

Campbelltown Precinct LAND USE AND INFRASTRUCTURE ANALYSIS





JULY 2015

To view an electronic version in PDF format, visit **www.planning.nsw.gov.au**

© Crown Copyright 2015

Department Planning and Environment

Printed 2015

Disclaimer

While every reasonable effort has been made to ensure that this document is correct at the time of printing, the State of New South Wales, its agents and employees, disclaim any and all liability to any person in respect of anything or the consequences of anything done or omitted to be done in reliance or upon the whole or any part of this document.

Copyright Notice

In keeping with the Planning and Environment's commitment to encourage the availability of information, you are welcome to reproduce the material that appears in this Planning Proposal for personal, in-house or non-commercial use without formal permission or charge. All other rights are reserved. If you wish to reproduce, alter, store or transmit material appearing in this Planning Report for any other purpose, a request for formal permission should be directed to:

Planning and Environment GPO Box 39 Sydney NSW 2001

You are required to acknowledge that the material is provided by the Department or the owner of the copyright as indicated in this Planning Report and to include this copyright notice and disclaimer in any copy. You are also required to acknowledge the author (the Department of Planning and Infrastructure) of the material as indicated in this Planning Proposal.



Introduction The purpose and background of the analysis	04	
		Transport and Movement
Precinct Character An overview of the precinct's character	05	Walking Catchment
Demographics and Economy A snapshot of the people, homes and jobs within the precinct	06	Open Space Network
Site Context	07	Topography
A summary of the precinct's environmental and built form constraints		Flooding and Drainage
Campbelltown Vision The vision for the precinct informed by the above analysis	16	Vegetation and Ecology
Land Use and Infrastructure Plan The framework to guide future growth in the precinct	18	Bushfire Risk
		Heritage
Public Domain Options The framework to guide public domain and landscape upgrades and treatment	24	Recent Residential Developmen
Projected Growth Short, medium and long term housing and employment projections	26	Land Ownership
		Social Infrastructure
Infrastructure Analysis Summary of the infrastructure items required to support the projected growth	27	

Q

Contents

Introduction

Purpose of the Land Use and Infrastructure Analysis

This Analysis forms part of the Glenfield to Macarthur Land Use and Infrastructure Strategy and describes the methodology and evidence base that informed the vision and projected growth for the Campbelltown precinct. Applying the principles of ecologically sustainable development has been intrinsic to this process.

The Analysis has incorporated a review of the character, demographics and economy of Campbelltown.

A comprehensive audit of the precinct's environmental and built form characteristics identified areas to be protected and unconstrained land suitable for development.

The vision and growth projections for the precinct have been informed by economic feasibility and market demand analysis and reflect the long term housing and employment needs for the area.

Recommended improvements to the transport network aim to encourage more people to walk, cycle and use public transport for local and regional trips.

Improved connections to ecological corridors and open spaces have been identified and recommendations made to improve the quality of open spaces and the public domain.

A summary of the infrastructure requirements to support the precinct's growth is also provided to guide more detailed service and infrastructure delivery investigations.



Figure 1: Glenfield to Macarthur Urban Renewal Corridor

4

Precinct Character

Precinct Character

Campbelltown is located approximately 44kms south west of the Sydney, located between Leumeah and Macarthur Stations on the Cumberland, Airport, Inner West and South Line. The precinct is a 50 minute commute from Sydney CBD and also has direct train services to Kingsford Smith Airport. The Southern Highlands Line also commences at Campbelltown Station. Campbelltown is the largest train station in the corridor and receives a high level of commuter traffic.

The study area is bound by the Hume Highway to the north, including the suburb of Blair Athol, Narellan Road to the west, George Street to the south and a significant drainage corridor to the east. The boundary of the precinct is based on a radius of 800m – 1.5km from Campbelltown Station, which represents a 10-20 minute walking trip.

The precinct is the major business and cultural centre for the region, with a mix of commercial, cultural, retail, civic and residential land uses. Queen Street is the focus of retail and commercial development in the precinct, with mixed-use and commercial development varying greatly between single storey shop fronts to multi-storey buildings with a range of retail and commercial and uses.

The precinct is characterised by a major split between the eastern and western sides of the railway station. The eastern side is a mix of retail, commercial, civic and residential uses, while light industrial and bulky goods uses are predominant on the western side of the station along Blaxland Road.

Residential development on the eastern side of the station is characterised by 3-4 storey medium rise housing and low rise housing further from the station. There are areas of medium rise development located close to the station and a number of high rise developments currently under construction.

Large areas of land surrounding the station contain at-grade car parking, particularly to the north-west of the station, with the station being a key Park & Ride location.

The vast majority of residential development within the precinct is focused towards the south and east of the precinct; however, Blair Athol in the north west of the precinct adjoining the Hume Motorway also features significant low density residential development.

Campbelltown station plays a vital role in connecting the precinct to Sydney and to other major centres to the north, most notably Liverpool. Many major roads also run adjacent to the precinct, including; the Moore-Oxley bypass to the south, Hume Motorway to the North and Narellan Road to the west.

An aerial image of the precinct is provided in Figure 3. A series of photos that illustrate the existing built form and character of the wprecinct are provided on page 7.



Legend	Key Landmarks						
- Precinct Boundary	1 Campbelltown Council Chambers	5	Queen Street Historic Buildings	9	H J Daley Library	13	Bradbury Park
Station	2 Campbelltown Court House	6	Campbelltown Mall	10	Campbelltown Arts Centre	14	Hurley Park
← Train Line	3 Mawson Park	7	Fisher's Ghost Creek	11	Campbelltown Catholic Club	15	Campbelltown Showground
	4 Glenalvon House, Lithgow St	8	Koshigaya Park	12	Rydges Campbelltown	16	Kanbyugal Reserve

Figure 3: Campbelltown precinct, with key landmarks identified

Demographics and Economy

Demographics

At the last census in 2011, the precinct had a population of 7,526 people, making up close to 20% of the population of the corridor. Key characteristics of the precinct population include:

- ▶ The median age is 33.3 years, the youngest of all precincts along the corridor
- A larger proportion of young children, teenagers and people in their 20's and 30's compared to Sydney
- The precinct has more residents born overseas compared with Campbelltown LGA, but slightly lower than the Corridor and Sydney. The Philippines, England and India were the most common countries of birth other than Australia
- A substantially smaller proportion of houses were detached dwellings compared to Campbelltown LGA
- than Sydney as a whole

- Families consisting of parents with children made up close to one third of all households - a lower proportion than Campbelltown LGA and Sydney
- > Over a guarter of households were lone person households a significantly higher proportion than Campbelltown LGA and Sydney
- ▶ The average household size of the precinct is smaller than Campbelltown LGA and Sydney, with 2.47 persons per household
- A smaller proportion of dwellings are owned outright or with a mortgage than for households in Campbelltown LGA and Sydney
- A higher proportion of residents walked to work than across the corridor, but significantly fewer residents travelled to work by train than in Campbelltown LGA and Sydney.

Economy

In 2011 there were 11.717 jobs in the precinct. The precinct has a diverse mix of employment including large healthcare, education, retail, industrial and business sectors and has a high business concentration in the centre.

Campbelltown is a major employment centre for the Macarthur Region and generates a notable proportion of the region's business, administration, health and retail jobs.

Health and education make up the largest proportion of jobs, followed by retail and business jobs. There is a smaller proportion of industrial jobs in the precinct than neighbouring precincts to the north.



6



Constraints Analysis

This section is an assessment of the constraints within the precinct. The physical characteristics of the precinct have been mapped and analysed to identify constrained and unconstrained sites for renewal. These characteristics include: transport and movement; open space; topography; flooding; vegetation; bushfire risk; heritage; recent residential development; land ownership; and social infrastructure.

The combination of these elements reveal the overall level of development constraint within the precinct. However, not all constraints that are identified are necessarily barriers to change, often they are opportunities for renewal in the future.



Figure 6: Images demonstrating the existing character and built form of the











Site Context





Campbelltown Precinct – Land Use and Infrastructure Analysis (7)



Transport and Movement

Blaxland Road and Campbelltown Road/Moore Street serve as the primary northsouth access ways in the precinct, while the Hume Motorway provides the main regional route for through traffic in the area. The main access points include Badgally Road and Broughton Street.

The southern half of the precinct from Moore Street contains a well connected local road network, largely due to the many north-south streets that provide access to Moore and Queen Streets. Traffic signalisation provides safe and convenient connections along Moore Street, Queen Street, Hurely Street and Oxley Street for pedestrians and cyclists.

There are a lack of east-west connections over the rail corridor providing limited regional connections to the city centre. Access is constrained by the rail corridor and limited to two road crossings. The precinct also has high demand for retail, commerical, industrial and commuter carparking.

Walking Catchment

Figure 8 below demonstrates the 5, 10 and 20 minute walking catchments from Campbelltown station. Pedestrian and cycling accessibility in the north of the precinct is greatly restricted by a number of factors, including the rail corridor, limited north-south connections, and the lack of dedicated and signalised crossings along Blaxland Road.

There are also a number of local streets with limited street lighting and pedestrian footpaths that further restrict active modes of transport.



8



Legend

Station

Frain Line

Precinct Boundary





Open space network

Campbelltown has a good supply of passive and recreational open space in the precinct. There are a number of local community parks, as well as large tracts of natural vegetation and surrounding bushland.

Local parks in the precinct include Harvey Brown Reserve, Kia Reserve, Kanbyugal Reserve, Koshigaya Park, Bradbury Park, Hurley Park, Centenary Park, Mawson Park and Campbelltown Showground.

Figure 9 identifies the passive and recreational open space found in the precinct.







Figure 9(b): Open space network in the Campbelltown precinct

Site Context

Topography

The topography within the precinct is undulating with a ridgeline that runs along the north-western edge of the precinct to the University of Western Sydney site, affording dwellings and the industrial area to the west views of Campbelltown.

The eastern half of the precinct has an undulating ridge to the south-east, that rises and then slopes down to the Smiths Creek Reserve to the east.



Figure 11 shows the location of waterways and associated riparian corridors in the precinct.

0

Campbelltown City Council is currently preparing a Floodplain Management Plan to idenifty areas subject to flooding. Once finalised, this Plan will be used to manage flood risk and inform future planning for the precinct.

Any development of land within the precinct will need to consider whether the land is flood prone and address any relevant flooding controls.



Legend

Station

Frain Line

____ 2m Contour

Precinct Boundary

Figure 10: Topography within the Campbelltown precinct

10



Campbelltown Precinct – Land Use and Infrastructure Analysis







Vegetation and Ecology

The precinct contains some dispersed areas of vegetation that are classified as Endangered Ecological Communities under the *Threatened Species Conservation Act 1995.* These include areas of Cumberland Plain Woodland and River Flat Eucalypt Forest on Coastal Floodplains.

The larger spanning areas of vegetation are found along the western half of the precinct; throughout the industrial and low density residential area to the west, and also along the largest eastern riparian corridor bordering the precinct.

Riparian corridors are identified in Figure 12 below, and these are largely colocated with significant areas of natural vegetation.



Bushfire Risk

Due to the small amount of existing vegetation in the precinct, there is relatively little land that is subject to bushfire risk. Much of the land in the north of the precinct is open and undeveloped vegetation and may pose potential bushfire risk.

Any redevelopment of land within these bushfire prone areas will need to provide the required asset protection zones in accordance with relevant bushfire protection guidelines.



Figure 12: Vegetation and ecology within the Campbelltown precinct



Figure 13: Areas of bushfire risk within the Campbelltown precinct





Site Context

Heritage

The precinct contains many heritage items, both of local and state heritage significance, with most concentrated around the Campbelltown CBD. Some of these items include: the Queen Street Building Group, the Former Commercial Bank of Sydney building, Glenalvon building, St Peter's Anglican, Campbelltown Court House, St David's Presbyterian Church, Warby's Stables and Barn, and St John's Church.



Legend

12

Recent development is considered a short to medium term constraint to development as the average life cycle of a building is generally 30 to 40 years.

Analysis of recent residential development over the last 15 years indicated that incremental low rise development has occurred throughout the precinct. There has also been increasing apartment development in recent years at the northern end of Queen Street in the eastern part of the precinct. Figure 15 below illustrates where this development has occurred.

Much of the recent development has occurred in the west of the precinct, generally in large residential developments. This provides limited opportunities for renewal over the next 20 years.





С

Land Ownership

The following figure illustrates the different land ownership patterns in the precinct. Large tracts of land are owned by Campbelltown City Council including Kanbyugal Reserve, Campbelltown Showground, Bradbury Park, and Koshigaya Park, as well as a large area of vacant land to the north of the rail line in the west of the precinct. Campbelltown City Council also owns a number of significant sites in the CBD which provide opportunities for renewal and revitalisation.

The NSW Government also owns many sites in the precinct, including Campbelltown North Public School, Campbelltown Performing Arts Centre, Centenary Park and Hurely Park.

There is some strata titled land throughout the precinct, predominantly in the south.

Overhead transmission wires and corresponding easements traversethe boundary of the precinct in the north-west. This significant utility service and easement corridor represent a constraint to certain types of development within its vicinity.



Figure 16(a): Land ownership within the Campbelltown precinct, Campbelltown



Figure 16(b): Land ownership within the Campbelltown precinct

Train Line

Local Government Owned

Site Context

Social Infrastructure

The precinct is well served by a range of community facilities and infrastructure as indicated in Figure 17. There are over six local open spaces, four schools, as well as many religious centres, childcare and early learning facilities, and various community services.

Many of these community facilities are located in the eastern half of the precinct within an 800m radius of the station. A large majority of Campbelltown's residents live in this eastern half of the precinct.

Local Government Social Infrastructure

	Infrast
1. Blair Athol Community Hall and John Kidd Reserve	24. /
2. Bradbury Oval	25. I
3. Campbelltown Art Centre/Japanese Tea House and Gallery	26. I
4. Campbelltown Showground, Campbelltown Community Preschool and Harlequin Rugby Club (private)	27. [28. (
5. Centenary Park	29. (
6. Gordon Fetterplace Aquatic Centre	(
7. HJ Daley Library	30. (
8. Hurley Park and Scout Hall	31. (
9. Kanbyugal Reserve	32. (
10. Koshiyaga Park	33. (
11. Mawson Park	34. (
12. Namut Early Learning Centre	35. (
State Government Social Infrastructure	36. 1
13. Beverly Park Special School and Lomandra School	37.
14. Campbelltown Fire Station	38. i
15. Campbelltown High School	39.
16. Campbelltown North Public School	40.1
17. Campbelltown Police Station and Campbelltown Community Services	41. I
18. Campbelltown Public School	42. I
19. Campbelltown Sexual Health Clinic	43.
	(

- 20. Macarthur Community Options and Campbelltown Civic Hall (Local Government)
- 21. Macarthur Infant, Child and Adolescent Mental Health Service
- 22. Traxside Youth Health Service

14

23. Family and Community Services

Private and	Non-government
Infrastructur	′e

- Anglicare
- Blair Athol Child Care Centre
- Broughton Street Child Care
- Burnside Family Centre and St Vincent de Paul
- Campbelltown Catholic Club
- Campbelltown Church of the Latterday Saints
- Campbelltown Mall and Campbelltown Mall Medical Centre
- Campbelltown Presbyterian Church and Community Child Care
- Campbelltown RSL and
- Chamberlain Street Medical Practice
- Church of God
- Complete Medical Centre
- Evocca College Campbelltown
- Hillsong Church
- iFamily Medical Centre
- Kidz Ink Long Day Care
- Land of Oz Kindergarten
- Little Einsteins Child Care
- Northside Macarthur Mental Health Clinic
- Partners in Care Early Childhood Care
- 44. Pied Piper Kindergarten
- 45. Queen Street General Practice 46. St Peter's Anglican Church and Primary School
- 47. St John the Evangelist Primary



- School and Sherpa's OOSH Care
- 48. Widgets Child Care
- Nearby facilities servicing the precinct
- 49. Campbelltown East Public School
- 50. Gilchrist Oval

- 51. St Patrick's College
- 52. St Thomas More Catholic Primary School
- 53. TAFE NSW South Western Sydney Institute
- 54. Fishers Ghost Reserve



Campbelltown Precinct - Land Use and Infrastructure Analysis

Local Government Social Infrastructure State Government Social Infrastructure Private and Non-Government Sector Social Infrastructure Nearby Facilities

Combined Constraints

The combined constraints mapping indicates that a number of sites contain some level of constraint for development.

A considerable amount of the northern half of the precinct is constrained by recent development, riparian corridors and significant vegetation.

The land to the south of the rail corridor has a considerable amount of heritage items, of both local and state significance, as well as some small pockets of recent residential development.

Some parts of the CBD contain flooding constraints. The extent of flooding impacts would be informed by Council's Floodplain Management Plan, and may require further flood anlaysis at the development application stage.

Unconstrained Land

Unconstrained land provides the most potential for renewal over the next 20 years, subject to further investigations.



Figure 18: Combined constraints within the Campbelltown precinct

Campbelltown Vision

Jobs

- A revitalised and activated Queen Street will deliver a significant amount of retail and commercial jobs with high levels of amenity and access to public transport
- A new prestige campus-style office park with access to the station, Hume Highway, TAFE and University of Western Sydney will facilitate business clustering and expansion of Campbelltown's knowledge economy in the medicine/health, education and administration sectors



Movement Network

- Promote cycling and walking by providing new shared pathways, separated cycleways, footpaths, pedestrian refuges, bicycle storage facilities and lighting
- Introduce new regional and local cycle routes and walking connections to improve links with Campbelltown station and the surrounding area
- Improve linkages to and through the City Centre through a high quality public domain connecting the revitalised commercial and retail core, Queen Street, Campbelltown Mall and Council chambers
- Improve east west connections by investigating a potential future pedestrian, cycle and public transport link between Badgally Road and Broughton Road



03

community

Housing

- outcomes
- servicing the area

Built Form

- the station

• Provide a variety of housing types within walking distance of the station to cater for all members of the

Open Space and Public Domain

• Enhance the activity around Campbelltown station and Queen Street with pedestrian friendly streets, outdoor dining, street tree planting, inviting public gathering spaces and attractive street furniture

• Establish a quality open space and public domain network that provides better linkages to and upgrades of existing open spaces

• Promote connections to ecological corridors within the precinct and broader area, including through Bradbury Park and Fishers Ghost Reserve

• Investigate opportunities to review underutilised open space to contribute towards recreational

• Strengthen community and cultural facilities, including a new district level multi-purpose community facility and expanded central library servicing Campbelltown and Macarthur

• Longer term provision of a new primary school

• Provide a range of building heights, with buildings between 7 and 12 storeys close to the station to maximise pedestrian activity and access to rail and bus services and increase trade for local businesses

• Retain the existing character of areas east of Lindesay Street, with a mixture of detached dwellings, townhouses and terraces

• Large floor plate, campus style office park west of





"Campbelltown - Macarthur is a Regional City Centre offering higher order civic, cultural, employment, residential and retail opportunities"

campbell

Figure 28: Desired future character for the Campo



Land Use and Infrastructure Plan





Figure 29: Campbelltown Land Use and

18

Future Precinct Character

The following diagrams and images demonstrate the desired future character for each area in Campbelltown precinct.

Low Rise Residential

This area will largely retain its existing character and dwelling mix. Single-detached dwellings will remain the dominant housing type, however over time there is potential for renewal of building stock to provide a mixture of duplexes, townhouses and terraces.

Medium Rise Residential

This area could accommodate apartment housing to deliver a high level of amenity for existing and future residents. This could comprise 3-6 storey apartment buildings, with potential for communal open spaces and shared facilities. The new dwellings should be carefully designed to integrate with the existing streetscape.

High Rise Residential

This area could accommodate apartment housing to deliver a high level of amenity for the existing and future residents. This could comprise 7-12 storey apartment buildings, with potential for communal open spaces and shared facilities. The new dwellings should be carefully designed to integrate with the existing streetscape.





Mixed Use Retail & Residential

This area could accommodate a mix of retail and residential uses that would complement the character of the local area. Buildings would have ground floor retail that would provide local services for residents and commuters, with apartments above ranging from 7-12 storeys in height. These would be set back from the street to ensure the scale and feel of Queen Street is maintained.





Figure 33: Proposed location of mixed use retail &

Campbelltown Precinct – Land Use and Infrastructure Analysis

Land Use and Infrastructure Plan

Commercial & Retail Core

This area could accommodate commercial offices on sites that are carefully designed to integrate into the surrounds. This area will accommodate intensification of employment and offices and more consolidated employment activities will occur, with premium office accommodation over time. Buildings should be setback from Queen Street to provide improved amenity and public domain outcomes.

Business Park

This area could accommodate a large floorplate, campus style office park to facilitate business clustering.

Employment

This area could accommodate a mix of commercial uses that would complement the character and function of Macarthur Square Shopping Centre. New public spaces will enhance the landscape character of the area. This area will provide for bulky goods retail and commercial development, but will not include retail uses.



0















Industry & Innovation

This area could accommodate large floorplate industrial offices and workshops on sites that are carefully designed to integrate with the existing streetscape.





Figure 37: Proposed location of industry & innovation, and



Figure 38: Desired future character for the Campbelltown precinct



Land Use and Infrastructure Plan

Transport and Movement

The proposed transport network aims to:

- Improve walking and cycling connections to Campbelltown Station and within Campbelltown CBD;
- Increase direct bus routes and improve suburban bus route travel times to centres; and
- Improve road and street legibility and permeability throughout the precinct.

Key network improvements are identified on Figure 39 and include:

Public Transport

- Investigate opportunities to improve direct connections and reduce travel times for the suburban bus network suburban bus network to create a more connected system that provides direct routes to, from and through the corridor
- > Potential extension of Badgally Road as a pedestrian, cycle and public transport link to improve east-west connections and access to the Campbelltown CBD

Walking and Cycling

- New regional cycle route parallel and perpendicular to the railway line to provide better connections to the station and surrounding area
- Series of local cycle network improvements, including;
 - Heading east through Mawson Park, connecting to Condamine Street
 - Towards Blaxland Road to the west
- Streetscape works, such as shared pathways, footpath improvements, pedestrian crossings and refuges to improve station connections and pedestrian environments.

Parking

Undertake a parking study for the precinct to identify parking demand, develop appropriate parking management strategies and identify opporuntities for improved mode share to increase walking, cycling and public transport use.



Environment and Open Space

The precinct contains a number of parks that perform both active and passive district level recreation functions. Enhancing existing open space and improving pedestrian and cycle links is a key priority for the precinct.

Bradbury Park and Sportsground, Hurley Park, Gordon Fetterplace Aquatic Centre and Campbelltown Showground provide a range of recreational functions, while Koshinyaga Park and Mawson Park support a range of civic functions.

Further embellishing existing open space and improving active transport connections would encourage more intensive use. Key recommendations for the precinct are proposed to:

- Enhance Bradbury Park as a major district recreation facility with improved links to surrounding ecological corridors
- Enhance Mawson Park and Koshigaya Parks to support more intensive use
- > Enhance and improve connectivity to ecological corridors and green links, including to Fishers Ghost Reserve
- ▶ Improve regional and local cycle and walking connections within the precinct
- Increase indigenous tree planting.

Community Facilities

Campbelltown precinct contains a number of community facilities that provide regional functions, including Campbelltown Arts Centre, Campbelltown Civic Hall and HJ Daley Library. However, there is currently no multi-purpose space within the precinct and community meeting and activity space is limited.

As Campbelltown and the adjoining Macarthur precinct develop as a regional city centre, a new district level multi-purpose community centre should be established. Council's existing HJ Daley Library should also be expanded to meet the combined needs of the regional city, which could be co-located with the new multi purpose community facility.

Education

There will be strong demand for additional classrooms and associated infrastructure in schools in the precinct. Advice from the NSW Department of Education indicates that a new primary school is likely to be required by 2036 to jointly serve the Macarthur and Campbelltown Precincts. Existing high school sites serving the precinct have large sites that may be able to accommodate requirements and no new schools are likely to be required by 2036.



Figure 40: Proposed open space, environment and community facility improvements in Campbelltown

Campbelltown Precinct – Land Use and Infrastructure Analysis 23



Public Domain Options

Queen Street Public Domain Vision

Queen Street and Campbelltown Mall are proposed to be upgraded to become an inclusive, safe and attractive urban place with active ground floor retail and outdoor dining. The area's development would be informed by the following design principles:

Design Principle 1

Create a locally-responsive public space with active retail edges that facilitates the 'everyday experience' - places to sit, lawn, trees, existing shade structures and outdoor dining areas - and also functions as a canvas for community gatherings, events and civic meetings.

Design Principle 2

Provide streets and a space with a high quality pedestrian amenity, including comfortable microclimate conditions, wide and accessible footpaths, street trees, good lighting and safer road crossings.

Design Principle 3

Reveal the precinct's unique natural and cultural qualities through interpretation materials selection and artwork.

Design Principle 4

Establish a consistent materials palette that is attractive and robust and responds to local precinct character and the practical demands of everyday use.

Design Principle 5

Create safe, vibrant pedestrian friendly streets by narrowing Queen Street and introducing a shareway at the Anzac Lane interface. Use cobbles and other pedestrian pavements within the shareway and Queen Street.

Design Principle 6

Implement best practice environmental and social sustainability by first creating a quality design with longevity and physical robustness, through appropriate materials selection and maximising tree planting including local species.

Public Domain Character



Materiality







Campbelltown Precinct - Land Use and Infrastructure Analysis

Queen Street and Mall Concept Plan



Figure 43: Proposed Queen Street and Mall Concept



Campbelltown Precinct - Land Use and Infrastructure Analysis 25

Projected Growth

Projected Growth

Campbelltown precinct's projected growth is a calculation of the amount of residential and employment development that is expected to take place by 2036. The outcome of these projected growth calculations is provided below.

Residential

The Department applied the Urban Feasibility Model (UFM) to determine the precinct's development potential under existing market conditions. The analysis indicated the potential for 4.900 dwellings to be feasibly developed in the current market.

Additional market demand analysis indicated that around 4,000 additional dwellings could be delivered in the precinct by 2036. This equates to around 160 dwellings per year, which has been used to assess future infrastructure requirements in the precinct. While this growth projection is lower than the precinct's feasible development potential, it reflects the likely growth in the precinct to 2036, having regard to the broader projected growth throughout the Glenfield to Macarthur corridor and surrounding areas.

Over time, there is likely to be increasing demand for a greater diversity of housing, including medium and high rise residential housing, close to the station, which will facilitate more retail investment and employment opportunities. This is consistent with broader market trends. Further from the station, low rise housing will remain the predominant housing type.



Figure 44: Existing and projected dwelling growth by typology in Campbelltown

Dwelling Type	2021	2031	2036
Low Rise		1,700	2,100
Medium Rise		400	700
High Rise		900	1,200
Total Dwellings	1,500	3,000	4,000

26

Employment

An employment lands analysis projected demand for an additional 385,000m2 of employment lands within the precinct to 2036. This will deliver around 6,800 additional jobs, predominately in education and healthcare (252,000m2) and retail (82,000m2).

The Land Use and Infrastructure Strategy provides appropriate employment floorspace to ensure there is capacity to accommodate this employment growth.

The Land Use and Infrastructure Strategy identifies significant areas of land on both the eastern and western side of the railway line allocated to education, health, business and industrial uses to ensure there is adequate capacity for future jobs employment growth.

There is considerable capacity within existing commercial and retail areas, particularly along Queen Street to provide additional retail floorspace to meet demand.



Figure 46: Existing and projected jobs growth by typology in Campbelltown

Job Type	2021	2031	2036
Industry	100	200	250
Retail	1,000	1,700	2,150
Business	500	800	1,000
Special Uses	1,250	2,650	3,450
Total Jobs	2,850	5,350	6,850

Calculating Growth Potential

Campbelltown precinct's projected growth is a calculation of the amount of residential and employment development that is expected to take place by 2036. The projected growth calculations take into consideration the following factors:

- report.
- sites.
- dwellings.
- - growth.

Development on unconstrained sites. Development is projected to occur on the unconstrained sites identified on page 15 of this

С

▶ The Proposed Future Character and Built From. The Land Use and Infrastructure Strategy on page 18 identifies the desired future character and built form throughout the precinct. These building types have been applied to the precinct's unconstrained

Assumptions. A series of assumptions have been applied to calculate the land areas required for each development type, and the number of dwellings and jobs that could be provided. These assumptions are documented in Figure 5 of the Glenfield to Macarthur Urban Renewal Corridor Strategy.

Economic Feasibility. An analysis of the housing potential and development feasibility of the precinct's unconstrained sites was undertaken using the Department's Urban Feasibility Model (UFM). The UFM is a strategic planning tool used to determine the likelihood of the current market to deliver various types of

Market Demand. A high level demand analysis has been undertaken to determine the demand for different dwelling types on unconstrained sites within the precinct. The analysis:

Assessed the desired future character, built form and housing types proposed under the Land Use and Infrastructure Plan, against market conditions and demand; and

Identified take-up/realisation rates for each land use within the precinct, which informed the calculation of the projected

The 'take-up' or 'realisation' rates were informed by several factors, including broader population growth, property submarkets, historic dwelling activity, the development pipeline, the precinct's dwelling capacity and current market feasibility.

Infrastructure Analysis

Infrastructure Analysis

Figure 48 provides a summary of the infrastructure items required to support the projected growth in the precinct. This includes public transport, walking and cycling upgrades, roads and community infrastructure. Services utilities such as water, sewage, electricity and gas will also be upgraded as the growth occurs.

The infrastructure items would be funded and delivered by a range of sources as identified in Figure 48, and would be subject to more detailed investigations to inform the delivery time frames, design and costings.

Item	Measure	Measure Planning Timing Timing		Funding Mechanism	
	Public Transport				
1	Increased rail services to meet the needs of the precinct's growth	TfNSW	Train service levels are reviewed continually by TfNSW. The stopping patterns and level of service will be matched to the growth of the precinct	TfNSW delivery responsibility	
2	Investigate opportunities to improve direct connections and reduce travel times for the suburban bus network suburban bus network to create a more connected system that provides direct routes to, from and through the corridor	TfNSW	Bus service levels are reviewed continually by TfNSW and RMS. Detailed planning for a new suburban bus route to be investigated based on development in the area.	TfNSW delivery responsibility	
3	Addtional 450 commuter car parking spaces near Campbelltown Station interchange	TfNSW	To be determined as precinct develops	TfNSW funding responsibility	
	Walking & Cycling				
4	New regional cycle routes parallel and perpendicular to the railway line to provide better connections to the station and surrounding area	TfNSW	To be determined as precinct develops	TfNSW funding responsibility	
5	 Series of local cycle network improvements, including: Heading east through Mawson Park, connecting to Condamine Street Heading west towards Blaxland Road 	Council	To be determined as precinct develops	Delivery as part of Council's Section 94 Plan/VPA	
6	Streetscape works such as footpath improvements, pedestrian crossings and refuges, street tree planting, bicycle storage facilities and lighting.	Council	To be determined as precinct develops	Delivery as part of Council's Section 94 Plan/VPA	
7	Potential pedestrian, cycle and public transport extension of Badgally Road across the rail corridor to improve connectivity	TfNSW/Council	Further transport investigations to be undertaken as the precinct develops	Subject to further funding and delivery mechanisms	
	Education & Community Infrastructure				
8	Potential longer term need for a new primary school to service the Campbelltown and Macarthur precincts	Department of Education and Communities	To be determined as precinct develops	Delivered as part of DEC's School Cluster Asset Plan	
9	Potential development of a multipurpose community centre and expanded central library servicing the Campbelltown and Macarthur precincts.	Council/ developer	To be determined as precinct develops	Delivery as part of Council's Section 94 Plan/VPA	

Figure 48: Infrastructure servicing required in the Campbelltown precinct

Campbelltown Precinct – Land Use and Infrastructure Analysis

27

© Crown Copyright 2015

Disclaimer

While every reasonable effort has been made to ensure that this document is correct at the time of printing, the State of New South Wales, its agents and employees, disclaim any and all liability to any person in respect of anything or the consequences of anything done or omitted to be done in reliance or upon the whole or any part of this document.

Copyright Notice

In keeping with the NSW Government's commitment to encourage the availability of information, you are welcome to reproduce the material that appears in this report for personal, in-house or non-commercial use without formal permission or charge. All other rights are reserved.

If you wish to reproduce, alter, store or transmit material appearing in this document for any other purpose, requests for formal permission should be directed to:

NSW Planning & Environment GPO Box 39 Sydney NSW 2001.

For more information visit: www.planning.nsw.gov.au/camellia