

STIRLING CITY CENTRE COMMUNITY NEEDS ASSESSMENT

JUNE 2013

**HAMES
SHARLEY**

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Milestone 1 – Current Situation

Introduction & Scope

The purpose of this initial summary paper which forms the output of the first Milestone for the Community Needs Assessment project is to detail the current situation in the Stirling City Centre structure plan area in terms of:

- Population, dwelling numbers and density;
- Socio-economic characteristics of the population;
- Proportion of Public Open Space; and
- Number of existing community and civic facilities by type.

To undertake this analysis we have drawn on statistical data for the structure plan area from the ABS Census 2011, ABS Socio-Economic Indexes for Areas (SEIFA), geographic data from the Stirling Alliance, existing background reports and plans provided by the Stirling Alliance.

It should be noted that the areas referred to in this paper have been aligned as closely as possible with the Stirling City Centre Structure Plan Area and its Area of Influence. These boundaries are detailed in **Figure 1** overleaf.

However, ABS data for the creation of a demographic profile for the area is not available at the most detailed meshblock level (smallest ABS geographic unit). Therefore a grouping of suburbs has been used to create the Structure Plan area and Area of Influence combined. The congruence between suburb boundaries and these combined boundaries is relatively close with the exception of Stirling. This suburb has almost half its area included within and half outside the boundaries, as illustrated at **Figure 2** overleaf.

As an example, based on 2011 ABS Census data, by including the suburb of Stirling in its entirety, the population of the structure plan area and area of influence totals 24,819 persons (black suburb boundaries outlined in Figure 2) as opposed to 18,979 (yellow shaded area of meshblocks) using the method outlined above. Combining the information for the four suburbs shown: Innaloo, Osborne Park, Stirling and Woodlands provides an appropriate overall picture of the current residents of the area.

The socio-economic profile of the Stirling City Centre has been compared with that of Greater Perth in the following section to highlight variations from the metropolitan average and the significance of these to future community facility provision will be further analysed later in this project.

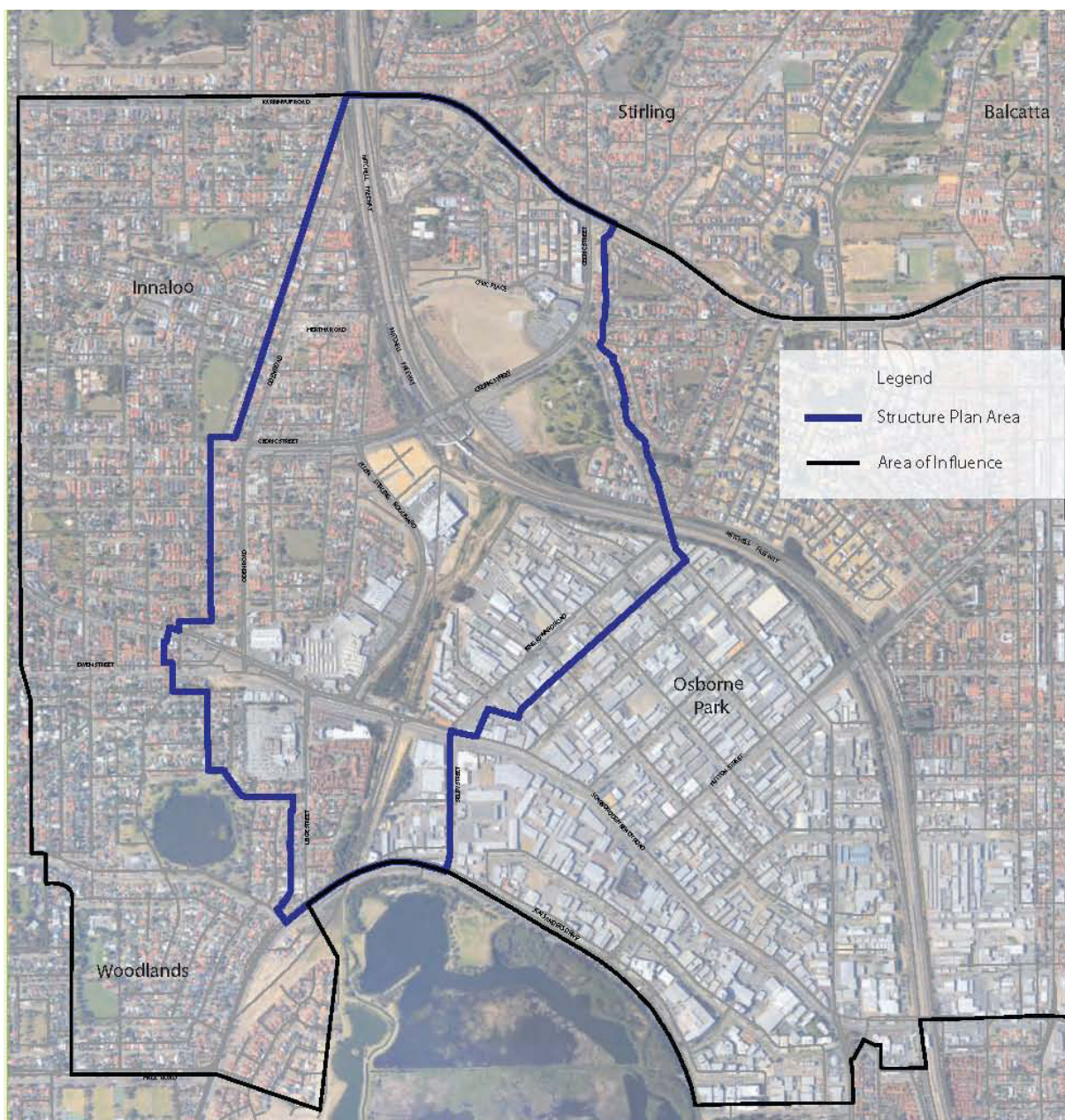


Figure 1 – Stirling City Centre Structure Plan Area and its Area of Influence (Source: Stirling Alliance Draft Stirling City Centre Structure Plan (July 2011))

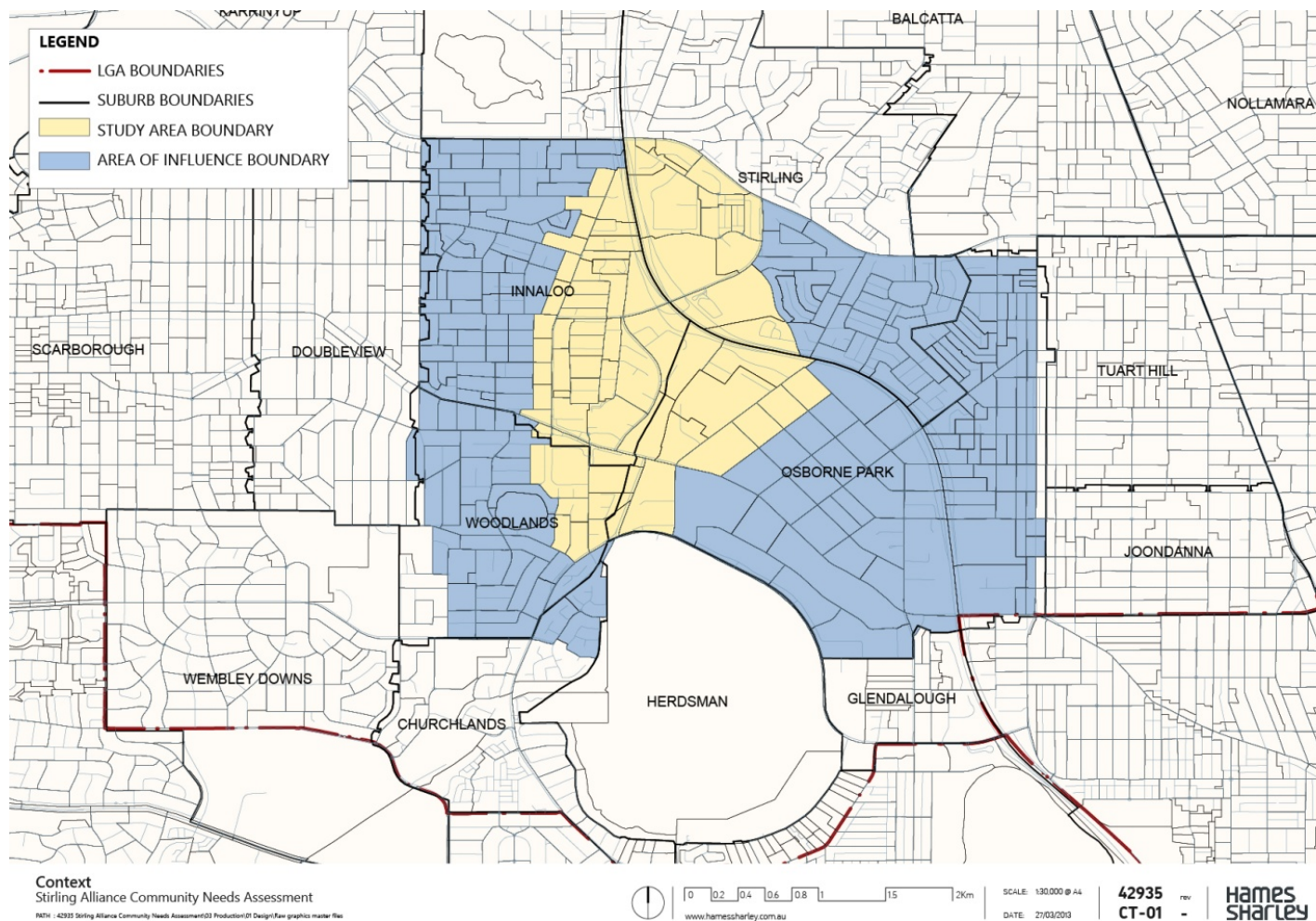


Figure 2 – Stirling Alliance Study Area Context Plan (Source – Hames Sharley 2013)

SUMMARY OF FINDINGS

Current population

Based on 2011 ABS Census data and using the calculation method outlined above the current population of the structure plan area and the area of influence is approximately:

Structure plan area	4,116 persons
Area of influence	14,863 persons
Total	18,979 persons

Source: ABS 2011 Census

Current demographics

As outlined in the Introduction, the areas referred to in this paper have been aligned as closely as possible with the Stirling City Centre Structure Plan Area and its Area of Influence. In this instance a grouping of suburbs (including Innaloo, Woodlands, Osborne Park and approximately half of Stirling) has been used to create the Structure Plan area and Area of Influence combined, which for the purposes of this paper will be referred to as the "Stirling City Centre".

The following demographic profile of the Stirling City Centre Study area compared with Greater Perth will provide a useful context for the Community Needs Assessment. As illustrated at **Figure 3** below, the Greater Perth area represents the Perth Metropolitan Area including Peel.

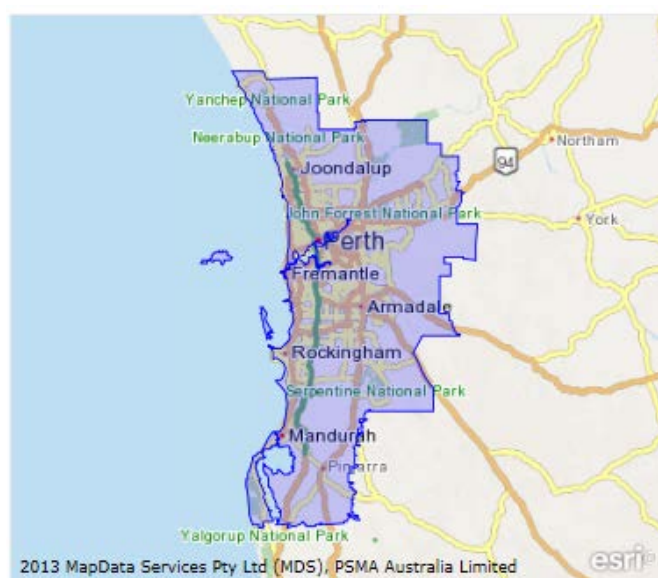


Figure 3 – Greater Perth Area (Source – Mapdata Services P/L 2013)

Age

As demonstrated in the below graph, the Stirling City Centre is under represented in terms of primary school age (4 -12 years) and high school age (13-18 years) children compared to the Greater Perth Area. The 40 – 54 years cohort is also under represented within the Stirling City Centre compared to Greater Perth.

Conversely, the Stirling City Centre has a higher percentage of persons aged 25 – 39 year olds and older persons (70 years plus).

The proportion of persons from an Indigenous background is on par with the Greater Perth area.

The above may indicate that there is currently below average demand for new school facilities within the study area.

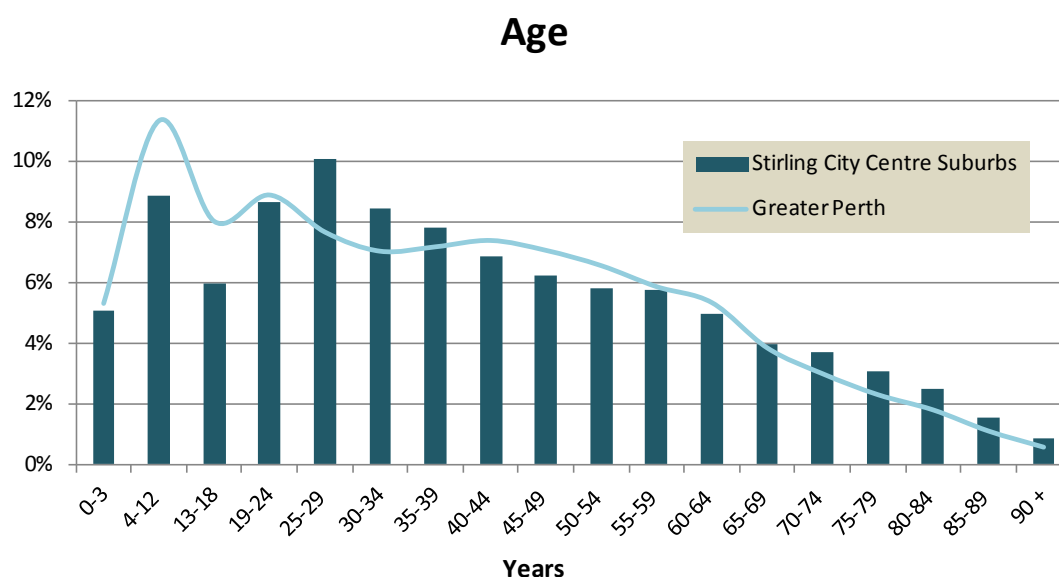


Figure 4 – Age Profile (Source – ABS 2011 Census)

Education

As demonstrated by the below graphs compared to the Greater Perth Area, there are a higher proportion of residents of the Stirling City Centre:

- Attending University or other tertiary institutions;
- Attending Catholic primary and secondary schools;
- Achieving Year 12 as their highest level of schooling; and
- Achieving tertiary qualifications.

Whereas the Stirling City Centre has a comparatively lower proportion of students attending government and non-government primary and secondary schools.

Educational Institution Attending

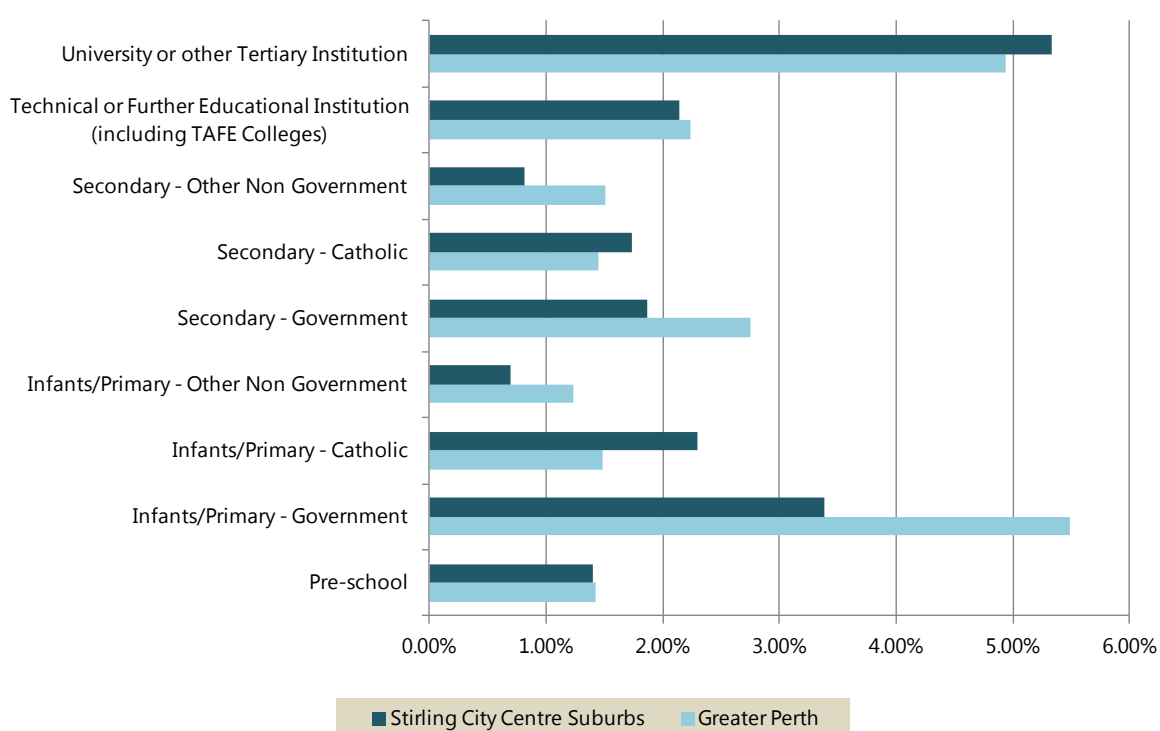


Figure 5 – Educational Institution Attending (Source – ABS 2011 Census)

Highest Year of Schooling Achieved

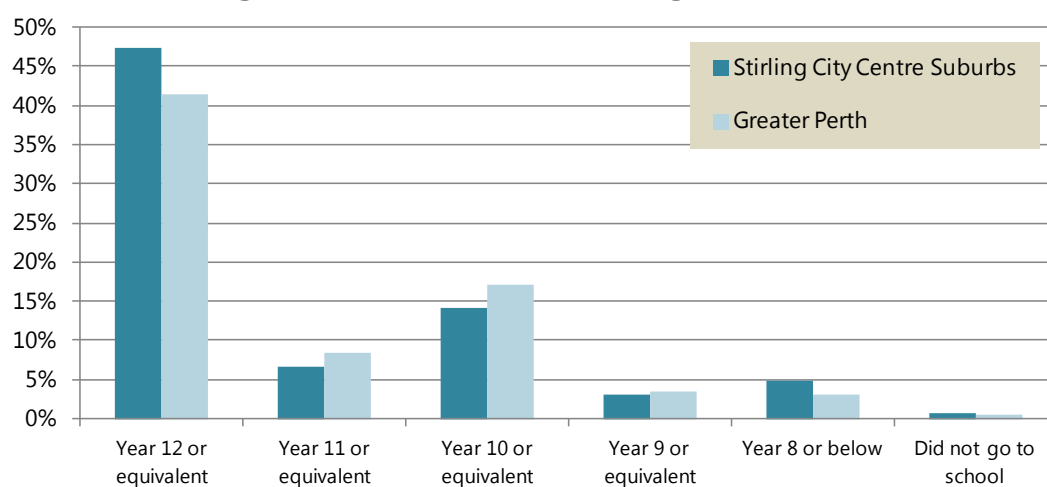


Figure 6 – Highest Year of Schooling Achieved (Source – ABS 2011 Census)

Post-school Education Level

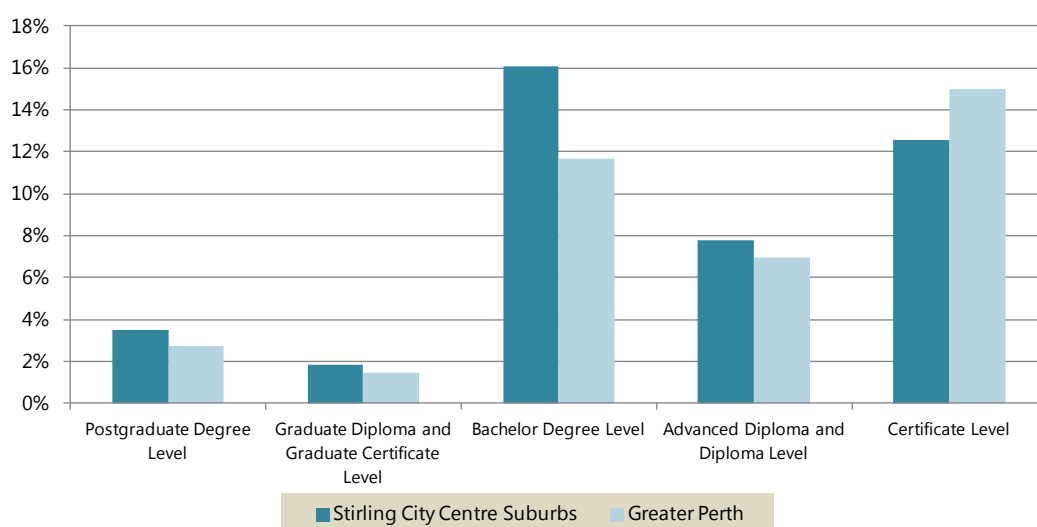


Figure 7 – Post School Education Level (Source – ABS 2011 Census)

Employment

As demonstrated in the graphs below, the Stirling City Centre is essentially on par with the Greater Perth area in terms of Labour Force Status. A slightly higher percentage are employed and work full time.

Similar to the Greater Perth Area, the highest proportion of workers are employed in health care and social assistance. Succinctly, the Stirling City Centre area is over represented in terms of residents who are professional, scientific and technical “white collar” employees (i.e. professionals and managers) and under represented in terms of the manufacturing, transport, postal and warehousing industries (i.e. technicians and trade workers). Construction, retail and education/training sectors are more prevalent in Stirling compared with the Greater Perth average.

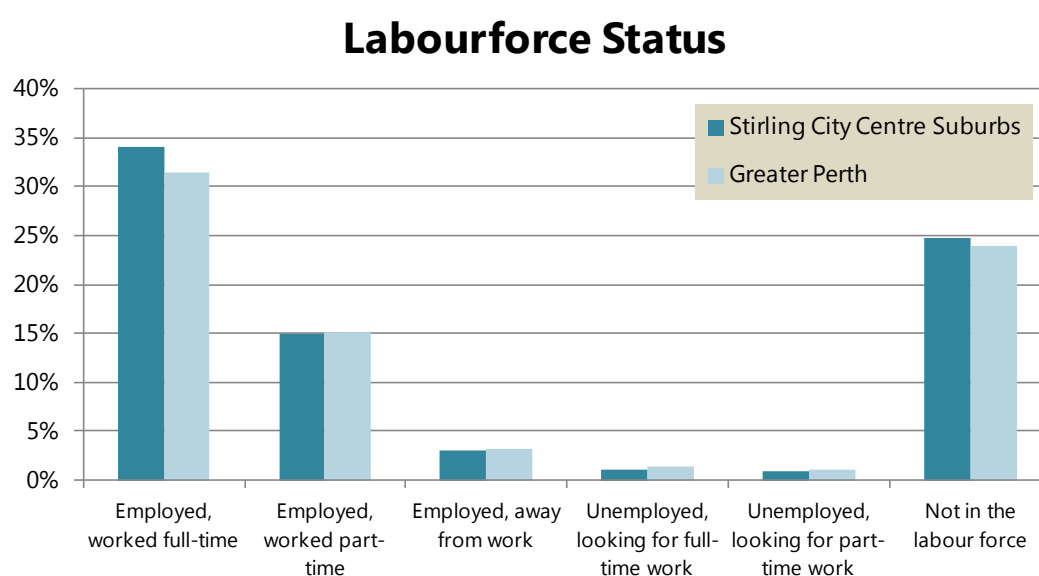


Figure 8 – Labour Force Status (Source – ABS 2011 Census)

Employment by Industry

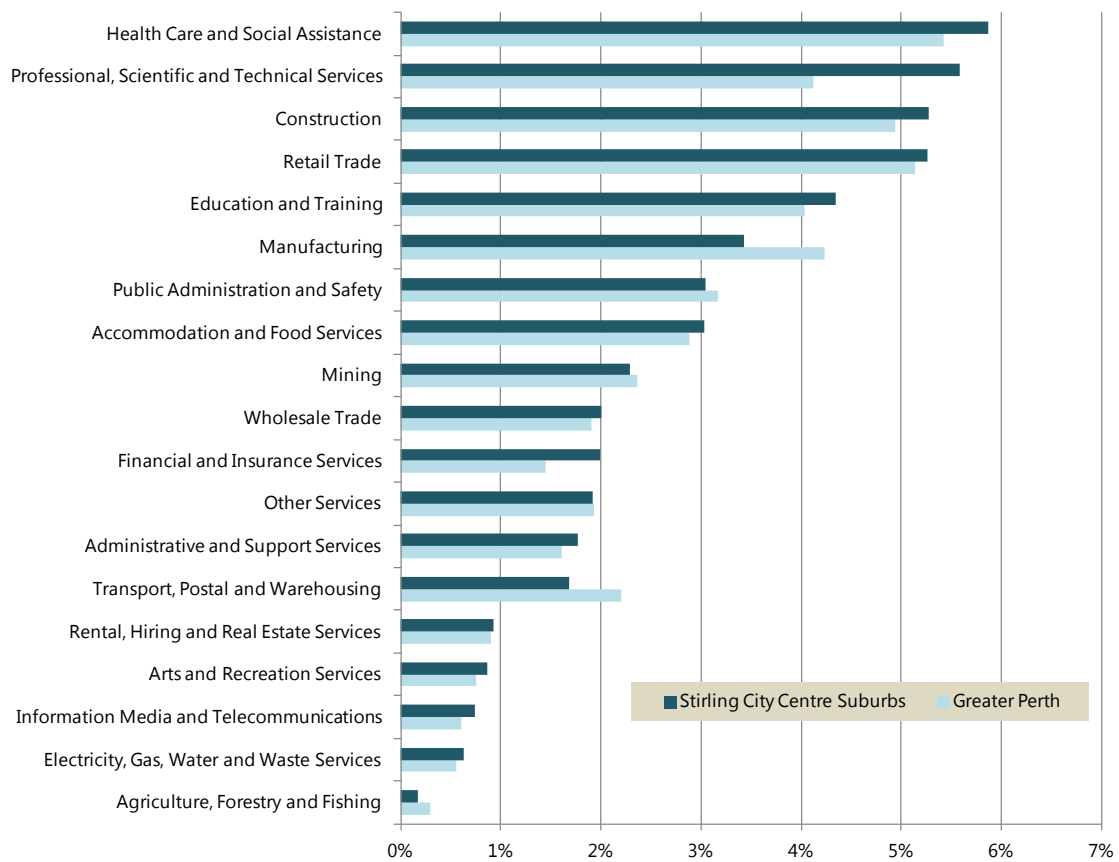


Figure 9 – Employment by Industry (Source – ABS 2011 Census)

Employment by Occupation

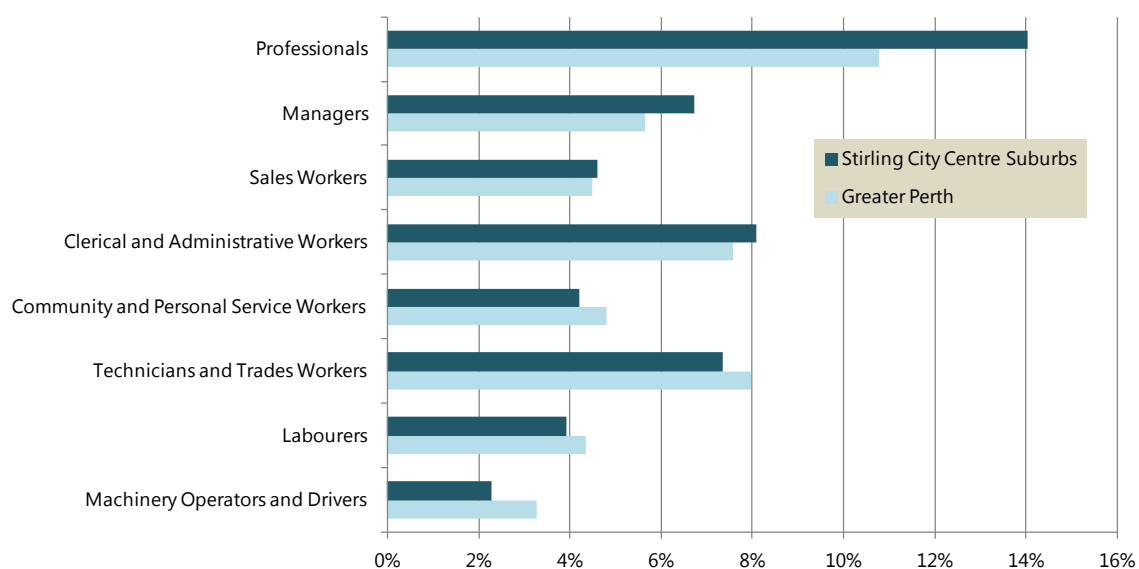


Figure 10 – Employment by Occupation (Source – ABS 2011 Census)

Household Type / Family Structure

The percentage of couple families with children is fewer within the Stirling City Centre than the Greater Perth Area whereas there is a greater proportion of lone person and group households.

In terms of household income, the Stirling City Centre has a greater percentage of lower income households (\$10,400 - \$51,999 p.a.), however a lower percentage of households earning \$52,000 - \$129,000 p.a. The Stirling City Centre also has a higher proportion of households earning over \$182,000 p.a.

Household type

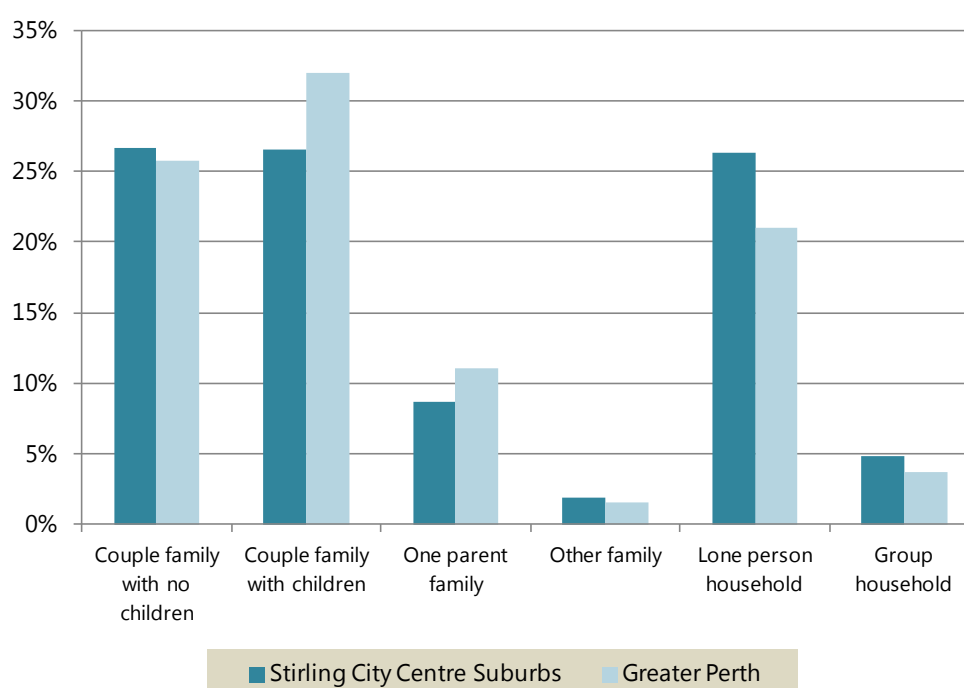


Figure 11 – Household Type (Source – ABS 2011 Census)

Household Income p.a.

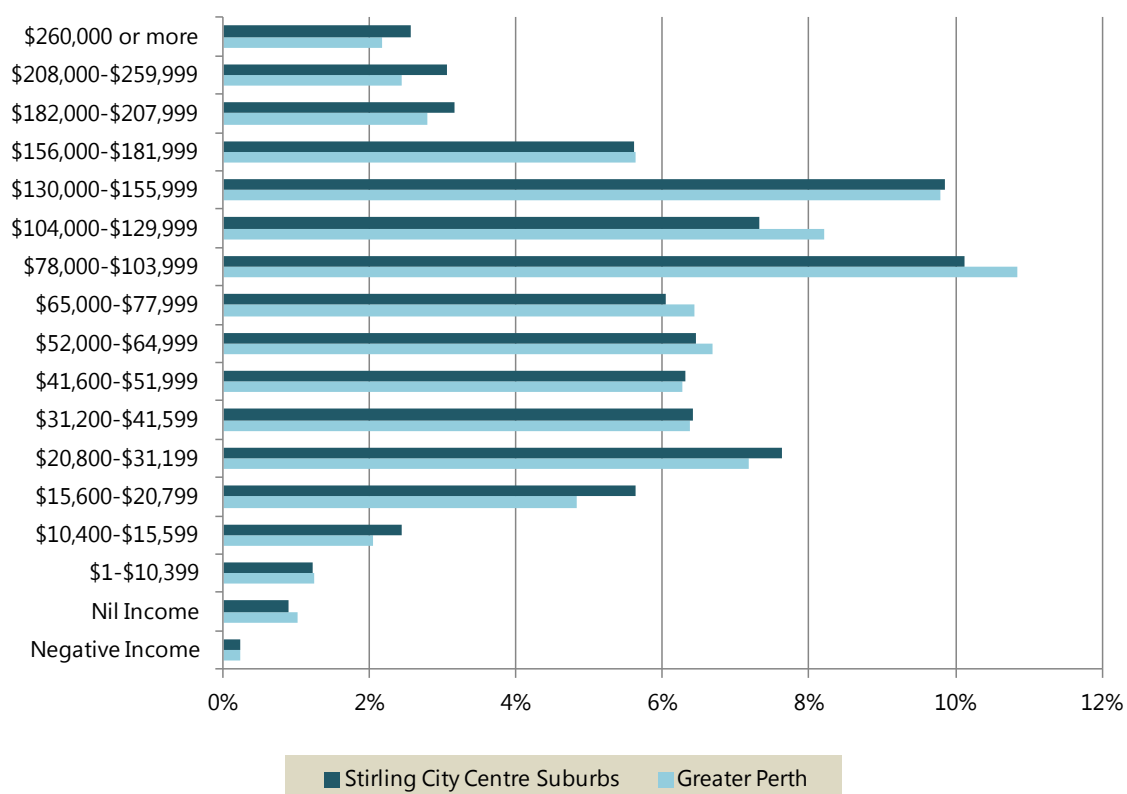


Figure 12 – Household Income (Source - ABS 2011 Census)

Dwelling Structure

The proportion of separate/detached houses is lower in the Stirling City Centre whereas there are more semi detached, row or terrace houses and apartments in comparison with the Greater Perth area.

There is a higher proportion of 1, 2 and 3 bedroom dwellings and fewer 4 and 5 bedroom dwellings in the Stirling City Centre (reflecting the dwelling types outlined above).

The majority of Stirling City Centre residents have one or two vehicles per dwelling. Of note is residents in the Stirling City Centre are more likely to have no motor vehicles than the Greater Perth average and 3 or 4 vehicles per dwelling is below average indicating a propensity towards other forms of transport.

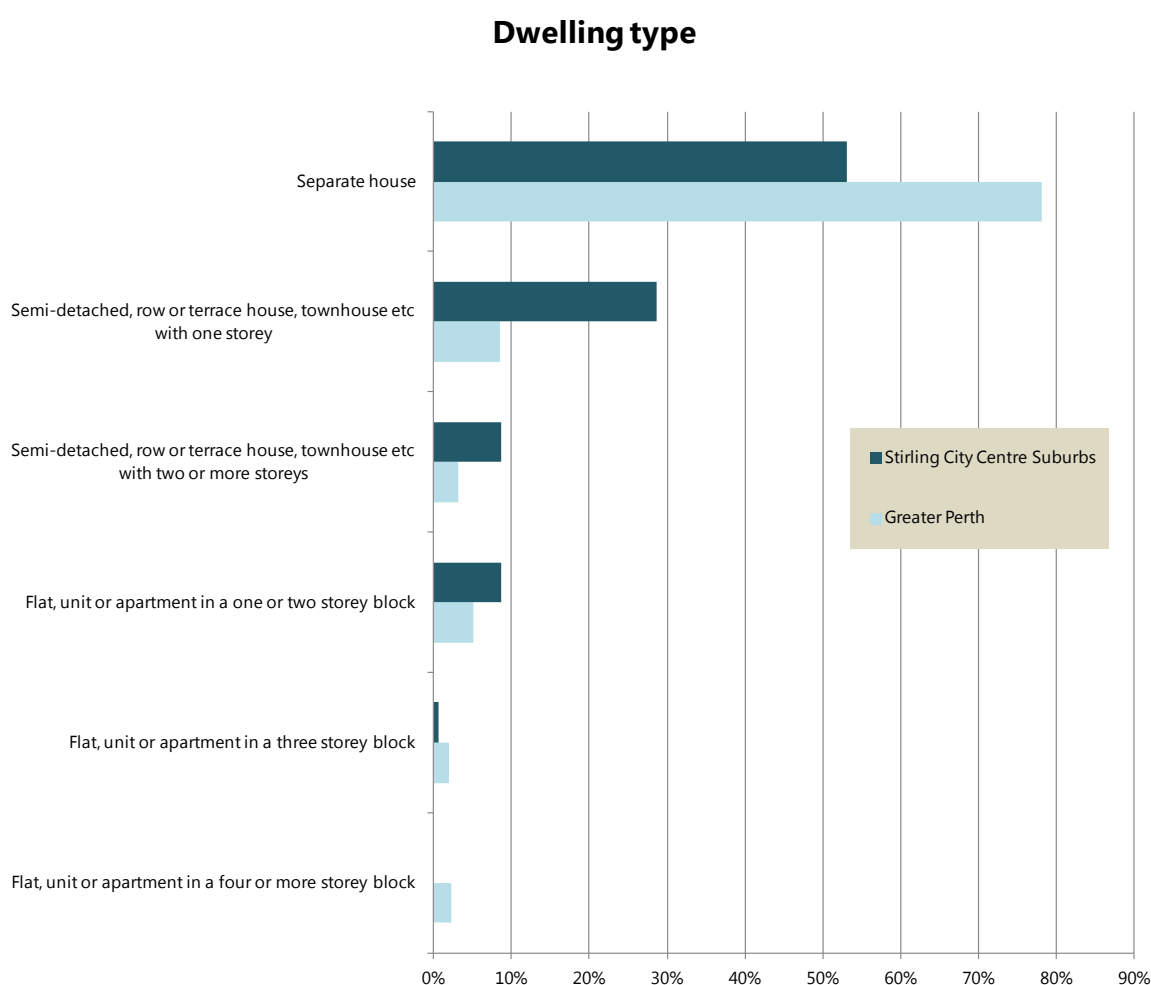


Figure 13 – Dwelling Type (Source – ABS 2011 Census)

Bedrooms per Dwelling

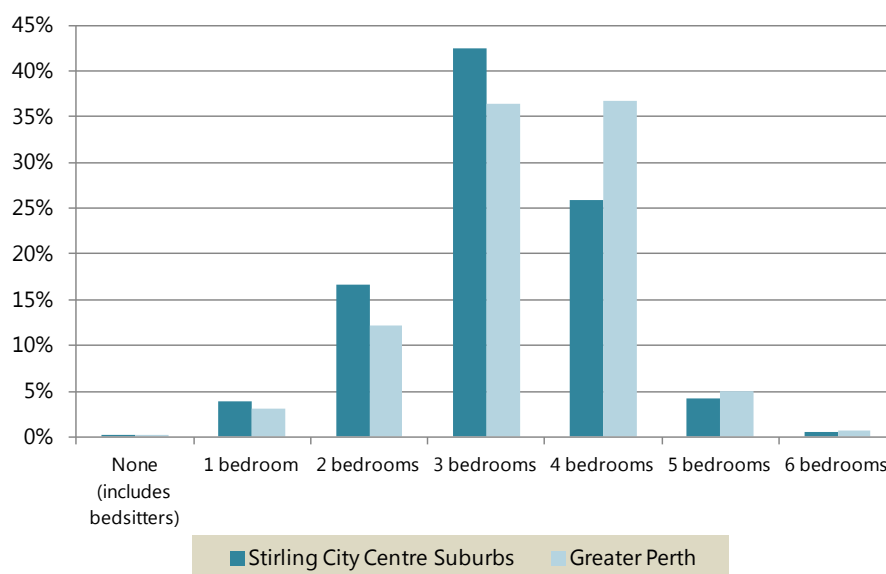


Figure14 – Bedrooms per Dwelling (Source – ABS 2011 Census)

Motor Vehicles per Dwelling

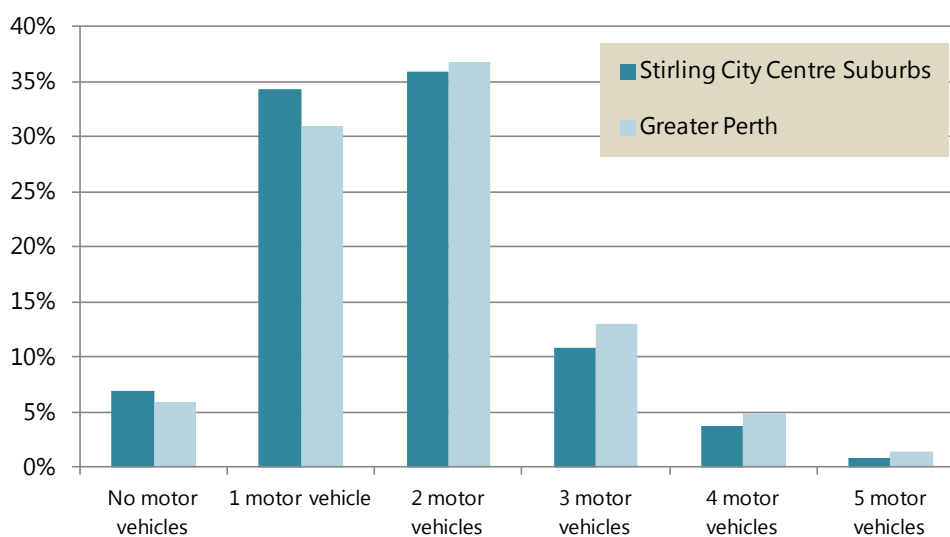


Figure 15 – Motor Vehicles per Dwelling (Source – ABS 2011 Census)

Tenure

As demonstrated on the graphs below, the Stirling City Centre has a higher percentage of homes that are owned outright (33%) in comparison to the Greater Perth Area (29%) and a higher percentage of homes that are being rented (31% compared to 28%). Conversely the Stirling City Centre has a lower percentage of homes owned with a mortgage (34% compared to 40% across Greater Perth).

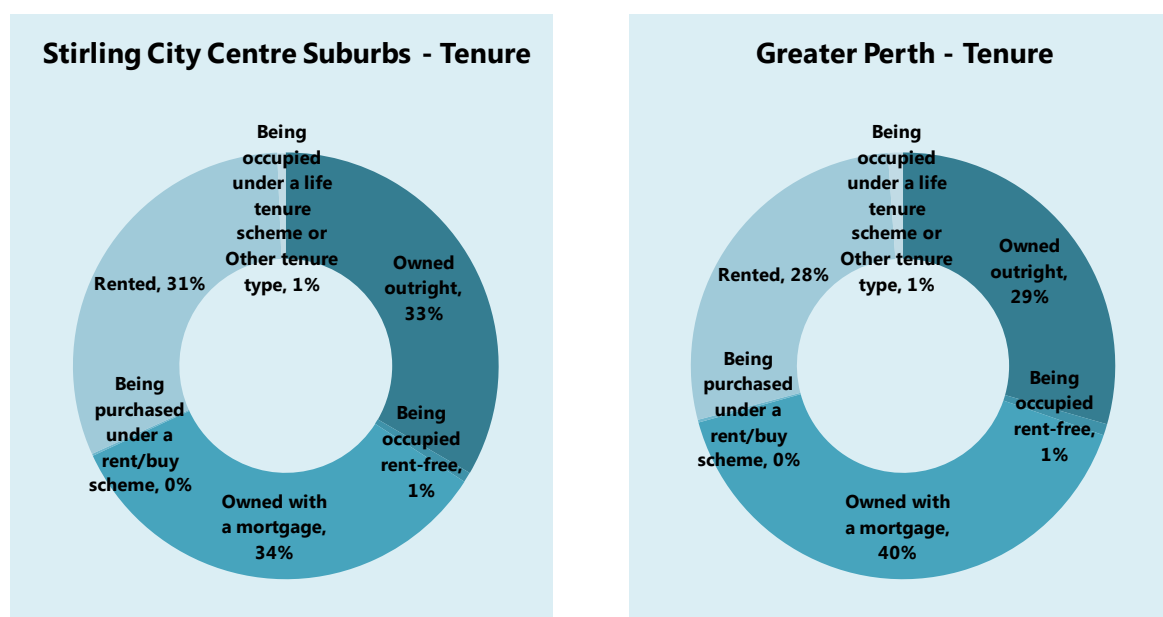


Figure 16 – Tenure Comparison (Source – ABS 2011 Census)

Rental Levels and Mortgage Repayments

As demonstrated by the graphs below, home owners and renters in the Stirling City Centre are paying rents and home loan repayments generally at higher levels than the Greater Perth average.

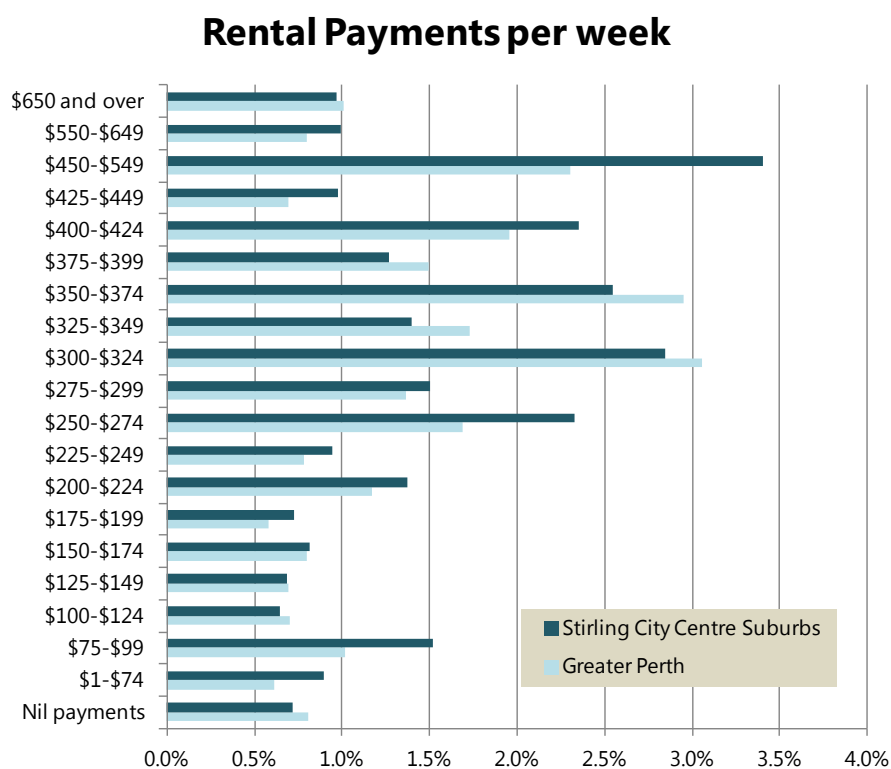


Figure 17 – Rental Payments per Week (Source – ABS 2011 Census)

Monthly Mortgage Repayments

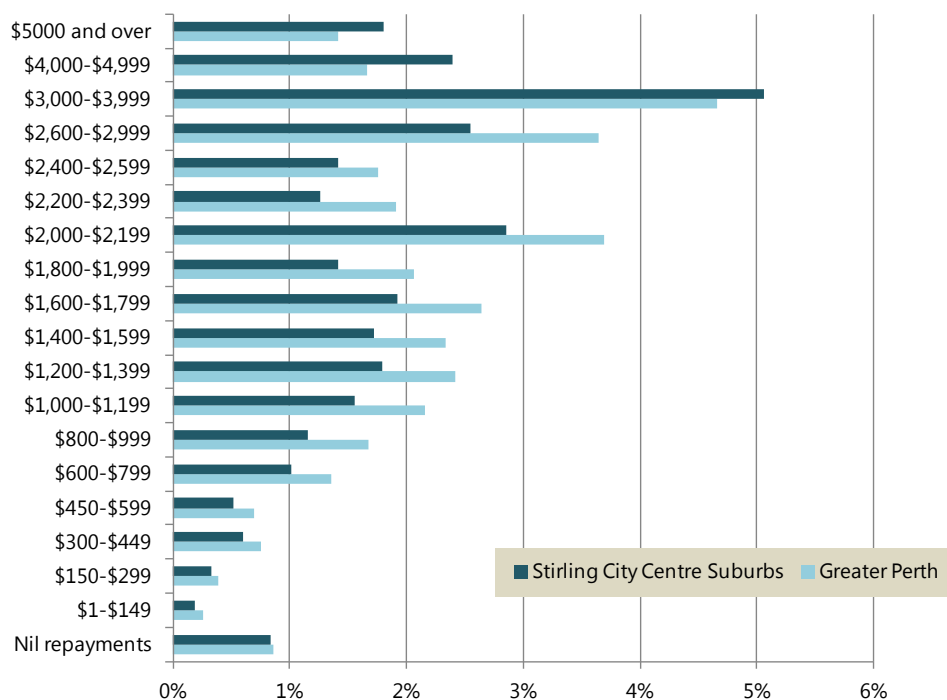


Figure 18 – Monthly Mortgage Repayments (Source – ABS 2011 Census)

Current socio economic status / Socio-Economic Indexes for Areas (SEIFA)

The ABS continues to broadly define relative socio-economic advantage and disadvantage in terms of *peoples access to material and social resources, and their ability to participate in society*. In order to assess the socio-economic well being of Australian communities, Socio-Economic Indexes for Areas (SEIFA) can be utilised.

SEIFA can be used for research into the relationship between socio-economic status and various health and educational outcomes. It helps identify areas that require funding and services; and identify new business opportunities.

SEIFA is a set of four indexes which rank geographical areas across Australia. These indexes are ranked by a score based on the characteristics of the people, families and dwellings in these areas. This can be used to determine where the wealthy live; where the disadvantaged live; and where the highly skilled and educated live.

Each index contains a different set of socio-economic information and is available right down to a Statistical Area Level 1 (SA1).

They are:

- Index of Relative Socio-Economic Disadvantage (IRSD)
- Index of Relative Socio-Economic Advantage and Disadvantage (IRSAD)
- Index of Economic Resources (IER)
- Index of Education and Occupation (IEO)

SEIFA uses a broad definition of relative socio-economic disadvantage in terms of people's access to material and social resources, and their ability to participate in society.

While SEIFA represents an average of all people living in an area, it does not represent the individual situation of each person. Larger areas are more likely to have greater diversity of people and households. It is important to note that the indexes are assigned to areas and not to individuals. They indicate the average socio-economic characteristics of the people, families and households living in the area.

For each index, geographic areas are assigned a SEIFA score which measures how relatively 'advantaged' or disadvantaged' that area is compared with other areas in Australia. There are four indexes in SEIFA 2011 which measure socio-economic status and the IRSD is the one we have chosen to illustrate the situation in Stirling.

Index of Relative Socio-Economic Disadvantage (IRSD)

The Index of Relative Socio-economic Disadvantage (IRSD) is a general socio-economic index that summarises a range of information about the economic and social conditions of people and households within an area. Unlike the other indexes, this index includes only measures of relative disadvantage.

- few households with low incomes, few people with no qualifications, and few people in low skilled occupations.

Suburb	2011 State Suburb Code (SSC)	Index of Relative Socio-economic Disadvantage	
		Score	Decile
Innaloo	50352	1041	8
Woodlands	50860	1103	10
Stirling	50740	1092	10
Osborne Park	50615	988	5

Together with the scores, the decile information indicates that Woodlands and Stirling occurring in the highest decile (meaning they are in the highest 10% of areas) and Innaloo not far behind in the 8th decile indicates the Stirling City Centre Area has households that are socio-economically least disadvantaged.

Existing Dwellings

Based on 2011 ABS Census data and using the calculation method outlined above, the number of dwellings within the structure plan area and the area of influence is approximately:

Structure plan area	1,992 dwellings
Area of influence	7,114 dwellings
Total	9,106 dwellings

Source: ABS 2011 Census

Net Density Per Hectare

Using the calculation method and areas outlined above, we have determined that the following areas apply:

Structure Plan Area	
Land Use	Ha
Residential	201.4685
Industrial	79.28979
Education	19.23551
Commercial	33.13949
Parkland	41.77015
Total Area	374.9035 ha
Area of Influence	
Residential	487.2719
Industrial	291.1779
Education	11.70807
Commercial	6.612332
Parkland	34.31863
Total Area	838.4924 ha
Total Combined Structure Plan Area and Area of Influence	1213.39 ha

Accordingly, using the below table we are able to calculate the net density per hectare.

Residential Area	Total Area (Ha)	Dwellings	Net density/Ha
Structure Plan Area	201.4685	1992	9.88 dwellings per ha
Area of Influence	487.2719	7114	14.60 dwellings per ha
Structure Plan & Area of Influence Combined	688.7404	9106	13.22 dwellings per ha

Existing Proportion of Public Open Space

Similarly, the simple calculation below illustrates the existing percentage of Public Open Space in the study area.

POS Area	Total Area (Ha)	POS Area (Ha)	% POS
Structure plan area	374.9035	41.77015	11.14%
Area of Influence	838.4924	34.31863	4.09%
Structure Plan & Area of Influence Combined	1213.39	76.08878	6.28%

Existing Community and Civic Facilities

Based on an analysis of existing studies and a visit to the study area, the following list of existing community facilities within the structure plan and area of influence has been prepared:

Type of Community or Civic Facility	In Structure Plan Area	In Area of Influence	Total No.
Child Health Centres	nil	nil	0
Childcare/ Playgroup Centres	Woodlands Child Care 40 Liege St Woodlands Cuddly Bear Child Care Centre 273 Ewan Street Woodlands Climb Early Learning Centre 15 Odin Road, Innaloo	Dinky Di Child Care Centre 12 Barnes Street Innaloo Star Bright Early Learning Centre 2 Hamilton Street, Osborne Park Mulberry Tree Childcare and Kindy 170 Hamilton Street, Osborne Park Possum Hollow Child Care Centre 177 Edward Street, Osborne Park	7
Primary Schools	nil	Yuluma Primary School St Dominic's School Osborne Primary School Woodlands Primary School	3
Secondary Schools	nil	nil	0
TAFE/Tertiary facilities	nil	nil	0
Hospitals	Osborne Park Hospital	nil	1
Police	nil	nil	0
Fire and Rescue	nil	Fire Station 47 Collingwood Street Osborne Park	1
Aged Persons Homes	Parkland Villas Woodlands (privately operated) Bethanie Village Birrallee High Care Facility	nil	3
Community Recreation Centres	nil	Osborne Park Recreation Centre Innaloo Recreation Centre	2
Libraries	nil	nil	0

Cinemas	Innaloo Megaplex	nil	1
Theatre	nil	Stirling Theatre 25 Morris Place, Innaloo	1
Churches	Christian City Church Beachway 5 O'Malley Street Osborne Park	Uniting Church in Australia (Grant St Innaloo Grace Assembly of God (Unit 8/386 Scarb. Bch Rd Osborne Park) Victory Life Centre (Cnr Neil St & Frobisher St Os Pk)	4
Museums	Nil	nil	0
Civic Facilities	City of Stirling Offices	nil	1
Civic and Public Open Space (Local and Community level and Special Purpose POS)	Stirling Civic Gardens - 122,218 m ² Osborne Reserve - 5,385 m ² Croxtton Reserve - 1,555 m ² Laga Reserve – 713 m ² Elton Reserve - 718 m ² Bajada Reserve - 1, 456m2 Talia Reserve - 16,233 m ² Odin Reserve – 827 m ² Hertha Reserve - 3,648 m ² Hertha Geneff Luba Reserve - 4,026 m ² Hertha Geneff Reserve - 3,157 m ² Talbot Way Reserve - 5,552 m ² Hertha North Reserve - 142,532 m ² La Grange Dongara Reserve – 36,119 m ²	Biralee Reserve Millett Park Woodlands Reserve Jackadder Lake Yuluma Park	18

Next Stages

The information presented above is designed to provide a 'snapshot' of the current demographics of the study area and will assist with our preparation of the overall Community Needs Assessment.

The next step is to progress with Milestone 2, where we will research world class urban regeneration projects of a similar nature, in order to identify a benchmark for best practice delivery of community and civic facilities in a City Centre development.

Following this, we will progress with Milestone 3 which involves the development of two scenarios based on the 'Hassell Yields' and outline the number and type of community and civic facilities required in the future City Centre and the spatial distribution of community and civic facilities in the future City Centre.

Milestone 2 - Benchmarking Report

Introduction

The process of benchmarking is pivotal in understanding the successes and shortcomings of the delivery of existing projects that are based on a similar methodology, scale and quality - both nationally and internationally.

The benchmarking process is one that should occur after the team has investigated the context of the site, and identified the opportunities and constraints both physically and in terms of economic, social and aspirational feasibility.

The projects that have been identified as having key relevance to the Stirling City Centre have qualities and elements that potentially influence the ultimate outcome of Stirling City Centres' built form and environment. All are world class regeneration projects of a similar nature, that have successfully converted brownfield sites into City Centre type developments.

The following projects do not necessarily represent physical solutions for the Stirling City Centre development, however they identify current and future directions, trends and processes from which the Stirling City Centre can evolve.

Similar Projects

For the purposes of this report, we have researched the following world class urban regeneration projects of a similar nature, that have successfully converted brownfield sites into City Centre type developments.

- Malmo Western Harbour;
- Glasgow International Financial Services District;
- Atlantic Station;
- Nottingham Old Market Square; and
- Central Dandenong Revitalisation.

Malmo Western Harbour

The closure of the Kockums shipyard presented real scope for the transformation and creation of a new district in the city - Västra Hamnen, or the "City of Tomorrow". The revitalisation of the Malmo Western Harbour has seen a dramatic structural facelift of this 140 hectare district and the city has now once more renewed its ties with the area.

One important feature of this district is the university at Universitetsholmen, which in a relatively short space of time has undergone major changes. As part of Malmo's transition from an industrial city to a knowledge city it has seized upon the opportunity to improve the provision of green space and community facilities throughout.

The regeneration of this area has included the following:

- Establishment of three new parks, each designed with a specific focus on ecological sustainability. Ankarparken, The Daniaparken, and Sundspromenaden which is a 220-metre long esplanade along the seashore;
- A number of parks that act as anchors for the larger open space system, including: Kungsparken, Slottsparken, Slottstradgarden, Pildammsparken, and Folkets Park. Water recreation and beaches are also an important part of the anchors, including Ribersborg Beach and Ribbans Kallbadhus;
- Civic plazas including Stortorget, Lilla Torg, and Gustav Adolf's Torg;
- Extensive walking routes through streets and parks;
- Dance theatre;
- Malmo exhibition and convention centre;
- Malmo museum;
- Congress and concert hall;
- Skate park; and
- The waterfront promenade.



Atlantic Station

Atlantic Station is a mixed-use centre on the northwestern edge of Midtown Atlanta, Georgia, United States. First planned in the mid-1990s and officially opened in 2005, this regeneration project is located on former brownfield site of the Atlantic Steel mill.

This project has allowed for the regeneration of the site with a mixture of retail, offices and residences and a focus on energy efficiency and walkability. A key community asset is the Millenium Gate, an \$18 million arch intended to pay homage to the history of Georgia. It houses 1,100 sqm of modern and traditional gallery space as well as exhibits that tell the story of the area and the former use of the site. The rooftop penthouse, gallery and oval lawn are available for conferences and functions and also contains a museum.

Other key elements of this 558,000 sqm redevelopment project include:

- 16 screen movie theatre;
- Library;
- Parks;
- Extensive network of bicycle lanes; and
- Outdoor cinema.



Old Market Square, Nottingham

Old Market Square is the UK's largest City square, measuring approximately 22,000 sqm and is the central heart of the Nottingham City Centre. A major redevelopment of Old Market Square was completed in March 2007.

Key features within this civic and community space include:

- Nottingham Council House (City Hall);
- Pedestrian focus of the city square;
- Ferris Wheel;
- Tram stops;
- Speakers corner;

The city square is often used for large local events, markets, fairs, concerts and exhibitions. It is the centre of local New Year's Eve celebrations. Landmarks such as the two stone lions and fountains are used as meeting places for locals.

Part of the redevelopment of the site included the recreation of an ancient border which once divided Nottingham. A new water feature dominates the west side of the Square, with jet fountains and waterfalls. These water features can be turned off if required, allowing an amphitheatre-like seating area to be created for shows and concerts. A local farmers market, was re-established, reflecting the original purpose of the Square.



Central Dandenong Revitalisation

The revitalisation of the Central Dandenong City area is \$290 million Victorian State Government initiative, focused on rejuvenating the City Centre through extensive infrastructure works and key initiatives designed to attract more than \$1 billion worth of private sector investment and 5,000 new jobs.

A cornerstone of this project is the development of a new \$50 million civic centre and community space for Central Dandenong. The new offices of the City of Greater Dandenong will be the focal point of this project, as part of a high-quality and continuous public realm that will join the whole centre of Dandenong together. Key elements include:

- 5 level building with 13,500 sqm of floor space;
- Council offices (which can be used as a flexible community space);
- Library (the 'living room of the City');
- Conference centre;
- Community rooms;
- Civic square (which can be used for markets and events); and
- Exhibition space and giant screen.

This project has been undertaken by Places Victoria in conjunction with the City of Greater Dandenong who have a development agreement in place to facilitate the purchase of the site for the new building to be located on the south west corner of Lonsdale and Walker Streets. Construction commenced in 2012 and will conclude early in 2014.



Necessary Civic and Community Facilities

Based on the above as well as the gap analysis undertaken as part of Milestone 1, we have formulated the following list of the civic and community facilities deemed necessary for City Centre development along with a description of which demographics they accommodate and which uses they are suitable to be coupled with. These facility types are not in priority order and represent a general list of uses than can be aspired to within a City Centre development.

This will provide a basis for the scenario planning to be undertaken as part of Milestone 3 of the Community Needs Assessment, where the below list of facilities may be refined further in terms of forecast need.

Facility Type	Key Demographic	Compatible Uses
Council Offices (* existing)	18 years plus Ratepayers	Library Museum
Exhibition / Function / Convention Centre	18 years plus	Council offices Performing arts
Cinemas (* existing)	All	City Centre
Hospital (* existing)	All	City Centre Consulting Rooms Pharmacy
Parks and green space	All	High density residential Workplaces
Bike lanes / cycle paths	25 – 40 year olds for exercise, getting to work 70 years plus in terms of gophers	Throughout City Centre
Play areas / skate parks / water play areas	Under 18 years (water play areas specifically for 0 – 3 years).	Near park and plaza areas
Plaza / Square	A wide range of users – i.e. for older demographics, a good spot to sit act as a meeting place. For younger users, facilities such as chess sets, play based public art could be an attractor. Similar examples around the world show these spaces can be used for outdoor screens, buskers and markets.	Central retail areas Play areas

Facility Type	Key Demographic	Compatible Uses
Library	All	Council offices
Child Health Centres	0 – 3 years and parents	Schools
Primary and Secondary Schools	4 – 18 year olds and parents	Parks and green spaces
TAFE / Tertiary (possibly shopfront style)	18 years plus	Central retail areas
Police (possibly shopfront style)	All	City Centre
Senior Persons Accommodation	60 years plus	Residential areas Public open space
Performing Arts / Theatre space	All	Council offices Plaza areas
Museum	All	Council offices Plaza areas
Art Gallery	All	Council offices Plaza areas

Milestone 3 - Scenario Planning Report

Introduction

With the completion of Milestone 1 and Milestone 2, the background research to inform and set the context for this Milestone 3 report has been finalised. In that regard, the work undertaken to date has included:

- a summary of the current demographic profile and trends affecting the study area;
- providing a list of current/existing community and civic facilities; and
- world class urban regeneration projects were researched and profiled in order to determine benchmarks for necessary and potential civic and community facilities for the Stirling City Centre.

Based on the background research undertaken, this Milestone 3 report will set out recommendations about future facility requirements based on the two future dwelling scenarios ('Hassell' 2013) to service the community infrastructure needs of the future residents and others using the centre.

The question we are seeking to address via this project is; *what additional community infrastructure needs will the projected population of the city centre need further to the facilities that are currently provided?* It is important to complement and build upon what exists and enlarge the range and depth of facilities that Stirling offers as a Strategic Metropolitan Centre of key importance in Perth's northern metropolitan area.

Background Literature

Further to the research and analysis undertaken, we have also assessed the implications of the following documents on the community infrastructure scenario planning for the Stirling City Centre:

The WALGA Guidelines for Community Facilities

Liaison with WALGA has determined that as they are member based they do not set any requirements or guidelines. However they have advised of the existence of two possibly relevant documents:

- *Contributions Towards Community Infrastructure Funding January 2008; and*
- *Local Government Shared Use of Community Facilities Discussion Paper 2010.*

WALGA have also advised that the Department of Sports and Recreation is in the process of finalising a more detailed Shared Use of Community Facilities guide, but it is not available for public comment.

The WALGA *Local Government Shared Use of Community Facilities Discussion Paper 2010* examines the effectiveness of shared use facilities between Local Governments and the Department of Education (DoE). It identifies that there is an opportunity for local governments and DoE to work together in planning for the shared-use of community and school facilities during the strategic land-use planning phase.

The range of shared facilities could include (but not be limited to): recreation centres, aquatic facilities, ovals, courts and libraries. There are many benefits including:

- Increased opportunities for the community to access local sport, leisure and recreation facilities.
- Improved security at schools as a result of increase use of facilities outside of normal school hours.
- An increased sense of community ownership of facilities.
- Increased utilisation of parks, ovals and facilities.
- Sharing of facility maintenance costs.
- Reduced capital costs in building separate facilities.

Appendix 5 of Liveable Neighbourhoods provides guidance on the layout of school sites. It details provision of a grassed recreation area of a minimum of 3,000 m² in area with a minimum dimension of 100m for non-government schools or provision of a grassed recreation area of minimum dimensions 118m x 84m for government primary schools.

It should be noted that the DoE supports the development of community-based facilities next to primary school sites but on land owned by the Local Government. DoE prefers not to have community or Local Government buildings on the Department's site. Examples of DoE's preferred configuration are Harmony Primary School and the future Aveley Primary School.

The *Contributions Towards Community Infrastructure Funding January 2008* paper notes the following:

- Requirements for contributions to community infrastructure are not as clearly defined as those for traditional infrastructure and have either been treated as part of the POS contribution or form part of a voluntary contribution agreed between developers and the Local Government.
- There is a growing expectation for community infrastructure however there is also a reducing capacity for Local Government to provide it. By including the provision of community infrastructure as a contribution, it can be factored into the decision making of developers.
- In order to support developer contributions, a Community Infrastructure Plan, Capital Expenditure Plan and methodology are required to be prepared.

The impact of the Multi-Unit Dwelling Codes on the nature of future development

The multi unit dwelling codes are amendments to the Residential Design Codes of WA, introduced in November 2010. Succinctly the Codes introduced new elements proposed to guide the development of multiple dwellings in areas with a coding of R30 or greater and within mixed use development and activity centres.

There is anecdotal evidence that the introduction of the Multi Unit Housing Codes has encouraged the development of multiple dwellings as an option in medium to higher density areas, where it may not have been an option before. Over time this will lead to increased densities in suburban areas in accordance with the principles of *Directions 2031* – and will also result in smaller private backyard areas, increasing the demand for and usage of public open space.

Healthy Spaces and Places: a national guide to designing places for healthy living

Healthy Spaces and Places was prepared by the Heart Foundation and the Planning Institute of Australia in 2009. It is a national guide for planning, designing and creating sustainable communities that encourage healthy living.

Healthy Spaces and Places aims to encourage the development of built environments that provide opportunities for physical activity and other health related activities. It highlights the importance of planning and designing communities for people movements, not just car movements and encourages the development of neighbourhoods that have good access to destinations and parks and open space with supporting infrastructure such as paths and public transport.

There are several relevant Design Principles including:

Parks and Open Space

- *A rule of thumb is to design the open space network as an integral part of the urban structure and offer a variety of safe and attractive spaces that are well*

distributed throughout a neighbourhood and that are accessible, connected and cater to the sporting and recreation needs of the community.

Environments for All People

- *Provision of community infrastructure and facilities that is accessible by public transport and with good pedestrian and cycle connections.*
- *A range of community services targeting specific needs groups such as children, young people and older residents.*
- *Local education facilities as well as child care, recreation and community facilities to increase social capital by providing opportunities for residents to connect.*
- *Adaptable and flexible buildings so use can change to meet changing community needs and expectations.*

The City of Stirling Public Open Space Strategy

The City of Stirling Public Open Space Strategy was endorsed by Council in December 2008. Key elements of the Strategy include:

- Must provide enough Public Open Space (POS) to cater for both active and passive pursuits.
- Need to account for trends in sustainability, lifestyle changes and community well being, reduced government spending, POS as a marketing asset, increasing expectations, safety and security, sport and recreation participation as well as demographic trends (ageing population, changes to household structure and employment patterns).
- City of Stirling specific issues include resource availability, competing uses, dwelling changes and population density, coordinated planning and management of POS, partnerships, demographic and social planning (i.e. stabilisation of the population as it is almost fully developed (i.e. no rural land), ageing population, more young adults than young children).
- The City of Stirling as a whole has 400+ reserves and 50+ major sporting reserves as well as bushland totalling 13.5% of the City. This equals 75 sqm open space per head of population.
- To date there has been no formal framework in which to address and determine POS provision and distribution. Most has occurred as a result of the 10% contribution for residential subdivision – however this does not take into consideration the complex issues regarding distribution, location, quality, role, trends, needs and use patterns relating to sport, recreation and leisure.
- The ad-hoc nature of land subdivision by private developers impacts on the ability of local government to strategically plan for POS provision.
- *Liveable Neighbourhoods* seeks to improve POS planning – it aims to provide a range of site responsive urban parkland that is under surveillance, safe and conveniently located. Natural features can be included in the 10% provision and households should be within 400m (5 min walk) of a neighbourhood park.
- Guiding Principles of this document are sustainability, access and availability, equity, quality and enjoyment, financial responsibility, flexibility, diversity, partnerships, culture and heritage, management, sports and recreation, community health and well being and efficient use of resources.

- The Strategy proposes new classifications for POS and standards based on size, service area/catchment population, location, timing of use and facilities.

The Department of Sport and Recreation Classification Framework for Public Open Space

This Classification Framework was released in November 2012 and represents a peer reviewed cross industry classification framework for describing POS in order to encourage the adoption of common terminology and enable comparative assessments of open space provision and function.

It outlines the environmental, social, cultural and economic benefits of public open space. The framework contains two central categories, function (recreation spaces, sport spaces, nature spaces) and catchment hierarchy (local open space, neighbourhood open space, district open space, regional open space).

In addition, Curtin University's Centre for Sport and Recreation Research have prepared research guidelines which have informed the Department of Sport and Recreation's research paper "Active Open Space in a Growing Perth and Peel".

For infill development these guidelines recommend 6.5sqm of open space per resident should be set aside as Active Open Space. The Guidelines also suggest this figure should be doubled to allow for parking, clubrooms and spectators.

Surrounding Context

In addition to the above, we have also been asked to consider the following:

The social catchment of the area including residential populations outside of the Structure Plan area who would be using these facilities

The social catchment / community of interest are the group of people that identify with and frequently use the city centre and its facilities. They originate from the areas and suburbs outside the area of interest – most likely the north western areas that lie approximately to the north of Hay Street/Underwood Avenue and the west of Alexander Drive. Communities to the south and east of these major roads are likely to have a closer affinity with other Strategic Metropolitan Centres such as Fremantle and Morley. As one moves further to the north of the Stirling City Centre, communities will also associate with Joondalup.

Populations within the areas and suburbs outlined above are likely users of the facilities. It is likely that the current attraction of the centre for retail, services and employment related trips could be expanded to include usage and connection with community facilities such as:

- Museums;
- Community centres;
- Conferencing facilities;
- Cultural facilities and
- Libraries.

Whereas uses such as schools and public open space (unless of regional significance) would be less likely to draw people from beyond the residential populations outside of the structure plan area.

The context of the City Centre including the Scarborough Beach Road Activity Centre and Herdsman-Glendalough Structure Plan as areas of influence.

In addition to the extensive works being undertaken to facilitate the regeneration of the Stirling City Centre, there are other redevelopment projects underway in the surrounding locality that may have a bearing on the Stirling City Centre. These include:

Scarborough Beach Road Activity Centre

The Department of Planning in partnership with the Cities of Stirling and Vincent is currently progressing the Draft Scarborough Beach Road Activity Centre Framework, which is due to be publicly released in the second half of 2013.

In the first instance the Scarborough Beach Road Activity Corridor Framework will provide an overarching transport and land use vision to guide the improvement of the form and function of the road and its surrounds. Following this, detailed planning will occur, lead by Local Government, and will include the preparation of plans and local scheme amendments for each section of the road and its surrounds.

It is envisaged that over time there will be increased density of development along the Scarborough Beach Road Activity Corridor in terms of both residential and commercial development and increased provision of public transport (bus and light rail) to accommodate this growth.

Herdsman-Glendalough Structure Plan

The preparation of the Herdsman and Glendalough Concept Structure Plan commenced in May 2009 and was approved by the City of Stirling in late 2011. This set the foundation for the preparation of the Herdsman-Glendalough Structure Plan which has recently commenced.

Once the Structure Plan is endorsed and approved, it is envisaged that this will facilitate the development of a world class Transit Orientated Development focused on the Glendalough Station, with a combination of mixed use, commercial and light industrial development to the west (within the Stirling City Centre Area of Influence).

Population and Dwelling Forecasts

Directions 2031

Directions 2031 and Beyond was endorsed by the Minister for Planning in August 2010 as a high level strategic framework and plan that establishes a vision for future growth of the metropolitan Perth and Peel Region.

To work towards this vision, *Directions 2031* establishes local population, housing and job targets and is supported by two sub-regional strategies that set out the desired pattern of urban growth throughout the Perth and Peel regions, including the Central Metropolitan Perth Sub-Regional Strategy.

By 2031 the population of the Central Metropolitan Perth sub region is projected to grow by approximately 29% to at least 910,000 people, requiring at least 121,000 new dwellings to be constructed. Out of this figure, the City of Stirling has a draft housing target of an additional 31,000.

Under the Central Metropolitan Perth Sub-Regional Strategy, the Stirling Strategic Metropolitan Centre TOD is identified as a future growth area with a forecast additional 7,600 dwellings. The documents notes that the study area is a large employment centre that has a significant amount of developable government owned land near the train/bus interchange as well as significant new job potential.

Importantly, *Directions 2031* advocates urban infill, and redevelopment of the Stirling City Centre is consistent with that principle, advocating a dwelling yield exceeding that envisaged in the Central Metropolitan Perth Sub-Regional Strategy.

Two Scenarios

As part of their work on the Stirling City Centre Detailed Yield Analysis, Hassell has developed a spreadsheet to model development yield for each street block, based on assumptions about the likely land use mix, building efficiency, building height and plot ratio. Being dynamic, both the development yields and forecast floor space spreadsheet allow for testing of different assumptions and variables over time.

The aspirational target population that has been adopted by the Stirling Alliance for the Stirling City Centre is 25,000 residents which equates to a dwelling target of approximately 13,900. This is recognised as an ambitious population target and accordingly the minimal acceptable number of dwellings has been set as 9,000.

We have developed two scenarios for future community infrastructure provision based on the 60% and 100% "Hassell Yields", as follows:

		Scenario 1 (60% Dwelling Yield)	Scenario 2 (100% Dwelling Yield)
	Current (2011) Source: Milestone 1 - this study	Aspirational (2031) Source: Hassell Yields	
Population	4,116	15,012	25,000
Average Household Size (persons per household)	2.1	1.8	1.8
Dwellings	1,992	8,340	13,900
Net Density per Hectare Source: Hassell Yields	9.2	38.9	64.8

Population Forecasts

Based on the above, the forecast population under Scenario 1 (60% yield) is 15,012 persons and Scenario 2 (100% yield) is 25,000 persons.

Projected dwelling numbers and net density/hectare

The anticipated dwelling numbers for the two scenarios are outlined in the table above. Under Scenario 1 there would be four times more dwellings per hectare versus the current situation. Further, under the aspirational population and dwelling forecast there will be seven times more dwellings per hectare in contrast to the current density.

Demographic types and distributions

As outlined in the Milestone 1 report, general implications of the demographic profile for now and the future are:

- Stirling area of influence suburbs currently have below average levels of primary and high school aged children. Although in the future the babies and toddlers age group which are on par with Greater Perth, will likely change this trend and require primary school provision;
- Ageing population evident with 75 yrs + group
- Above Greater Perth average levels more one person households and some empty nesters;
- More young adults (19-29 yrs) than average driving the couple family with no children and group households, as well as young children proportions being above average;
- Below average proportions of separate houses and semi-detached dwellings above average as were low rise (up to two storey) flats/units/apartments. The Area of Influence has already got fairly diverse dwelling stock compared with Greater Perth but there is more scope for higher rise and higher density dwellings.
- Dwellings with 1, 2 and 3 bedrooms are more common than average and 4 and 5 bedroom dwellings less so, reflecting the housing stock outlined above.
- Of note is residents in the Stirling City Centre are more likely to have no motor vehicles than the Greater Perth average and 3 or 4 vehicles per dwelling is below average indicating a propensity towards other forms of transport.

Expected socio-economic status

Selected characteristics of the Stirling Area of Influence suburbs are outlined in the table below alongside the profile for Greater Perth. The former are expressed as ranges across the four suburbs: Woodlands, Stirling, Osborne Park and Innaloo. It is anticipated that the Stirling City Centre's future population will be relatively similar to the Greater Perth profile. The Socio-Economic Indexes for Areas (SEIFA) were discussed in the Milestone 1 report and it is anticipated that the future residents of the Stirling City Centre will continue to include households that are socio-economically least disadvantaged.

Selected Characteristics	Stirling Area of Influence Suburbs (range)	Greater Perth
Median Age	32 - 42 years	36 years
Average Household Size (persons per household)	1.9 - 2.8 persons	2.6 persons
Median Weekly Household Income	\$1,100 - \$1,756	\$1,459
Median Monthly Mortgage Repayment	\$1,733 - \$2,383	\$2,000
Median Weekly Rent	\$275 - \$350	\$320
Average Motor Vehicles/dwelling	1.3 - 2 motor vehicles	1.8 motor vehicles
Average Number of Bedrooms/dwelling	2.3 - 3.7 bedrooms	3.3 bedrooms

Source: ABS Census 2011

Projected requirement for Public Open Space, estimated requirement for community facilities such as schools and community centres:

The table below outlines the types of space and relevant catchments as outlined in the City's Open Space Strategy:

Open Space Type	Catchment it serves
Local Open Space (0.2 – 2 ha)	Serves the residents of approximately a 400m catchment
Community Open Space (0.5 – 5 ha)	Serves the residents of approximately a 800m catchment
District Open Space (5-20 ha)	Serves the residents and visitors of approximately a 1.5km – 2.5km radius
Regional Open Space (30 – 80+ ha)	Serves all City Residents and wider metropolitan region. Principal catchment area is approximately 2.5km radius.

Source: City of Stirling Public Open Space Strategy (2008)

As outlined in the Milestone 1 paper, the existing provision for local and community open space within the Structure Plan Area totals 344,139 sqm and includes the following:

- Stirling Civic Gardens - 122,218 m²
- Osborne Reserve - 5,385 m²
- Croxton Reserve - 1,555 m²
- Laga Reserve – 713 m²
- Elton Reserve - 718 m²
- Bajada Reserve - 1, 456m²
- Talia Reserve - 16,233 m²
- Odin Reserve – 827 m²
- Hertha Reserve - 3,648 m²
- Hertha Geneff Luba Reserve - 4,026 m²
- Hertha Geneff Reserve - 3,157 m²
- Talbot Way Reserve - 5,552 m²
- Hertha North Reserve - 142,532 m²
- La Grange Dongara Reserve – 36,119 m²

It is considered that some of the smaller areas above will be consolidated to allow for small scale development allowing the City to concentrate its efforts in maintaining a fewer number of larger parks within the 400m and 800m catchments. Also, due to the nature of the Stirling City Centre development District and Regional Open Space is already catered for (i.e. it is unlikely that areas of 20 + ha will be made available).

As summarised in the table below, the Milestone 1 report identified the total area of existing POS within the structure plan area and area of influence combined. Other than the traditional 10% POS requirement given up at the time of residential subdivision, our research has not uncovered any specific ratios or requirements for the provision of POS in city centres or with office spaces and civic uses. Indeed much of the literature highlights the issues (i.e as density increases, the amount of POS remains the same) involved with the arbitrary 10% requirement, but do not present site specific responses.

In that regard, by applying the 10% requirement to the existing study area, a POS requirement of 121.339 hectares is identified, some 45.25 ha more than the current provision.

	Area (ha)	Area POS (ha)	% provision	10% provision
Structure Plan & Area of Influence Combined	1213.39	76.08878	6.28%	121.339 ha

At the 8 May 2013 Stirling Alliance Integration Workshop, a common theme relating to Public Open Space related to providing quality over quantity. Indeed the provision of Public Open Space needs to be approached in a collaborative manner, spatially identifying areas that can and cannot accommodate high quality POS and overlaying this with the work being undertaken in terms of urban design and engineering. For example once areas for future residential (which will include mixed use city centre areas) are spatially defined, then analysis can be undertaken to ensure most if not all of these are within a 400m walkable catchment.

Items such as the following would need to be considered in any analysis:

- Sharing of facilities with schools;
- Smaller yards in high density residential areas leading to an increased demand for POS;
- Streets and street trees as important parts of the public realm; and
- Provision of roof gardens.

In doing so, it may be determined that a figure of other than 10% is appropriate in this instance. As the quality and location of POS is vitally important, as an example, less than 10% of high quality open space would be preferable to over 10% of poorly located open space.

Estimated requirement for civic facilities such as town squares and art galleries.

Refer to the table and discussion in the following section.

The following table outlines the community facilities identified in our Milestone 2 report as well as the land allocation and population ratios used by the various agencies (and identified in the Estill and Associates *Demographic Profiling and Community Infrastructure Needs Assessment* (2008). This then allows us to determine the possible provision of community and civic facilities based on the two scenarios:

Proposed Use	Ratio	Current Structure Plan area Provision	Scenario 1 (15,012 persons)	Scenario 2 (25,000 persons)	Area of Influence & Broader Catchment
HEALTH					
District Hospital	1.6 beds per 1,000 persons	Osborne Park Hospital			
Private Hospital	2.0 beds per 1,000 persons of which 1.5 available to non insured	nil	17 beds	28 beds	
Community Health	1 : 25,000 persons			1 health centre	
Child Health Centres	1 : 6,000 persons (0-5 years)	Nil - Age group is 7% of current population	1,051 (0-5 years)	1,750 (0-5 years)	1 centre
Health Professionals and Ancillary Services	1: 5,000 persons		3 health or ancillary professionals	5 health or ancillary professionals	
Nursing Home	1 bed : 25 (70+)	Parkland Villas / Birralelee High Care / Bethanie Village Age group is 11% of current population	1,801 (70+ years) 72 beds	3,000 (70+ years) 120 beds	
Retirement Accommodation	1 unit : 130 (60+)	Age group is 21% of current population	3,153 (60+ years) 24 units	5,250 (60+ years) 40 units	
EDUCATION					
Government Pre Primary	1 per 4,000 persons 1 per 1,400 lots	nil			3 linked to existing schools
Government Primary	1 per 1500 lots – applies to Greenfield development situations though in this instance area is serviced by two schools that appear to have capacity to accommodate more students.	nil		1 Primary School and some students to existing schools such as Osborne and Yuluma	Osborne PS (175 students) Yuluma PS (188 students) Woodlands PS (364 students)

Proposed Use	Ratio	Current Structure Plan area Provision	Scenario 1 (15,012 persons)	Scenario 2 (25,000 persons)	Area of Influence & Broader Catchment
Government High School	1 per 6,500 lots	nil			Churchlands SHS Balcatta SHS
Non Government Primary Schools	1 per 33,000 Catholic 1 per 150,000 Anglican	nil			St Dominic's School (Catholic) 1 Anglican PS
Non Government High Schools	1 per 65- 70,000 persons (Catholic) 1 per 100,000 persons (other)	nil			1 Catholic HS 1 Other HS
TAFE (possibly shopfront style)	1 per 100,000 persons	nil			1 TAFE (shopfront/ commercial or office area)
University (possibly shopfront style)	1 place : 36	nil			
CHILDREN / FAMILY SERVICES					
Child Care	1 place : 12 persons (0-5 years) includes private (an increasing workforce in the City Centre is likely to fuel a demand for Child Care places)	3 centres Age group is 7% of current population	1,051 (0-5 years) 88 places	1,750 (0-5 years) 146 places	4 centres current
Family Day Care	1 place : 50,000 persons (in planning terms each application for these types of centres is assessed on its merits)	5 centres			
EMERGENCY SERVICES					
Police (possibly shopfront style)	1 : 32,000 Police Station 1:10,000 shopfront style			1 shopfront style station	1 Police Station
RECREATION AND SPORT					
Public Club Rooms	1 : 4,000 persons		3 Public Club Rooms	6 Public Club Rooms	
Sportsgrounds	1 : 4,000 persons Curtin <u>Guidelines</u> for Active Open Space – 6.5 sqm per person (possibly doubled to accommodate parking, clubrooms etc)		3 grounds 9.76 ha	6 grounds 16.25ha	
Local Park	1:2,000 persons		7 Local parks	12 Local parks	

Proposed Use	Ratio	Current Structure Plan area Provision	Scenario 1 (15,012 persons)	Scenario 2 (25,000 persons)	Area of Influence & Broader Catchment
BMX / Skate Park	1: 15 – 25,000 persons			1 BMX/Skate Park	
Hard Courts	4 : 6,000 persons		10 hard courts	16 hard courts	
Indoor Recreation Centre	1: 30,000 persons	nil			Osborne Park Recreation Centre Innaloo Recreation Centre
Aquatic Centre	1: 40,000 persons	nil			1 Aquatic Centre
Ancillary Open Space	2ha per 1,000 persons		30ha	50ha	
AMENITIES					
Post Office	1:50,000 persons	Australia Post Shop in Westfield Innaloo			
Library	1.25 books per head	nil		1 Library	
Community Centre	1: 4,000 persons		3 Community Centres	6 Community Centres	
District Community Centre	1:20,000 persons			1 District Community Centre	
Regional Cultural Facility (performing arts, exhibition areas, studio workshops)	1: 130,000 persons				1 Regional Cultural Facility

In addition, there do not appear to be set ratios for the following uses. This is because private facilities will typically be determined based on demand and feasibility analysis undertaken by the operator:

- Commonwealth Departments such as Centrelink, Employment, Community Services and Legal Aid, which are typically a part of multi Service Centres;
- Theatre spaces (could be part of Regional Cultural Facility above);
- Museums(could be part of Regional Cultural Facility above);
- Art galleries(could be part of Regional Cultural Facility above);
- Bike lanes and cycle paths;
- Plazas and squares;
- Council offices (existing);
- Convention Centres;
- Cinemas; and
- Private / Commercial Recreation Facilities.

Land Area and Responsible Authorities

Following from the above table, please find below a summary of the spatial requirements and responsibilities for each use. Please note, the list is not intended as “must haves”, these are covered in the ‘Required Community Uses’ section below.

Uses such as schools and specific sporting uses have defined land requirements, however many other uses do not. The area of land to be set aside typically depends on the proposed scale, size and nature of use and whether it is intended to occupy the lot with just the building and parking, co-locate it with other uses or provide open space around it.

Land Use	Typical Size of Land Required	Responsible Agency - Funding	Responsible Agency - Management
Post Office	Usually within shopping centre	Australia Post	Australia Post
Public Library	No identified set standard	State Govt – Library Board Local Government	State Govt – Library Board Local Government
Community Centre	No identified set standard	Local Government Lotteries Commission	Local Government
District Community Centre	No identified set standard	Local Government	Local Government
Regional Cultural Facility (<i>performing arts, theatre spaces, art galleries, museums, exhibition areas, studio workshops</i>)	No identified set standard	Local Government	Local Government
BMX / Skate Park	No identified set standard	Local Government	Local Government
Hard Courts	No identified set standard	Local Government Private sector	Local Government Private sector
Indoor Recreation Centre	No identified set standard	Local Government	Local Government
Aquatic Centre	No identified set standard	Local Government	Local Government
Ancillary Open Space	Part of 10% POS allocation	Local Government	Local Government
Public Club Rooms	No identified set standard	Local Government	Local Government
Local Park	0.2 – 2ha	Local Government	Local Government
Police (<i>possibly shopfront style</i>)	No identified set standard	State – WA Police Department	State – WA Police Department
Private / Commercial Recreation Facilities	Commercial decision based on size of development	Private sector	Private sector
Family Day Care	Typically provided at residential premises with a maximum of 7 children	Local Government Private Sector	Local Government Private Sector

Land Use	Typical Size of Land Required	Responsible Agency - Funding	Responsible Agency - Management
Child Care	<p>WAPC Development Control Policy 2.4 states: If co-located with a school an additional 3,000 sqm required at the school site.</p> <p>Local Government Policies typically require a minimum lot area of 1,000 sqm</p>	<p>Local Government Private Sector</p>	<p>Local Government Private Sector</p>
Sportsgrounds	<p>Department of Sports and Recreation provide guidelines on the dimensions of specific uses, such as:</p> <ul style="list-style-type: none"> • Basketball - 28m x 15m • Cricket – between 137m and 150m diameter • Australian Rules - 135m and 185m long and between 110m and 155m wide • Soccer – length 90m to 120m, width 45m to 90m • Netball – approx 40m by 20 m required • Tennis Court – 23.77m by 10.97 m <p>Curtin Guidelines promote 6.5sqm per person for Active Open Space.</p> <p>Co-location and sharing of facilities is promoted, which will impact on the size required.</p>	<p>Local Government</p>	<p>Local Government</p>
Government Pre Primary	<p>Typically provided with the primary school</p> <p>WAPC Development Control Policy 2.4 states: If co-located with a school an additional 3,000 sqm required at the school site.</p>	<p>State (Dept of Education)</p>	<p>State (Dept of Education)</p>

Land Use	Typical Size of Land Required	Responsible Agency - Funding	Responsible Agency - Management
Government Primary	WAPC Development Control Policy 2.4 states: 4ha Verbally – 1 primary school per 1500 lot catchment Co-location with POS / community facility sites etc encouraged	State (Dept of Education)	State (Dept of Education)
Government High School	WAPC Development Control Policy 2.4 states: 10ha Verbally – 1 high school per 3 – 5 primary schools (approx 6,500 lots) Co-location with POS / community facility sites etc encouraged	State (Dept of Education)	State (Dept of Education)
Non Government Primary Schools	WAPC Development Control Policy 2.4 states: 4ha Catholic Education Commission will require a 5 ha site where a church and associated community facilities are included on the site. (Combined primary and secondary 10 – 12ha)	Religious and Non Government Organisations	Religious and Non Government Organisations
Non Government High Schools	WAPC Development Control Policy 2.4 states: 8 – 10ha (Combined primary and secondary 10 – 12ha)	Religious and Non Government Organisations	Religious and Non Government Organisations
TAFE (<i>possibly shopfront style</i>)	11 – 25 ha for full college	State Government	State Government
University (<i>possibly shopfront style</i>)	No identified set standard	State Government	State Government
District Hospital	No identified set standard	State – Health Dept	State – Health Dept
Private Hospital	No identified set standard	Non Government / Private Sector	Non Government / Private Sector
Community Health	No identified set standard	State – Health Dept	State – Health Dept
Child Health Centres	No identified set standard	State Government Local Government	State Government Local Government

Land Use	Typical Size of Land Required	Responsible Agency - Funding	Responsible Agency - Management
Health Professionals and Ancillary Services	Commercial decision based on size of development	Private sector	Private sector
Nursing Home	No identified set standard	Non Government / private sector Local Government State Government	Non Government / private sector Local Government State Government
Retirement Accommodation	No identified set standard	Non Government / private sector Local Government	Non Government / private sector Local Government
Cinemas	Commercial decision based on size of development	Private sector	Private sector
Council offices (existing)	Usually within a wider civic precinct	Local Government	Local Government
Plazas / Squares	Case studies provided by Place Laboratory <ul style="list-style-type: none"> Rouse Hill Town Square 1050 sqm Northbridge Piazza 2100 sqm Joynton Park 12600 sqm Darling Quarter 13,600 sqm Drying Green (Shea's Park) 5,500 sqm 	Local Government State Government	Local Government State Government
Convention Centres	Commercial decision based on size of development	State Government Private sector	State Government Private sector

Required Community Uses

Based on the above table, the results of this community needs assessment have highlighted that for Scenario 1, the following facilities are of greater importance for early establishment in the city centre to ensure it is an attractive place to live, work and play for both current and future communities.

- Public Open Space
- Plazas and squares (benchmarking provided by Place Laboratory)
- Sportsgrounds, hardcourts and clubrooms
- Primary school
- Community centre(s)

With an already higher proportion of aged persons expected to continue growth into the future, it is also important to provide a range of facilities and amenities for older persons.

It is anticipated that in later phases when the City Centre development is almost complete/mature and will require a catchment that includes both the Area of Influence and the community of interest beyond:

- Community Health Centre
- Aquatic Centre
- Library
- Museum
- Library
- Regional Cultural Facility
- District Community Centre
- BMX / Skate Park
- Shopfront style Police station

Our finding has been that the difference between the two scenarios for residential development (dwelling targets/population) result in differing profiles of facilities required. As would be expected a smaller quantum and breadth of facilities is justifiable if a smaller population eventuating.

Conclusion

The above information represents a list of uses that could potentially be considered within the Stirling City Centre. The location of new community facilities will in principle be in well serviced public transport and walking/cycling locations to maximise use and accessibility to residents and workers.

The challenge from here is to spatially locate the desired uses and establish, through the planning process, the desires of local and state government agencies as well as private operators in terms of the uses that they wish to develop as well as the timing for this, taking into account existing land uses beyond the defined boundary.