

Analysis

Section 2: Analysis

- 1.0 Public Space
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Analysis

01. Public Space

Griffith Central Business District Strategy

A city rich in town planning and design

Walter Burley Griffin

Griffith has a unique city plan, one of only three other settlements designed by Walter Burley Griffin in 1914. The original plan was based on an integration of the 'City Beautiful' and 'Garden City' design movements. Kabail (2006) explains that Griffin wanted Griffith to be a compact city centre in walking distance to its residential population and accommodate beautiful streets, expansive urban parks and high quality architecture.

Griffith is just one of three Australian settlements designed by Walter B. Griffin and therefore has important local, state and national heritage significance. While Griffin's master plan for Griffith is still evident today, it is important to note that the rise of urban sprawl, the prioritization of traffic movement and fragmentation of retail services has weakened many of his initial concepts and ideals.

While it is difficult to preserve a master plan, it is essential that the Strategy recognize Griffin's contribution and wherever possible uphold his ideals of a walkable city, wide tree-lined boulevards and abundant open space and quality architecture.



Tree-lined Boulevards



Urban Parks



Civic Centre



Railway



Canal



Walter Burley Griffin's vision for Griffith (Image: NSW Government, State Records)



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An underutilized canal

Main Canal

The main canal was an important feature within Sir Walter Burley Griffin master plan for Griffith and it acts as an important reference point, framing the southern fringe of the city centre. The canal runs 6.7kms through the city and a 2km walking trail runs along the main section of the canal.

The canal has a rich history and celebrates human ingenuity. The Griffith region was birthed on the introduction of irrigation through a comprehensive network of canals. The main canal was one of the first canals constructed and is a reference to the surrounding agricultural industry in the region.

However, the portion of canal within the city centre is underutilized and a poor reflection of Griffin's original plan. The levee is a visual barrier between the city and the canal and has experienced significant neglect. While the canal and the colonnade of mature eucalyptus trees provide a majestic view, the aging infrastructure deters a greater number of people using and experiencing the area.

In many other cities water has long been a prized and celebrated element within the urban fabric. These areas are often sought after areas, with higher housing prices and a vibrant public realm. The main canal offers an opportunity to establish a similar valued feature within Griffith's city centre.

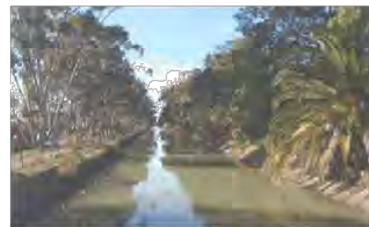
Open Space Corridor

In accordance with Walter Burley Griffin's original master plan, abundant open space surrounds the main canal. However, the open space along the canal has little public purpose or identity. Don Best Park is little more than a vacant allotment and the adjacent Recreational Reserve is a large stormwater detention basin that could facilitate multiple uses.



Main canal and surrounding open space corridor

2km walking and cycling trail
along the canal



Main canal assets



Large open spaces

Open Spaces

The health of a city is largely dependent on social, economic, cultural and environment exchange and public open space is an essential asset that enables the exchange to happen (Mean & Tims, 2005).

While the city centre does not lack parks and open space, their uses are generally mono-functional. It is also noted that the majority of open space area is located at the fringe of the study area and there are large sections of the city centre absent of open space (as illustrated below). The existing open space network is predominantly east to west and there is limited north-south connection between green areas, making the open space network fragmented.

Memorial Gardens and CWA Park are popular parks in the city centre, both on the northern side of Banna Avenue. Their central location make them valuable community assets and important meeting areas for residents, workers and visitors alike. However, other open space areas to the fringe of the city centre lack identity and are poorly utilized.



Public open space

Large area having no public open space provision



Memorial Gardens



Don Best Park



Skate Park

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Lack of street diversity

Street Hierarchy

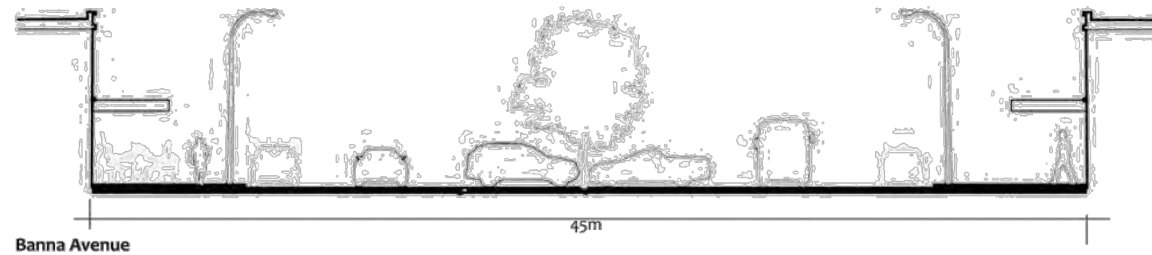
The streets within Griffith predominantly serve vehicle movement and as a result there are a limited number of functions that a street might be used for. In particular, car-parking consumes extensive areas within the streetscape hindering the quality of the public realm.

Griffith generally has large street widths and there is significant potential to improve the public realm along the streets. However, many of the streets in the city centre are dominated by traffic and parking and appear bleak and generally unattractive to pedestrians. National Association of City Transport Officials (NACTO, 2013) found that wide travel lanes and undifferentiated street space has an adverse affect on how people experience the street.

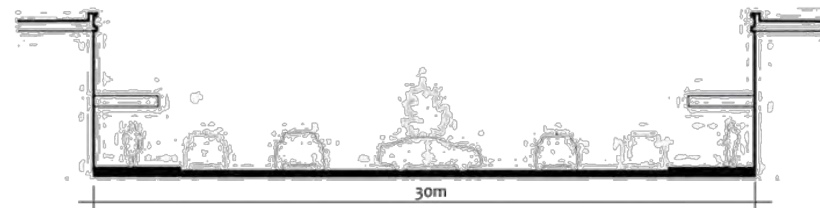
It is stressed that pedestrian-prioritized streets are good for businesses, generating higher revenues for businesses and higher values for property owners (NACTO, 2013). This is further supported by Heart Foundation (2011) which stated that 85% of surveyed businesses attributed quality streetscapes as the primary element in attracting customers and tenants.

**85% of surveyed
businesses say quality
streetscapes attract
customers and tenants**

(Heart Foundation, Good for Business)



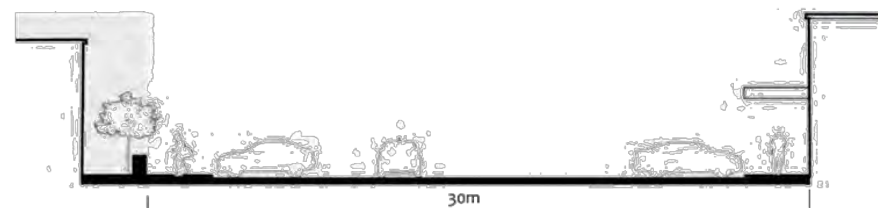
Banna Avenue



Yambil Street



Yambil Street



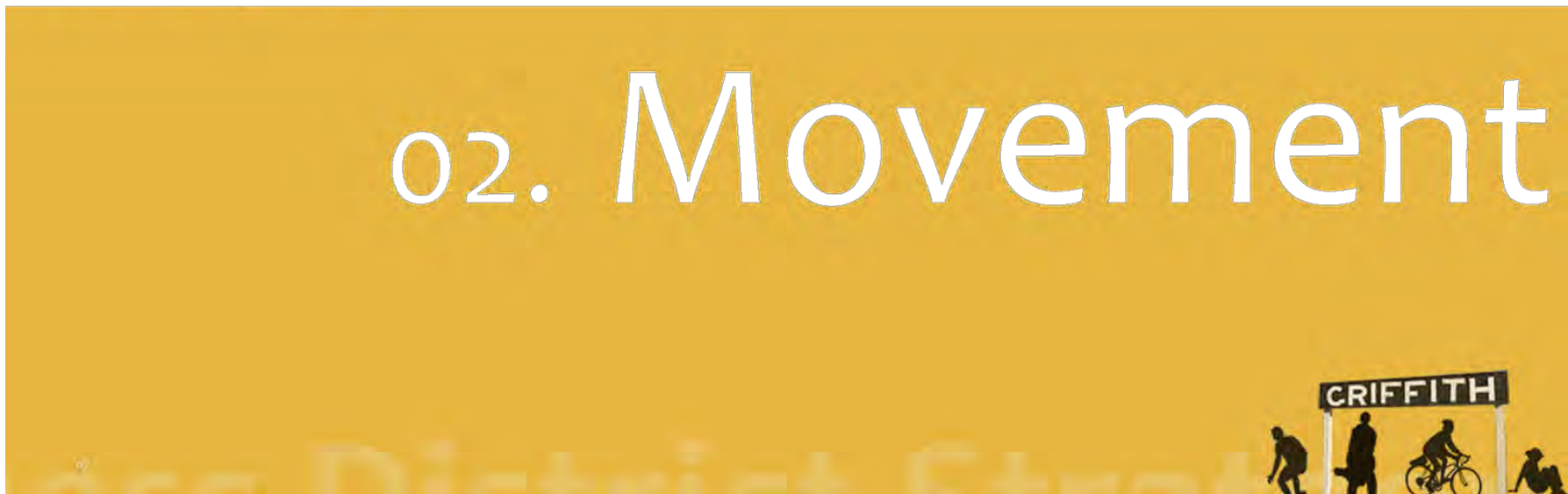
Kooyoo Street



Kooyoo Street

Analysis

02. Movement



A railway dividing the city

Barriers

The railway presents a significant barrier in connecting the city centre with the northern suburbs of Griffith. It is not only a physical barrier but also a visual barrier that detracts from the visual amenity of the centre.

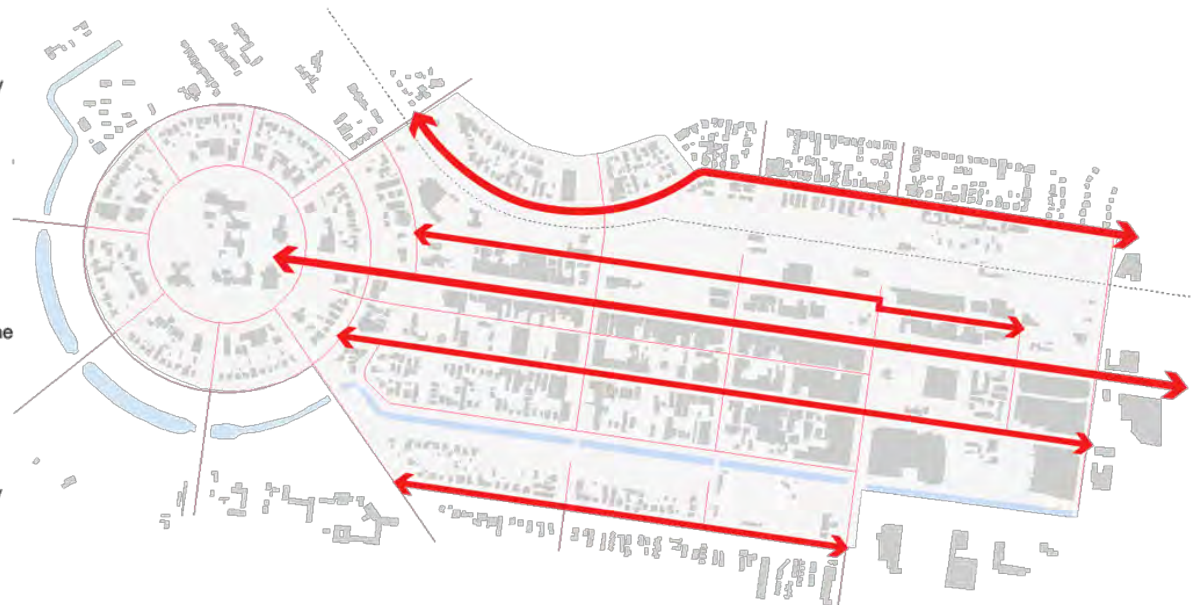
At present a freight terminal is located in the city centre on the northern side of the railway line. The terminal is a noisy and dusty environment, inappropriately located in the city centre. Moreover, the terminal welcomes large trucks entering from Tranter Place requiring that they come through the CBD to get to the terminal.

Recent discussion between the community, Council and Patricks (freight company) has been to relocate the terminal away from the city centre. This move would significantly improve the amenity of the city and provide a significant parcel of land to be redeveloped.

The canal levee presents another visual barrier within the city centre.

Linearity¹

The railway line and canal have created a strong east-west linearity of the city centre's main transport and activity corridors - Banna Avenue and Yambil Street. As a result, the city centre has limited north-south activity corridors intersecting between the streets and canal.



Linearity of the CBD

¹ Linearity in geography describes settlement forming along a long line, typically following a transport route, road, river and/or canal.



Dominant rail infrastructure



Trucks through the CBD

Vehicular dependency

Traffic Volume

Griffith city centre is a traffic dominated environment and the community is heavily dependant of vehicle usage.

In the majority of cases, streets have been designed to promote and encourage vehicular movement and not benefit the pedestrian environment. This often presents unpleasant and potentially dangerous environment for pedestrians.

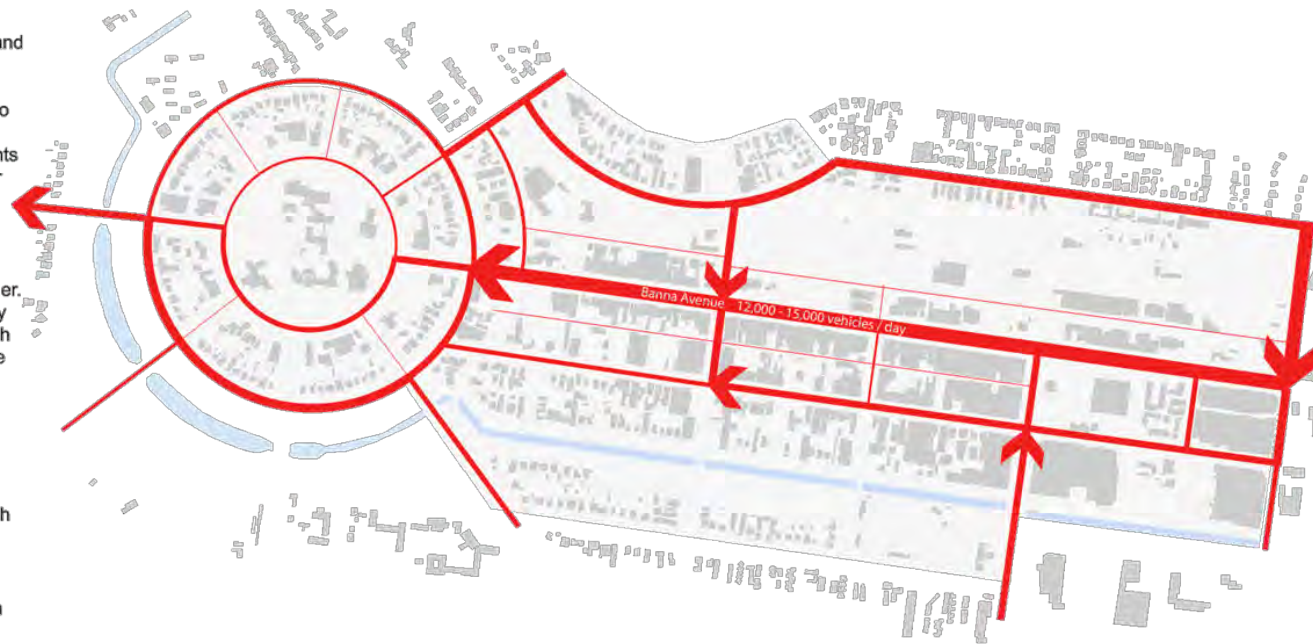
It is also addressed that vehicles do not just enter the Griffith city centre for employment or errands but as a thoroughfare to get from one side of the city to the other. While Banna Avenue effectively limits traffic speeds by having regular pedestrian crossings, other streets such as Yambil Street do little to reduce speed and facilitate vehicular thoroughfares.

In order to promote a more dynamic city centre and reinforce its retail core, driving speeds need to be reduced. In addition, other modes of transportation, including walking, cycling and public transportation require further promotion to provide the population with alternatives.

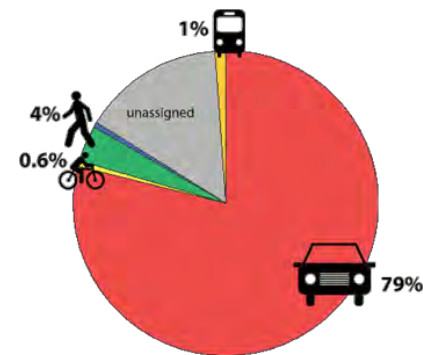
Mode of Transport

The graph illustrates the percentage of Griffith's urban population that travel to work. A significantly high percentage of people travel to work by private vehicles (79%) but only a small percentage walk (4%), cycle (0.6%) or use public transport (0.4%) (ABS, 2011).

These statistics are revealing as the majority of the Griffith urban area is in comfortable walking or cycling distance from home to work.



Vehicular movement



Mode of transport (ABS, 2011)

The city centre is **heavily dominated** by vehicular traffic



Ample car-parking

Parking Numbers

Consistent with a city that is dominated by vehicular traffic, car parking is a significant feature in the city centre. In comparison to the size of the city, Griffith has a high number of parking spaces in the study area.

In an area between Yambil Street to Olympic/Railway Streets and from Kookora Street and Jondaryan Avenue (as illustrated on the Car Parking plan), there are approximately 1,700 parking spaces. The highest occupancy rates are on Banna Avenue, Ulong and Kooyoo Streets. However, there is a low occupancy rate along Yambil and Olympic/Railway Streets (Griffith City Council, 2013).

There is a lack of designated motorbike parking throughout the city centre.

It should be noted that a greater number of parking spaces does not alleviate parking pressures, rather studies have shown that increasing parking spaces only facilitate increased car ownership and usage (Gehl, 2010)(Farr, 2008).

Distribution and Condition

On- and Off-street parking is generally well spread out across the city centre. It is also noted that car parking areas are generally well landscaped, softening their visual impact in the area. In addition, several off-street parking areas provide alternative access through to adjoining streets. For example, the Senior Citizen's Carpark provides access to Yambil Street and Canal Street.

Case Study: Wagga Wagga Main Street

Redevelopment of the main street in Wagga Wagga has seen a significant reduction in on-street car-parking. The car parking has been relocated to several allotments directly behind the main street and retail core. The car parking areas have strong connection to lane-ways or arcades that connect to the main street.



Car parking



Off-street parking



High levels of on-street parking

Weak pedestrian network

Pedestrian Network

A significant portion of Griffith's population is in walking distance of the city centre but there is a perception that walking is not an attractive form of transportation.

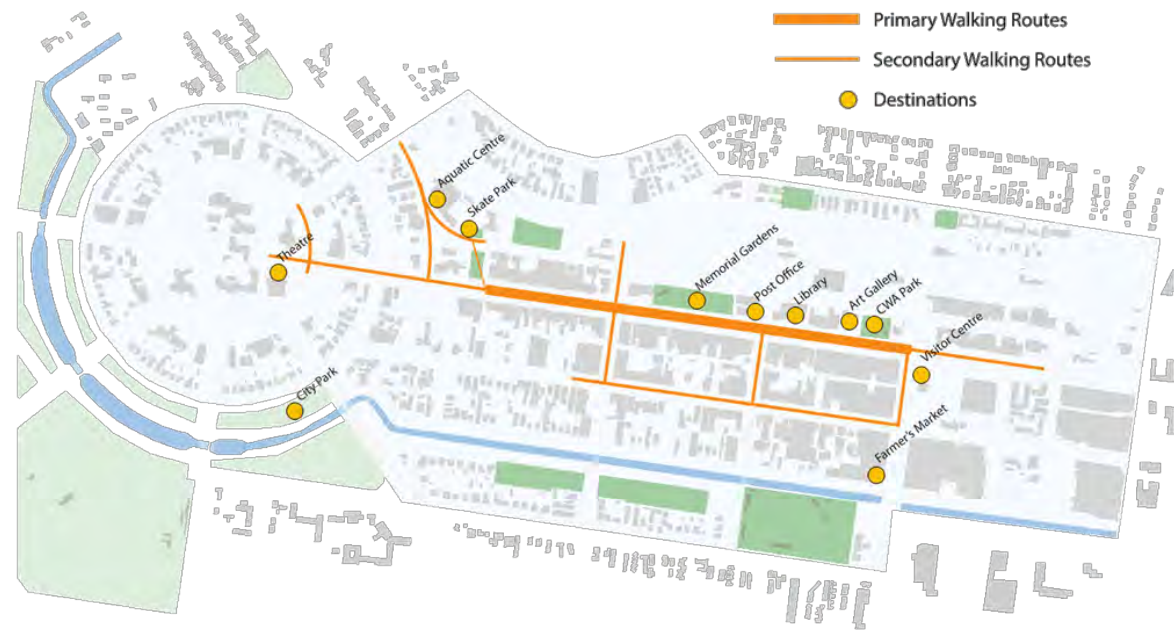
The city centre has a relatively weak pedestrian network and the 2013/14 Community Survey (Griffith City Council, 2014) revealed that 33% of community respondents were unsatisfied with the state of footpaths in the Council area. It is important to note that not all streets leading into the city centre have footpaths, significantly detracting people from

With a more extensive and better quality pedestrian network, an increasing number of people will choose to walk and spend longer time in the city centre. Further, it is noted that walking is a sustainable, healthy and social mode of transportation.

Destinations

Destinations are scattered across the city centre. While attractions are typically located along Banna Avenue, there are a number of isolated attractions such as the Griffith Regional Theatre, Griffith Aquatic Centre, City Park and Sunday Rotary Market. There is also significant portions of the city centre without any significant destinations.

It is important that Council consider how it might best make destinations more legible and connected to a quality pedestrian network. Further, the city centre would be better supported by additional key destinations within the study area. For example, Olympic Park, old Police Station, McKirby Park, Clock tower building, Area News building and old Bowling Green are all underutilized sites that might be considered for development.



Pedestrian network and key destinations

A better quality **pedestrian network** will encourage people to choose to walk and spend longer time in the city centre.



City destinations



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Pedestrian interruptions & permeability

Interruptions

The pedestrian crossings located in the main section of Banna Avenue making the street a convenient and attractive pedestrian environment. Unfortunately, pedestrian crossings do not extend beyond Banna Avenue, reducing streetscape appeal and convenience to other areas of the city centre.

With no pedestrian crossing points and limited traffic slowing methods applied traffic generally moves quickly along Yambil Street, Ulong Street, Canal Street and Kookora Street.

Laneways and Arcades

There are a few scattered north-south laneways and arcades in the retail core, connecting Banna Avenue to other city streets. However, laneways and arcades in the city centre are neglected and unattractive environments.

The most significant laneway is Banna Lane, a long narrow laneway behind Banna Avenue. The lane is a neglected space with poor frontages and limited activity **but widely used as a pedestrian and cycle corridor.**



Pedestrian crossing points and interruption points

Case Study: Melbourne Laneways

Melbourne's city centre has seen huge change over the last two decades and a significant move has been to transform neglected and under-utilized laneways into attractive places to meet, stay and socialize.



Pedestrian convenience?



Poor cycle network

Alternative Commute

The city of Griffith is a short cycling commute to the city centre (as indicated in the Bicycle Commute plan). However, there are few Griffith residents commuting by bicycle and the majority of usage is weekend recreational use.

Utilising the bicycle as a mode of transportation is a sustainable, cost effective and healthy alternative.

Bicycle Network

The bicycle network in Griffith is disconnected from the city centre. While there are several shared pathways that enter the fringe of the study area, there is little connection through the city or to city destinations.

The Griffith Bicycle Plan (Griffith City Council) proposes an extensive bicycle network in future but it is dominated by shared off-road paths which are arguably inappropriate in the city centre. As a result, the Griffith Bicycle Plan has limited provision for bicycle access within the city centre itself.

Bicycle paths do not need to rely on shared off-road paths and a variety of options for bicycle access can contribute in making streets more diverse and interesting.



0.6% of Griffith cycle to work
(Australian Bureau of Statistics)



Bicycle infrastructure



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Analysis

03. Social Fabric

Griffith Central Business District Strategy

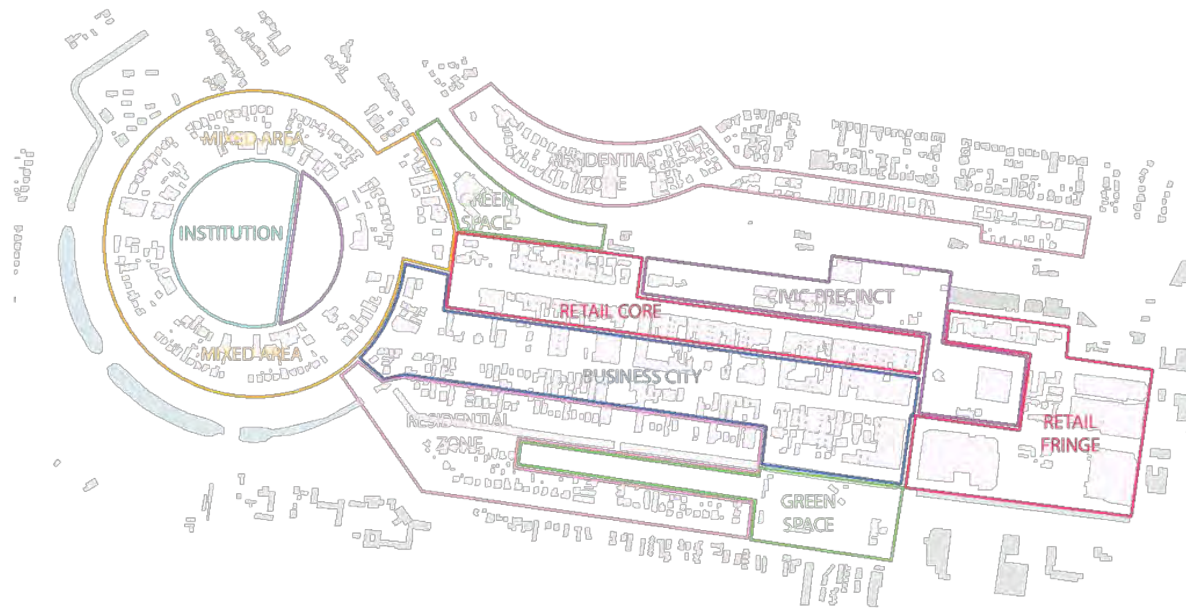
Mono-functional City

City Functions

Like many Australian cities, Griffith suffers from modernistic planning ideals of the post-war period. The functions in the study area are mono-functional and only active during limited periods of the day.

Griffith's retail activities are concentrated along Banna Avenue and business and community services are generally located along Yambil Street. However, the retail core (Banna Avenue) has suffered from the establishment of shopping malls and large retailers to the east, drawing potential consumers away from the retail core. The Heart Foundation (2011) indicates in 'Good for Business' that *a dollar spent at an independent business generates approximately three times as much benefit to the local economy as spending a dollar at a chain retailer*. Locally-owned businesses can thrive in densely-built and walkable communities such as Griffith's retail core if development is prioritised in these areas.

It is imperative that Council continue to nurture locally-owned businesses by providing an attractive streetscape and highly accessible and liveable retail core. Further, it should encourage a policy of great mixed uses in the city centre.



City functions



Fragmented centre



Quality shop fronts



Dominant shopping centres



Heritage community services

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City for living

Residents in the city centre contribute to the precinct's life and dynamism. It ensures people are using the area at all times and are regularly overlooking and maintaining the environment.

Existing Residential

The majority of residential areas are located to the edge of the city centre. While it is difficult to calculate the exact population within the city centre, it is estimated that the city supports a population between 1200 and 1500 people (ABS, 2011).

The housing type is typically single storey detached houses and double storey apartment blocks and town houses. While there is a number of mixed-use development creeping into the city centre, this remains more uncommon than the norm. There are considerable potential for greater residential density and mixed used development throughout the city - which would alleviate the push to develop more greenfield sites and further encroach on valuable agricultural land. Further, more people living in the city centre creates a safer and more dynamic place.

This is further supported by the Griffith Local Environmental Plan (2014) which seeks to encourage developers to consider shop-top or mixed use development.

Affordable Living

An assessment of the 2011 ABS Population and Housing Census reveals that there is a high concentration of low socio-economic families (45%) living in the city centre. **Canal and Olympic Street are areas of low socio-economic housing which are affordable and within easy access of city centre amenities.**

Living in the Griffith city centre can be affordable and an area the Council could promote to future developers and investors.



Residential population



Variety of accommodation

Place to visit

Griffith is a surprising oasis within a semi-arid landscape. Many visitors are taken by the greenery, variety of services and multicultural society found in the town.

The Griffith Visitor Centre provides an important initial destination for visitors arriving to Griffith. However, beyond this point there is limited way-finding to further direct tourists to landmarks and destination points.

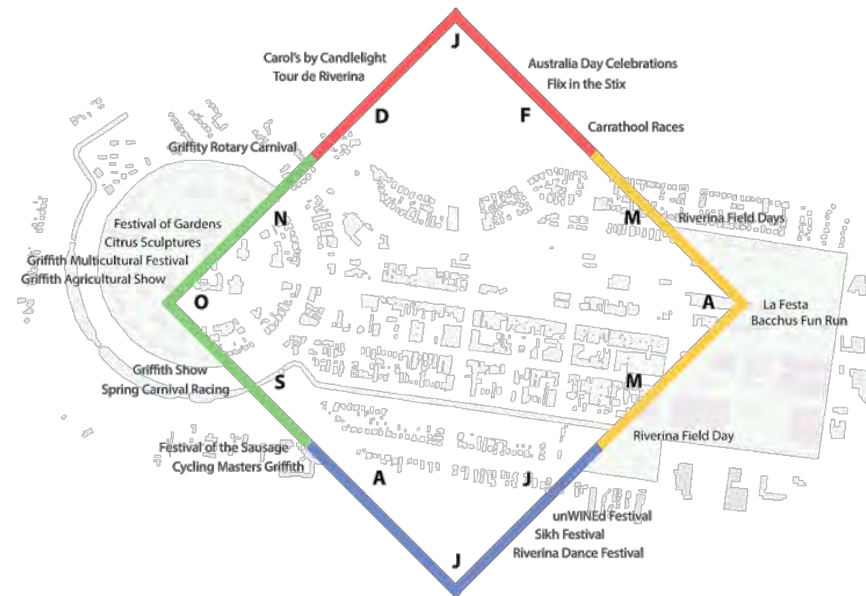
Festivals & Events

Griffith is synonymous with festivals and events, celebrating a rich diversity of people and produce. The calendar of events illustrates that Griffith has festivals and events almost all year round.

However, the location of events and festivals is haphazard at best, spreading throughout the greater city area from Ted Scobie Oval in the northeast to the Griffith Showgrounds in the southwest. The most prominent event location in the city centre is Memorial Gardens, however due to its limited area, large festivals and events occur outside the centre. As a result, this significantly reduces businesses capitalizing on large events that occur in Griffith and reduces the city legibility and identity.

Number of Beds

Griffith has over 575 rooms for accommodation and a total of 960 beds. Accommodation is often full at certain times of the year, particularly when the city hosts regional community, cultural and sporting events.



Calendar of events

Year round festivals and events throughout Griffith



ANZAC (Memorial Gardens)



Citrus sculptures



Multi-cultural performances



Limited staying activities

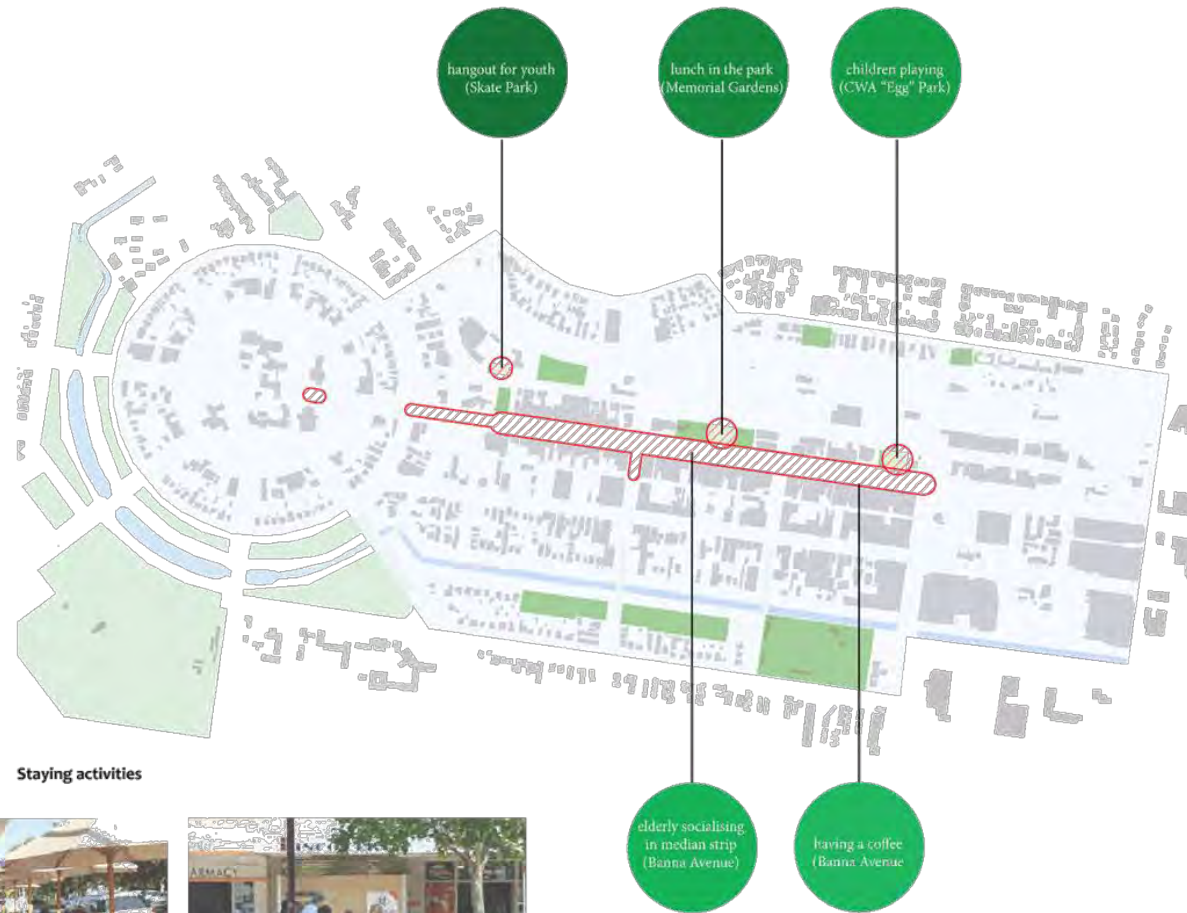
Staying Activities¹

Staying activities can be classified as standing, sitting on a bench, sitting on secondary seating, sitting on cafe seats, recreational pursuits, cultural activities, commercial activities and child play.

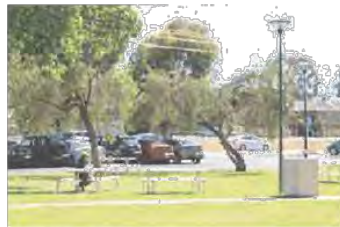
The primary activities identified in the city centre are standing and sitting and they generally concentrate along the stretch of Banna Avenue. However, it is important to note that Banna Avenue has slightly different activities occurring in the bottom, middle and top blocks.

Children, youth, elderly and ethnic groups have limited representation in the city centre and more could be done to identify and implement city activities that accommodate them. For example, a quality playground will attract children and parents who stay in the area for longer periods of time because of the play activity.

¹ Staying activities describe activities associated with the length of time a person may or may not stay in one place. Commonly, the quality of a city is measured by the quantity and quality of staying activities on offer (Gehl, 2010).



Staying activities



Lunch in the park



Cafe seating



Sitting in shade

Children at play

Children in Griffith

Griffith has a high percentage of children (22%) in comparison to other regional centres and the NSW state average. Further, there is particularly a high percentage of children between the ages of 0-4 (ABS, 2011). A greater number of play opportunities in the city centre will further encourage families to spend longer periods of time in the area.

Limited Places for Children

There are few places in the city centre for children to play. The CWA Park (or more affectionately named "Egg Park") is the primary playground in the city centre. The playground has a strong patronage and an important meeting place for families. Further, the library is another well patronised "indoor" play area. However, more play opportunities could be incorporated into the city centre to benefit business.

A skate park and youth centre (PCYC) for teenagers is located towards the western end of Olympic Street and provides a strong youth precinct in the city centre. The skate park has strong patronage during after school hours, weekends and school holidays. However, a greater number of recreational and social opportunities for youth in the city centre would create better inclusion.



Play facilities



Poor standard of play



Public benches and cafe seats

Public Benches

A public bench offers an important invitation to pedestrians to pause, stay and rest within the public realm. A bench offers opportunity to rest, view, socialize and ultimately encourages the public to extend their time in the public realm.

Griffith has an uneven distribution of public benches though the city centre. The majority of seats are found along Banna Avenue with a limited number spreading to other streets. This severely limits the potential of other streets such as Yambil Street, Kooyoo Street, Railway Street, Ulong Street and Canal Street to act as attractive places to stay and experience.

While there are a large number of public benches along Banna Avenue, people sitting on benches remains low which puts into question whether benches are comfortable, shady or provide an attractive view.

Outdoor Cafe Seating

The cafe culture within the city centre is clearly an essential part of Griffith's cultural identity. Outdoor cafe seating spills cafe life into the street, potentially creating greater vibrancy and liveliness in the city.

At present, there are 339 outdoor cafe seats in the study area. The outdoor seats concentrate along Banna Avenue and Ulong Street. However, there is little consistency and enforcement on how cafe seating is arranged along the streetscape. **This is unsightly along the streetscape and can cause pedestrian obstruction.**



Bulky street furniture



Variety of sitting opportunities



Cafe seats



Uncoordinated cafe seating arrangements

Night life

Evening Activities

Night life is a term referring to entertainment that is available and frequented more regularly during the evening. A night life is a helpful indicator towards a city's vitality and the perception of safety (Gehl, 2011).

Griffith's night life is concentrated primarily along Banna Avenue at the top and bottom blocks. The city is generally quiet at night and the activities are typically mono-functional - pubs and restaurants. It is also a popular past-time to do drive laps of Banna Avenue to see what is happening along the street.

The middle block is almost completely absent of night activities, resulting in a feeling of isolation between the two main concentrations of night activities at the top and bottom blocks.

The city should look to extend the number of night activities through the city centre and extend the type and function of night activities occurring.

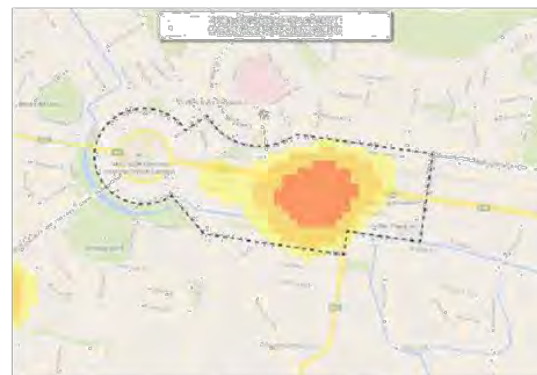
Safety

Griffith CBD is generally perceived by the public to be unsafe at night. The centre is inactive and dark at night, having limited surveillance or 'eyes on the street'.

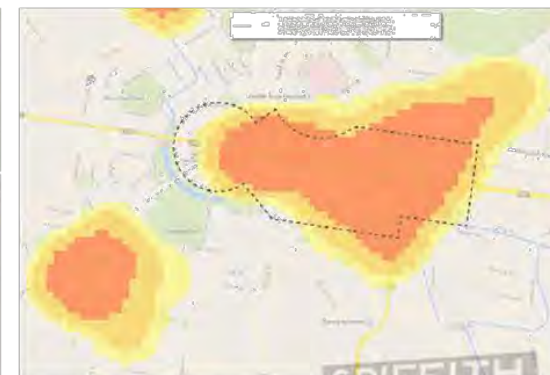
CCTV is located along Banna Avenue and Kooyoo Street but this should not be the only measure to mitigate antisocial behaviour. A greater number of people using or looking over the city streets (passive surveillance) at night-time significantly reduces crime and improves public perception of safety (Gehl, 2008).

NSW Bureau of Crime Statistics and Research (BOCSAR) indicate there is a high concentration of non-domestic assault and malicious damage occurring in the city centre (as referenced in the following diagrams).

Council is currently preparing a Crime Prevention Strategy that seeks to implement safe-by-design principles, particularly focusing on encouraging passive surveillance (eyes on the streets).



Crime hotspots for non-domestic assault (BOCSAR)



Crime hotspots for malicious damage (BOCSAR)



Analysis

04. Visual Amenity

Griffith Central Business District Strategy

34

Poor legibility

Legibility¹

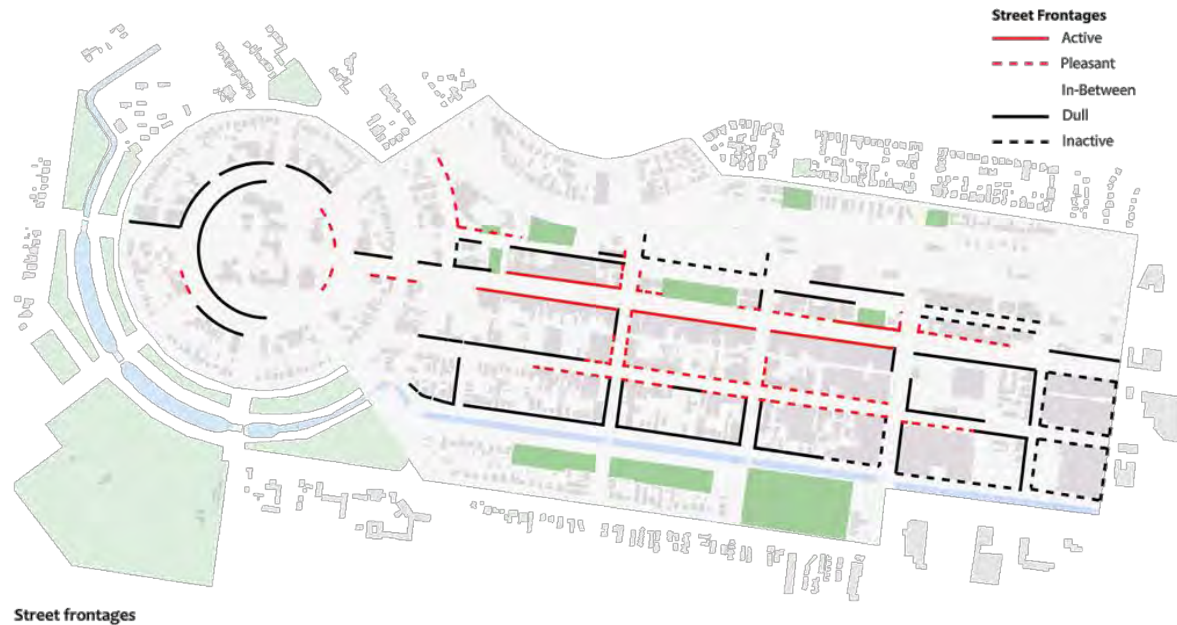
The Griffith CBD has a lack of legibility - meaning it is difficult for visitors to clearly understand their surroundings and orientate themselves through the city. The entrances into the city centre are weak, there are a limited number of landmark buildings.

Street Frontage

There are a number of streets in the CBD that lack active or pleasant frontages with expansive blank walls (as referenced in the corresponding plan - Street Frontages). Further, several precincts have inconsistent setback which detract from the pedestrian environment.

No surprisingly, Banna Avenue provides the most pleasant street frontage having a variety of small shop fronts providing a diverse range of services at a human-scale. The most inactive areas are in the supermarket precinct where a number of supermarkets have long blank walls immediately adjacent the public realm (east end of Yambil Street). Large car parking areas fronting the street are also another detraction in the area.

Council should seek to limit inactive street frontages and require shopping centres and large retailers to address secondary frontages and screen large car parking areas.



Street frontages

¹ Legibility describes the ease or difficulty to which a person (an outsider) can read and orientate themselves within a city (Bentley et al, 1985).



Active frontage



Inactive frontage



Lack of entrance statements

Entrances

The city entrances are critical in achieving a sense of arrival in Griffith.

There are three major entrances to the city centre. Each route passes through light industrial and commercial areas generating an unappealing first impression of the city (Clouston, 1993). Further, power-lines and light poles detract from the amenity of the area.

The 2013/14 Community Survey (Griffith City Council, 2014) revealed that the community are particularly interested in having the city entrances improved, with more than 43% of participants unsatisfied with the city entrances.

Roundabouts

Griffith has a number of roundabouts at important entrance points into the city centre. At present, roundabouts have varying levels of presentation - from attractive landscaping to concrete masses.

There is a degree of unrealized potential in these roundabouts as they leave a continuing impression on tourists as they enter Griffith. It is important that this impression is a positive.



City centre entrances

Case Study: Coleambally Entrance Sign

Coleambally conducted extensive community consultation for the design of the town's entrance sign. The sign establishes a good first impression, attempting to attract travellers to town, who ordinarily pass the town by. It is also recognised that the entrance sign builds community identity and creates a town landmark.



City entrance



Nodal points

Hidden heritage

Heritage

Griffith was originally master planned by Walter Burley Griffin in keeping with City Beautiful and Garden City movements. It has a unique layout not commonly found in Australian cities or towns and should be one that is preserved and celebrated.

The CBD accommodates a collection of notable historic buildings, including examples of Art Deco and Georgian Revival buildings. A large portion of Banna Avenue is located in a historic conservation area which seeks to "conserve the heritage significance of heritage items and heritage conservation area..." (Griffith City Council, 2014).

While there are a number of heritage sites that have plaques indicating their historical significance, they are poorly publicised and not well maintained. Further, the city has seen a number of historic buildings become derelict or have been demolished, including the Old Police Station and Area News Building.

Parapets

The shop fronts along Banna Avenue (and to some degree Yambil Street) have detailed parapets. While some parapets are well presented, there are many that have been covered cladding for signage. As an area of historic conservation it is important that the parapets are celebrated.

Awnings

Awnings are a prominent feature along Banna Avenue, providing pedestrians continuous shelter from rain, wind and sun, however their appearance is often unappealing. The remainder of the city centre has an inconsistent coverage of awnings.

A more consistent awning network along Yambil Street, Ulong Street and Kooyoo Street would significantly improve the pedestrian environment surrounding the retail heart of the city centre.



Understated heritage buildings



Parapets need to be revealed



Awnings are bulky and poorly maintained



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Street elements

A high quality streetscape is dependent on quality details (Gehl, 2011).

The street furniture in the Griffith landscape is generally low quality and poorly maintained. It is essential that a set of guidelines are prepared to guide the location, number and design of street furniture in the future.

Further, street elements are almost non-existent beyond Banna Avenue, significantly reducing the appeal of streets such as Yambil, Ulong, Kooyoo and Canal.

Bins

Bins are a dominant feature along Banna Avenue, cluttering the streetscape. Does Banna Avenue need as many bins?



Bins dominate the Banna streetscape



Footpath

Footpaths in the city centre are a continual issue for debate, particularly from an aesthetic and maintenance perspective. The city centre has a variety of different paving treatments reducing the visual attractiveness of the street. The most attractive footpaths in the city centre incorporate a consistent style and quality paver (Banna Avenue bottom block), however these areas are attributed to the highest levels of maintenance.

Policy concerning footpath construction and design needs to be reviewed, establishing a consistent style that is attractive and affordable.



Footpaths are not consistent



Way-finding

There is a lack of pedestrian way-finding within the city centre, reducing a person's ability to orientate themselves.

Griffith should develop a signage and way-finding strategy to establish a more coherent city centre and promote a stronger walking environment.



Wayfinding is limited and isolated

Street trees

Street Trees

A popular asset within the city centre are the street trees. For instance, the London plane trees along Banna Avenue are a visual asset and should be protected and maintained. The condition of a number of the plane trees, particularly those located in parking areas are in poor condition and initiatives need to be considered in order to protect their health along the street.

There is also a general lack of consistency and cohesion of street trees across the city centre. This is most prevalent along Ulong Street, Kooyoo Street, Jondaryan Avenue and Yambil Street. Further, the community have commented that the selection of street trees are not always appropriate for the climate and environment.

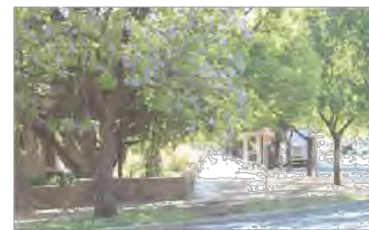
There are few examples of native plant species in the city centre. Studies have shown that native planting can enhance the local micro-climate and are generally tolerant to drought and frost, requiring lesser maintenance and irrigation (Wanneroo City Council, 2005).



Street trees



Tree-lined boulevards



Colour of jacaranda



Colonnade of gums



Public art and monuments

The most obvious monument landmarks in Griffith are the Cenotaph in Memorial Gardens, Firefly in the Visitor Centre car park and the Nancy Blumer monument in Neville Place. All these monuments are important reference points that make the city more legible (Lynch, 1960).

However, there are a number of other examples of public art and monuments that appear to be placed arbitrarily or have limited relationship with the site (Clouston, 1993). For example, having the detridge wheel and firefly monuments in the same location is confusing and the war memorial at the Banna Avenue and Kooyoo Street intersection is isolated. Moreover, there are examples of monuments and public art that need refurbishment such as the Kathleen Aiton Memorial in CWA Park.

The monuments and public art in Griffith would benefit from a narrative that sought to connect the elements through the city. There are also a number of nodal sites that would be enhanced by public art and a number blank walls in the city centre that might incorporate street art and murals.



Memorial monuments are a significant feature in the city centre



Place-making initiatives give a city personality



Art work establishes cultural identity and city vibrancy

