

Local Housing Strategy

Adopted 20 March 2018

City of Melville

Local Housing Strategy

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CITY OF MELVILLE LOCAL HOUSING STRATEGY



EXECUTIVE SUMMARY

The *Local Housing Strategy* considers whether the supply of housing meets the needs of the community now and into the future. Comprising mostly of demographic study and housing issues analysis, the strategy concludes with high level recommendations aimed at better balancing the mix of housing types across the City.

The *Local Housing Strategy* supports the vision set out in the City's *Local Planning Strategy*, which was approved by the Western Australian Planning Commission in May 2016. The *Local Housing Strategy* was prepared in response to state government policies, particularly *Directions 2031 and Beyond* and the draft *Towards Perth and Peel@3.5 Million*, which have set for the City of Melville infill targets of 11,000 new dwellings by 2031 and 18,000 new dwellings by 2050.

Close to the CBD, with excellent transport links including heavy rail, activity centres, significant future employment opportunities, parks, natural features including the Swan and Canning Rivers, and first-class community facilities, the City of Melville has much to offer and will continue to prove attractive as a place to live and work into the future.

As an established inner-ring municipality, the City of Melville has no further greenfield development opportunities. Most new housing will be provided through infill redevelopment of existing residential and mixed-use sites close to activity centres, transport corridors and transport nodes. These are ideal locations for smaller dwellings such as apartments and townhouses. Housing in these locations typically leads to a reduction in private transport costs and increased interest in living, working and shopping locally.

Research shows that the current trends of smaller household sizes and an ageing population are creating a need for more small dwellings. The *Local Housing Strategy* provides a rationale for determining which housing types should be encouraged, and in which locations.

Consultation reveals a clear preference for allowing low-density suburban areas to remain as they are. Within these areas, single detached dwellings built in the suburban vernacular will continue to be the principal housing type.

There are nine activity centres of at least district centre size in the City of Melville. Of these, the Canning Bridge Activity Centre, Melville City Centre and Murdoch Specialised Activity Centre will play particularly important roles in providing for more apartments. In the two years since the Canning Bridge plan was adopted in March 2015, the City received development applications for more than 900 apartments in this centre alone.

The *Local Housing Strategy* recognises that housing diversity will increase gradually over time. It is desirable that there be a wide range of housing available for residents at all stages of their lives so that elderly people and first-home buyers, for example, are able to find suitable housing in their preferred areas. It is also recognised that infill development is of high quality and has positive impact on streetscapes and residential amenity.

Following gazettal of *Local Planning Scheme 6* (LPS6) in May 2016, the City's planning scheme is now substantially aligned with the *Local Planning Strategy*.

The *Local Housing Strategy* has a planning horizon of around 15 to 20 years, after which time it will be reviewed.

1. INTRODUCTION

1.1. City of Melville Local Housing Strategy

The *Local Housing Strategy* is a strategy for meeting the housing needs of the City of Melville community over the next 15 to 20 years. This is chiefly done by encouraging a mix of housing types that are appropriate for the needs of the demographics within the City. By ensuring that suitable housing is built in appropriate locations, the strategy will enable Council to preserve the character of its existing residential areas.

Melville is an area of predominantly low-density housing. Consultation with local residents during the preparation of LPS6 and the *Local Housing Strategy* identified a preference that the City's low-density suburban areas remain relatively unchanged. In conjunction, the proposal for intensifying development in activity centres and major public transport corridors and transport nodes has been well received.

Transport corridors under consideration include Canning Highway, Marmion Street, Riseley Street, Leach Highway and South Street. Major transport nodes include Canning Bridge, Bull Creek and Murdoch train stations and the Booragoon Bus Station.

Structure plans, or activity centre plans, have been prepared for the centres of Canning Bridge Activity Centre, the Riseley District Centre, the Murdoch Specialised Activity Centre, the Melville City Centre and the Melville District Centre. Associated scheme amendments are complete or are nearing final approval. The City has also recently completed a suburban revitalisation project known as the Willagee Structure Plan

The *Local Housing Strategy* is an advisory document, not a statutory document, intended to simply recommend approaches to current housing problems and flag issues for further investigation. LPS6 remains the principal instrument through which local planning and development control is exercised.

1.2. The City of Melville in the Metropolitan Context

The City of Melville is located in Perth's southwest, around 8 kilometres from the Perth GPO along the banks of the Swan and Canning Rivers.

A predominantly residential area with some industrial and commercial land uses, the City is about 52.87 square kilometres in size. There are approximately 18 kilometres of river foreshore. In 2016 the City's population density was 20.11 people per hectare.

The City of Melville comprises 18 suburbs: Alfred Cove, Applecross, Ardross, Attadale, Bateman, Bicton, Booragoon, Brentwood, Bull Creek, Kardinya, Melville, Mount Pleasant, Murdoch, Myaree, Palmyra, Willagee and Winthrop and around 80% of Leeming.

Due to its isolated location, swampy foreshore and infertile soils, the Melville district was sparsely settled until the 1890s. Immediately prior to World War One the population had barely reached 2,000.

Significant development did not occur until after World War Two. A major land reclamation project along the Swan River foreshore aided growth in the 1960s, and by 1968 the City's population was 52,000. The population continued to increase in the 1970s and 1980s, from 57,000 in 1976, to 72,000 in 1986. Population growth slowed in the 1990s, with an increase from 85,000 inhabitants in 1991 to just over 90,000 in 2001. From 2001 the population was stable, rising marginally to over 91,000 in 2006, but since

then has steadily increased to 95,700 in 2011. The Estimated Residential Population for 2016 is 106,294.

Major land uses and activities in the City include Murdoch University, South Metropolitan TAFE, Garden City Shopping Centre, Melville Glades Golf Course, Point Walter Golf Course, Wireless Hill Park, Piney Lakes Reserve and several other bushland areas and reserves, especially along the foreshores. The City is served by Canning Highway, Leach Highway, Roe Highway and Kwinana Freeway.

There is a diversity of ethnic groups within the City and a variety of income levels, family arrangements and educational backgrounds.

There are more than 210 parks and reserves comprising 600 hectares of public open space and 300 hectares of bushland in the City of Melville. Significant environmental sites include Blackwall Reach reserve, the marine parks at Point Walter and Pelican Cove, river foreshore rehabilitation sites along Burke Drive and at Bull Creek, Piney Lakes, Booragoon Lake and Blue Gum Lake.

Within the City there are tertiary education campuses (5 facilities including Murdoch University, South Metropolitan TAFE, WA Horticulture and Environmental Science Skills Centre, WA Centre for Leadership & Community Development and the Centre for Adult Education), 11 secondary schools and 25 primary schools.

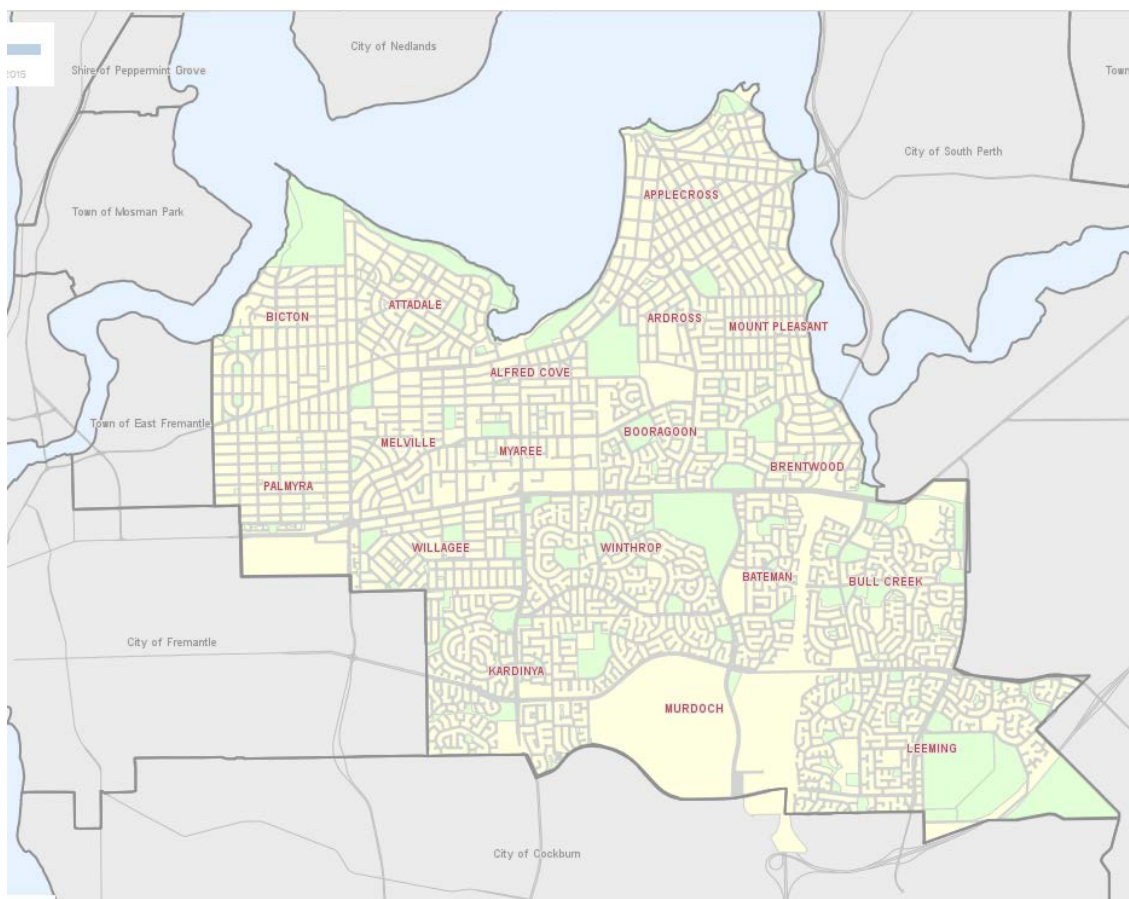


Figure 1: City of Melville Locality Plan
Source: City of Melville

2. OBJECTIVES OF THE LOCAL HOUSING STRATEGY

The following objectives have been adapted from the *Local Planning Strategy*:

Table 1: Local Housing Strategy Objectives

Source: City of Melville

Local Planning Strategy Objective	Discussion within Local Housing Strategy
To ensure new residential development is based on good design principles which protect amenity	Sections 6, 8, 9.1.1, 9.1.5, 9.2, 9.3 & 9.4
To provide for a variety of lot sizes and housing types to cater for the housing needs of residents at all stages of life	Sections 4, 5, 6, 8 and 9
<p>To identify suitable areas for consideration for provision of greater housing choice which:</p> <ul style="list-style-type: none"> are strategically located close to, or well connected to, existing and future services such as employment centres, major transport routes/hubs, community facilities, and activity centres are opportunity sites in need of private or public investment to regenerate ageing housing stock 	Sections 8.1, 8.2, 8.3 8.4, 8.10, 9.1, 9.2, 9.3, 9.4, 9.5 & 9.6
To encourage cost-effective and resource-efficient development with the aim of promoting affordable housing	Section 8.3
To contribute appropriately to the urban infill aspirations of <i>Directions 2031</i> and <i>Perth and Peel @3.5 Million</i>	Sections 3.2.2, 3.2.3, 9.2.1 & 9.2.2

3. STATE AND METROPOLITAN PLANNING CONTEXT

3.1 State Planning Strategy

The Western Australian Planning Commission published the *State Planning Strategy 2050* in 2014. This strategy considers how and where the state should develop in the long-term. It also provides a basis for coordinating a complex planning system in which decisions concerning land releases, environmental priorities, investment in infrastructure and the provision of economic development programs are made regularly.

The *State Planning Strategy 2050* vision for Western Australia, including Perth and the City of Melville, is one of “sustained growth and prosperity.”

With regard to Greater Perth (defined by the Australian Bureau of Statistics as the old Perth metropolitan area plus Mandurah and Pinjarra), the strategy focusses a good deal on housing affordability. The strategy acknowledges that housing affordability issues are partly the result of mismatches between housing stock and the needs of residents, and partly the result of higher living/transport costs associated with cheaper land on the city outskirts. The strategy encourages housing diversity and compacts settlements centred on mixed-use transport hubs/activity centres as the primary response to affordability problems.

3.2 Regional Strategies

3.2.1 Metropolitan Region Scheme

The *Metropolitan Region Scheme* (MRS) is the State statutory planning scheme for land use in the Perth metropolitan area and defines the future use of land with zones and reservations.

Like local planning schemes, the MRS comprises maps and a scheme text. All local government planning schemes are required to be consistent with the MRS.

The MRS is based on the 1955 *Stephenson/Hepburn Report*. Gazetted in 1963, the MRS has been the statutory instrument for metropolitan land use planning since. The MRS map is amended from time to time in response to strategic planning requirements or justified proposals. Amending the MRS is a complex procedure which requires the consent of both houses of state parliament.

3.2.2 Directions 2031 and Beyond

Directions 2031 and Beyond is a spatial framework for the growth of Perth and the Peel regions. On pages 22 and 23 of the document a number of themes relevant to the *Local Housing Strategy* are made clear, namely:

- A more compact city is desirable
- We must work with the city we have
- We must make more efficient use of land and infrastructure
- We must prioritise land that is already zoned for development

Directions 2031 and Beyond promotes the “connected city model” which assumes a more balanced distribution of housing, population, and employment across the metropolitan area. Improvements will take the form of targeted infill development and an increase in the intensity of greenfields residential development.

Content of *Directions 2031 and Beyond* specific to the City of Melville includes:

- An infill target of 11,000 new dwellings by 2031
- Designation of the Murdoch Specialised Activity Centre as a specialised centre/major transit orientated development site with the potential for growth in excess of 1000 dwellings
- Designation of the Melville City Centre as a secondary centre
- Designation of the Canning Bridge precinct as a district centre and major transit orientated development site with the potential for growth in excess of 1000 dwellings
- Classification of the Riseley, Bull Creek, Kardinya, Melville District Centre and Petra Street centre as district centres
- Census housing stock data showing that in 2006 the City of Melville had the third highest percentage of detached dwellings in the Perth metropolitan area

The subsequent state planning document, *Perth and Peel@3.5 Million*, builds on the vision of *Directions 2031*. *Perth and Peel @ 3.5 Million* sets an infill target for the City of Melville of 18,000 new dwellings, inclusive of the 11,000 prescribed under *Directions 2031*.

It is expected that the infill target can be comfortably met. A more detailed explanation may be found in section 9.2.

3.2.3 Draft Central Sub-Regional Strategy (May 2015)

The draft *Central Sub-Regional Strategy* forms part of the *Directions 2031* vision. In this strategy, development opportunities are discussed in the context of population projections for the sub-region (one of five, which altogether cover the Perth and Peel regions), which includes the City of Melville.

The draft strategy:

- discusses the population growth expected in each local government area
- estimates the dwelling supply for each sub-region
- investigates the development potential of special urban growth areas including activity centres and transit-orientated developments
- priorities actions to support vibrant activity centres, affordable housing and housing diversity in areas with access to public transport
- identifies important public transport projects
- supports the delivery of land for commercial activity and the creation of jobs
- prioritises the rollout/upgrades of services and public infrastructure

3.2.4 State Planning Framework

The State Planning Framework is also known as *Statement of Planning Policy No 1* (SPP 1.0). SPP 1.0 integrates state and regional policies, strategies and guidelines to aid decision-making on development in Western Australia.

Section A sets out general principles for land use planning and development. Section B lists plans, policies, strategies and guidelines, and each of these becomes a provision of the SPP. In addition, the SPP provides direction as to the resolution of conflicts, and establishes that the provisions of the State Planning Strategy generally prevail.

3.3 State Planning Policies

The following Statements of Planning Policy are relevant and have implications for the City of Melville and the *Local Housing Strategy*.

3.3.1 SPP 3.0 - Urban Growth and Settlement

This policy sets out the principles that apply to planning for growth in Western Australia. Its objectives include managing the development of urban areas in response to the social and economic needs of the community, recognising relevant climatic, environmental, heritage and community values, and promoting sustainable, liveable neighbourhoods.

3.3.2 SPP 3.1 - Residential Design Codes

The *Residential Design Codes* (the *R-Codes*) provide development controls for housing density and residential design. The *R-Codes* was first adopted as state government policy in 1985, and has been revised several times. As of July 2017, it is the October 2015 version of the *R-Codes* that is current.

The density codes of the *R-Codes* (eg R20, R30, R60, RAC-0) were designed to set limits on the number of dwellings per hectare. At the strategic level, these codes can be used by local governments to ensure appropriate distribution of housing types.

Local planning schemes adopted by local authorities can also include provisions which add to and/or complement the built-form design requirements of the *R-Codes* (eg front setbacks, building height) by either altering the *R-Code* standards or including additional standards. A number of local authorities use this approach and have adopted design guidelines as policies under their schemes.

Detail on the strategic rationale for various density codes may be found in section 9.2 of this strategy.

3.3.3 SPP 3.6 – Developer Contributions for Infrastructure

This policy sets out the principles for developer contributions.

It has been the practice in Western Australia for many years for the developer to provide standard infrastructure such as water supply, sewerage, drainage, roads, and even some community infrastructure such as public open space, car parking and primary school sites.

SPP 3.6 allows local governments to insist on developer contributions for non-standard infrastructure. To do so, the local government must prepare a development contributions plan. Ideally, the contributions plan is linked to a local planning strategy, adopted structure plans or a local planning scheme.

As of July 2017 the City is not considering a developer contributions plan. Nevertheless, under the Canning Bridge Activity Centre Plan, developers are eligible for building height bonuses commensurate with the level of community benefit achieved by their designs.

3.3.4 SPP 4.2 – Activity Centres for Perth and Peel

SPP 4.2 - Activity Centres for Perth and Peel, gazetted in 2010, replaced the former *Metropolitan Centres Strategy*. The policy builds on the hierarchy of activity centres established in *Directions 2031 and Beyond*.

Key features are:

- caps on shopping floor space within centres have been removed
- mixed-use threshold set as one of the criteria for future growth of centres
- activity centre plans for district centres are required to be prepared
- housing targets are to be set for activity centres through the provision of appropriate R-Codings or residential densities. The targets for district centres are set at a minimum of 15 dwellings per gross hectare* and a desirable 30 dwellings per gross hectare within a walkable catchment of the centre.

SPP 4.2 also provides a Model Centre Framework addressing spatial and urban design considerations for future growth in centres.

Further to the above policy, the City prepared the *Local Commercial and Activity Centres Strategy* in 2013. An Activity Development Framework within this strategy sets out the intent for activity centres, prescribing goals and assessment criteria. The strategy is expected to gradually shift the City's centres from a retail-dominant model towards a more balanced mix of uses. It is expected that residential uses will play a major part in the future of Melville's centres.

The City has adopted structure plans or activity centre plans for the Murdoch Specialised Activity Centre, the Melville City Centre (also referred to as the Booragoon Secondary Centre), the Melville District Centre, the Canning Bridge District Centre and the Riseley District Centre. Each of these plans provide for significant residential opportunities, mostly in the form of apartments and townhouses.

NOTE *: Typically, the average code (or net density) equivalent is two to three times the number of actual dwellings per gross hectare. This means that density codes for district centres should be set at around R50 as a minimum. **Source:** SPP4.2

3.3.5 SPP 5.4 – Road and Rail Transport Noise and Freight Considerations in Land Use Planning

SPP 5.4 aims to make sustainable land use and transport more compatible. SPP 5.4 objectives include limiting the effects of transport noise on people, protecting transport corridors from residential development, and encouraging best design practice.

SPP5.4 does this primarily by:

- identifying the situations in which it would be appropriate to assess proposals for transport noise impacts
- establishing noise criteria to be used in the assessment of these proposals
- identifying measures that can be adopted to reduce road and rail transport noise in these instances.

As the City of Melville already has several important road transport corridors, there are many instances in which the policy applies to residential development.

3.4 Liveable Neighbourhoods and Development Control Policies

3.4.1 Liveable Neighbourhoods

The purpose of the *Liveable Neighbourhoods* policy is to improve the structure of new urban development on greenfield and large urban infill sites.

In general, *Liveable Neighbourhoods* replaces the current WAPC development control policies, which include *DC 1.1 Subdivision of Land – General Principles*, *DC 1.2 Development Control – General Principles*, *DC 1.6 Planning to Support Transit Use and Transit Orientated Development*.

Liveable Neighbourhoods aims to:

- increase the uptake of non-car transport options
- achieve density targets
- improve urban water management
- improve the planning of public open space
- encourage the retention of environmental features
- establish standards for street design

The City of Melville has no remaining greenfield sites and has very few large scale, single site infill opportunities. As such, *Liveable Neighbourhoods* can be applied in the case of large infill sites (such as the former Carawatha Primary School site in Willagee) and used as a guide to best practice elsewhere.



Image 1: Vacant Land in the Murdoch TOD area

There are approximately 22,405m² of vacant land currently zoned for mixed-use development between Fiona Stanley Hospital/St John of God Hospital and the Murdoch Train Station. **Source:** City of Melville

3.5 Strategic Policies

Strategic policies are essentially non-statutory development control policies, guidelines and Planning Bulletins endorsed by the WAPC. The following strategic policies are especially relevant to planning in the City of Melville:

3.5.1 Affordable Housing Strategy 2010 – 2020: Opening Doors to Affordable Housing (Department of Housing)

The *Affordable Housing Strategy 2010-2020 - Opening Doors to Affordable Housing* (usually abbreviated to *Affordable Housing Strategy*) is a 10-year strategic document intended to address the lack of affordable housing opportunities for low-to-moderate income earners in Western Australia.

The state government is seeking to increase the range of housing solutions available to those facing housing stress by moving away from the provision of public rentals to a system of stakeholder collaboration. Greater private investment in affordable housing options is encouraged through special mechanisms such as Private/Public Partnerships and Keystart Loans. Affordable housing-friendly planning reforms are also considered.

The *Affordable Housing Strategy* proposes that a greater range of housing types (especially smaller dwellings) be made available on the market. The *Affordable Housing Strategy* notes the importance of local housing strategies.

3.6 WAPC Planning Manuals and Guidelines

3.6.1 Local Planning Manual

The Local Planning Manual is a guide to the preparation of local planning strategies and local planning schemes. LPS6 and the Local Planning Strategy were prepared in accordance with this manual.

3.6.2 Structure Plan Framework

The *Structure Plan Framework* informs the preparation of activity centre plans, several of which will be produced within the City of Melville over the medium term.

These plans will guide the development and use of land in the areas they apply to. Under SPP 4.2, activity centre plans are required for all activity centres of district centre size and above.

3.6.3 Local Development Plan Framework

Local development plans (LDPs) link lot design to development standards. They are useful in the development of highly constrained sites, or in the staged development of large single lots.

LDPs can supplement the development standards of local planning schemes and the *R-Codes*.

3.6.4 Acid Sulfate Soils Planning Guidelines

The *Acid Sulfate Soils Planning Guidelines* ensure the subdivision and development of land containing acid sulfate soils is managed appropriately.

Geotechnical surveys suggest that some land in the City is at risk of these soil types.

4. LOCAL PLANNING CONTEXT

4.1 People, Places, Participation 2016-2026: A Strategic Community Plan for the City of Melville

People, Places, Participation 2016-2026 was prepared following extensive community engagement with assistance from a Community Reference Panel. The document provides a summary of feedback received on what is considered most important to those who live, work and play in the City, and lists strategies for the achievement of those aspirations.

The community's aspirations are all of significance to the *Local Housing Strategy*.

Table 2: Community Aspirations Relevant to Housing

Source: City of Melville

Aspiration	Relevance to Local Housing Strategy
<i>Safe and Secure</i>	Implies that housing diversity will strengthen social connections in each local community and make it safer
<i>Sense of Community</i>	Specifies lively and vibrant public spaces, which implies a need for increased residential density in/around centres
<i>Healthy Lifestyles</i>	Specifies need for public spaces to accommodate walking, cycling and exercise. Residential density in key areas strengthens rationale for increased investment in public spaces
<i>Clean and Green</i>	Implies need for more residential density around transport corridors and hubs. Implies need to retain private open space in the form of low-density residential codings across most of City
<i>Sustainable and Connected Transport</i>	Implies need for more residential density around transport corridors and hubs
<i>Growth and Prosperity</i>	Implies need for more residential density in/around centres to support commercial activity

The recommendations of the *Local Housing Strategy* are consistent with the overarching recommendations of *People, Places, Participation 2016-2026*.

4.2 Local Planning Strategy

On 27 May 2016 the City's *Local Planning Strategy* was approved by the WAPC.

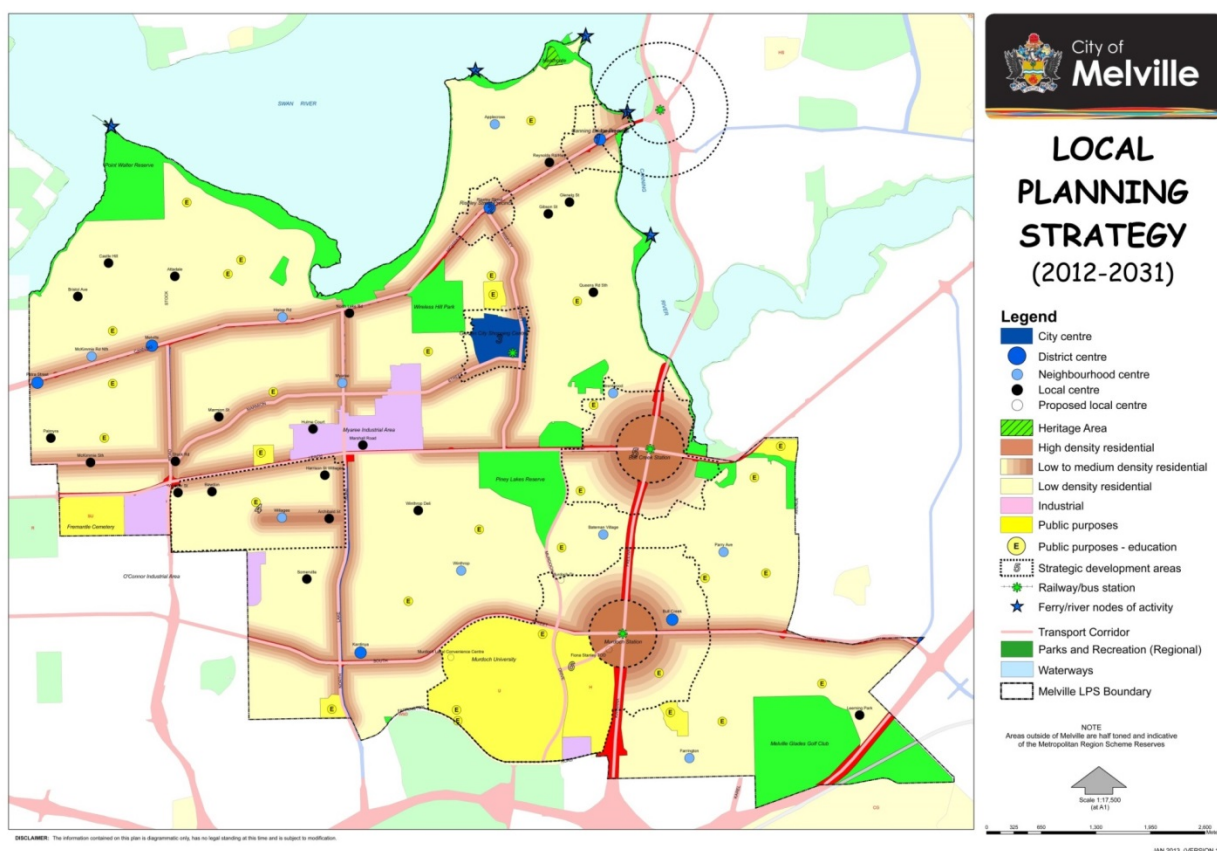


Figure 2: Local Planning Strategy

Source: City of Melville

The *Local Planning Strategy* focusses on activity centres and transport corridors, recognising a hierarchy of centres and areas marked for further study.

The content of the *Local Planning Strategy* has been incorporated into LPS6. As the planning horizon for the *Local Planning Strategy* is longer than the life of the average Scheme, its implementation must necessarily be gradual.

To some extent the *Local Planning Strategy* and LPS6 anticipated the recommendations made under this *Local Housing Strategy*.

4.3 Local Planning Scheme No. 6

Land use and housing densities are managed under LPS6. Gazetted on 27 May 2016, LPS6 has been informed by the *Local Planning Strategy*, which lists objectives of special significance to the *Local Housing Strategy*. These objectives are summarised in Section 2 of this strategy.

4.4 Greenfield Sites

The City of Melville is an established area and does not contain any greenfield sites currently zoned for residential purposes. The last new suburb fully developed with low-density housing was Winthrop in 1995.

There are however, a few smaller brownfield locations (defined by Newton et al 2011 as large-scale, previously developed sites) with residential potential. The City acquired the 2.6 Ha former Carawatha Primary School on Archibald Street in Willagee in 2006 for the purpose of public open space and residential development. A residential development concept plan for this site was included in the *Willagee Structure Plan* in 2013. It is expected that the land will be developed by 2022.



Image 2: The Carawatha site in Willagee
Comprises 2.6 Ha of residential land. **Source:** City of Melville

4.5 Local Housing Density Patterns

Due to the predominantly low-density residential coding prevailing within the City of Melville, most housing comprises single residential dwellings, and a relatively small number of grouped dwellings. Most single house lots are between 600m² and 800m² in area. Housing is typically single-storey, although two-storey dwellings have become more numerous since the 1990s.



Image 3: Bull Creek

Typical streetscape in Bull Creek showing low-density housing from the late 1970s/early 1980s.

Source: City of Melville

Most existing apartment buildings date from the 1960s. Almost all of these are in the north of the City, along Canning Highway and in Bicton and Applecross. The introduction of infill dwelling targets under *Directions 2031* and the *Central Sub-Region Planning Strategy*, and the amendment of the *R-Codes* to incorporate the Multi Unit Housing Code have encouraged a new generation of apartment buildings.

As of July 2017, large apartment buildings have been approved for a number of sites, including:

- Ogilvie/Kishorn Roads (Mount Pleasant, 2015) 233 apartments
- Sleat Road, (Applecross, 2015) 199 apartments
- Canning Highway (Applecross, 2017), 432 apartments
- Davy Street (Booragoon, 2015) 124 apartments

The increasing popularity of apartments may be attributed in part to the improved quality of dwellings. New apartments are typically better designed than their older counterparts, offering more light, ventilation, storage, outdoor living and all-round amenity.



Images 4 & 5: Apartments Old and New

Apartments from the 1960s vs apartments from 2015. **Source:** City of Melville

It is expected that more apartments will be built over the next 20 years as the market responds to demand for smaller dwellings.

4.6 Recent Work on Age-Friendly Initiatives

In 2013 the City published *Age-Friendly Melville: Directions from Seniors 2013-2017*, following extensive consultation with local seniors on matters such as housing, community support, transport and social participation. Of particular relevance to housing, were the following themes:

- More age-appropriate housing is required near shops, transport and services
- More residential care is required, especially those that offer more high care facilities
- There is a need for more multi-level apartments, accessible and with elevators, which are close to public transport
- There is a need for more information to be delivered about housing options
- Seniors want to remain in their own homes independently for as long as possible



Image 6: Housing for Seniors

Arcadia Waters (formerly St Joseph's Hospital), a retirement village in Bicton offering units and apartments.

Source: City of Melville

Age-Friendly Melville: Directions from Seniors 2013-2017 recommends the following actions:

- To promote accessibility and connections to community services in order to influence the independence and quality of life of older people
- To advocate with relevant agencies for an increase in High Care Facilities to keep pace with population increases
- To ensure the local planning scheme includes aged care accommodation developments
- To ensure issues of design for accessibility, access to transport and home modification options for new and renovated building developments within the City are considered

The *Local Planning Strategy* refers to the following objectives, which are of relevance to *Age-Friendly Melville* themes:

- provide for a range of residential densities to facilitate the development of a variety of housing types and neighbourhood characteristics based on proximity to service, existing character and landscape characteristics
- encourage the incorporation of higher density housing in conjunction with suitable secondary and district centre commercial development, subject to appropriate design controls to ensure a satisfactory level of amenity for residents
- promote innovative, high-quality residential developments on opportunity sites
- capitalise on residential development opportunities
- support increases in housing density where character and amenity of the neighbourhood is not prejudiced and there is capacity in existing infrastructure and services
- develop initiatives to increase the availability of existing housing
- investigate allowing the development of housing or additions to housing where there is no significant adverse impact upon the amenity of adjoining properties
- have regard to WAPC *Directions 2031 and Beyond* dwelling targets for the City
- undertake housing preference analysis of market trends
- promote a diversity of housing to better enable ageing in place.

People, Places, Participation 2016-2026, the City of Melville's strategic community plan, also makes reference to age-friendly housing requirements. In this plan, an age-friendly city is one in which:

- public place, facilities, and infrastructure are designed to be accessible, safe and suitable to the needs of different age groups; and
- community facilities are clustered so as to improve accessibility.

With its focus on concentrating housing around existing infrastructure, the *Local Housing Strategy* is expected to satisfy the above requirements.

4.7 Relevant Local Planning Policies

The recent gazettal of LPS6 has reduced the need for new planning policies. At the moment there does not appear to be a need for policies additional to those listed below.

LPP1.1 Planning Process and Decision Making

Outlines the assessment and advertising processes to be followed for development applications and other planning applications within the City of Melville.

LPP1.2 Architectural and Urban Design Advisory Panel

Outlines the process for the establishment and operation of an Architectural and Urban Design Advisory Panel in the City of Melville.

LPP1.3 Waste and Recyclables Collection for Multiple Dwellings Mixed Use Developments and Non-Residential Developments

Prescribes waste management requirements for new and existing multiple dwellings, mixed use and non-residential developments within the City of Melville.

LPP1.4 Provision of Public Art in Development Proposals

Contains requirements for the provision of public art schemes or cash in lieu for certain development types over \$1 million in the City of Melville.

LPP1.5 Energy Efficiency in Building Design

Describes design principles for the construction of energy efficient buildings within the City of Melville.

LPP1.9 Height of Buildings

Contains building height provisions for development outside of Activity Centre Plan areas within the City of Melville.

LPP1.10 Amenity Policy

Outlines where an Amenity Impact Statement is required to be included as part of a planning application within the City of Melville.

LPP1.11 Canning Highway Precinct Design Guidelines

Relates to the assessment of development located on properties within one street block of Canning Highway within the City of Melville.

LPP1.17 Additional Development Exemptions

Exempts certain developments from the need for formal planning approval.

LPP3.1 Residential Development

Applies to new houses and additions to existing houses such as carports, patios and fences.

5. DEMOGRAPHIC ANALYSIS

5.1 General

According to the 2016 Census, the estimated resident population of the City was 106,294 people.

In the same year there were 41,285 dwellings of all types.

5.2 Housing tenure: homeowners, mortgagees and renters

Housing tenure data provides an insight into the socio-economic status of an area, as well as the role the area plays in the housing market. Tenure can also reflect built form, with a higher share of renters in high-density housing and a substantially larger proportion of home owners in separate houses.

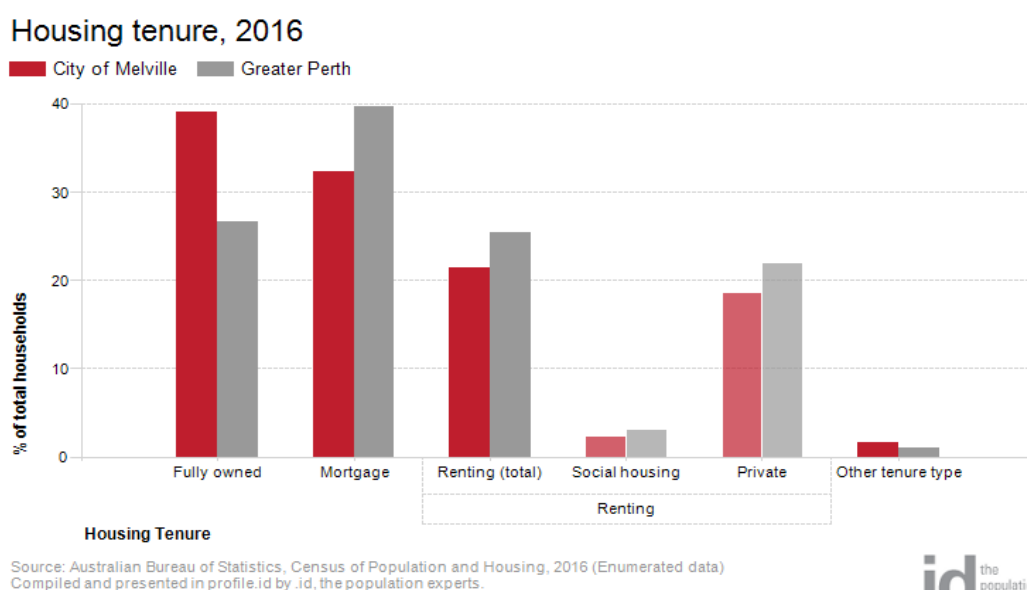


Figure 3: Housing tenure (2016)

Source: ABS and id

Compared to Greater Perth in 2016, there was a larger proportion of households who owned their dwelling; a smaller proportion purchasing their dwelling; and a smaller proportion who were renters.

Overall, 39.2% of the population owned their dwelling; 32.4% were purchasing, and 21.5% were renting, compared with 26.7%, 39.7% and 25.5% respectively for Greater Perth.

These statistics are typical of areas with high proportions of mature residents.

5.3 Household Profiles

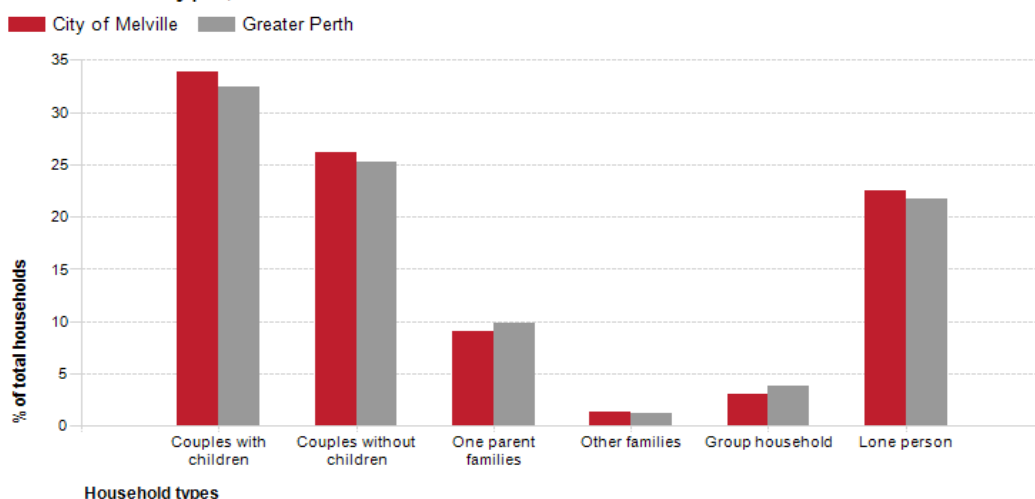
Data for the household/family types in the City of Melville in 2016 compared to Greater Perth show two important trends.

There was a higher proportion of couple families with child(ren) and a lower proportion of one-parent families. Overall, 33.9% of total families were couple families with child(ren), and 9.0% were one-parent families, compared with 32.5% and 9.8% respectively for

Greater Perth. These data suggest that the City of Melville remains relatively popular with traditional families.

There was a higher proportion of lone person households and a higher proportion of couples without children. Overall, the proportion of lone person households was 22.5% compared to 21.7% in Greater Perth while the proportion of couples without children was 26.2% compared to 25.3% in Greater Perth. These data suggest that a significant portion of residents is mature, and may have different housing needs to those with children.

Household type, 2016



Source: Australian Bureau of Statistics, Census of Population and Housing, 2016 (Enumerated data)
Compiled and presented in profile.id by .id, the population experts.

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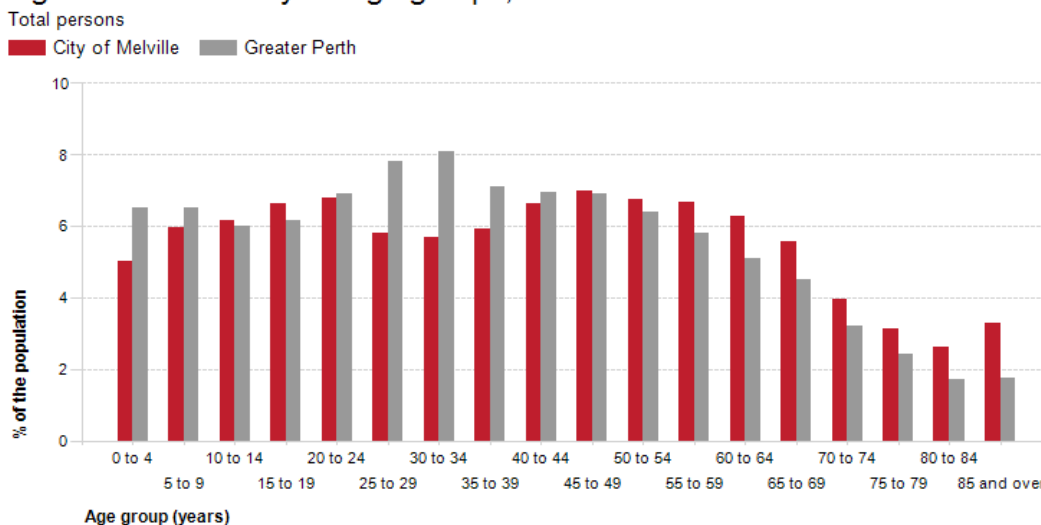
Figure 4: Household Types (2016)

Source: ABS and id

5.4 Age Structure and Ageing Trends

As the graph below makes plain, the City is already ageing, with proportionally more residents aged 45 and over in Melville than the rest of Perth. There are especially large differences in the numbers of 55-69 year olds and those aged over 80.

Age structure - five year age groups, 2016



Source: Australian Bureau of Statistics, Census of Population and Housing, 2016 (Usual residence data)
Compiled and presented in profile.id by .id, the population experts.

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the population experts

Figure 5: City of Melville Age Structure by Five-Year Age Groups (2016)

Source: ABS and id

Data for the five year age groups of the City of Melville in 2016 compared to Greater Perth show that there was a lower proportion of people in the younger age groups (under 15) and a higher proportion of people in the older age groups (65+).

Overall, 17.1% of the population was aged between 0 and 15, and 18.6% were aged 65 years and over, compared with 19.1% and 13.6% respectively for Greater Perth. Once again, the percentage of residents aged 65 years and older is especially significant.

It is also noted that the data show a marked lack of 25 to 39 year olds in the City of Melville compared to the rest of Perth.

Changes in the City's age structure from 2011 to 2016 show marked increase in the number of residents aged 60+, as depicted in **Figure 6** below.

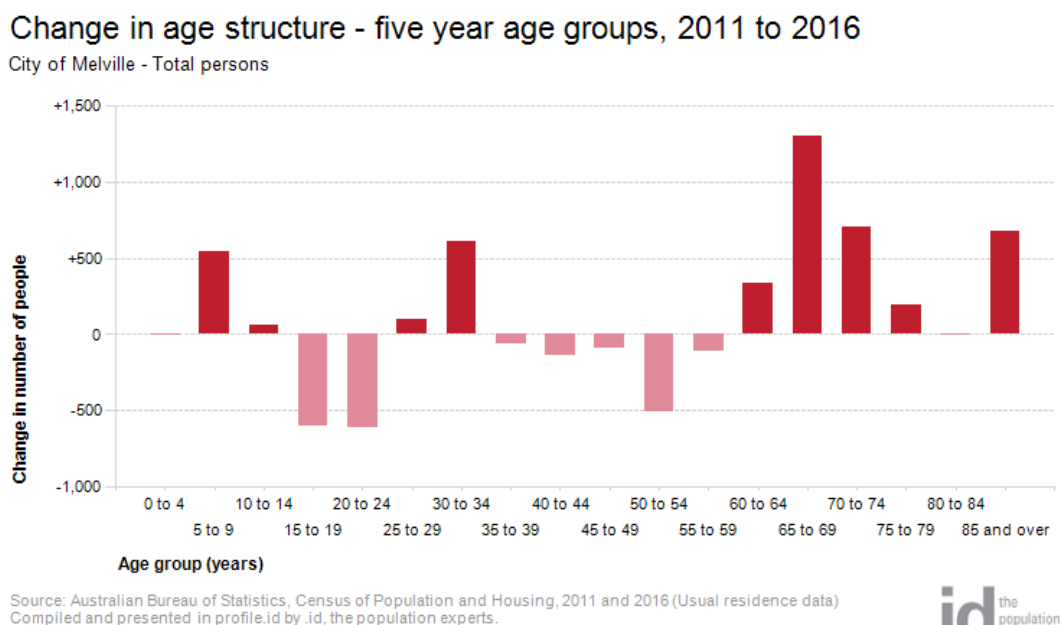


Figure 6: Change in City of Melville Age Structure (2011 – 2016)
Source: ABS and id

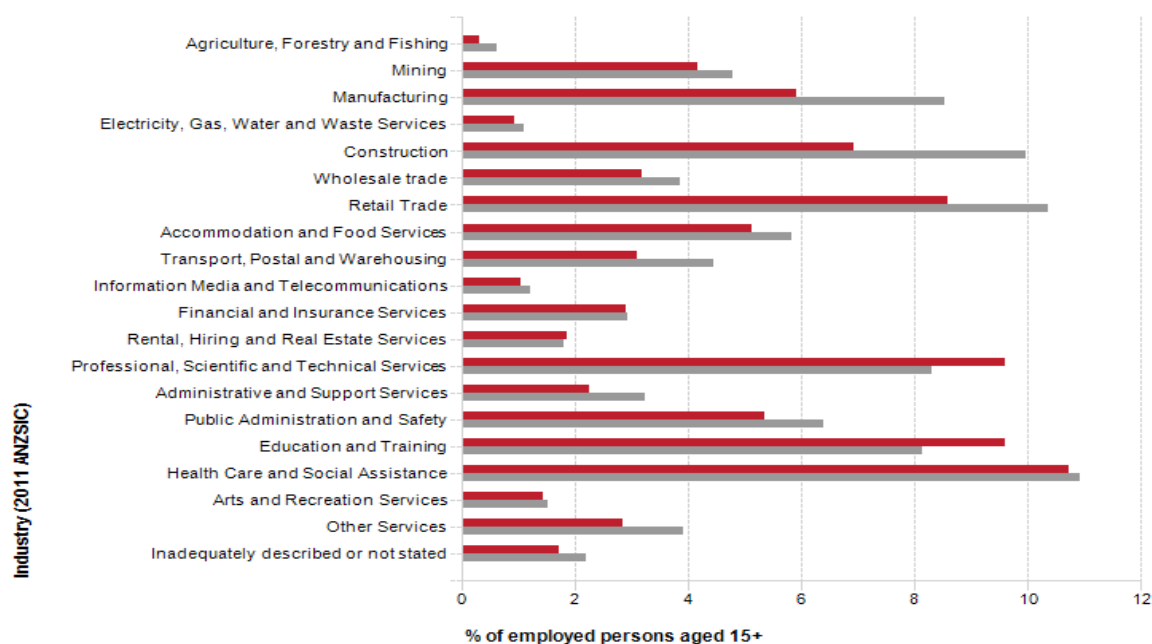
5.5 Employment

The industries best represented in the working population of the City of Melville are Health Care and Social Assistance (10.7%), Professional, Scientific and Technical Services (9.6%) and Education and Training (9.6%) (See **Figure 7** below.)

Industry sector of employment, 2011

Total employed persons

■ City of Melville ■ Greater Perth



Source: Australian Bureau of Statistics, Census of Population and Housing, 2011 (Usual residence data)
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Figure 7: Employment by Industry (2011)

Source: ABS and id

The most significant differences between the City of Melville and Greater Perth workforces are in the categories of:

- Professional, scientific & technical services (+);
- Education and Training (+);
- Construction (-)
- Manufacturing (-)
- Retail trade (-)

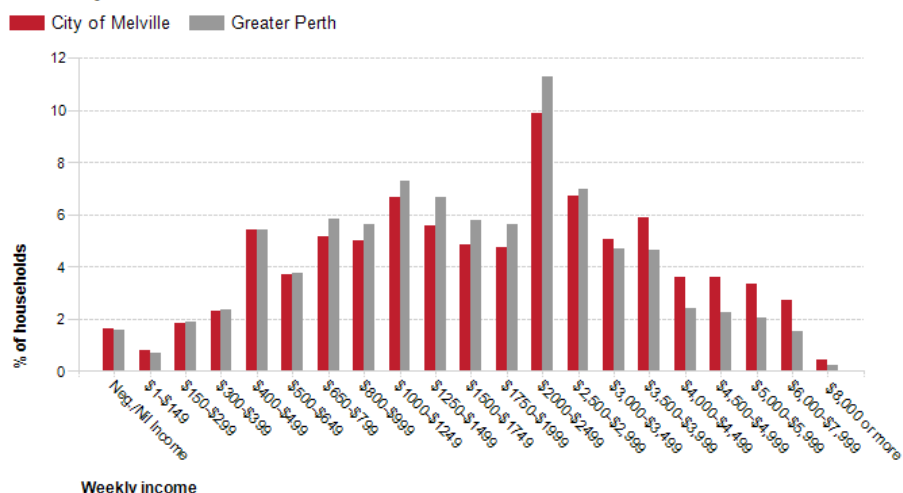
These data indicate the City's workforce is relatively "white collar."

5.6 Household income

Compared to Greater Perth, the City of Melville has a larger proportion of high income households (those earning \$2,500 per week or more) and a similar proportion of low income households (those earning less than \$650 per week).

Overall, 31.4% of the households earned a high income and 15.7% were low income households, compared with 24.8% and 15.7% respectively for Greater Perth.

Weekly household income, 2016



Source: Australian Bureau of Statistics, Census of Population and Housing, 2016 (Enumerated data)
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Figure 8: Weekly household income (2016)

Source: ABS and id

5.7 Population Density

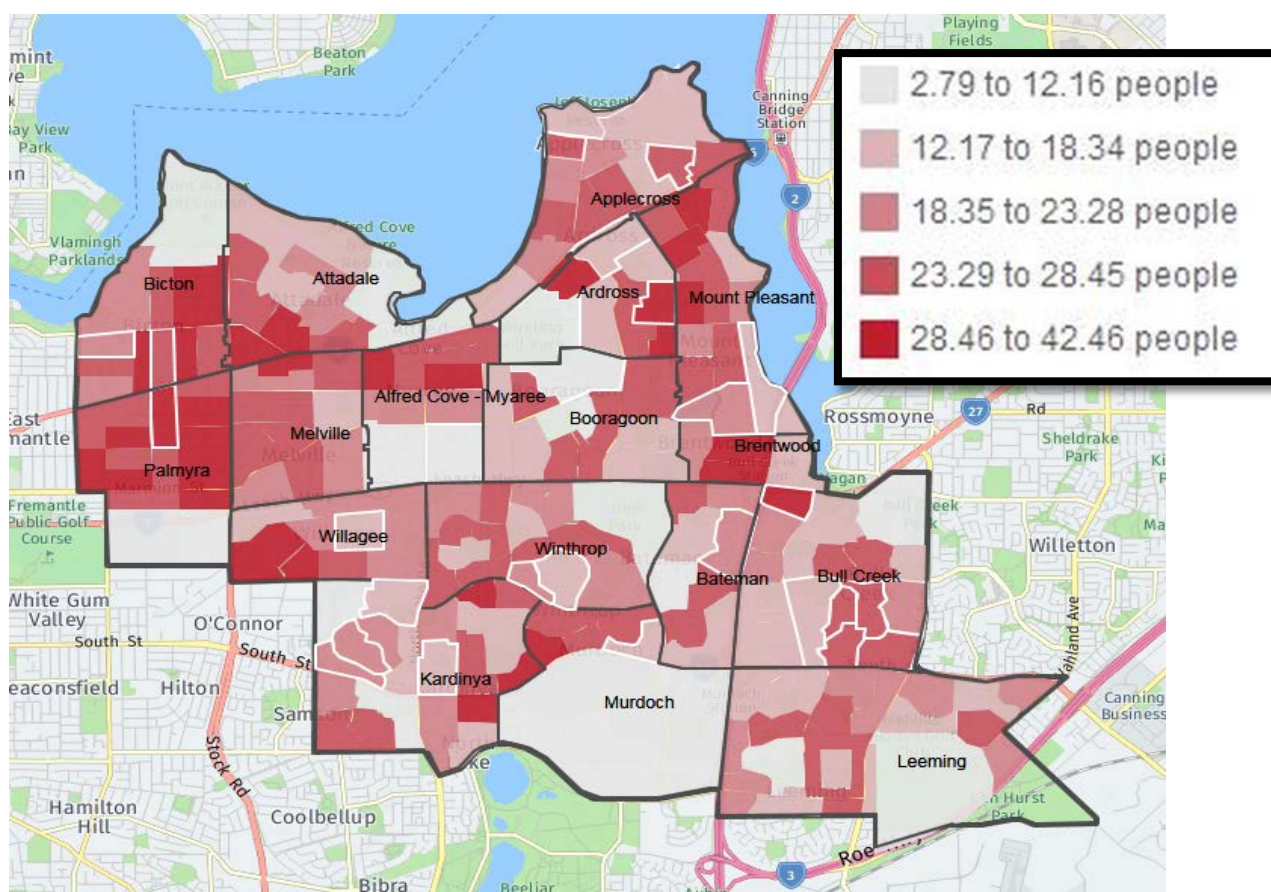


Figure 9: City of Melville Population Density Map (2016)

Source: ABS and id

The above map shows City of Melville population densities are highest in several pockets. The first pocket is in the west of the city, centred on Canning Highway. This pocket comprises the infill development of Palmyra and the medium density dwellings/apartments of south Bicton. Infill development in south-west Willagee

comprises the second pocket. Another pocket occurs in Kardinya , just north of Murdoch University, where student sharehouses are common. A fifth pocket of infill development is found in Brentwood, west of the Kwinana Freeway. The sixth pocket is in northern Mount Pleasant.

5.8 Population Forecasts and Projections

In *Towards Perth and Peel@3.5 Million*, the WAPC plans on the assumption that Perth will reach a population of 3.5 million by 2050.

The ABS has published population forecasts which suggest that the population of Perth and Peel will be between 2.40 million and 2.88 million by 2031. *Directions 2031* suggests that somewhere between 358,000 and 429,000 additional dwellings will need to be constructed by this date to meet demand.

It is already well-known that the City of Melville has an ageing population, with an age profile biased towards mature families and older households. Macroplan (2010) notes that the transition of the 45-64 year-old age group into retirement will see a big reduction in the number of working age people, which will pose some major challenges for the City of Melville.

This ageing trend is also indicative of world population trends resulting from longer life spans, declining birth rates and the ageing of the post-WWII baby boomer generation.

5.8.1 Population Projections – Qualifying Note

It is important to note that population projections assume that trends will continue and cannot anticipate all circumstances that may arise. Projections cannot factor in major natural disasters or significant economic downturns as these are impossible to predict with certainty. Projections assume that governments and service agencies will continue to expand the infrastructure required for additional people.

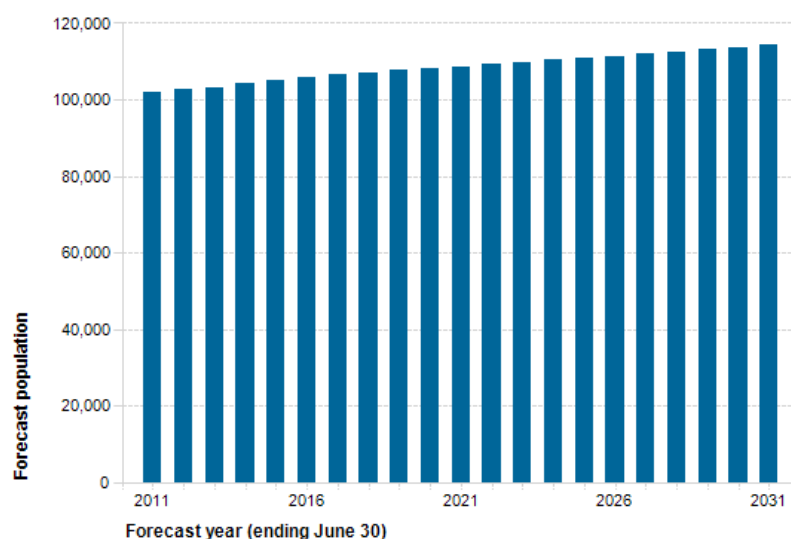
The City of Melville can significantly influence population growth within its local government area. For example, by changing density codings the City can increase potential residential densities.

5.8.2 Population Forecasts

According to id (a data analysis company), the City of Melville's total estimated residential population for 2031 is 114,174, which is an 8.85% increase in population over the years 2015-2031.

Forecast population

City of Melville



Population and household forecasts, 2011 to 2031, prepared by .id, December 2011.

.id
the population experts

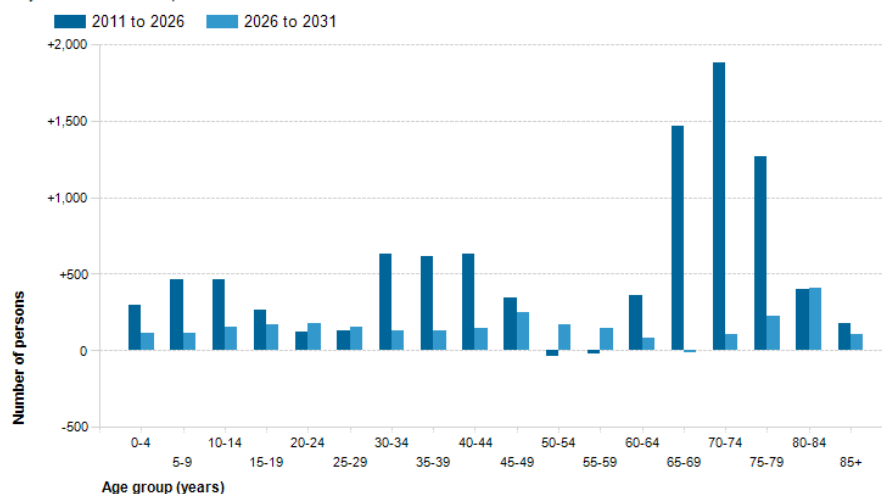
Figure 10: City of Melville Population Forecast to 2031

Source: id

This growth is significant, and will place increased pressure on services and infrastructure unless appropriately located.

Forecast change in age structure - 5 year age groups

City of Melville - Total persons



Population and household forecasts, 2011 to 2031, prepared by .id the population experts, December 2011.

.id
the population experts

Figure 11: Forecast Changes in Age Structure

Source: id

As the above figure makes clear, much of the forecast population growth is expected to occur in the 60+ age cohorts.

5.9 Summary

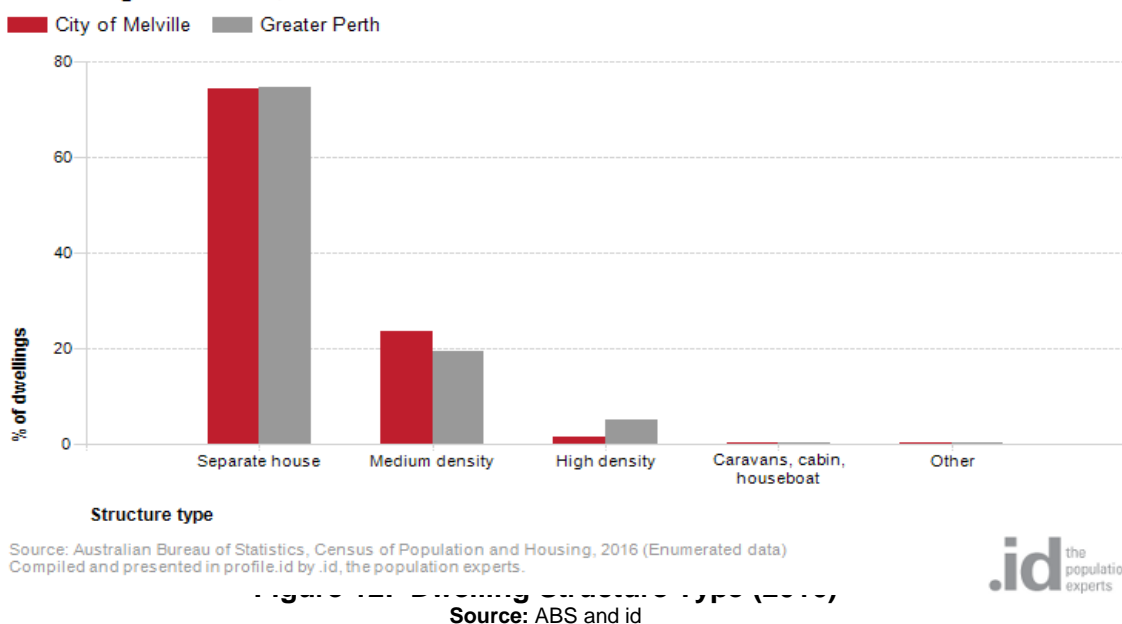
- Compared to the rest of Perth, the City has a high proportion of homeowners and a low proportion of renters
- The City has a higher proportion of couple families with child(ren), lone person households and households of couples without children than the rest of Perth
- The City of Melville is already ageing faster than the rest of Perth
- The City's workforce is slightly more white collar than the rest of Perth's
- Overall, the City's residents have higher incomes than those in the rest of Perth
- There are four pockets of population density in the City of Melville: South Bicton/north Palmyra, the Canning Bridge precinct, the areas surrounding Murdoch University, and south-western Willagee.
- The number of residents aged 55+ is expected to increase dramatically by 2031

6. HOUSING ANALYSIS

6.1 Housing Types and Densities

Rowley and James (2017) point out that compared to other Australian capital cities, Greater Perth shows a distinct lack of housing diversity, with a high proportion of detached dwellings. In Greater Sydney, for example, only 55% of dwellings are classified as detached houses, compared to 75% in Greater Perth. Comparisons of City of Melville housing to that of Greater Perth's should be understood in this context.

Dwelling structure, 2016

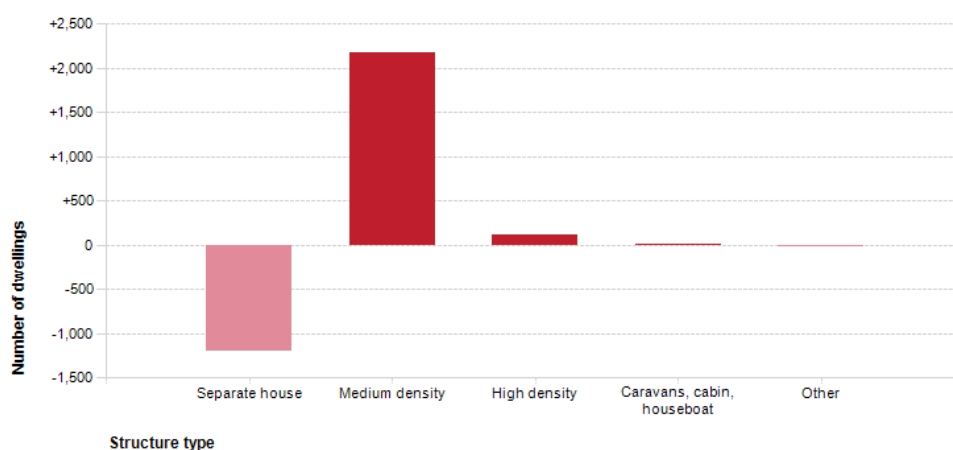


In 2016, 74.3% of all dwellings in the City of Melville were separate houses; 23.7% were medium density dwellings, and 1.7% were high density dwellings, compared with 74.6%, 19.6%, and 5.1% in the Greater Perth respectively.

These figures show a marked change from pre-2011 trends (see Figure 13 below), where the over-representation of low-density, single dwellings within the City highlighted a lack of housing choices. Updated building approval figures for the City (see section 6.6) show that many of the medium and high density dwellings have been approved since the 2015/16 financial year. Nevertheless, despite the declining numbers of separate houses, the City still has a relatively low percentage of high-density dwellings.

Change in dwelling structure, 2011 to 2016

City of Melville



Source: Australian Bureau of Statistics, Census of Population and Housing, 2011 and 2016 (Enumerated data)
Compiled and presented in profile.id by .id, the population experts.

.id
the population experts

Figure 13: Change in Dwelling Structure Type (2011-2016)

Source: ABS and id

Most of the suburbs in the City remain coded for low and medium density housing. (A fuller explanation of density codes may be found in sections 9.4 and 9.5 of this strategy.) Residential codings are typically R17.5, R20 and R25, requiring average lot sizes of between 571m² and 350m². R20 is the most widespread coding.

Table 3: Predominant LPS6 Density Codes by Suburb

Source: City of Melville

Suburb	Predominant density codings under LPS6
Alfred Cove	Approx. 90% R20
Applecross	Approx. 90% R12.5, R15 and R20
Ardross	Approx. 80% R20, 15% R40
Attadale	Approx 90% R12.5, R15 and R25
Bateman	Approx 95% R20
Bicton	Approx 85% R15, R17.5 and R20
Booragoon	Approx 75% R20
Brentwood	Approx 95% R12.5, R20 and R25
Bull Creek	Approx 90% R20
Kardinya	Approx 95% R20 and R25
Leeming	Approx 95% R20
Melville	Approx 65% R20
Mount Pleasant	Approx 95% R12.5 and R20
Murdoch	Approx 75% non-residential, 20% R20
Myaree	Approx 50% non-residential, 20% R20
Palmyra	Approx 85% R20
Willagee	Approx 90% R40 and R25
Winthrop	Approx 97% R20

6.2 Dwelling Size

Bedrooms per dwelling is used all over Australia as a measure of dwelling size.

There is a larger percentage of five bedroom or greater dwellings in Melville compared to the Greater Perth area (8.7% versus 5.9%) and a smaller percentage of dwellings with 1 or no bedrooms (includes bedsitters) (1.9% compared to 3.5%). See **Figure 14** below.

Number of bedrooms per dwelling, 2016

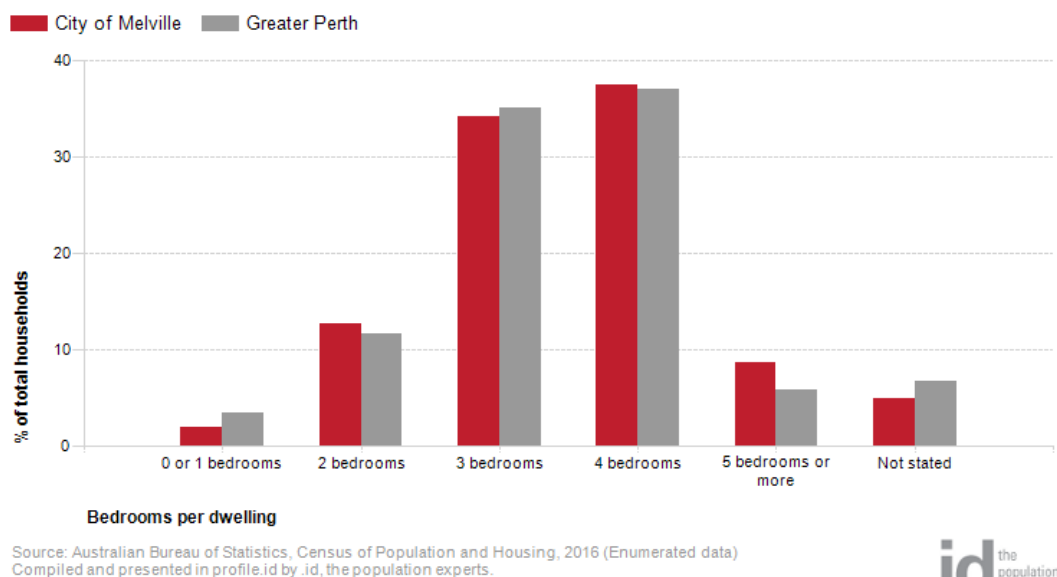


Figure 14: Number of Bedrooms per Dwelling (2016)

Source: ABS and id

Data show that between 2011 and 2016 four and five (or more) bedroom dwellings were being built at much faster rates than smaller dwellings. See **Figure 15** below.

Change in number of bedrooms per dwelling, 2011 to 2016

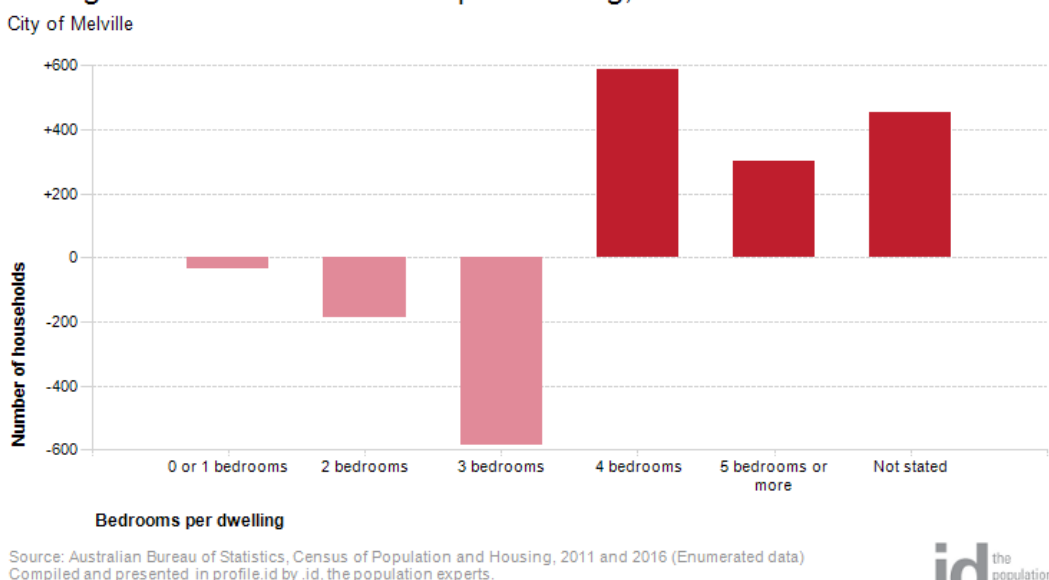


Figure 15: Changes in Number of Bedrooms per Dwelling (2016)

Source: ABS and id

The data below show that 56.6% of all Melville dwellings are occupied by only one or two people, very similar to the figure for Greater Perth of 56.4%. There is clearly a mismatch between dwelling types/sizes, and household sizes, with the result being an oversupply of large dwellings and too few smaller dwellings.

Table 4: Number of Persons per Household (2016)

Source: ABS and id

Number of persons usually resident	Number	%	Greater Perth %
1 person	8,422	23.5	23.0
2 persons	11,877	33.1	33.4
3 persons	5,920	16.5	16.8
4 persons	6,447	18.0	17.0
5 persons	2,348	6.6	6.7
6 or more persons	828	2.3	3.1
Total classifiable households	35,842	100.0	100.0

An obvious way for the City to better match household types to more appropriate dwellings is to plan for higher densities around transport hubs and town centres. Other potential responses include the encouragement of ancillary dwellings and key-share homes in low density areas.

6.3 Age and Condition of Housing

Owing to its poor soils and the availability of housing sites closer to Perth/along the railway north of the river, the City of Melville developed slowly, with very little housing available at the turn of the 20th Century.

Limited development occurred in Palmyra, Bicton and Applecross before 1940. Some original housing still exists in Palmyra and Bicton.



Image 7: Pre-war housing in Bicton.

Source: City of Melville

After the Second World War, the City grew rapidly. Most of land between the river and Leach Highway was developed with low-density housing by 1975.

With the exception of Willagee, almost all of the housing south of Leach Highway was built after 1970. The construction of residences in Murdoch, Winthrop, the west of Leeming and large areas of Kardinya did not commence until the late 1980s.



Image 8: Typical housing in Winthrop, from the 1990s and in very good condition.

Source: City of Melville

6.4 Public and Social Housing

Social housing is usually defined as rental housing delivered by the government and/or non-profit organisations for the purpose of assisting the disadvantaged, such as low-income earners or people with disabilities. In Perth the best known social housing provider is the Housing Authority (formerly known as the Department of Housing) but there are others such as Shelter WA, Foundation Housing and Access Housing. Social housing has a modest presence in Melville generally, with only 2.4% of properties qualifying as social housing in the 2016 Census (down from 2.7% in 2011), compared with 3.1% for Greater Perth.

There are relatively high concentrations of social housing in the suburbs of Willagee and Brentwood (18.5% and 16.2%).

The Housing Authority intends to dilute its presence in Willagee, where a large number of its dwellings are aged single houses/grouped dwellings in need of attention. These will be replaced with small (2 and 3 bedroom) grouped dwellings, most of which will be sold on the private market. These will be rolled out over a period of 10-20 years.

Table 5: Social Housing in the City of Melville, 2016

Source: ABS and id

Suburb	# social housing properties	Social housing as percentage of suburb dwelling numbers
Alfred Cove/Myaree	17	1.0%
Applecross	0	0.0%
Ardross	0	0.0%
Attadale	5	0.2%
Bateman	19	1.5%
Bicton	39	1.5%
Booragoon	0	0.0%
Brentwood	137	16.3%
Bull Creek	43	1.5%
Kardinya	19	0.6%
Leeming	0	0.0%
Melville	12	0.6%
Mount Pleasant	3	0.1%
Murdoch	6	0.5%
Palmyra	206	6.6%
Willagee	367	18.5%
Winthrop	0	0.0%
Whole of City	885	2.4%

Overall the City is not expected to play a major role in the Housing Authority's redevelopment programs.

6.5 Seniors' Housing

In this section of the strategy only formal seniors' accommodation (sometimes referred to as retirement villages, seniors' villages, lifestyle villages and nursing homes) are considered. Other types of accommodation suitable for seniors are covered in sections 8.4 and 9.6.

Figures from the Department of Health Commonwealth Division in WA for June 2016 indicate the municipality has a total of 1,034 residential care beds. According to the Federal Government target of 113 places per 1,000 persons aged 70 and over (Australian Institute of Health and Wellbeing, 2012), the number of care beds in Melville appears inadequate, with a shortfall of around 412 beds.*

A list of seniors' villages/care homes within the City of Melville in July 2016 may be found in **Table 6** below. The table shows numbers of independent living units as well as care beds as these are often provided on the same sites.

* Calculations are based on Census data for 2016, which give a figure of 12,795 people aged 70 and over in the City of Melville. At the target rate of 113 residential care places per 1,000 such residents, the City requires around 1,446 beds.

Table 6: Retirement Villages/Care Homes in the City of Melville

Source: City of Melville

Name	Type	Location	No. units/ beds
Braemar Lodge	Independent Living	Point Walter Road, Bicton	55 units
Carinya on Bristol	Care	Bristol Avenue, Bicton	40 beds
Carinya of Bicton	Care	Preston Point Road, Bicton	92 beds
RAAFA Bull Creek	Independent living and care	Bull Creek Drive, Bull Creek	403 u & b
Alchera Applecross Village	Independent living	Canning Highway, Applecross	24 units
Alchera Bull Creek Village	Independent living	Hassell Crescent, Bull Creek	23 units
Alchera Webber Gardens	Independent living	Bawdan Street, Willagee	35 units
Alchera Weeronga	Independent living	Worley Street, Willagee	73 units
Amana Frederick Guest	Independent living plus care	Gleddon Road, Bull Creek	40 u & b
Westside Leeming	Independent living	Theakston Green, Leeming	60 units
Aegis Melville	Care	French Road, Melville	92 beds
Aegis Kitchener Gardens	Independent living	Kitchener Road, Melville	28 units
Myaree Gardens	Independent living	Marmion Street, Myaree	69 units
Parkland Villas	Independent living	Marmion Street, Booragoon	185 units
Braemar Coovina	Care	Leach Highway, Willagee	108 beds
Braemar Village	Care	Charsley Street, Willagee	52 beds
Opal Aged Care Applecross	Care	Riverway, Applecross	88 beds
Amana Lefroy Hostel	Care	Lefroy Road, Bull Creek	76 beds
Regent's Garden Bateman	Care	Amur Place, Bateman	72 beds
Regent's Garden Booragoon	Care	Marmion Street, Booragoon	100 beds
Arcadia Waters Bicton	Independent living	Stock Road, Bicton	71 units
St Ives Melville	Independent living plus care	Rome Road, Myaree	47 units
St Ives Murdoch	independent living plus care	Windelya Road, Murdoch	361 u & b
Total			2,194 units & beds



Image 9: Westside Leeming, a 60-unit village for the over 55s

This is only accommodation of its type in Leeming, despite the suburb's population of 9,119. Source: City of Melville

There are limited large (greater than 2,000m²) land parcels in the City of Melville, and consequently there are few opportunities for new retirement villages without land assembly. To accommodate the growing number of downsizing seniors it is considered important that the City allows for more small dwellings in strategic locations within each suburb.

6.6 Building Activity

Building approvals indicate the general level of residential development and are an indicator of economic activity, employment and investment.

Building activity varies with the general state of the economy and is influenced by factors such as interest rates, availability of mortgage funds, government spending, and business investment.

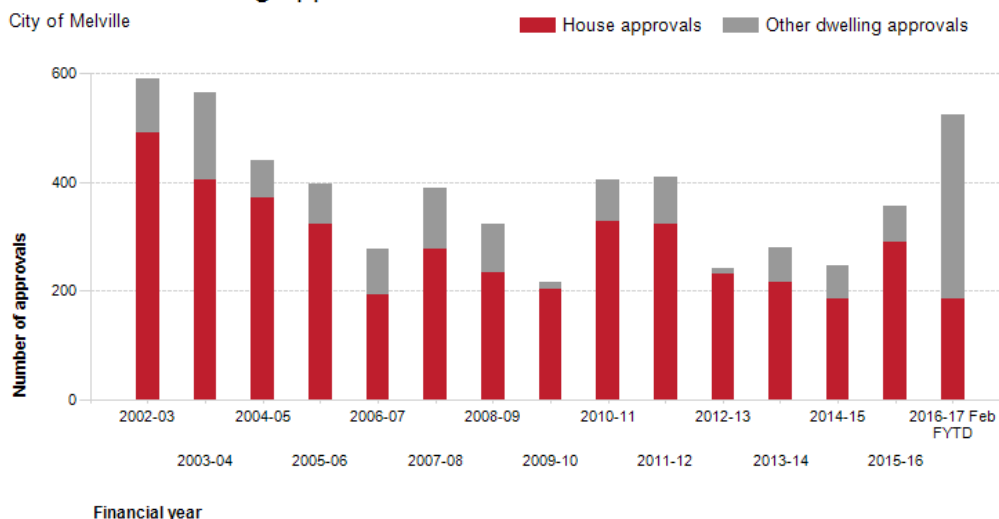
Table 7: Residential Building Approvals, City of Melville – Houses and Other Dwellings (2002-2017)

Source: City of Melville Building Department and id

City of Melville	Number			Annual change		
Year (ending June 30)	Houses	Other	Total	Houses	Other	Total
2016-17 Feb FYTD	186	337	523			
2015-16	289	66	355	+103	+6	+109
2014-15	186	60	246	-31	-3	-34
2013-14	217	63	280	-14	+53	+39
2012-13	231	10	241	-91	-78	-169
2011-12	322	88	410	-7	+13	+6
2010-11	329	75	404	+127	+62	+189
2009-10	202	13	215	-32	-76	-108
2008-09	234	89	323	-42	-25	-67
2007-08	276	114	390	+84	+30	+114
2006-07	192	84	276	-131	+11	-120
2005-06	323	73	396	-48	+3	-45
2004-05	371	70	441	-33	-91	-124
2003-04	404	161	565	-86	+62	-24
2002-03	490	99	589	+28	-5	+23

Residential building approvals

City of Melville



Source: Australian Bureau of Statistics, Building Approvals, Australia (8731.0). Compiled and presented by .id, the population experts.

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the population experts

Figure 17: Residential Building Approvals, City of Melville - Houses and Other Dwellings (2002-2017)

Source: Australian Bureau of Statistics and id

Residential building activity varies considerably over short time frames. Australian Bureau of Statistics building approvals records indicate that in only three of the last 12 years have more than 400 building approvals been granted. The 2016/17 financial year to date has shown a high number of building approvals, particularly for “other dwelling approvals”, which, for the first time, have exceeded the approvals for houses. These

data reflect the recent developer interest in multiple dwellings.

Over the next few years these apartment projects are likely to house considerable numbers of people.

6.7 Summary

- The City of Melville has a similar proportion of separate houses to the rest of Perth. There is a higher proportion of medium density dwellings and a lower proportion of high density dwellings
- In the City of Melville there is a mismatch between dwelling types/sizes, and household types, with an high proportion of large dwellings (4 or more bedrooms), and a relatively low proportion of smaller dwellings
- Much of the housing stock south of Leach Highway is in general newer than the housing stock north of Leach Highway. This may have implications for upcoding
- Only 2.4% of properties qualifying as social housing in the 2016 Census, compared with 3.1% for Greater Perth. Suburbs such as Willagee and Brentwood have much higher percentages than the Perth average though
- As there are a limited number of sites within the City that are suitable for new retirement villages. Alternatively a large number of small (1-2 bedroom) dwellings would be required for downsizing seniors
- There is unmet demand for residential care places in the City of Melville
- The 2016/17 financial year to date has shown a high number of building approvals, particularly for “other dwelling approvals”, which, for the first time, have exceeded the approvals for houses. These data reflect the recent developer interest in multiple dwellings

7. UTILITIES AND SERVICES

7.1 Sewerage, Water, Gas, Power and Telecommunications

As an inner-ring municipality with long-established infrastructure, all areas of the City are connected to sewerage, water, gas, power and telecommunications. This network of services and infrastructure makes infill development a much smaller financial burden on the state (or wider society) than development in the outer areas of Perth. As the following table makes clear, the cost of developing 1,000 new infill lots is nearly half that of developing the same number on the metropolitan fringe.

Table 8: Estimated development costs per 1,000 dwellings in Australian capital cities 2008

Source: Trubka et al. (2008).

	Inner City	Outer City
Infrastructure		
Roads	\$5,086,562	\$30,378,881
Water and sewerage	\$14,747,616	\$22,377,459
Telecommunications	\$2,576,106	\$3,711,851
Electricity	\$4,082,117	\$9,696,505
Gas	N/A	\$3,690,843
Fire and ambulance	N/A	\$302,509
Police	N/A	\$388,416
Education	\$3,895,458	\$33,147,274
Health (hospitals etc)	\$20,114,867	\$32,347,327
Transport		
Transport and travel time	\$206,542,055	\$342,598,098
Roads and parking	\$46,937,535	\$154,826,095
Externalities	\$2,219,884	\$9,705,379
Greenhouse gas		
Greenhouse gas	\$17,388,226	\$36,703,251
Health (from activity)		
Direct	N/A	\$1,933,088
Indirect	N/A	\$2,296,863
Total	\$323,590,426	\$684,103,839

7.2 Public Transport

The City of Melville is well serviced by public transport. The Perth-Mandurah railway on Kwinana Freeway provides two rail stations, Bull Creek and Murdoch, with Canning Bridge Station very close as well. The rail stations have large park-and-ride capacities and are important bus transfer facilities.

There are several high-frequency bus routes within the City, including Canning Highway, Leach Highway and the Circleroutes along South Street.

Over 90% of the City's residents live within 400m of a bus stop. The focus of the Local Planning Strategy and the draft Local Housing Strategy on transport corridors and activity centres would increase the percentage of residents who meet this criterion.

A network of cycle paths, shared paths and cycle-friendly streets has been improved since the City's Bike Plan of 2012.

7.3 Roads

The City of Melville is well serviced by major road transport routes.

Easy access to the CBD and northern/southern suburbs is possible along Kwinana Freeway.

The City's suburbs are connected east/west to the freeway and beyond by the Primary Regional Roads of South Street, Leach Highway and Canning Highway. Primary and Other Regional Roads running north/south are Stock Road and North Lake Road. An extensive network of local distributor roads connects these primary and secondary roads to the local suburban road network.

Leach Highway, Kwinana Freeway and Stock Road form major freight routes for trucks accessing the port at Fremantle. The potential extension of Roe Highway, a specialist freight route, is to be determined by State government.

7.4 Summary

As an inner-ring metropolitan municipality that was mostly developed over a 40-year period following WW2, the City of Melville has long established connections to all services. The City is also well serviced by roads, heavy rail, bus routes and cycling paths.

8. HOUSING ISSUES

There are important housing issues that need to be addressed in the housing strategy and beyond. The two standout issues are the lack of housing diversity and the high cost of housing. These issues are major factors in seniors' housing considerations.

A comprehensive data/literature review was undertaken as part of the *Local Housing Strategy*. The results of this review may be found under the various issue headings below. Another major part of the housing issues section comprises the results of the 2016 Housing Needs Survey.

8.1 Housing Needs Survey

In September and October 2016 a comprehensive survey of local housing issues was undertaken by the City of Melville of residents. Survey invitations were sent to all households in the City.

The survey was publicised online and by email.

Generally, it is recommended that surveys aim to reduce sampling error (or confidence interval) to +/- 5% at the 95% confidence level. For a population of 106,000 the required sample size would be 384, which would be rounded up to 400 people. It is noted that 400 is a common sample size in government surveys.

A total of 3,602 responses were received to the Housing Needs Survey. A confidence level of 99% with a confidence interval of +/- 2.11% (Creative Research Systems 2016) suggests the data are very accurate representations of the general population.

Data were analysed with Minitab data analysis software. A summary of the survey results is on the following page, in **Table 9**.

Table 9: Housing Needs Survey 2016 Results

Source: City of Melville

Theme	Strength of support for theme (Score range 1-5, where 5 indicates maximum support)	Suburbs most supportive (Score range 1-5, where 5 indicates maximum support)	Suburbs least supportive (Score range 1-5, where 5 indicates maximum support)	Other observations
1. Living close to work	Mean result of 3.476, suggesting moderate support	Ardross 3.603 Palmyra 3.576 Bull Creek 3.559	Winthrop 3.271 Murdoch 3.309 Bicton 3.323	Answers clearly correlated to age. Young people prefer living close to work.
2. Living within walking distance of public transport	Mean result of 4.008, suggesting very strong support	Bateman 4.198 Applecross 4.102 Bull Creek 4.269	Attadale 3.786 Willagee 3.726 Melville 3.910	All suburbs rated this theme highly. Most important to the 18-24 and 65-74 year old age cohorts. Note that the most interested suburbs are serviced by heavy rail. The <i>Local Planning Strategy</i> already recommends further work in these areas.
3. Living close to the shops	Mean result of 4.043, suggesting very strong support	Bull Creek 4.222 Palmyra 4.116 Brentwood 4.093	Attadale 3.888 Bateman 3.924 Mount Pleasant 3.941	All suburbs rated this theme highly. Most important for seniors aged 65+.

4. Living close to cafes, pubs, restaurants etc	Mean Result of 3.525, suggesting strong support	Melville 3.746 Ardross 3.738 Palmyra 3.723	Bateman 3.325 Leeming 3.353 Kardinya 3.414	Interest in living close to entertainment noticeably decreases with age, declining with each age cohort after 25-34. There is more interest in entertainment among those in 1 or 2 bedroom dwellings.
5. Living in a quiet area away from traffic	Mean result of 4.181, suggesting very strong support	Bicton 4.291 Ardross 4.289 Kardinya 4.284	Brentwood 4.027 Melville 4.076 Leeming 4.09	All suburbs rated this theme highly. Answers clearly correlated to age. Older residents prefer quiet areas.
6. Living in an area welcoming to seniors	Mean result of 3.525, suggesting strong support	Bull Creek 3.714 Murdoch 3.636 Applecross 3.613	Willagee 3.371 Alfred Cove 3.377 Palmyra 3.393	Answers clearly correlated to age.
7. Living in a Universal Access home	Mean result of 3.028, suggesting moderate support	Bull Creek 3.222 Murdoch 3.091 Applecross 3.094	Alfred Cove 2.883 Willagee 2.886 Myaree 2.898	Answer clearly correlated to age, as expected. More important for those in 1 or 2 bedroom dwellings.
8. Living close to playgrounds, parks and nature	Mean result of 4.157, suggesting very strong support	Bicton 4.295 Myaree 4.322 Willagee 4.246	Bateman 4.019 Leeming 4.023 Murdoch 4.055	Of increasing importance until the 35-44 age cohort. Past this age the theme steadily decreases in importance with age of respondent. Theme is most important to couples with children at home.
9. Living in a secure building complex	Mean result of 3.109, suggesting moderate support	Bull Creek 3.252 Bicton 3.226 Murdoch 3.218	Alfred Cove 2.890 Myaree 3.153 Willagee 3.017	Most important to 18-24 year old age cohort. Increases in importance for each age cohort after 35-44.
10. Living in a low maintenance home	Mean result of 3.505, suggesting strong support	Brentwood 3.827 Bateman 3.656 Bull Creek 3.647	Myaree 3.22 Melville 3.323 Willagee 3.366	An important issue for those aged 45 or older. An important issue for residents in 1 or 2 bedroom dwellings.
11. Living in a home with a large garden/backyard	Mean result of 3.143, suggesting moderate support	Winthrop 3.480 Willagee 3.446 Myaree 3.390	Brentwood 2.773 Murdoch 2.855 Mount Pleasant 2.886	Answers clearly correlated to age. Definite lessening of interest in big backyards after age 45.
12. Being able to subdivide	Mean result of 2.809, suggesting moderate support	Bateman 3.229 Bull Creek 3.068 Booragoon 2.949	Palmyra 2.528 Myaree 2.661 Melville 2.670	No clear correlation of age to answers. Importance does slightly increase with dwelling size of respondent.
13. Low cost, affordable housing for seniors/first home buyers in suburb	Mean result of 3.166, suggesting moderate support	Bateman 3.408 Kardinya 3.398 Willagee 3.382	Winthrop 2.819 Attadale 2.977 Applecross 2.297	Clear correlation of age to answers. Most important to 18-24 and 65 + age cohorts. Noticeably more support for theme among residents of 1 or 2 bedroom dwellings.
14. Two or three-storey townhouses	Mean result of 2.877, suggesting moderate support	Bateman 3.255 Brentwood 3.160 Bull Creek 3.012	Bicton 2.704 Winthrop 2.711 Palmyra 2.786	Very clear correlation of age to answers. Support for theme decreases in each age cohort after 18-24.
15. Four-storey (or higher) mixed-use buildings	Mean result of 2.177, suggesting low support	Bateman 2.535 Booragoon 2.343 Bull Creek 2.355	Bicton 1.919 Myaree 2.000 Melville 2.014	Very clear correlation of age to answers. Support for theme decreases in each age cohort after 18-24. Noticeably more support for theme among residents of 1 or 2 bedroom dwellings.

There is very strong support for the concept of housing close to public transport, shops and parks, and strong support for housing close to entertainment such as cafes and pubs. There is a very strong preference that the above housing not compromise quiet suburban areas.

Taken together, the data clearly show support for the general thrust of the *Local Planning Strategy*, with its emphasis on preserving suburban amenity (parks, quiet suburbs) while making efficient use of established activity centres and transport infrastructure.

8.2 Housing Diversity

As per section 6.1 of this report, there is a limited range of housing options in the City of Melville. In particular, in comparison to the rest of Perth, there are fewer apartments/small dwellings available.

There is a mismatch between dwelling type and/or size, and household size. Nearly half of all dwellings within the City are occupied by one or two people, however there is a limited number of one-bedroom and two-bedroom dwellings. There is also a higher number of larger dwellings.



Image 10: Housing diversity issues in Winthrop

In 2011 there were only seven 2-bedroom dwellings in the suburb of Winthrop. **Source:** City of Melville

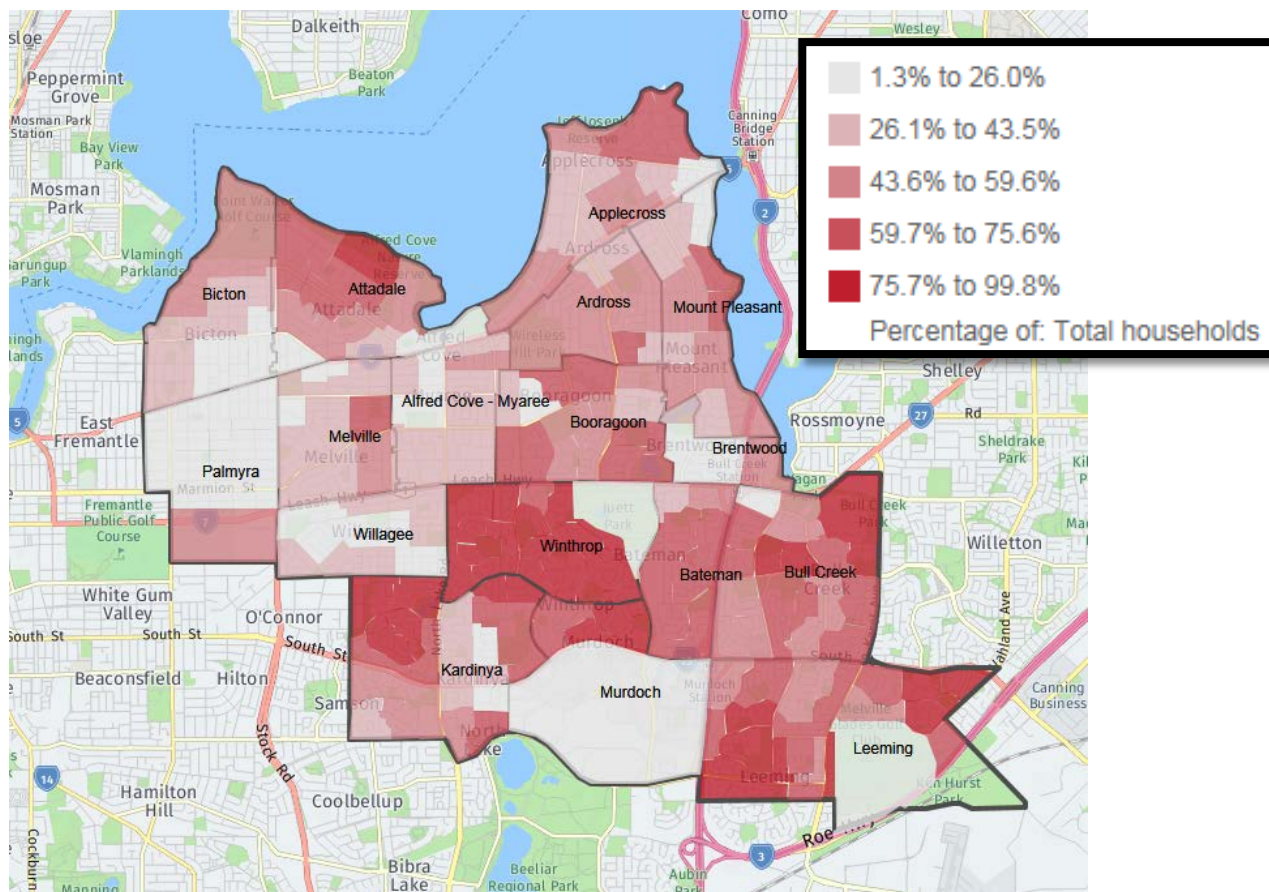


Figure 18: Dwellings with four bedrooms or more (2016)

Source: ABS and id

This suggests that the *Local Housing Strategy* should promote an increase in housing diversity. It is expected that recent density code changes brought into effect under LPS6 will cater for most demand for smaller dwellings in the medium term and will at the same time ensure that the amenity of quiet suburbs remains unaffected.

8.3 Housing Affordability

The high cost of housing is another major issue in the City of Melville.

8.3.1 Cost of land and construction

In earlier times land around Perth was cheap. Easily accessible land in inner-ring areas such as the City of Melville is now scarce and expensive.

Median house prices in suburbs of Melville are significantly higher than the median house price for the Perth Metropolitan Area. Willagee and Palmyra have the lowest median house prices. However, both suburbs are well above the Perth Metropolitan figures for these indices. Applecross and Attadale have the highest median house prices in the City. See **Table 10** below.

Table 10: Median Price All House Sizes – City of Melville Suburbs Compared to Perth Metropolitan Area (July-September 2017)

Source: [REIWA Website](#) accessed 1 February 2018

Suburb	Median Price All House Sizes July-September 2017
Alfred Cove	\$740,000
Applecross	\$1,600,000
Ardross	\$1,000,000
Attadale	\$1,185,000
Bateman	\$715,500
Bicton	\$955,000
Booragoon	\$850,000
Brentwood	\$644,000
Bull Creek	\$690,000
Kardinya	\$630,000
Leeming	\$655,000
Melville	\$785,000
Mount Pleasant	\$1,020,000
Murdoch	\$668,444
Myaree	\$720,000
Palmyra	\$611,000
Willagee	\$531,500
Winthrop	\$860,000
Perth Metropolitan	\$512,000



Image 11: High-cost housing in the City of Melville

Applecross has some of the most expensive housing in the state. Source: City of Melville

The cost of renting a dwelling within the City of Melville is higher than the Perth Metropolitan median in all suburbs except for Kardinya. The suburbs of Murdoch, Willagee and Kardinya offer the most affordable rental homes. Ardross and Applecross are the most expensive Melville suburbs in which to rent houses.



Image 12: Lower-cost housing in the City of Melville

Willagee offers the most affordable housing in the City. **Source:** City of Melville.

Table 11: Median Weekly House Rental for All House Sizes – City of Melville Suburbs Compared to Perth Metropolitan Region (July-September 2017)

Source: [REIWA Website](#) accessed 1 February 2018

Suburb	Median Weekly Rental, All House Sizes July-September 2017
Alfred Cove	\$430.00
Applecross	\$523.00
Ardross	\$505.00
Attadale	\$415.00
Bateman	\$425.00
Bicton	\$400.00
Booragoon	\$425.00
Brentwood	\$403.00
Bull Creek	\$430.00
Kardinya	\$350.00
Leeming	\$425.00
Melville	\$445.00
Mount Pleasant	\$485.00
Murdoch	\$369.00
Myaree	\$425.00
Palmyra	\$380.00
Willagee	\$365.00
Winthrop	\$485.00
Perth Metropolitan	\$360.00

The drop in house prices/rents over 2015/2016 has not improved affordability for those in the bottom two quintiles of income (Duncan et al 2016). Many Melville seniors are in these income categories.

The cost of housing construction has also increased. According to the ABS, between 1987 and 2012 the average cost of building a new house (land price and landscaping costs excluded) in Australia increased four-fold (Allianz Australia 2016). Some of these increasing costs are the simple function of much larger average home size, which has risen from 162.4m² in 1984/5 to 248m² in 2008/9. Nevertheless, the rate of annual cost-of-build increase has been consistently greater than the rate of average house size increase (ABS 2009).

Western Australia has proven one of the most expensive Australian states in which to build, with the cost of new housing 4.3 times higher than that for 1987/8.

Table 12: Cost of Building Figures, State by State 1987-2011

Source: Australian Bureau of Statistics, 2012

Australian State/Territory	Cost of building 1987-8 (\$)	Cost of building 2011-12 (\$)	Times more expensive over 24 years
Australian Capital Territory	75,696	315,524	4.2
New South Wales	85,345	313,132	3.6
Northern Territory	79,819	346,224	4.3
Queensland	70,999	297,448	4.2
South Australia	67,880	227,069	3.3
Tasmania	63,426	246,555	3.9
Victoria	82,321	273,890	3.3
Western Australia	69,558	295,851	4.3



Image 13: Trend towards larger homes

According to the ABS, the average size of a new home in Perth is more than 248m², which is more than 80m² larger than the average size in 1984/5. **Source:** City of Melville

As nothing can be done by local governments about the price of land, the single most effective way for the City to improve housing affordability is to plan for higher densities around transport hubs and town centres (Judd et al 2014, WALGA 2015). As there is evidence that government fees/charges/development requirements can add to the cost of housing, some simple suggestions are offered in section 8.3.3.

This particular approach is well supported by the WAPC. Section 7.1 of *Perth and Peel @ 3.5 Million* (WAPC 2015) stresses increased housing diversity as a potential solution to housing affordability issues. Section 7.4.1 of *Directions 2031 Central Sub-regional Strategy* (WAPC 2010) states that planners should simply encourage a range of housing so that people have greater choice of housing form and cost. The document also recognises that the planning system has little direct influence on private household expenditure, which is determined by the individuals and the market.

8.3.2 Housing stress

Housing Stress is defined as per the NATSEM (National Centre for Social and Economic Modelling) model as households in the lowest 40% of incomes who are paying more than 30% of their usual gross weekly income on housing costs.

Housing affordability is a significant issue if mortgage and rent payments rapidly increase as a share of income. Housing stress is particularly acute for those on fixed incomes such as pensions or unemployment benefits.

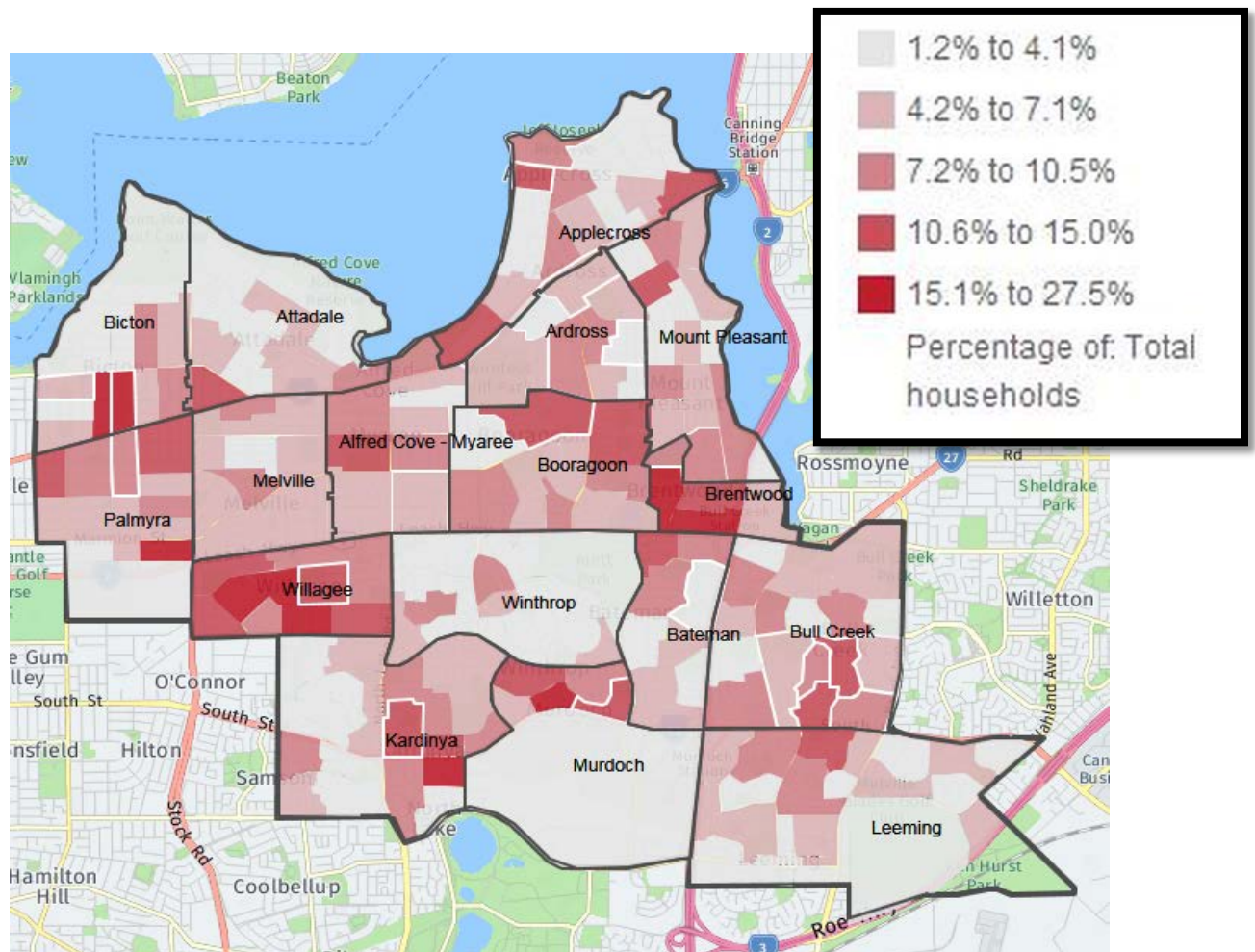


Figure 19: City of Melville Households in housing stress (2016)

Source: ABS and id

In 2011, 6.2% of the City of Melville's households were experiencing housing stress compared to 9.0% of households in Greater Perth.

While the City of Melville generally had a lower proportion of households experiencing housing stress, there was considerable variation across the City. Proportions ranged from a low of 2.9% in Winthrop to a high of 12.2% in Murdoch.

The five areas with the highest percentages of households in housing stress were:

- Murdoch (12.2%)
- Willagee (10.9%)
- Brentwood (9.7%)
- South West Melville (7.9%)
- Palmyra (7.7%)

The figure for Murdoch is not surprising given the number of full-time students living within walking distance of Murdoch University. Duncan et al (2016) suggest that figures for the other four areas might reflect higher percentages of renters on fixed incomes.

As the City does not intend to improve housing affordability with direct subsidies, the single most effective way for the City to help is planning for higher densities around transport hubs and town centres (Dockery et al 2015, Judd et al 2014, WALGA 2015). Doing so would enable more people to find accommodation of the right size for their stage of life close to public transport.

Improvements in housing stress data could be expected to gradually follow in these areas.

On a positive note, it should be emphasised that not all cases of housing stress are unsustainable. Duncan et al (2016) quotes ample research showing that households who trade off inner-city locations for cheaper land and larger homes on the outskirts of Perth proportionally increase their transport costs and realise little or no financial gain. Inner-city households may be devoting higher percentages of their incomes to housing – even to the point of crossing the housing stress threshold - but they are saving substantially on transport. Once again, the policy of planning for higher densities (meaning smaller, more affordable dwellings) around transport hubs and town centres (meaning proximity to public transport, places of work and so on) could assist those who are prepared to trade off dwelling size for a more convenient inner-city location.

8.3.3 Effects of government fees/developer requirements on housing prices

In 2008, the Reserve Bank of Australia addressed the topic of housing costs in Australia as follows:

Economic theory and international evidence suggest that housing prices can be boosted by land usage policies (which can create artificial scarcity of residential-zoned land), problems with the complexity of the development process (which creates rents), and the fees and charges imposed on development (Reserve Bank of Australia 2008).

At the local level, the main issues are likely to be fees and charges, developer requirements (such as parking and public art), and delays in the approvals process.

There is ample evidence that the cost of housing is increased significantly by parking minimums (Litman 2016). The City's *Car Parking Strategy* (adopted in June 2014), recognises the connection between government requirements and development costs already:

Car parking is commonly perceived to be “free” as motorists don’t usually need to pay a direct cost to park their car. However, car parking is never free as governments or businesses must pay for the cost of providing and maintaining car parks as well as absorbing the opportunity costs for the land required to provide parking.

The direct costs of parking are included in everyday expenses such as higher development costs, higher consumer prices and/or high taxes and rates.

A breakdown of parking costs is provided below. Note the cost per bay, which should be compared to the cost of the dwelling with which it is associated. An off-street surface bay provided for a \$400,000 apartment represents around 18% of the total price.

Table 13: Estimated Costs of Providing Car Parking in City of Melville Activity Centres

Source: Luxmoore Parking and Safety 2013

Type of parking	Land area per bay	Land cost	Floor space (incl turning areas) per bay	Construction costs per bay	Total cost per bay
On-street surface	15m ²	\$0	N/A	\$3,500	\$3,500
Off-street surface	35 m ²	\$70,000	35 m ²	\$3,500	\$73,500
Deck 2 level	16 m ²	\$32,000	32 m ²	\$31,000	\$63,000
Deck 4 level	8 m ²	\$16,000	32 m ²	\$34,000	\$50,000
Basement 2 level	8 m ²	\$16,000	32 m ²	\$44,000	\$60,000

Residential parking requirements are set by the *R-Codes*, which are produced by the state government. Nevertheless, in mixed-use areas of activity centres there are opportunities for the City to accommodate reciprocal parking and other initiatives that could lead to lower housing costs. It is recommended that these alternatives be seriously considered where possible.

Delays in the approvals process may sometimes add to development costs but they are not necessarily the result of flaws in local government. It would be better for the *Local Housing Strategy* to concentrate on flexible approaches to parking and public art.

8.3.4 Ancillary dwellings and small dwelling alternatives

Ancillary dwellings (also known as granny flats) are small, self-contained dwellings located on the same lot as another single house.

Sometimes the dwellings are attached to the main house or integrated into the main house. Commonly, ancillary dwellings are a separate building from the main house. Ancillary dwellings are typically between 50-80m², comparable in size to two-bedroom apartments.



Separate dwelling

You can build a separate dwelling on your lot that is completely detached from the main home.

Convert an existing home

You can convert part of your existing home into an ancillary dwelling by separating one part of the house.

Extend your existing home

You can extend your current home by building an addition such as an extra room or, in the example provided, adding a second storey above a garage

Figure 20: Types of ancillary accommodation

Source: Housing Authority Ancillary Dwellings Fact Sheet

Typically, an ancillary dwelling will have facilities, such as a small kitchen, laundry and bathroom, that allow one or two occupants to live in them independently.

Recent changes to the *R-Codes* have made it possible to rent ancillary dwellings to non-family members. The relatively low-cost nature of ancillary dwellings (many are less than \$100,000) offers housing opportunities within the financial reach seniors, students or private tenants.

As ancillary accommodation is limited to lots of at least 450m², there is the potential for them to improve housing affordability in suburban areas which are otherwise unlikely to be redeveloped with smaller homes.

In the City of Melville there are no restrictions on these dwellings beyond the *R-Codes*.

Data on the numbers of ancillary dwellings being approved is difficult to accurately capture as many of them are incorporated into other development types. City officers report that the number has increased since the changes to the *R-Codes*. Officers also report that the dwellings are no more associated with amenity issues than other development types.

As of October 2017 the most innovative Western Australian local government approach to small dwellings is the City of Fremantle's *The Freo Alternative*. This project contemplates allowing the land under/around an ancillary dwelling to be subdivided from the parent lot and owned by a separate party. Residents, developers and the state government are still engaging with the City of Fremantle over *The Freo Alternative* and the project is some way from completion. City officers will monitor the progress of *The Freo Alternative* as it may yield important developments over the coming years.

For now, however, it is recommended that the City continue its practice of following the *R-Codes* with regard to ancillary dwellings.

8.3.5 Baugruppen, co-housing and the Nightingale Model

Baugruppen housing is a model in which a group of private owners design and build their own development. There is no formal difference between the Baugruppen concept from its co-housing counterpart, though Baugruppen are more associated with urban environments and are typically multi-storey, multi-family buildings rather than detached houses.

Central to both models is a communal style of living that could potentially save on construction costs. Typical building features include common kitchens, laundries, tool sheds, children's playgrounds and so on.



Image 14: Townhouse style co-housing
 Showing common green space and shared playground
Source: Livewell Co-Housing

Baugruppen developments are becoming more popular overseas and the concept is slowly gaining ground in Australia. As of June 2017, several Baugruppen buildings have been approved by the City of Fremantle, including one in Landcorp's White Gum Valley development. There are no impediments to Baugruppen or co-housing in the City of Melville.

The Nightingale model typically offers a custom-designed, eco-friendly product that is similar to Baugruppen housing. These developments are characterised by the Nightingale Housing Model licence. Under this licence the development is funded by investors whose returns are capped, which keeps apartment prices below normal market value.

Nightingale projects incorporating co-housing elements like shared kitchens, laundries etc and are usually built on land with good access to public transport.

Land costs across much of the City of Melville are probably too high for Nightingale projects, but there is potential in suburbs like Willagee and Brentwood. These suburbs would be ideal for Nightingale projects as they are currently associated with higher levels of housing stress.

There are no impediments to Nightingale projects in the City of Melville.

8.4 Seniors' Housing

8.4.1 Ageing population

Australia's population is ageing. This is partly due to an increase in life expectancy as a result of improved health care/preventative health measures, and partly due to the low birthrates which have occurred since the 1970s.

In Western Australia, the WAPC predicts that the population of Perth will be 3.2 million by 2022, an increase of 50% from the 2012 population of Perth.

Forecast id projects that the City of Melville's population will increase from 106,771 (2016) to 128,415 by 2036. Over this time the number of over 55s would increase by 11,598.

Table 14: Forecast age structure - 5 year age groups 2011 to 2036

Source: id

City of Melville - Total persons	2011		2026		2036		Change between 2011 and 2036
Age group (years)	Number	%	Number	%	Number	%	Number
0 to 4	5,218	5.1	5,947	5.0	6,446	5.0	+1,228
5 to 9	5,497	5.4	6,335	5.4	6,812	5.3	+1,315
10 to 14	6,094	6.0	6,899	5.9	7,391	5.8	+1,297
15 to 19	7,402	7.2	7,885	6.7	8,461	6.6	+1,059
20 to 24	8,244	8.1	8,208	7.0	8,920	6.9	+676
25 to 29	6,347	6.2	7,067	6.0	7,758	6.0	+1,411
30 to 34	5,337	5.2	6,659	5.6	7,274	5.7	+1,937
35 to 39	6,281	6.1	7,428	6.3	8,053	6.3	+1,772
40 to 44	6,930	6.8	8,064	6.8	8,715	6.8	+1,785
45 to 49	7,404	7.2	8,197	7.0	8,865	6.9	+1,461
50 to 54	7,670	7.5	7,760	6.6	8,412	6.6	+742
55 to 59	7,134	7.0	7,047	6.0	7,624	5.9	+490
60 to 64	6,227	6.1	6,597	5.6	6,874	5.4	+647
65 to 69	4,568	4.5	6,135	5.2	6,135	4.8	+1,567
70 to 74	3,398	3.3	5,486	4.7	5,702	4.4	+2,304
75 to 79	3,039	3.0	4,672	4.0	5,275	4.1	+2,236
80 to 84	2,732	2.7	3,494	3.0	4,501	3.5	+1,769
85 and over	2,613	2.6	3,988	3.4	5,198	4.0	+2,585
Total persons	102,135	100.0	117,869	100.0	128,415	100.0	+26,280

As section 8.4.3 explains, the number of expected seniors has significant implications for the housing market.

8.4.2 Housing issues for local seniors

Consultation with local seniors via surveys and workshops in 2016 shows a correlation between housing issues and age. For example, the graph below plots responses by age cohort to the question "Living in a home with a big backyard is important to me." The graph shows that respondents aged 45 and older are increasingly inclined to place less value on big backyards. This could suggest unmet demand for homes on lots that are smaller than the standard in Melville.

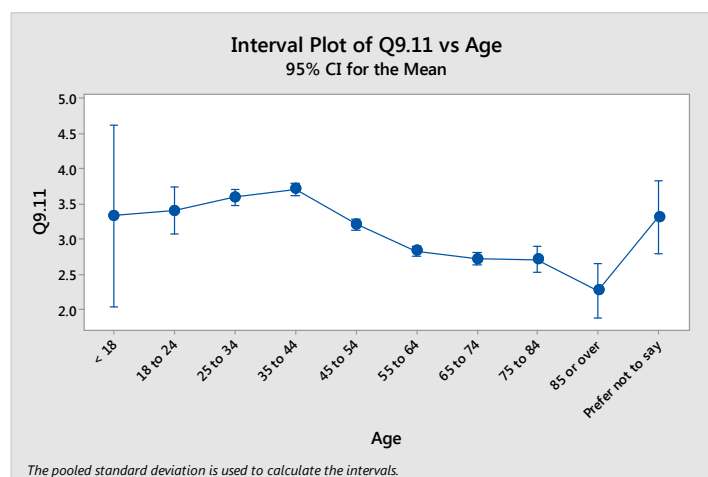


Figure 21: Responses by age cohort to Housing Needs Survey Question: "Living in a home with a big backyard is important to me" (September-October 2016)

Source: City of Melville

Data also show plainly that the same age groups value low-maintenance homes more and more with age:

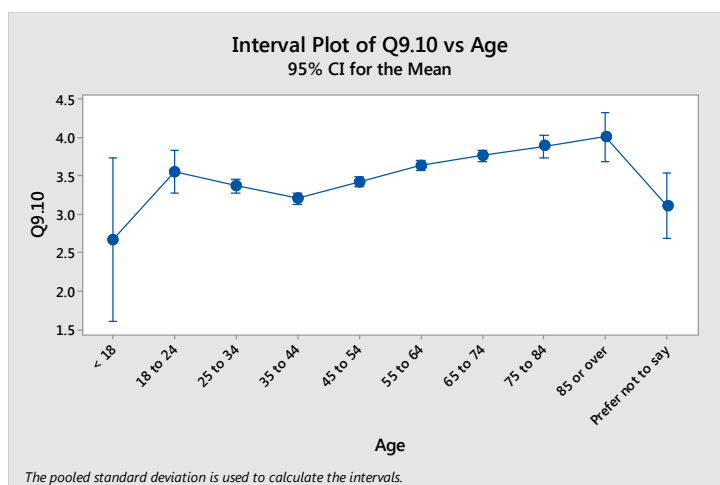


Figure 22: Responses by age cohort to Housing Needs Survey Question: "Living in a low maintenance home is important to me" (September-October 2016)

Source: City of Melville

Once again, the trend could suggest unmet demand for new homes on lots that are smaller than the standard in Melville. The survey results are fully detailed in Appendix 2.

Overall, the Housing Needs Survey results and other consultation with local seniors indicate housing issues that are similar for seniors all over the country (WALGA 2015, Annand et al 2015). There are issues with downsizing in particular. The chief barrier to downsizing is clearly the lack of suitable housing stock in familiar, accessible locations, with many seniors considering their downsizing options to be inappropriate, unaffordable or unsuitably located (Judd et al 2014).

In this regard the City of Melville is making progress already. According to a 2014 Australian Housing Urban Research Institute survey (published in Judd et al 2014), the "dream downsizing home" is:

1. Smaller in size, along with having a more manageable yard, than the current home
2. Easy to access and to move around in, and preferably with only one level
3. A lifestyle improvement, particularly in terms of good entertaining areas
4. Close to shops, health services and public transport
5. Located in an area which desired by the downsizers, often close to where they currently live
6. Something which delivers financial savings, as a result of discharging a mortgage or collecting capital gain
7. Alongside likeable neighbours

A good part of the "downsizing wish list" is anticipated in the City's strategic approach to housing density, which encourages smaller homes in close proximity to transport and activity centres. It is acknowledged however that compulsory universal design (under item 2) may worsen affordability, and that councils can do little to regulate the interpersonal dimension of housing under item 7.

Through its Seniors Assistance Fund (SAF), the City does already offer limited financial help to seniors who require small-scale, access-related modifications to their homes (such as ramps and handrails) or gardens. Officers report that demand for resources

from the SAF far outstrips supply. The scale of demand probably reflects preference of many seniors to remain in their homes as long as possible as much as it reflects the lack of downsizing options.

Other barriers to downsizing include emotional attachments to the family home, confusion over ownership models/lease arrangements in retirement homes, fixed incomes of retired seniors making obtaining finance more difficult, and the cost and stress of moving (Annand et al 2014, Judd et al 2014, Kelly et al 2015). The City is not contemplating direct action in these areas, though it is noted that community development staff regularly refer local senior citizens to agencies/not-for-profits who do.

Housing affordability looms as a major issue for many local seniors. First and foremost, not all seniors are homeowners. Data clearly show the rate of home ownership among seniors is dropping. Many enter retirement with few assets and will be forced to rent while on fixed incomes (Dockery et al 2015). More generally, as the cost of land in the City of Melville is significantly higher than the rest of Perth on average, downsizing options can be just as expensive as the original home. Smaller homes (apartments and ancillary dwellings) require less land and fewer materials, and are perhaps the single most effective solution if built in sufficient quantities. Small dwellings close to transport and activity centres offer opportunities for low income households to save on transport costs as well. Section 8.3 of this strategy covers affordable housing in more detail.

8.4.3 Retirement villages and alternatives

The proportion of seniors who wish to move into retirement villages or nursing homes is fairly low, around 5.7% (Property Council 2016). The likely implication for providers of specialised seniors' housing within Melville is an increase in demand that outstrips supply, with an extra 661 retirement village units required by 2036,* but very little land on which to build.

Some of the local retirement villages are already offering apartments, or including apartments in their upcoming redevelopments. Development of this type means an increase in the number of retirement village units without the need for more land. It is too early to know what percentage of demand these apartments will cater for.

***NOTE:** projections suggest 11,598 additional over 55s are expected in the City of Melville by 2036. Unit numbers are based on 5.7% of this figure, as per demand rates provided by the Property Council in 2016.



Image 15: Seniors' homes

Apartments for seniors at St Ives Murdoch. **Source:** City of Melville

Given the scarcity of sites suitable for new seniors' housing complexes, alternatives should be explored. Suggested solutions (adapted from Dockery et al 2015, Housing Authority 2016) include:

- home support and transport services to older residents to enable ageing in place
- improving education of seniors (or pre-seniors) about housing options
- recognising the connection between land use planning, walkable lifestyles and health
- encouraging Universal Design so as to future proof more homes
- encouraging ancillary dwellings in low density areas
- allowing development of aged and dependent persons' dwellings on smaller lots

Once again, the single most effective way for the City to accommodate the above suggestions is planning for higher densities around transport hubs and town centres. Doing so enables more people to find accommodation of the right size for their stage of life close to public transport.

Recent changes to the R-Codes and the City's planning scheme allow for ancillary dwellings and aged/dependent dwellings in a good range of suburban contexts. Home support, transport and education programs are already provided by the City of Melville and several local not-for-profits.

Aged care facilities are considered of benefit to the community under element 22 of the Canning Bridge Activity Centre Plan. This plan may encourage the provision of several such facilities (within mixed-use developments) in the Canning Bridge area over the long term.

Mixed-use development on retirement village sites may also become more popular over time. Examples of compatible land uses could include community facilities (such as Men's Sheds) or small-scale dining establishments (such as small cafes) that do not compromise the residential amenity of the village or surrounding areas. Ideally these activities would be accessible to the wider public, not just village residents. For any retirement village site, Council could entertain, advertise and support/not support mixed-use suggestions on their merits as part of a Local Development Plan.

8.5 Environmentally Sustainable Design

A broad term, Environmentally Sustainable Design (ESD) aims at reducing the negative impact of development on the environment. Typical ESD considerations include:

- optimising site potential
- minimising non-renewable energy consumption
- using environmentally friendly products
- using energy and water efficient appliances
- reducing potable water use
- improving indoor environmental quality
- optimising operations and maintenance

There are many ways to incorporate the above considerations into new buildings. The best-known are discussed below.

8.5.1 Green Star-rated Buildings

Green Star is a voluntary sustainability rating system for Australian buildings. The process is administered by the Green Building Council of Australia and is designed to verify the environmental performance of large-scale office and residential developments.

Projects are formally assessed in nine categories: Management; Indoor Environment Quality; Energy; Transport; Water; Materials; Land Use & Ecology; Emissions and Innovation. A building's total score is then translated into a rating as per **Table 15** below.

Table 15: Green Star Building Rating System

Source: Green Building Council of Australia

Score	Rating	Category
10-19	One Star	Minimum Practice
20-29	Two Star	Average Practice
30-44	Three Star	Good Practice
45-59	Four Star	Best Practice
60-74	Five Star	Australian Excellence
75+	Six Star	World Leadership

Nationally recognised, the system allows comparisons between buildings across Australia. As the standards of assessment are high, there is some assurance that the buildings will perform as expected.

The Canning Bridge Activity Centre Plan (CBACP) specifies that new development in the Canning Bridge precinct needs to achieve a minimum four-star rating from the Green Building Council. Five-star ratings are required for development bonuses under element 21. As of June 2017, three of the largest development approvals for buildings under the CBACP (Cirque, The Precinct and Finbar Applecross) have met this five-star requirement.

The single biggest barrier to more extensive use of the Green Star system is expense. As costs are ultimately borne by residents and not by the developers, Green Star ratings should be sought with caution where housing affordability is an issue.

8.5.2 Life Cycle Assessments

Life Cycle Assessment (LCA) measures the full environmental impact of a development from the extraction of raw building materials through to construction methods and long term building performance.

LCAs work best as an aid to design. While more comprehensive than Green Star ratings, LCAs necessarily model around assumptions. The assumptions are sometimes difficult to uphold and the appropriateness of LCAs for compliance should be questioned.

8.5.3 Other green building systems

Green building systems popular in other parts of the world include LEED (USA), Living Building Challenge (USA), BREEAM (UK), HQE (France), CASBEE (Japan), BCA Green Mark (Singapore) and DGNB (Germany). These systems are well known but are of limited utility to local developers.

8.5.4 Baugruppen and co-housing

As section 8.3.5 of this strategy explains, Baugruppen housing is a model in which a group of private owners design and build their own development. There is no formal difference between the Baugruppen concept from its co-housing counterpart, though Baugruppen are more associated with urban environments and are typically multi-storey, multi-family buildings rather than detached houses.

Central to both models is a communal style of living that could potentially meet many ESD aspirations. Typical building features include common kitchens, laundries, tool sheds, children's playgrounds and so on.

Baugruppen developments are becoming more popular overseas and the concept is slowly gaining ground in Australia. As of June 2017, several Baugruppen buildings have been approved by the City of Fremantle, including one in the White Gum Valley development. There are no impediments to Baugruppen or co-housing in the City of Melville.

8.5.5 Nightingale Model

The Nightingale model offers custom-designed, eco-friendly dwellings similar to Baugruppen housing. These developments are characterised by the Nightingale Housing Model licence. Under this licence the development is funded by investors whose returns are capped, which keeps apartment prices below normal market value.

Nightingale projects very often score high on ESD measures, incorporating co-housing elements like shared kitchens, laundries etc and usually being built on land with good access to public transport.

Land costs across much of the City of Melville are probably too high for Nightingale projects, but there is potential in suburbs like Willagee and Brentwood. There are no impediments to Nightingale projects in the City of Melville.

8.5.6 Building Codes of Australia

Many ESD principles are covered under The Building Codes of Australia. The codes stipulate energy efficiency requirements for insulation, glazing and building materials and even appliances. Passive solar design is also an important concept in the codes.

The codes prescribe Australia-wide minimum standards for building permits. As such the codes are not an appropriate instrument for Councils to use for ESD in planning approvals.

8.5.7 Local Planning Policy 1.5

Local Planning Policy 1.5 Energy Efficiency in Building Design describes design principles for the construction of energy efficient buildings within the City of Melville. Under this policy, developers are encouraged to consider passive solar principles, climate control landscaping and water saving initiatives (such as rainwater tanks and greywater systems).

8.6 Lack of Mixed-Use Developments

At present there are only a few true mixed-use residential developments within the City. One example is the Queens Road centre in Mount Pleasant.



Image 16: Mixed-use development

Mixed-use development in the Queens Road local centre, Mount Pleasant. **Source:** City of Melville

Nevertheless, there is some indication of an increasing appetite for apartments in the Perth housing market. The number of mixed-use development applications received by the City of Melville reflects this trend.

The year 2015 saw five or six mixed-use development proposals approved by the state government Development Assessment Panels. The Canning Bridge precinct has attracted the three largest development proposals, which together include a total of approximately 900 apartments. Other mixed-use development proposals have been received for properties in the Riseley Centre.

There are a number of social, economic and environmental benefits of well-designed, well-located mixed-use developments. LPS6 and the plans for the Canning Bridge precinct, Riseley Centre, Melville District Centre, Booragoon secondary centre and Willagee provide the kind of planning framework that can secure these benefits.

8.7 Streetscapes, Character and Amenity of Residential Areas

The City is well known for its green streetscapes and its low-key, suburban atmosphere. As the 2016 Housing Needs Survey and other work make clear, these qualities are highly prized by residents. Babb (2017) cites ample evidence that good design is critical to the overall quality of development in these contexts. It is important that the strategy encourages infill development in harmony with the relevant local character.



Image 17: Low-density character

Large homes in low-density areas are common across the City of Melville. **Source:** City of Melville

The issue of neighbourhood-conscious design is particularly important for multiple dwelling projects in suburban settings, such as the R40/60 areas in parts of Willagee, where there are often fears that new developments will negatively affect the streetscape. There are several methods of ensuring apartments are context-responsive in these circumstances. Within Willagee, for example, clause 6.1.1 of the Willagee Structure Plan lists design requirements that specify quality building finishes, adequate open space, staggered facades and the screening of bins and car parking from public view. Outside Willagee, it can be expected that *State Planning Policy 7.3 Design WA Apartment Design Guidelines* (due to take effect in late 2017) will improve the quality of all multiple dwelling developments. A draft version of the policy lists detailed objectives for the following design elements and more:

- Building envelopes and setbacks
- Streetscape considerations
- Tree retention
- Communal/public open space
- Public domain interface
- Pedestrian access
- Facades
- Landscape design

There is ample evidence that the above approach is best practice for urban planners. For example, Babb's 2017 article *Delivering Quality Infill Development in Perth* notes the centrality of good design to quality infill and suggests several policy directions that are consistent with *Design WA*: firstly, allowing developers to better respond to neighbourhood/site environments, and balancing yield with the preservation of green space, privacy and other suburban amenities. Datta's 2017 paper *Innovative Architectural Design: A key to sustainable infill development for Greater Perth* prescribes an approach in which the spatial performance of a development is paramount, rather than its compliance with regulatory codes.

Babb goes further, stressing the seldom-recognised role of quality streets in best practice urban infill. Ideally, streets would be upgraded as part of (or relatively concurrent with) each significant infill project. Streets could be reconfigured as low-speed environments for people rather than cars, rich with detail such as landscaping, public art and other enhancements. It is beyond the scope of the *Local Housing Strategy* to cover a public-realm subject such as streets in detail, but the strategy ought to recommend that the City continue with its planned demonstration projects. The strategy should also flag the integration of street enhancements into urban infill projects as a topic worthy of further investigation.

Design review panels are also effective at improving the way multiple dwelling developments fit in with their neighbourhoods. In the City of Melville all proposals for 10 or more apartments are automatically referred to the local design review panel as part of the formal assessment process. Grouped dwelling developments of concern to planners can be referred to the design review panel at any time.

Section 9.1.5 covers multiple-dwelling density issues in greater detail.

8.8 Heritage

Developed mostly in the post-war years with simple suburban housing, the City of Melville is better known for its parks than for built-form heritage. Sites of high heritage value, such as Heathcote and the Tivoli Theatre in Applecross, and Miller's Bakehouse

in Palmyra, are not suitable for residential development in any event.

The Local Government Inventory (also known as the Municipal Heritage Inventory) was comprehensively overhauled before adoption in June 2014. There are 69 places on the inventory. Intended as more of a source of heritage advice than a protection mechanism, the inventory does not limit the redevelopment of any residential property except for those already on the State Register of Heritage Places.

The Heritage List is part of LPS6 and comprises the best places on the Local Government Inventory. While these places are considered worthy of more management than those merely on the inventory, owners retain access to a wide range of development options. There are 35 places on the LPS6 Heritage List. Only 15 of these places would be suitable for residential development.

The effect of heritage on the housing strategy is negligible.

8.9 Lack of City-Owned and/or Controlled Land

As of January 2017, the only City-owned property deemed officially suitable for residential use is the Carawatha site in Willagee. A concept plan outlining the residential development principles appropriate for the site was adopted by Council in December 2013 as part of the *Willagee Structure Plan*.

Other sites, such as the Mount Pleasant Bowling Club in Ardross, are being investigated for their residential potential but the likelihood of eventual development is uncertain at the time of writing. In most cases the yields would be insignificant.

The housing strategy should not depend on the availability of City-owned land for residential development.

8.10 Developer Contributions

The City does not have greenfield sites in need of new infrastructure such as services, roads, drainage, open space, schools, footpaths, community facilities and recreation centres. Population growth will be accommodated by infill development, which typically requires that infrastructure be gradually upgraded. Liaison with service authorities at the time of review of the Local Planning Scheme or the preparation of activity centre plans enables providers to anticipate demand.

The state government is responsible for most sub-surface infrastructure. Local governments typically provide drainage, footpaths, public art, street trees, street furniture, parks, libraries, sports facilities and public toilets.

In Western Australia, development contributions for state-government infrastructure is part of the planning system. The state planning framework also provides for developer contributions for providing or upgrading local government infrastructure.

Local governments face increasing pressures on services as a result of population and economic growth and from increasing community expectations.

Development contributions are normally imposed as conditions of subdivision, strata-subdivision or development approval. In cases of fragmented ownership where cost sharing arrangements are necessary, development schemes can be prepared and implemented or development contribution arrangements can be introduced under local government schemes.

8.11 Summary

- The Housing Needs Survey confirms support for the general principles of the *Local Planning Strategy* and LPS6
- There is a mismatch between dwelling type and/or size, and household size. Nearly half of all dwellings within the City are occupied by one or two people, however there is a limited number of one-bedroom and two-bedroom dwellings. There is also a higher number of larger dwellings
- Median house prices in all suburbs of Melville are significantly higher than the median house price for the Perth Metropolitan Area
- The City should continue encouraging ESD practices
- LPS6 encourages mixed-use developments in strategic areas. These developments are proving viable and more should be encouraged
- Suburban amenity is important to local residents. New development needs to respect local character and amenity
- Heritage is not expected to prove a hindrance to infill
- There are no greenfield sites in the City of Melville and only a limited number of City-owned sites
- The City has elected not to pursue developer contributions

9. STRATEGIC ANALYSIS

9.1 Constraints on the City's Ability to Increase Housing Choice

9.1.1 Predominance of R20 coding

R20 coding has been the predominant coding in Melville for many years. Large parts of some areas, such as Attadale north of Swan Road, are coded even lower. Many of the residents in these low-density areas have made their expectations of suburban amenities like trees and big gardens very clear.

A rationale for upcodes is provided in section 10 of this strategy.

In any event, high proportions of properties in low-density areas are too distant from public transport to warrant upcoding. Some of the lower density areas comprise culs-de-sac and the irregularly-shaped lots associated with them. These tend not to deliver medium density housing effectively as the streets are not conducive to walking/cycling and the irregularly-shaped lots are harder to develop.

One of the objectives of this Housing Strategy is to ensure that a wide range of housing is provided. For many families within the City of Melville, low-density suburban housing is the most appropriate type. As the range of housing can be increased by focusing development in strategic areas close to centres and transport, it is considered better to leave most parts of most suburbs at low densities.

In most cases the low-density codings ought to be considered major constraints.

The strategy of concentrated change has met with widespread community support.



Image 18: Low-density character

Neighbourhoods comprising low-density housing in culs-de-sac score poorly on walkability measures. Note the absence of footpaths, which are difficult to justify in this context. **Source:** City of Melville

9.1.2 Lack of Undeveloped Large Sites

Owing to its established nature, the City offers very few undeveloped (or seriously underdeveloped) sites of more than 2,000m².

The housing strategy should not rely on these being available.

9.1.3 Industrial Areas

Industrial zones in Myaree, Booragoon and Kardinya cover a large area but are not suitable for residential development of any kind.

The housing strategy should not consider industrial areas available for re-zoning.

9.1.4 River Foreshores

Most residential land along the Swan River and Canning River foreshores is coded R12.5. There is little appetite for significantly increasing densities in these areas and there would be little gain for the City as most are distant from public transport.

Moderate increases in density could be supported at the next Scheme review.

With the exception of land covered by structure plans/activity centre plans, the housing strategy ought to consider these areas off limits for high density.

9.1.5 Multiple-Dwelling Density Issues

As mentioned in other sections of the *Local Housing Strategy*, residents greatly value the low-key, suburban character of many areas. There is sometimes concern over the potential effects of multiple dwelling developments on the quiet amenity of suburbs.

Recently, several planning controls aimed at limiting the impact of multiple dwelling developments have been discussed in detail by the Council. Foremost among these was the potential re-introduction of multiple dwelling site area minimums for Residential R40 (and lower) lots outside activity centres and high frequency transport corridors. In June 2017 Council elected not to pursue this approach for the following reasons:

- *Planning Bulletin 113 July 2015* provides WAPC guidance on scheme amendment proposals that seek to control multiple dwelling developments in R40 coded areas. The bulletin makes clear that the WAPC would not support the prohibition of multiple dwellings from areas within 800m of a rail station, strategic metropolitan centre, secondary centre, district centre or specialised activity centre. Planning Bulletin 113/2015 also suggests that apartments are considered appropriate for all R40 areas within 200m of public open space, 400m of local or neighbourhood activity centres and 250m of high-frequency bus routes. It would be difficult for Council to impose bespoke restrictions on multiple dwellings in such areas.
- The *R-Codes* were updated in October 2015 with minimum site area requirements for multiple dwellings in areas coded R30 and R35.
- It is recognised that residential density is best controlled through the zoning and coding of land. There is already a range of 21 density codings that the City can use to control residential density. In areas where multiple dwellings are not desired it is simplest to apply codings of less than R40, rather than that proscribe apartments from R40 codings that would otherwise allow for them.
- Council's one-time suggestion of two different R40 controls based on location

would introduce unnecessary complexity into the planning system.

- Minimum site area controls for Residential R40 lots are likely to have the effect of discouraging smaller dwellings when community feedback is that there is a lack of housing choices in the City and the State planning framework proposes to facilitate more housing choice through increasing the supply of one and two-bedroom dwellings.
- The Willagee Structure Plan has led to areas of R40 codings in Willagee close to centres, bus routes and parks. This outcome was supported by the community through the structure plan and scheme amendment processes. Changing the outcome would require significant consultation.
- Site area minimums for multiple dwellings in R40 areas would affect the City's ability to deliver on the target to provide 11,000 new dwellings by 2031. The change would also require the Local Planning Strategy/ LPS 6 to be modified, which would necessitate extensive public consultation. A change of this nature would also require WAPC approval, which, as discussed is unlikely.
- The design of multiple dwelling developments will be improved by the WAPC via the draft *State Planning Policy 7.3 Design WA Apartment Design Guidelines*. Released for comment from October to December 2016, the policy aims to improve apartment development built form, urban design and streetscape outcomes. It is expected that the policy will be in effect by the end of 2017.

Overall, the community has been clear in its desire for a greater range of housing choices, particularly in areas near shops, services and public transport. The current mix of housing is not suitable for Melville's changing population and only an increase in the number of smaller dwellings will resolve the issue. The *Local Housing Strategy* should therefore not discourage multiple dwellings in areas that have been deemed appropriate for them.

There are many well-documented benefits to housing density in strategically important locations. The National Heart Foundation of Australia (2014) has recently published studies offering clear evidence that:

- Higher levels of walking are found in neighbourhoods with high-density mixed-use zoning, connected street networks, access to public transport and a balance of jobs to housing
- A mix of housing types in walkable environments close to local shops and services is associated with more walking in older adults and may protect against a decline in physical activity over time
- Walkable high-density neighbourhoods are associated with lower cardiovascular disease risk factors such as obesity and type 2 diabetes mellitus
- Adolescents are more likely to be physically active in areas with a mix of land uses and higher residential densities
- Children are more likely to be physically active in more walkable neighbourhoods with access to recreation facilities close by, and to walk to school in neighbourhoods with connected street networks but low traffic speeds and volume
- Recreational walking is associated with the presence, proximity and quality of green space, and the aesthetics of the space

Areas of high dwelling density, such as the Canning Bridge precinct, should therefore be understood as opportunities for the City to invest efficiently in walkable public spaces.

9.2 Opportunities for Increasing Housing Choice

9.2.1 Activity Centres, Transport Nodes and Corridors

As the Local Planning Strategy and other sections of the housing strategy make clear, the land near transport corridors such as Canning Highway and transport hubs such as the rail/bus stations offer excellent opportunities for medium and high-density development.

During the LPS6 review much of the residential land around transport corridors such as South Street and Marmion Street retained older codings in anticipation of a specialised study. This transport corridor report is expected in the medium term, following state government feasibility studies of light rail along South Street. Early indications suggest that at least 2,125 dwellings could be expected in transport corridors before 2031.



Image 19: Medium-density character

Townhouses in the R40 area of Bateman are within walking distance of the Bull Creek train station and make good use of rare land. **Source:** City of Melville

9.2.2 Activity Centre Plans and Structure Plans

As mentioned in other sections of the *Local Housing Strategy*, the City has prepared six activity centre plans/structure plans for the purpose of rejuvenating key areas. All plans recognise the importance of housing. A description of the housing component of each is below:

Canning Bridge Activity Centre Plan

Already a sizeable district centre, the Canning Bridge area is served by excellent bus and rail links. The plan allows for an additional 2,100 dwellings by 2031. Most of these dwellings are expected to be apartments. As of June 2017, around 900 new apartments have been approved.



Image 20: Activity centres

There is enormous redevelopment potential in activity centre plan areas like the Canning Bridge precinct, which offers excellent transport options, night life, shops, restaurants and proximity to the Swan River.

Source: City of Melville

Murdoch Specialised Activity Centre Structure Plan

Offering two regional hospitals, a major university and other large employers within walking distance of a train station, the Murdoch Specialised Activity Centre is likely to become the single biggest employment centre outside the Perth CBD by 2031.

There are more than 20,000m² of vacant land available for mixed use development between the train station and hospitals. Around 900 dwellings (all apartments) could be expected here by 2031.

Beyond the centre core to distances of around 800m from the station there is scope for many more dwellings of all types. Research into residential development opportunities within the station catchment has already commenced as of June 2017.

Further research into housing opportunities along the adjacent South Street transport corridor will follow state government studies on light rail between Murdoch station and Fremantle.

Willagee Structure Plan

Long considered an underperforming suburb, Willagee was the subject of a special structure plan in 2013. The plan recognises the importance of housing in rejuvenating the area and sets yield expectations of around 1,200 new dwellings over the next few decades.

The former Carawatha Primary School site on Archibald Street will provide about 140 of these dwellings in the form of apartments, townhouses and detached houses. Across the wider suburb and its centres a mix of apartments and detached dwellings is expected, with some townhouses likely as well.

Riseley Activity Centre Structure Plan

Prepared for the district centre on the intersection of Canning Highway and Riseley Street in 2015, the Riseley Activity Centre Structure Plan anticipates an extra 300 dwellings by 2031. These will take the form of apartments in the centre core, with townhouses expected on the fringes.

Melville City Centre Activity Centre Structure Plan

Structure planning for the Booragoon Secondary Centre (also known as the Melville City Centre) was completed in 2014. The structure plan proposes that an additional 1,370 new dwellings be incorporated into the centre, mostly in the form of apartments in the frame. Approximately 900 of these could be expected by 2031.

Melville District Activity Centre Plan

The *Melville District Activity Centre Plan* was approved by Council in November 2016. Around 354 additional dwelling are expected here by 2031.

A good deal of planning has been done for some of the most important places in the City. Concentrating development in these areas will probably provide around 70% of the dwellings required under *Directions 2031*.

The WAPC estimates that the City of Melville should be able to accommodate approximately 11,000 new dwellings by 2031. It is expected that this target can be comfortably met, as shown in **Table 16** below.

Table 16: Estimates of New Dwellings to 2031, by Location

Source: City of Melville

Area	Extra Dwellings by 2031 (target 11,000)
Canning Bridge	2,100
Melville City Centre (Booragoon Secondary Centre)	900
Riseley Centre	300
Willagee	1,200
Murdoch	700
Melville District Centre	350
Transport Corridors	2,125
Other Areas	4,450
TOTAL	12,425

9.3 Criteria for Identifying Areas Suitable for Greater Housing Choice

In accordance with the Housing Needs Survey, *Local Planning Strategy*, the *Local Housing Strategy*, *SPP 4.2 Activity Centres in Perth and Peel* and *Directions 2031 Central Sub-regional Strategy*, the following density increase rationale is recommended:

- Most suburban areas should remain low-density, coded no higher than R20 or R25
- In accordance with sections 4.1 (d), 7.3, 8.4.2, 8.4.4 of *Directions 2031*, areas of especially low coding (R17.5 or less) that have close proximity to public open space, foreshores, parks and other such high amenity could be considered for upcoding to higher codes within the low-density code range. Considerations would also include the age of housing stock, street layout and the pattern of subdivision.
- Mixed-use developments will be encouraged in activity centres as per *SPP 4.2 Activity Centres in Perth and Peel*, with higher densities also proposed for the walkable catchments of specialised, secondary, district and neighbourhood centres
- The transport corridors of Canning Highway, Marmion Street, Leach Highway, South Street and Riseley Street are good locations for more housing. Detailed investigations into the appropriate density codes should be conducted under the upcoming transport corridor study

- e) The transport nodes of Bull Creek Train Station and Murdoch Train Station are good locations for more housing. Detailed investigations into the appropriate density codes are warranted

Age of housing stock is also an important consideration, as homes near the end of their economic lives (40-50 years) are more likely to be redeveloped. It is important to note however that while newer single dwellings are not as likely to be demolished, they can be internally adapted for higher density living relatively easily. For this reason the age of housing stock is best regarded as a guide only.

The state government's *Directions 2031 Central Sub-regional Strategy* (Section 4.1 Liveable Priority Area, p 16) encourages local governments to apply higher densities through local planning strategies and schemes within areas that have close proximity to public open space, foreshores, parks and areas with potential for high quality views

9.4 Selection of Residential Density Codes

Table 1 of the 2015 *R-Codes* allows local governments to control the residential density of an area by prescribing minimum and average lot areas for each of the 21 density codes. In R20 areas, for example, an average lot size of 450m² per dwelling is required. In R40 areas the required average is 220m².

With their associated height limits, minimum frontages, front setbacks, rear setbacks and open space requirements (and others) the *R-Codes* also directly affect the scale of buildings. In R20 areas, for example, lots must be a minimum of 10m wide, with the building footprint no more than 50% of the property. The dwelling must also be an average of 6m from the front boundary. The R20 coding therefore produces areas with distinctly suburban character. By contrast, in areas with R60 coding have no minimum frontages. A building may cover 60% of the lot and a good deal of the building may be constructed on the side boundaries. The R60 coding can produce an area with an inner city character similar to Subi Centro.

The City can select the code it deems most appropriate for the desired character of an area. Below is a guide to the pros and cons of each code group.

Table 17: Pros and cons of low-density development

Low-density development (R-Codes R12.5, R15, R20 and R25)	
<i>Pros</i>	<i>Cons</i>
Preserves suburban amenity in accordance with community desires	Reduces feasibility of public transport, likely to lead to car dependence
Limits the number of apartments	Cannot guarantee tree preservation
May help with retention of trees on private land	Footpaths and other infrastructure difficult to justify. Shops less viable also
Popular with families especially	Large land areas per dwelling make housing more expensive to buy and maintain
	Dominated by large homes. Whole neighbourhoods show poor diversity of housing types

Table 18: Pros and cons of medium-density development

Medium-density development (R-Codes R30, R35, R40, R50 and R60)	
<i>Pros</i>	<i>Cons</i>
Can increase viability of public transport	Can reduce viability of verges if not managed
Encourages smaller, more affordable dwellings	Building design often requires careful assessment
Helps City meet state government infill targets while preserving suburban amenity	Must be located within comfortable walking distance of public transport
Allows for apartments under a plot ratio control	Increases impact on public space

Table 19: Pros and cons of high-density development

High-density development (R-Codes R80, R100, R160 and RAC-0)	
<i>Pros</i>	<i>Cons</i>
Can dramatically increase viability of public transport & justify significant investment in infrastructure	Must be limited to activity centres or very close to major transport hubs
Produces smaller, more affordable dwellings	Building design often requires careful assessment
Helps City meet state government infill targets while preserving suburban amenity	Increases impact on public space
Makes shops, restaurants etc more viable	
Allows for apartments under a plot ratio control	

9.5 Dual-Density Codes or Split Codes

There has been discussion about the merit of using dual-density codes (eg R20/40, R30/60) to encourage amalgamation and the development of small dwellings. Dual-density codes are currently occur under LPS6 in parts of Willagee, Alfred Cove and Melville. It is proposed that additional dual-density codes be left out of this strategy, for the following reasons.

Dual-density codes work by attaching specific design criteria to a density code that is more generous than the status quo. Dual-codes encourage solutions to specific problems, such as restricting car access to a freight route, or ensuring the provision of services in infrastructure-poor areas, but they are redundant for issues that could be resolved with a regular density code upgrade.

Dual-density codes are also potentially confusing. While other local governments are currently using double and even triple-density codes (eg the City of Fremantle's R20/30/40 areas), there are yet others, such as the City of Canning, that find the practice so cumbersome they are abandoning split density codes altogether.

It is considered that the City could achieve its housing strategy objectives without resorting to more dual-densities.

9.6 Seniors' Housing/Dependent Persons' Dwellings/Ancillary Dwellings

Demand for seniors' housing of all types is rapidly increasing and the City should allow for an increase in stock. Two important principles must be considered in the approach.

Firstly, the City is not a housing developer but rather a facilitator of housing opportunity. The direct provision of such housing is at any rate outside the City's scope of resources.

Secondly, the City should avoid zoning private land specifically for aged or dependent persons' housing. Normal residential zoning already allows for retirement-village-style housing (apartments included). High-care facilities often require assessment on their merits but this can usually be done within the parameters of normal residential zoning. Extraordinary requirements can be accommodated under specially prepared Local Development Plans and there is always the potential for a high-care residential development policy should this type of housing prove consistently problematic. Market

forces may shift and make overly specialised zoning a hindrance to development. Many seniors have expressed a preference for housing outside the retirement village context, close to shops, medical services, transport and other amenities. Mixed-use development in activity centres may prove ideal for this type of development.

It is acknowledged that Part 5 of the 2015 R-Codes already contains provisions that encourage several types of dwellings suitable for seniors and dependents. These include ancillary dwellings (or granny flats), aged or dependent persons' dwellings and single bedroom dwellings. Part 5 allows for all these sorts of dwellings in low-density areas, subject to certain requirements. Section 8.4.3 of this strategy covers these alternatives in more detail.

Further, the City can support the state government's universal access design initiative, *Liveable Homes*.

9.7 Summary

- Most of the City's R20 residential areas should be considered off limits for substantial change
- As an established municipality, the City has very few parcels of residential land bigger than 2,000m²
- Industrial areas are not suitable for residential use
- River foreshores are unsuitable for substantially increased housing densities except where identified under an activity centre plan/other specialised study
- Multiple-dwelling developments in suburban areas can cause issues and should be managed carefully
- Land near transport corridors, transport hubs and activity centres also offer excellent opportunities for high/medium density residential development
- The *R-Codes* offer a wide variety of density codes. Each produces a fairly predictable urban outcome. Split-coding can be used as an incentive for especially desirable development
- The market will seek ways of delivering many types of housing for seniors. The City should allow for these to occur

10. The Local Housing Strategy: Recommendations

10.1 Major Housing Issue Recommendations

The three primary themes of affordability, insufficient housing diversity and seniors' housing issues have been well covered throughout the *Local Housing Strategy*. Below is a table of recommendations aimed at tackling each. Supplementary housing issues such as waste management issues and the loss of trees on private land are covered in Table 21.

Table 20: Major Housing Issue Recommendations

Housing Issue	Relevant Local Housing Strategy Objectives	Recommended Approach	Recommended Projects/Actions
Housing diversity: high proportion of large dwellings, low proportion of small dwellings	<p>To provide for a variety of lot sizes and housing types to cater for the housing needs of residents at all stages of life</p> <p>To identify suitable areas for consideration for provision of greater housing choice which:</p> <ul style="list-style-type: none"> are strategically located close to, or well connected to, existing and future services such as employment centres, major transport routes/hubs, community facilities, and activity centres are opportunity sites in need of private or public investment to regenerate ageing housing stock <p>To contribute appropriately to the urban infill aspirations of <i>Directions 2031</i> and <i>Perth and Peel @3.5 Million</i></p> <p>To ensure new residential development is based on good design principles which protect amenity</p>	<p>Acknowledge that LPS6, <i>Local Planning Strategy</i> and various structure plans/activity centre plans were prepared to address the housing diversity issue and are already operational</p> <p>Gradually change codings in selected areas as per the <i>Local Planning Strategy</i> to provide for more small dwellings close to activity centres and transport. Retain low-density coding (R25 or less) in suburban areas so as to protect amenity</p> <p>Acknowledge that <i>Local Housing Strategy</i> and proposed projects/actions are consistent with endorsed <i>Local Planning Strategy</i> and <i>Directions 2031</i></p>	<p>Commence Murdoch Residential Opportunities Report (short/medium term, 1-5 years)</p> <p>Commence Canning Highway Corridor Study (short term, 1-2 years)</p> <p>Commence Corridor Studies for Marmion Street and South Street (medium term, 3-5 years)</p> <p>Initiate or encourage preparation of Activity Centre Plans as per <i>State Planning Policy 4.2</i> for Bull Creek, Kardinya and Petra Street district centres (long term, 5+ years)</p> <p>Consider upcodes of low-density/high amenity areas as per the rationale provided in section 9.3 as part of next Scheme Review (7-10 years)</p>
Affordability of housing: high cost of land per square metre, oversupply of large dwellings on large lots	<p>To encourage cost-effective and resource-efficient development with the aim of promoting affordable housing</p> <p>To provide for a variety of lot sizes and housing types to cater for the housing needs of residents at all stages of life</p> <p>To identify suitable areas for consideration for provision of greater housing choice which:</p> <ul style="list-style-type: none"> are strategically located close to, or well connected to, existing and future services such as employment centres, major transport routes/hubs, community facilities, and activity centres are opportunity sites in need of private or public investment to regenerate ageing housing stock <p>To contribute appropriately to the urban infill aspirations of <i>Directions 2031</i> and <i>Perth and Peel @3.5 Million</i></p>	<p>Acknowledge that LPS6, <i>Local Planning Strategy</i> and various structure plans/activity centre plans were prepared to address the affordable housing issue and are already operational</p> <p>Gradually change codings in selected areas as per the <i>Local Planning Strategy</i> to provide for more small dwellings close to activity centres and transport</p> <p>Acknowledge that <i>Local Housing Strategy</i> and proposed projects/actions are consistent with endorsed <i>Local Planning Strategy</i> and <i>Directions 2031</i></p> <p>Continue with R-Codes practice of allowing alternative housing options such as ancillary dwellings/aged & dependent persons' dwellings in low-density areas. Monitor innovative small-dwelling strategies such as <i>The Freo Alternative</i></p> <p>Informally encourage all types of co-housing in strategically appropriate areas</p>	<p>Commence Murdoch Residential Opportunities Report (short/medium term, 1-5 years)</p> <p>Commence Canning Highway Corridor Study (short term, 1-2 years)</p> <p>Commence Corridor Studies for Marmion Street and South Street (medium term, 3-5 years)</p> <p>Initiate or encourage preparation of Activity Centre Plans as per <i>State Planning Policy 4.2</i> for Bull Creek, Kardinya and Petra Street district centres (long term, 5+ years)</p> <p>Consider upcodes of low-density/high amenity areas as per the rationale provided in section 9.3 as part of next Scheme Review (long term, 7-10 years)</p>

Seniors' housing issues: lack of housing diversity, high cost of housing	<p>To provide for a variety of lot sizes and housing types to cater for the housing needs of residents at all stages of life</p> <p>To encourage cost-effective and resource-efficient development with the aim of promoting affordable housing</p>	<p>Acknowledge that LPS6, <i>Local Planning Strategy</i> and various structure plans/activity centre plans were prepared to address the housing diversity/affordability issues and are already operational</p> <p>Gradually change codings in selected areas as per the <i>Local Planning Strategy</i> to provide for more small dwellings close to activity centres and transport</p> <p>Acknowledge that <i>Local Housing Strategy</i> and proposed projects/actions are consistent with endorsed <i>Local Planning Strategy</i> and <i>Directions 2031</i></p> <p>Continue with R-Codes practice of allowing alternative housing options such as ancillary dwellings/aged & dependent persons' dwellings in low-density areas. Monitor innovative small-dwelling strategies such as <i>The Freo Alternative</i></p> <p>Informally encourage all types of co-housing in strategically appropriate areas</p> <p>Encourage retirement facilities to include facilities that can also be accessed by the surrounding community of older residents (spaces for gatherings, Men's Sheds, dining opportunities etc)</p>	<p>Lobby state government to abolish stamp duty (short term, 1-2 years)</p> <p>Strengthen links to home support and transport services to older residents to enable ageing in place (short term, 1-2 years)</p> <p>Improve education of seniors (or pre-seniors) about housing options such as ancillary dwellings, co-housing etc. Prepare housing info packs for Community Development staff to hand out (short term, 1-2 years)</p> <p>Recognise connection between land use planning, walkable lifestyles and health. Prioritise a more walkable public realm in all major projects (1-2 years)</p> <p>Investigate the desirability of compulsory Universal Design (2-5 years)</p>

10.2 Supplementary Housing Issue Recommendations

During internal consultation in March 2016 a number of issues not directly related to housing diversity, affordability or seniors' housing were raised. Some of these issues were also flagged by members of the community during the Housing Needs Survey period in September and October 2016.

Table 21: Supplementary Housing Issue Recommendations

Issue	Recommended Projects/Actions	Lead service Area
Waste bins for grouped dwellings in medium density areas can compromise footpaths and verges on collection days	<p>Strengthen requirement for waste management plans on medium-density development applications. Developer to consider options such as staggered collection days, smaller bins & shared bins</p> <p>Review waste management policy (1-2 years)</p> <p>Revise Development Control Unit process at Operational Management Team level to ensure prompt expert comment on all medium density Development Applications (1-2 years)</p>	<p>Planning Services</p> <p>Technical Services</p> <p>Operational Management Team</p>
Medium density areas adversely affected by increase in numbers of crossovers, which create stormwater and verge issues	<p>Review crossover specifications (eg minimum widths, use of water permeable materials etc)</p> <p>Encourage access to grouped/multiple dwelling sites via laneways or single driveways whenever possible</p> <p>Advocate for underground power, which frees up room on verges</p>	<p>Technical Services</p> <p>Planning Services</p> <p>Technical Services</p>

Poorly designed, oversized homes/apartments create streetscape and neighbour issues	<p>Promote examples of better design</p> <p>Be clearer with designers upfront about need for quality design that respects streetscape</p> <p>Ensure proposals for multiple dwellings are consistent with <i>Design WA</i></p>	Planning Services
Construction sites harder to manage as houses are bigger & lots are smaller. Issues with dust, noise, damage to infrastructure, use of verge for storage and parking are more common	<p>Strengthen requirement for customized Construction Management Plans (CMPs) and Demolition Management Plans (DMPs)</p> <p>Prepare template of ideal CMP/DMP</p> <p>Strengthen presence of Building Services at pre-lodgement meetings for large-scale proposals</p>	<p>Building Services</p> <p>Building Services</p> <p>Building Services</p>
Bigger homes/smaller yards mean less room for children to play outdoors	<p>Consider more verge “parklets” like those in Willagee</p> <p>Encourage community-led placemaking on wide verges to increase available play/interaction areas</p> <p>Add social infrastructure (eg BBQs) and age-appropriate exercise equipment to parks as appropriate</p>	Technical Services & Community Development
Tree loss on private land increasing due to preferences for large homes/low maintenance yards. Heat island effect worsening, loss of suburban amenity apparent	Continue with Urban Forest Strategy	Technical Services

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