the original Emu Bank homestead. Consideration should be given for its inclusion on the ACT Tree Register and how it should be sensitively incorporated into any future redevelopment of the precinct.

RECOMMENDED PUBLIC DOMAIN UPGRADES

- Develop a street tree planting plan for the town centre core that keeps existing eucalypts where possible and ensures new large-canopied street trees are provided throughout the centre to achieve a minimum 50% shade coverage of the streets.
- This planting plan should form part of the proposed streetscape master plan work, and identify preferred species for each street as well as planting locations including where narrow verges would require on-street planting. Above ground clearances will also need to be examined in terms of TCCS minimum requirements.
- New street trees will require correct preparation to TCCS requirements, including structural soil cells and adequate soil and root barriers to reduce conflict with paving areas. Trees will be preferably irrigated by stormwater, ensuring a water source and helping reduce stormwater volume.
- New trees should be species that are tolerant of urban spaces and are drought and disease resistant. This would require TCCS approval, but could include species such as the Oriental Plane (*Platanus orientalis*).
- Complete the avenue of street trees at the north end of Benjamin Way. Planting of these trees has been constrained by the five 1.8 metre diameter stormwater pipes in the northern median of Benjamin Way, as indicated on **Figure 22**. TCCS now consider the depth of these will result in minimal future conflict with tree roots. Subject to Roads ACT agreement, the median will support the planting of trees to form a continuous avenue of trees from Belconnen Way to Emu Bank. However, due to ongoing problems with damage from Elm Leaf Beetle, TCCS require an alternative tree species to elms be used.

"TREES WILL BE PREFERABLY IRRIGATED BY STORMWATER, ENSURING A WATER SOURCE AND HELPING REDUCE STORMWATER VOLUME."

Figure 22: Benjamin Way cross section



EMU RIDGE AREA

The 2001 master plan suggestion for a water quality control pond and gross pollutant trap (GPT) on the former Eastern Valley Way oval is dependent on the success of the new wetlands adjacent to the Belconnen Skate Park, as well as the costs of cleaning the current GPT. Establishing ponds in Canberra's inner north has provided a strong basis for community involvement, attractive public space and increased wildlife habitat. Establishing a new pond at Eastern Valley Way could provide a significant public domain improvement for this area.

RECOMMENDED FURTHER STUDIES

- Prepare a feasibility study to determine the technical requirements for a water quality control pond and gross pollutant trap on the former Eastern Valley Way oval.

6. RECOMMENDATIONS FOR IMPLEMENTATION

6.1 THE PROCESS OF CHANGE

Implementation of development set out in the master plan will be progressive over the longer term as it is dependent on capital works funding from the ACT Government, investment decisions by private business and land availability.

It can be implemented through:

- a Territory Plan variation, including a revised Belconnen Precinct Code and changes to the Territory Plan land use map as indicated on **Map 29**
- the sale of Territory-owned land, otherwise known as land release
- capital works, including public domain upgrades, to be considered in context of future budgets
- further studies, and
- uptake of opportunities by private developers and the community.

These are described in more detail below.

6.1.1 TERRITORY PLAN VARIATION

A master plan is a non-statutory planning document. However, the relevant provisions can become statutory through a variation to the Territory Plan to revise the existing Belconnen Precinct Code. The precinct code will realise some of the planning policy recommendations and provide the opportunity for the building heights, setbacks and land uses outlined in the master plan to be implemented as development and redevelopment occurs.

There will be opportunity for the community to provide feedback on the precinct code through a separate community engagement process.

6.1.2 PUBLIC DOMAIN UPGRADES

Infrastructure and public space improvements are required to realise the vision and some of the strategies of this master plan. This will involve further investigations by various government agencies and funding consideration through future government budget bids.

6.1.3 COMMERCIAL OPPORTUNITIES

Business, commercial developers and the wider community are responsible for taking advantage of opportunities identified within the master plan. A number of changes indicated in the master plan are on existing developed sites or require substantial investment. Therefore, implementation of the master plan will be progressive over time.

6.1.4 FURTHER STUDIES

Potential further studies could include:

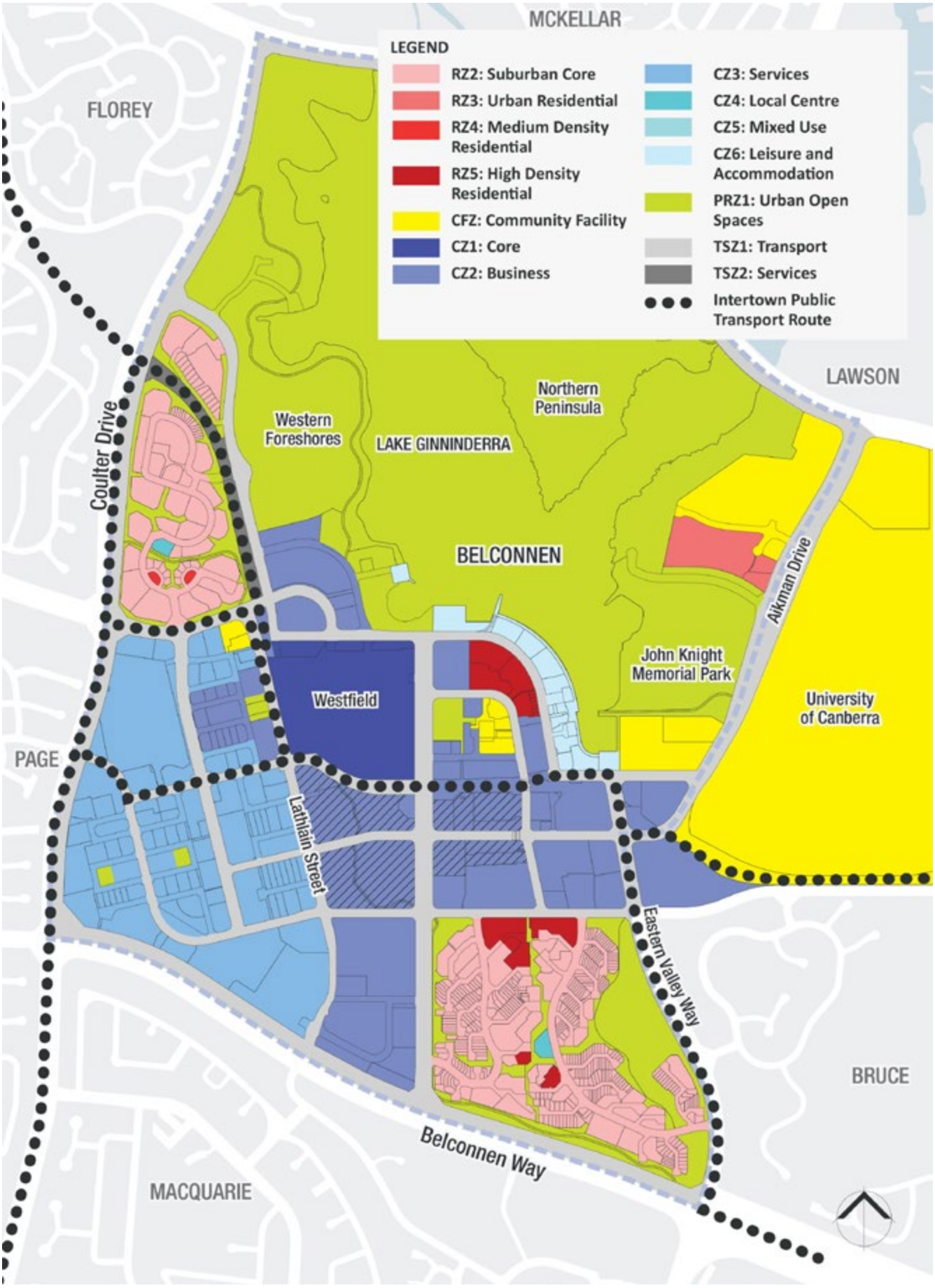
BELCONNEN TOWN CENTRE STREETSCAPE MASTER PLAN

A consolidated streetscape master plan is required to provide clear and coordinated direction on public domain improvements. This would include aspects such as a street tree planting plan, verge and paving improvements, street furniture requirements and locations, lighting improvements, and improvements to pedestrian links, including consideration of signalised crossings and possible removal of slip lanes to improve pedestrian safety. This work could be undertaken with the development of a 'Belconnen Design Manual' as outlined below.

BELCONNEN TOWN CENTRE DESIGN MANUAL

Public domain improvements in the city centre are guided by the 'Canberra Central Design Manual', which provides a consistent approach to elements such as paving, seating and lighting. The development of a similar manual for Belconnen town centre requires consideration; however, it may be more cost effective to adopt the Canberra Central manual.

Map 29: Proposed Territory Plan zones



A ROAD TRAFFIC STUDY

A traffic study is required to determine the future requirements of road corridors. It would potentially include Ginninderra Drive between William Slim and Aikman drives; Lathlain Street between Belconnen Way and College Street; Luxton Street between Coulter Drive and Josephson / Totterdell St; and Nettlefold Street between Coulter Drive and Egan Court.

A PUBLIC TRANSPORT STUDY

A study of future public transport requirements in the town centre is required, including consideration of the need or suitability of the Cohen Street bus station and how to accommodate additional platforms, if required, at the Westfield bus station. Other considerations could include the impact of gazetting the community bus station as a road to allow private vehicles. This could also include a review of the current Intertown public transport reservations indicated on various sites in the town centre, including the reservation between CISAC and the University of Canberra.

CARPARK DESIGN STUDIES

A study of the Bunnings and Westfield carparks is encouraged to investigate how a redesign could improve the congestion on Lathlain Street resulting from queuing within the carparks. These studies and any resultant redesign would be undertaken by the lessees of these carparks and would assist in creating more efficient carparking for their customers.

AN ACCESSIBILITY STUDY

An accessibility study of the core area of the town centre is required to ensure key pedestrian routes are compliant with disability codes. This could be undertaken as part of general consideration of improvements to pedestrian routes through the centre.

DEVELOPMENT OF A MANAGEMENT STRATEGY FOR THE BELCONNEN SKATE PARK

Together with TCCS, Sport and Recreation Services and users, develop a management strategy for the Belconnen Skate Park to ensure its ongoing improvement and maintenance.

COMMUNITY FACILITY NEEDS STUDY

The relocation of the library and community centre from the current Chandler Street sites to a more visible and accessible location on Lathlain Street is strongly supported by the management and many users of these facilities. These two buildings provide facilities for the whole Belconnen district, including meeting rooms, the library, a child care centre, indoor sports courts, the youth centre, administration offices and a community theatre. As part of any relocation a detailed needs assessment is required to ensure any replacement facility provides sufficient space to accommodate the future needs of the growing Belconnen District, not just the town centre.

Rezoning the community centre and library sites from community facility zone (CFZ) to enable redevelopment is considered premature at this stage, given the area and type of replacement facilities is unclear, the possible heritage value of the Belconnen Library building and the possible delay to the release of the sites at Lathlain Street.

PROGRESS HERITAGE RECOMMENDATIONS

As detailed under section 3.2.1, the Belconnen Town Centre Library and Tumbling Cubes at Margaret Timpson Park were considered to have sufficient qualities to meet the assessment requirements of the ACT Heritage Act, however they require further assessment to determine if they are able to be nominated to the ACT Heritage Register.

It is recommended further investigation of these items is undertaken to determine heritage significance.

It is recommended that the remaining English Elm, marking the site of the Emu Bank Homestead is considered for listing on the ACT Tree Register.

7. ENDNOTES

1. 'Belconnen's Aboriginal Past', Peter Kabaila, 1997
2. Belconnen Town Centre Master Plan Report, NCDC 1968
3. Environment and Planning Directorate estimates, derived from ABS 2011 census data
4. Australia Bureau of Statistics 2011 census data
5. APS Statistical Bulletin 2013-14
6. Property Council of Australia, February 2015
7. Colliers International retail research and forecast report first half 2014
8. Heart Foundation 'good for business', 2011
9. Belconnen Town Centre Master Plan, NCDC 1968
10. Belconnen Town Centre Public Transport Improvements and Transport Orientated Development, ACTPLA 2008
11. Australian Conservation Foundation Consumption Atlas.
12. ACT State of the Environment Report 2015, EPD 2016.
13. Canberra Times article: "Austerity drive wipes out one in 11 federal government jobs in Canberra" November 14 2014 Markus Mannheim.
14. Andrew Barr MLA media release 2 September 2015: 'ACT's economic growth leads the nation'.
15. Andrew Barr MLA media release 4 June 2015 'Strengthening CBR's higher education sector'.

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