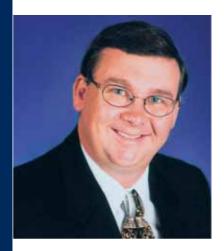




MAYOR'S MESSAGE



BETWEEN NOW AND THE YEAR 2021, THE CITY OF WANNEROO FACES THE CHALLENGE OF HAVING TO APPROPRIATELY ACCOMMODATE DOUBLE ITS CURRENT POPULATION WHICH IS EXPECTED TO BE AROUND 220,000 PEOPLE.

To ensure the City of Wanneroo does this correctly and successfully, it has developed the Local Housing Strategy 2005.

It's aimed at guiding future housing development in new residential areas; protecting existing residential areas from inappropriate development and ensuring adequate housing choice is available to meet the changing social and economic needs of the community.

The Local Housing Strategy is a key component of the City's Smart Growth Strategy - and together the two strategies indicate the commitment the City of Wanneroo has to planning for the future needs of the community as well as facilitating and supporting effective growth management.

Additional objectives of the Strategy are to ensure that an adequate supply of affordable housing is provided, particularly for first home buyers, and to promote appropriate forms of housing close to existing and proposed community facilities and services.

The Local Housing Strategy is an important document, which will help shape the City of Wanneroo in the future. I look forward to the City implementing the strategy over coming years.

JON KELLY JP MAYOR

Prepared for the City of Wanneroo by MacroPlan Australia Pty Ltd





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Abbreviations

ABS	Australian Bureau of Statistics
The City	City of Wanneroo
CPI	Consumer Price Index
LHS	Local Housing Strategy
MacroPlan	MacroPlan Australia Pty Ltd
MDP-ULRP	Metropolitan Development Plan – Urban Land Release Program
MDP-TP	Metropolitan Development Plan – Trends and Projections
MRS	Metropolitan Regional Scheme
SEIFA	Socio-Economic Index for Areas
TPS	Town Planning Scheme
UGB	Urban Growth Boundary
WAPC	Western Australian Planning Commission

1.0

1.0OVERVIEW OF THE LOCAL HOUSING STRATEGY





1 Overview of the Local Housing Strategy

1.1 Background

The City of Wanneroo (City) is located within the North-West Corridor of Perth and 22 kilometres from Perth's city centre. The City of Wanneroo is one of the fastest growing Local Government Areas in Australia. The Smart Growth Strategy (2005) estimated the population of the City of Wanneroo at 107,820 as of January 2005 and this population is forecast to increase to 147,000 by 2011. This is an increase of approximately 39,000 people in the next 6 years with an average growth rate of just almost 6,500 people per annum.

Metroplan and the Residential Design Codes for Western Australia recommend that Local Governments prepare a Local Housing Strategy for their respective districts.

The City of Wanneroo Smart Growth Strategy's Principle 1 – Lifestyle and Housing states that the City, shall prepare and implement a Local Housing Strategy. The Smart Growth Strategy Steering Committee has subsequently endorsed a proposal that a Local Housing Strategy be prepared for the City.

The Western Australian Planning Commission has prepared the "Greater Perth, Population and Housing Discussion Paper Two", which takes into consideration the need for careful planning regarding the types of housing, which should be provided in the future for Perth.

The State Housing Strategy is currently being prepared by the Office of Policy and Planning of the State Department of Housing and Works. Technical papers released regarding that strategy also confirm the need for careful strategic planning in respect to the provision of housing, in particular to ensure that there will be appropriate and affordable housing for future communities.

1.2 Project Area

The Local Housing Strategy encompasses the whole of the City of Wanneroo. Its major focus will be those urban and rural parts of the City where housing is possible.

PROPOSED MITCHELL FREEWAY/ RAILWAY

PERTH

SWAN RIVER

Figure 1. City of Wanneroo Context Map

1.3 Aim

To guide the future form and types of housing within the City of Wanneroo.

1.4 Objectives of the Strategy

The principal objectives of the strategy are to:

- (a) Ensure that a wide range and choice of housing is provided to meet the changing social and economic needs of the community, and to understand the community's attitude to housing choice.
- (b) Ensure that an adequate supply of affordable housing is provided particularly for first home buyers.
- (c) Promote innovative, cost-effective and well-designed forms of housing which incorporate environmentally beneficial features.
- (d) Promote appropriate forms of housing close to existing and proposed community facilities and services (eg. Employment centres, transport hubs) to enable more efficient and effective use of those facilities and services.
- (e) Ensure an overall density, which will improve the viability and range of transport alternatives.
- (f) Ensure that residential areas are designed for all people of all ages and abilities and that these areas are protected from inappropriate development.
- (g) Provide a greater degree of certainty to developers and the community in the development of new housing areas and the redevelopment of existing housing areas.
- (h) Provide the City for an improved basis for decision making in relation to development applications and rezoning proposals; and
- (i) Provide a component of a future Local Planning Strategy to support a future review of the City's district town planning scheme.
- (j) Promote universal design¹ principles to ensure that all housing has a core of accessible features to the main living areas of the house.

-

¹ 'Universal design' refers to the design of products and environments so as to be usable by all people, to the greatest extent possible, without the need for adaption or specialised design.

2.0

2.0 STATE, METROPOLITAN AND LOCAL PLANNING POLICIES





2 State, Metropolitan and Local Planning Policies

This section of the strategy outlines contemporary strategies, polices and regulations that inform the preparation of the Local Housing Strategy. Other State and local documents and regulatory factors that are relevant are included in the Appendices in Section 11.

State and local planning strategies, policies and regulations shape the location and type of housing that will be built, renovated and redeveloped in the City of Wanneroo. They provide the context of the metropolitan and local housing issues and principles of relevance to the Local Housing Strategy.

High level State strategies and policies for housing take effect through the Local Housing Strategy. It will inform direct actions by relevant agencies as well being a key component in the preparation of a Local Planning Strategy, which will ultimately form the basis for an updated District Planning Scheme.

The Local Housing and Local Planning Strategies and Scheme will inform the Western Australian Planning Commission in its consideration of applications for subdivision. They will also guide private sector proposals such as structure plans for land development.

2.1 State Planning Strategy 1997

The State Planning Strategy is the pre-eminent planning policy in Western Australia and it contains guidance and strategies on the development of communities and housing. It includes strategies, criteria and actions under a Community Principle: "To respond to social changes and facilitate the creation of vibrant, accessible, safe and self-reliant communities."

Key strategies relevant to the Local Housing Strategy are:

- 'Respond to the changing needs of population'. This includes the need to provide
 a wide range of housing types to meet the changing nature of households. The
 related action is to give greater emphasis to ensuring an appropriate housing and
 density mix to meet existing and potential demand from aged people, Aboriginal
 people, peoples with disabilities, non-traditional families and different ethnic
 groups.
- 'Provide for a range of housing opportunities'. This includes providing for a
 range of lots and housing types in large, comprehensively planned development
 projects or smaller redevelopments to reflect the diverse needs of the community.

2.2 Statement of Planning Policy No. 1: State Planning Framework

The policy gives effect to the general principles for land use planning and development arising from the State Planning Strategy. The principle of 'Community' is particularly relevant to housing:

'A2. Community

Planning anticipates and responds to the needs of the existing and future communities through the provision of zoned and serviced land for housing, employment, recreation and open space, commercial and community facilities. Planning should recognise the need for and, as far as practicable, contribute towards more sustainable communities by:

- Accommodating future population growth and providing housing choice and diversity to suit the needs of different households, including specialist housing needs and the services they require;
- Providing for a range of accessible community resources including affordable housing, places of employment, open space, education, health, cultural and community services...'

2.3 Metroplan 1990: A Planning Strategy for the Perth Metropolitan Region

Metroplan is the Western Australian Government's statement about Perth's direction into the 21st century and it provides the general framework for growth and change for Perth.

Metroplan is the official metropolitan planning strategy for Perth. Whilst its policies remain relevant, Metroplan has been under review for several years, and in 1999 the State Government launched its Future Perth Vision, which has now been developed into the Network City: Perth's Planning Strategy 2004-2030 following the Dialogue with City Forum in 2003. Any application of Metroplan polices should have regard for consistency and contradictions in the approaches of later but are not yet finalised documents.

The aims of Metroplan, which are of relevance to the development of the Local Housing Strategy, include:

Urban

'Displaying the excitement and diversity of a cosmopolitan city, with areas of higher density residential development that do not sacrifice the benefits of a relaxed low-density lifestyle'.

To achieve the urban form that displays diversity, Metroplan emphasises the need to control urban sprawl, encourage diversity and choice in housing, provide affordable and quality housing in a wide range of locations and provide new homes close to employment and amenities.

Metroplan suggests that containment of urban sprawl can be achieved through increasing the density of housing in the new urban areas and through redevelopment of existing suburbs.

Green

'Reducing the impact of development on the environment by planning a more efficient city'.

Economically efficient

'Capable of bearing the capital and operating costs required for high quality developments'.

Socially just

'Providing a high quality living environment with a good range of affordable housing and a balanced distribution of employment and community services'.

Relevant policy measures are:

- As a general guideline, the minimum R-Code for sewered residential areas should be R20.
- Local governments to be encouraged to prepare local housing strategies and housing design and development guidelines to ensure the amenity of established suburbs is protected from ill-considered or inappropriate development.
- Medium and higher density residential development being promoted close to the strategically important locations of: public transport nodes, railway station precincts, Perth Central area, regional centres, tertiary institutions, employment centres and major leisure facilities where appropriate.
- For new areas, generally, structure plans and town planning schemes should provide for residential densities of R20, and for a proportion of the land to be allocated for medium and higher density housing.
- Examination of the introduction of different charging schemes for certain infrastructure services to encourage more efficient use of new housing land.
- Public housing programs emphasising a wide range of densities and housing types.
- Release and development of surplus public lands.
- Cooperation between Government and industry to promote innovative, cost efficient and well designed medium density housing developments.

2.4 Dialogue with the City 2003: Working together to make Perth the World's most liveable city

"The Dialogue with the City" was a large-scale community consultation forum, as part of the Western Australia Department for Planning and Infrastructure's long term planning process. The overriding goal of the Dialogue with the City Forum was to achieve a sustainable city region.

The purpose of the Dialogue with the City Forum was to provide participants and the Department for Planning and Infrastructure with reliable and valid measures of what is important to the residents of the extended Perth area with respect to the future development of the city.

The aim was to provide data that represents the view of Perth's people on a range of issues over a cross section of groups (age, gender and location of residence across the city).

Findings from the forum are categorised into a number of issues and the results are set out in Appendix 11.1:

The important issues to the forum participants were:

- Protection of natural waterways and natural bushland from future development.
- Reduce Perth's dependency on private vehicles and encourage people to use public transport as much as possible.
- Offer a range of lower and higher density living options to be made available to people, and encourage suburbs to have a mix of houses, units and flats.

In terms of housing, many people (57%) stated that Perth had got it right when it came to providing a mix of lower and higher density living options for Perth's people. They (50%) also mostly thought that Perth had got it right when it came to encouraging suburbs that have a good mix of houses, units and flats.

Most people (65%) wanted growth in Perth to be encouraged in established areas and greenfield sites to remain undeveloped. They (61%) wanted every suburb to have some form of lower and higher density residential development rather than few specific areas for higher residential development.

Most people (75%) wanted all suburbs to have a share of affordable rental housing in contrast to (25%) who wanted affordable rental housing to be concentrated in specific suburbs. A proportion of people (28%) wanted the Government to increase funding on providing more housing for socio-economic disadvantaged, aged and disabled members of the community.

2.5 The Network City: Perth's Planning Strategy 2004-2030 (Draft)

The Dialogue with the City Forum created a new set of priorities and policies to generate a new strategy for Perth, which has resulted in the creation of The Draft Network City: Perth's Planning Strategy 2004-2030 by the Department for Planning and Infrastructure to guide development for Perth to 2030.

Urban Growth Management

The strategy seeks to manage urban growth to limit urban through the allocation of a 60/40 split between new development in existing urban areas and new growth areas (See Appendix 11.3 for details). Housing and job targets are proposed to be determined by local government areas and sub-regions. Staging strategies and infrastructure programs are proposed to be used to influence the location and timing of development.

A State and local government partnership is proposed, including agreement to a process of setting targets and a means to achieve them. Models of community consultation, including local dialogues are proposed in this process.

The basis of the 60/40 split is not stated. It would seem that the proposed target may be very difficult to achieve without considerable State government intervention in local planning. For example, Melbourne with much larger inner and middle suburbs is currently only achieving 30/70 split between new development in existing urban areas and new growth areas.

Activity Centres and Corridors

An Activity centre in the Network City Plan are locations where employment, retail, living, entertainment and specialised employment such as medical services occur. The objective for the centres in relation to housing is:-

'Foster land use and transport integration to form a network city by...
(c) Encouraging mixed-use development in activity centres, including higher density residential developments and employment generators, especially where centres are well served by public transport and have higher amenity, walkable environments.'

Network City also proposes activity corridors that link activity centres. The intent is to focus higher density housing, retail, entertainment, business and other high activity uses towards the corridor's centre line, particularly at district and local centres, in a fashion which creates more opportunity for more houses and jobs within a 10 minute or 400 metre 'walkable' catchment.

Key actions arising from Activity Centres and Corridors strategies are:-

Action 1-2(a) [WAPC] In association with local government and other stakeholders, undertake a detailed appraisal of opportunities to:

a) increase the number of homes adjacent to activity centres and corridors;

- b) identify opportunities for consolidation in established middle and outer areas where housing stock is over 35 years of age
- c) preserve opportunities for land that is earmarked for development

Action 1-2(b) [Department of Housing and Works] Develop sub-regional housing strategies as proposed in the Western Australian State Sustainability Strategy that integrates an audit of existing housing stock and tenure with projected population, household and dwelling requirements

Action 1-3(c) [Department of Planning and Infrastructure] With State prepared population, job and home targets, work with local government to define smaller areas and targets as well as local dialogues to see how these targets can be achieved.

Action 1-3(d) [Department of Planning and Infrastructure] Once population, job and home targets have been set, initiate local participatory processes to determine how the targets may be achieved, then review the likelihood of achieving the 60:40 dwelling development target.

Affordable and Diverse Housing

The strategy defines housing affordability as

'relates primarily to entry level home purchase and to the private rental sector for households on lower incomes (less the \$540 per week – the second income quartile for private sectors in 2001)'.

A second definition is that

'affordable housing coveys the notion of reasonable housing costs in relation to income. That is, housing costs that leave households with sufficient income to meet the basic needs such as food, clothing, transport, medical care and education'.

Key strategies and actions in Network City strategy are:-

Strategy 3-8 Develop initiatives to increase the availability of affordable housing, including Homeswest and community housing, in locations with high accessibility to facilities and services, including public transport.

Action 3-8(c) [Department of Planning and Infrastructure] Require local planning strategies to include consideration of housing diversity and affordability.

Strategy 3-9 Promote and facilitate increased housing diversity to match the changing housing needs of Perth's population, in locations which provide equitable access and lifestyle opportunities.

Action 3-9(b) [Department of Housing and Works] Work with the development industry and lending agencies to encourage investment in housing diversity, through measures such as 'location efficient mortgages' and the development and promotion of improved designs for small lots.

Implications for the City of Wanneroo

The City of Wanneroo through the development of the North West sector is a key stakeholder in the strategy. Even after the significantly increased emphasis on urban consolidation, the Network City strategy envisages that the North West sector will provide for 43% of all greenfields growth and almost a quarter of all metropolitan growth.

Network City and the City of Wanneroo's Smart Growth Strategy have similar intent, in particular in respect to providing lifestyle and housing choices. However, the strategies and actions would see a radical shift in the location and form of urban development in the City of Wanneroo.

Syme Marmion Consultants estimate that to meet the strategy's targets, some 26,000 new dwellings would need to be located in the North West sector in existing urban areas. They estimate that given curvilinear street networks and the new age of most of the housing stock, only 10,000 new dwellings could be envisaged, and there would still be likely major community resistance.

It is likely that under the Network City strategy, planning and infrastructure resources would be diverted away from greenfields expansion. If consolidation targets cannot be met, there would be land supply problems and consequent increases in land and housing prices.

The choice for the Local Housing Strategy is to reflect the Network City Strategy and try to reduce greenfields commitments and enforce higher density development on all established areas.

Alternatively the Local Housing Strategy could place emphasis on innovative development solutions in greenfields sites to create housing choice and integrated transport oriented development forms as well seek urban regeneration for those suburbs in need of revitalisation.

2.6 North-West Corridor Structure Plan (1992)

The North-West Corridor Structure Plan (NWCSP) takes Metroplan's regional level proposals to a sub-regional level for the north west portion of the metropolitan region. It is currently being reviewed.

The NWCSP provides urban areas for just over 420,000 people to reside in the North-West Corridor. It establishes the principles for the integrated and detailed planning of local areas. It provides the framework and guidance for the preparation of:

- District structure plans for the comprehensive development of the North-West Corridor, and
- Local structure plans.

The NWCSP includes a framework for development within the corridor to the year 2021. The purpose was to ensure a comprehensive approach to planning and development in the corridor was undertaken. The NWCSP identified areas for residential development, local employment, the provisions of services and infrastructure and conservation and protection of the environment.

There were 5,215 Ha of land identified in Urban and Urban Deferred Zones, with total potential dwellings of 55,935 and a total potential population of 167,805. Further details are provided in Appendix 10.2.

The following elements from the plan are relevant to housing:

- The objective regarding 'the timely provision of residential land to meet future housing needs and a wide variety of housing types, price and location'.
- The plan discusses 'opportunities for different housing types and densities in the new urban areas to provide greater choice and to better cater for the needs of different households'. In new development areas it points to the need for:-
 - more consolidated development and higher lot yields;
 - greater variety in the price and type of housing to cater for different housing needs;
 - a base R20 Coding and density targets in district and local structure plans for new suburban areas;
 - higher densities close to retail and commercial centres, the public transport network and at other major activity centres, to make full use of services and facilities.

2.7 Liveable Neighbourhoods

Liveable Neighbourhoods is set out as a development control policy, but it actually carried many of the principles and strategies that underpin sustainable urban development and Smart Growth. It applies to the design of urban development and guides greenfields subdivision.

The Policy has been on trial since February 1998, and is under review with the draft Liveable Neighbourhoods Edition 3 having been exhibited in 2004.

Liveable Neighbourhoods notes that:

'The Western Australian community is changing. The majority of households are now one and two persons, yet most new houses still have three or four bedrooms with two car garages. The lack of fit between housing stock and households may not serve our community well.'

The related aim of Liveable Neighbourhoods is:-

'To provide a variety of lot sizes and housing types to cater for the diverse housing needs of the community at a density that can ultimately support the provision of services'.

Liveable Neighbourhoods includes six design elements. Appendix 10.6 sets out matters that are relevant to the Local Housing Strategy.

2.8 Metropolitan Development Program – Urban Land Release Plan 2003/2004 to 2007/2008

The MDP 2003/2004 to 2007/2008 provides an overview of recent and proposed residential lot activity on land zoned Residential, Special Residential and Special Rural.

The MDP is prepared by the WAPC to advise government on land use planning and the co-ordination of services and infrastructure provision throughout the Perth Metropolitan Region. The MDP has 2 principal roles:

- 1. To identify and monitor past, current and projected residential land development activity and the associated services and infrastructure requirements and provision within a 5 year horizon.
- 2. To provide this information for government and the public for land planning and budgeting purposes.

North-West Corridor

The North-West Corridor recorded the highest residential type lot production (23%) over the last 5 years in the MDP Region. Butler was identified as the top suburb for its future five-year lot production in the North-West Corridor. It is projected that Butler will produce over 2,500 lots from 2003/4 to 2007/8.

The attraction of the metropolitan coast as a magnet for development is set to strengthen with the proportion of lots scheduled for creation within 5 km from the coast increasing from 40% of total lots in 2003/2004 to 54% in 2007/2008. The North-West and the South-West Corridors have been identified as the leading corridors for residential lot production for the next 5 years with 17,700 and 17,600 respectively. Further details regarding the MDP are included in Appendices 11.4 and 11.5.

2.9 Smart Growth Strategy

The Smart Growth Strategy is to provide a clear framework for the City of Wanneroo to manage its future growth, in particular the rapidly increasing population growth and its rate of urban development. The Smart Growth Strategy sets out an overview of the approach the City of Wanneroo will take to achieve sustainable outcomes for the community regarding urban development, community development, economic development and conservation proposals.

The key principles of the Smart Growth are:

Principle 1: Lifestyle and housing choice

Principle 2: Effective use of land and infrastructure

Principle 3: Long term health of the environment

Principle 4: Identity, equity and inclusiveness

Principles 5: Long term economic Health

Principle 6: People and government.

The following key 'Strategies' and 'Actions' under Principle 1 are relevant to the Local Housing Strategy:

'Strategy 1a. By promoting a range of lot sizes to cater for different lifestyle choices.

(i) Action

Guide the future variety of lot sizes to cater for a range of lifestyle choices.

(ii) Action

Encourage a variety of housing choices in urban and rural locations

Strategy 1b. By promoting a range of housing types in appropriate locations to meet current and future market demands.

(i) Action

Guide the future variety of housing types to cater for market demands

(ii) Action

Encourage a variety of housing types to meet changing lifestyle demands

(iii) Action

Work with stakeholders to promote an adequate supply of affordable housing

(iv) Action

Encourage the application of universal design principles in house design to allow greater housing choice for people living with disabilities.'

Also identified within principle 1 is a need to prepare and implement a Local Housing Strategy for the City of Wanneroo. The key points arising from the Smart Growth principles are identified within the key themes of the Local Housing Strategy in Section 5.

3.0

3.0ECONOMIC AND
DEMOGRAPHIC
DRIVES OF CHANGE





3 Economic and Demographic Drivers of Change

As part of the study, MacroPlan identified the macro & micro drivers of the housing market for the North-West Corridor and the City of Wanneroo.

3.1 Demand and Supply Drivers

Population Growth

Population growth and net migration has been a significant factor in increased housing demand.

- In Western Australia there has been an increase in overseas migration and a decrease in interstate migration as detailed in the table below.
- While natural increase will decline further as a result of the shifting demographic circumstances and societal behaviour, migration to Western Australia continues to strengthen.
- Growth in population is bolstered by strong net increases in overseas migration that has averaged between 10,000 and 17,000 over the past 8 years compared to less than 6,000 in previous years. The cyclical nature of interstate migration has reached its lowest point (in 2002) for Western Australia and initial 2003 figures indicate a return to a balanced inflow and outflow of net interstate migration.
- Cyclical trends would suggest a return to positive interstate migration over the coming five-year period. This trend will further increase population growth in Western Australia in coming years.

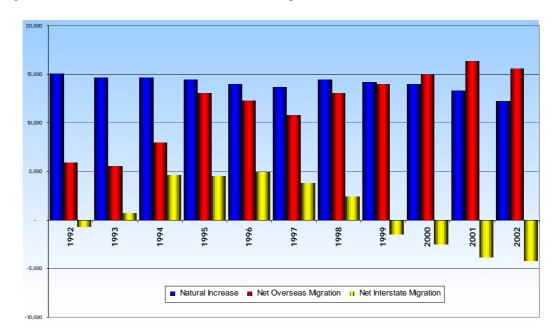


Figure 2. International and Interstate Migration 1992 to 2002, Western Australia

Source: MacroPlan Australia

 The reliance on overseas migration will likely further increase the need to diversify housing stocks.

Interest Rates

Interest rates are a short term 'driver' of activity as they affect a person's ability to repay debt. They also have a bearing on housing investment (supply). As such, they are a significant driver for the housing development market. Interest rates in Australia have been stable since the mid-1990's. The interest rates are at a lower rate than standard long-term averages.

Finance Approvals

Finance approvals reflect what is currently actually happening. Dwelling finance across Australia has increased significantly since 1998. This growth is in terms of numbers of approvals rather than increase in dollars. Dwelling finance in Western Australia since 1998 has also reflected this trend across Australia.

The 2003 period for Western Australia recorded a much higher finance approval rate when compared to Australia. Dwelling finance in Western Australia grew by 13% for the period of 2002-2003. During the same period dwelling finance in Australia only grew by 9.6%.

Inflation

Changes in the Consumer Price Index (CPI) affect a person's disposable income and it has a short-term impact on the hosing market. The CPI 2004 December quarter figure indicated that underlying inflation rose by 0.5% to be 2.3% over the year, down from 2.6% in the September quarter. The headline CPI also eased from 2.6% to 2.4% over the year.

The NAB expects both measures of inflation to move below 2% in the near term. This period of low inflation & high consumer confidence in the housing market has strengthened property markets across Australia. Whilst the housing market in New South Wales and Victoria has softened, the Perth housing market is expected to remain strong for at least another 12 months.

Employment

A sustained period of economic growth in Australia has helped sustain a low unemployment rate of 5.3%. The relatively low national unemployment rate is expected to continue.

- The MDP trends and projections 2002/2003 to 2006/2007 indicated that in August 2001 over 100,000 persons were employed (full-time and part-time) within the North-West Corridor. This figure was second highest within the MDP Region outside the Middle Sector.
- The North-West Corridor accounted for 19% of all persons employed full-time within the MDP Region in August 2001.
- The percentage of full-time employed persons in the City of Wanneroo has decreased slightly from 1996 to 2001, as identified within MacroPlan's micro drivers.
- For the period of 1997 to 2002 the North-West Corridor recorded the lowest average unemployment rate for the MDP Region with 5.5%, which is comparative to the Australian rate. Unemployment within the City of Wanneroo has been replaced with part time employment, which is reflective of the North-West Corridor having a high proportion of households whose weekly income are at \$1,200 or more (31%).
- The total labour force percentage for the City of Wanneroo has been stable for the last 10 years.
- Over the last ten years there has been a significant increase in the number of white collar workers and pink collar workers residing in the City of Wanneroo. This would indicate that professionals are moving to Wanneroo and is reflected in the increase in dual income households in Wanneroo.

Construction Costs

- Construction costs affect the supply of housing.
- Construction costs in Sydney and particularly Melbourne skyrocketed during the late 1980's and again in the late 1990's.
- Construction costs for Perth has been relatively stable, keeping pace with inflation on average for the past 10-15 years. The recent housing boom has changed this position with price rises due to very strong residential demand.
- The cost of constructing a standard brick veneer house varies by 30% in Melbourne compared to Perth; \$1,175 m² compared to \$900 m² respectively in 2004.
- Perth's lower construction cost gives it a comparative advantage over other capital cities.

Buyer Grant Scheme

- Housing affordability in Australia has significantly influenced the first home buyer market in Australia. First home buyers are being pushed out of the housing market by investors.
- The First Home Buyers grant has been influenced by housing affordability and spiralling land and established house prices.
- Across Australia, the proportion of first home buyers has decreased from just over 25% to approximately 18% of the total housing market during the past two years (Dec 2003).
- In WA the First Home Buyers grant represented 26% of finance approvals between Aug-Oct 2004, reflecting the influence of more recent policy lever of Stamp Duty Exemption since July 2004.

Wealth

Strong increases in wealth and the capital gains free status of houses have a number of impacts on the housing market. These impacts include:

- Demand for larger and higher amenity housing as a status symbol
- Quicker mortgage repayment, which leads to greater mobility and household turnover
- Increased capacity in the market to invest in rental return or to secure a holiday home/future retirement location
- Further decreases in household size
- Baby boomers (those people born between 1946 and 1965, who were aged 36-55 at 2001 Census) represent a higher level of wealth compared to other age groups
- The North-West Corridor has a high proportion of high income households, 31% of households earning \$1,200+ per week
- Low unemployment rate and an increase in dual income homes for the City, and
- An increasing number of homes owned and being purchased within the City.

3.2 Likely Future Demand - Short Term

- The MDP: ULRP 2003/2004 to 2007/2008 indicates that during 2002/2003 3,305 dwellings were given building permits for the North-West Corridor.
- Some 717 dwelling approvals were granted for the 1st quarter of 2003/2004, the highest September quarter for Wanneroo on record.
- The MDP: ULRP 2003/2004 to 2007/2008 indicates that for this 5 year period, indicative lot development for the North-West corridor will total 17,719, which is highest for the MDP Region. It is expected that the indicative lot development for this 5 year period will yield a total of 19,022 dwellings, which is second only to the South-West Corridor.
- From the indicative numbers provided, there are strong indications that the housing market within the North-West Corridor and the City will continue to be strong within the next 1 to 5 years, even with an expected slow down in the growth of the national GDP.

3.3 Demographic and Household Characteristics

There is a major and on-going shift in the demographic and household requirements for the City. More diverse housing will increasingly be needed to respond to a challenge of older and non-traditional families who will increasingly be living in the municipality.

- In 1991 very young families and first home buyers were dominant within the City;
- In 2001 the market was dominated by first and second home buyers, with a significant increase in the 20-34 and 35-50 age cohorts; and
- By 2011, it is anticipated that the City of Wanneroo market will be a mixture of first, second, third and fourth home buyers and retirees.

AGE STRUCTURE AND FERTILITY

- The total fertility rate² in Australia has been decreasing for a considerable time. The total fertility rate was 1.75 in 1999.
- A reduced fertility rate will result in a greater reliance on immigration for population growth. This leads to increased multi-cultural tastes and preferences in housing types.

² 'Fertility Rate' is the number of births per 1000 females aged 15 to 44 years.

AGEING

The ageing of the population is one of the key drivers influencing the size and direction of the housing market in Australia.

- As the population ages the number of persons per household decreases (e.g. children leaving home, increased incidence of divorce, partner attrition).
- Wealth also increases with baby boomers (45-64) representing higher level of wealth when compared to other age groups
- As people age, their housing preferences alter with demands for lower maintenance, easier access, safety and security etc. As previously noted, people use their home a status symbol of wealth, thus a larger house represents higher success. The size of the home could be substituted for living in a high amenity environment (gated, body-corporate etc)
- An ageing population will result in continuing demand for a variety of housing products within the market
- The MDP: Trends and Projections anticipate the age group over 60 will increase significantly between 2002 to 2007. It is forecast that this age cohort will increase by 13.3%.
- MacroPlan identified that there will be a significant increase in the 50+ years age group in the City by 2011

80+ 65-80 50-64 = 2011 35-50 **2001 1991** 20-34 5-19 0-4 0 5,000 10,000 15,000 20,000 25,000 30,000 35,000

Figure 3. Age Structure 1991 to 2011, City of Wanneroo

Source: MacroPlan Australia based on Australian Bureau of Statistics data

HOUSEHOLD TYPE

- 'Couple Families with Children' will continue to be the largest household group within the City. The percentage of 'Couple Families with Children' in 2001 is shifting towards the Perth average of 52%.
- Since 1991 there has been an increase in all other household types, particularly couple without children and lone person households.

70% **1991** 60% **1996** 50% 2001 40% 30% 20% 10% 0% Couple Couple One Other Multi-Group family with family parent family family person household children without household household family children

Figure 4. Household Type 1991 to 2001, City of Wanneroo

Source: MacroPlan Australia based on Australian Bureau of Statistics data

HOUSEHOLD SIZE

- There has been a strong trend in decreasing household sizes throughout Australia, which has created additional demand for housing without population growth.
- The average Australian household size has decreased from 4.5 in the 1900's to 2.7 persons presently.
- The MDP: Trends and Projections estimated that the North-West Corridor will experience strong growth in lone person households between 2002 to 2007 with annual growth rate of 4.3%.
- Increases in couple family without children, lone parent and lone person households supports the MDP's projections for the North-West Corridor.
- Couple family without children and lone parent family households are also expected to experience strong growth between 2002 to 2007 with an annual growth rate of 4.2% and 2.2% respectively.
- ID Consulting forecast that the average household size for the City would decrease marginally from 2.96 in 2001 to 2.86 in 2016.
- Household size is stabilising within the City of Wanneroo, although the percentage of young families will continue to increase in the immediate future. It is forecast that the household size for the City of Wanneroo will grow towards the Perth average in the next 10 to 15 years, as couple family without children and lone person households continue to grow.

3.2
3.1
3.0
2.9
2.8
2.7
2.6
2.5
1991
1996
2001

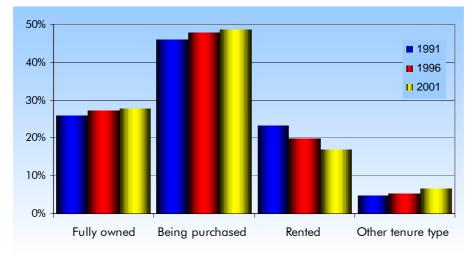
Figure 5. Household Size 1991 to 2001, City of Wanneroo & Western Australia

Source: MacroPlan Australia based on Australian Bureau of Statistics data

TENURE TYPE

- The City of Wanneroo has a strong mortgage representation with 49% compared to Perth's average of 32%. This can be attributed to increasing wealth and the preference for owner occupation.
- Rental properties experienced a 6% decrease between 1991 to 2001 from 23% to 17%. This can be partly explained by the 'New North' project which is seeing a significant portion of the Homeswest properties in Girrawheen and Koondoola refurbished and sold.

Figure 6. Tenure Type 1991 to 2001, City of Wanneroo



Source: MacroPlan Australia

EMPLOYMENT STATUS

- The percentage of full time employment decreased slightly from 1996 to 2001.
- A significant increase in part-time employment has replaced unemployment within the City of Wanneroo. This is reflected in increasing wealth with an increase in the percentage of dual income households for the City.
- The total work force³ for the City of Wanneroo is stable in contrast to the national decrease.

70% 1991 60% **1996** 50% 2001 40% 30% 20% 10% 0% **Full Time** Part Time Unemployed Total labour Not in labour force force

Figure 7. Employment Status 1991 to 2001, City of Wanneroo

Source: MacroPlan Australia based on Australian Bureau of Statistics data

- White-collar employment increased between 1991 to 2001 in line with the state average. There has been an increase in the number of professionals residing in the City of Wanneroo.
- There is higher proportion of pink-collar (female service industry) workers in the City of Wanneroo, reflecting dual income homes.
- Blue-collar workers are still predominant within the City of Wanneroo although the proportion has decreased since 1996.
- The Socio-Economic Indexes for Areas (SEIFA) (indication of advantage/disadvantage) indicates a strong diversity in wealth levels across the City of Wanneroo. Higher SEIFA results for the City is aligned to coastal areas.

³ The 'Work force' includes people aged 15+ years who: work for payment or profit, or unpaid helper in a family business; have a job but on leave or temporarily absent; are on strike or stood down temporarily; or have no job but are actively looking for work.

45% 40% 35% **1991 1996** 30% II 2001 25% 20% 15% 10% 5% 0% White Collar Pink Collar Blue Collar Other

Figure 8. Occupation Type 1991 to 2001, City of Wanneroo

Source: MacroPlan Australia based on Australian Bureau of Statistics data

DWELLING TYPE

- Housing products within the City of Wanneroo currently do not reflect the shifting demographic trends that have been forecast.
- Counter to emerging demographic trends towards a more aged population and more diverse family structure, the development of the separate house has been increasing since 1991 and represents 90% of housing products for the City of Wanneroo.
- Since 1991 there has been a decrease in housing diversity products within the City of Wanneroo. This is reflected by group dwellings (semi-detached, row or terrace, flats apartments etc) making up only 10% of total housing products in 2001.

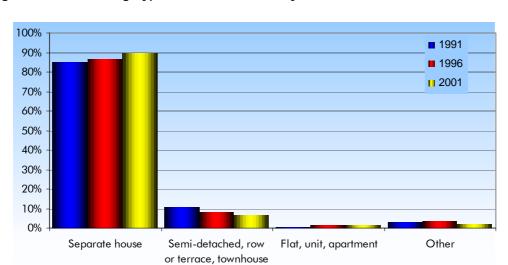


Figure 9. Dwelling Type 1991 to 2001, City of Wanneroo

Source: MacroPlan Australia based on Australian Bureau of Statistics data

3.4 Implications for the City of Wanneroo

The above assessment identifies an emerging and significant shift in the demographics and household profiles for the North-West Corridor and the City of Wanneroo, which will result in an accelerating need for housing in the next few years.

There is a lack of housing diversity for the City of Wanneroo with separate dwellings currently making up 90% of dwelling types for the City.

Indicative MDP figures indicates that for the period of 2003/2004 to 2007/2008, a total of 16,235 single dwellings will be developed in contrast to 1,182 group dwellings for the same period. One of the challenges for the Local Housing Strategy is to ensure that new housing product development reflects the shifting demographic profile of the City.

Another challenge for the City of Wanneroo is to supply sufficient land to accommodate the rapid population growth. ID Consulting forecast a development rate of 2,170 households per annum between 2001 and 2006. To test the accuracy of the forecast, MacroPlan reviewed dwelling approval data from the ABS for the City of Wanneroo. In the year 2001/02 dwellings approvals totalled 2,329 and the following year totalled 2,709. The first quarter of 2003/2004 revealed dwelling approvals of 717, the highest September quarter for Wanneroo on record. These figures indicate a household development rate in Wanneroo that exceeds the forecasts by both Planning WA and ID Consulting for the current 5 years.

4.0

4.0HOUSING SYSTEM ASSESSMENT





4 Housing System Assessment

The following analysis was prepared by the Department of Housing and Works for the City of Wanneroo Local Housing Strategy. It presents a range of dimensions which are considered that more fully explore housing concepts.

All data is based on the 2001 Census unless otherwise noted and excludes 'not stated' in any percentage calculations.

To assist in better understanding these concepts, the analysis is presented as a series of comparative assessments of the City of Wanneroo both within and beyond the shire boundary as follows:

- Beyond the shire includes the adjoining City of Joondalup and Perth Metropolitan Region
- Within the shire, utilising the three Statistical Local Areas (SLAs) defined by ABS that seems to fit well with the manner in which the City has developed historically.

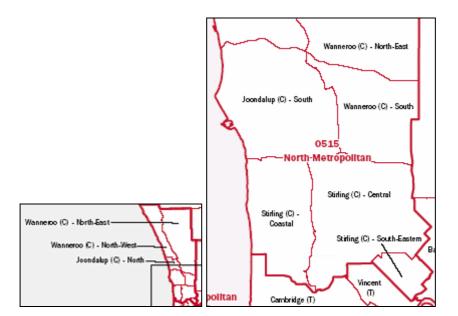
The ABS – SLA typology splits the City of Wanneroo as indicated on the accompanying plans:

North West - the coastal corridor that has emerged from the original Quinns Rock, Yanchep and Two Rocks townships and now the focus of major coastal development since 1989

North East – focuses on the outward growth from the old Wanneroo township and picks up the emerging suburbs of Tapping, Carramar and Banksia Grove to the north and Hocking and Pearsall to the south. This SLA also picks up the primary peri-urban, special rural and rural areas of the City

South – covers the area south of Ocean Reef Rd. It includes the major State Housing Commission estates developed in the 1960s and 70s that are now undergoing urban renewal as part of the New Living 'New North' project and the more recent developments emerging at Landsdale, Madeley and Darch

Use of the ABS gives some appreciation of the variability across the shire generally as per 5.2 of the DPI LHS Guidelines (1992).



4.1 Housing Stock

In accordance with the DPI LHS Guidelines (5.5), a detailed evaluation of the type, age, condition and distribution of housing stock warrants discussion as it may influence the need to guide future housing investment to better meet the needs of the future population and household structures.

Key Points

- The City of Wanneroo is dominated by single detached housing (90%) with the balance (10%) comprising of semi-detached duplexes and townhouses (7%), flats / units (2%) and other (1%)
- Wanneroo's proportion of detached housing is similar to the adjoining City of Joondalup (91%) but significantly higher than the overall Perth Metropolitan Region (77%)
- The dominance of new single detached dwelling activity over the 1991-2001 period resulted in the proportion of detached housing increase from 86% to 90%, at the same time as the average household size was declining. Over the same period, the adjoining City of Joondalup recorded a decline in the proportion of detached housing (from 93% to 91%), due primarily to multi-residential activity associated with the development of the Joondalup City Centre

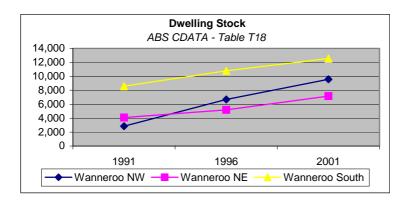
In terms of the local distribution of the housing stock, Census trend data between 1991 and 2001 indicates some variability across the City:

North West – a slight fall in the proportion of detached housing (95% to 94%) but this may also be attributed to the inclusion of aged person accommodation (1996) and serviced apartments (2001) in the respective Censuses

- North East an increase from 91% to 92% in single detached housing associated with the outward growth of the Wanneroo township
- South there is a marked increase in the proportion of detached housing (81% in 1991 to 87% in 2001) which is attributed to the growth of new suburbs of Marangaroo, Alexander Heights and Landsdale. This has the affect of decreasing the proportion of multi-residential dwellings in the older public housing estates further south. Demolition of some of the older multi-residential state housing may also have contributed to the increase.

4.2 Historic Growth and Recent Housing Activity

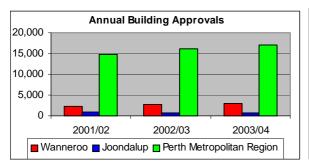
The City of Wanneroo dwelling stock increased by 89% or 13,800 over the 10 year 1991-2001 intercensal period. Over the same period, the adjoining City of Joondalup dwelling stock increased by a similar 14,300 or 36% whilst the Perth Metropolitan Region increased by 27% overall.



The distribution and growth of the dwelling stock across the City of Wanneroo over the 10 year 1991-2001 period is indicated on the graphic. Whilst the North West recorded the strongest growth, the South maintains its pre-eminence with the largest dwelling stock in 2001.

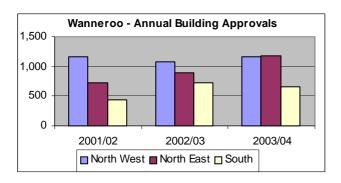
Recent development activity since 2001, based on *ABS Building Approval data (Cat 8731.0)* highlights:

- The dominant role the City of Wanneroo plays in Perth's housing growth, contributing the highest number (3,000 in 2003/04) and growing proportion (18% in 2003/04, up from 16% in 2001/02) of new dwelling approvals
- A declining level of activity in the adjoining City of Joondalup associated with the declining level of new subdivided land available
- Single detached housing continues to dominate new housing in the City of Wanneroo (95-99%) compared with the City of Joondalup (66-83%) and Perth Metropolitan Region (83-86%)



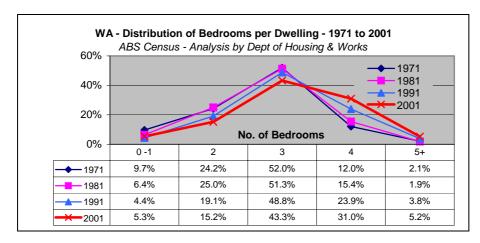


 Within the City, the North West has dominated with a consistent level of activity over the past three years, However, the North East with steady growth exceeded the North West in 2003/04.

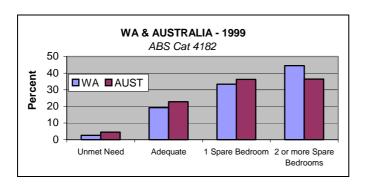


4.3 Dwelling Size

ABS research indicates the average size of new dwellings in WA has increased by 24% from 185m² in 1985 to 229m² in 2003, well below the national average increase of 40% over the same period.



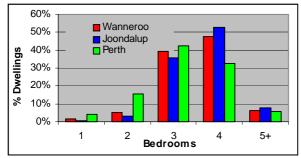
Associated with the increase in house size is the growth in the number of bedrooms per dwelling. The accompanying graphic highlights the shifts in distribution for WA over the past 30 years.

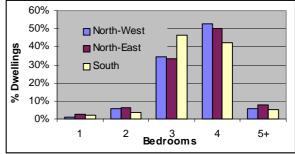


The other feature emerging from ABS research (1999 Australian Housing Survey Cat. 4182.0) is the level of notional excess housing in WA based on the adopted Canadian Occupancy Standard. The analysis indicated WA had some 45% of its dwelling stock with two or more spare bedrooms compared with the national figure of around 35%. ABS does however place a caveat on household utilisation which acknowledges 'spare' capacity is used for a variety of purposes.

In the absence of detailed analysis of the size of new dwellings at SLA level, the distribution of household bedroom numbers provides a reasonable proxy for dwelling size. Data from the 2001 Census indicates:

 3 (39%) and 4 (48%) bedrooms dwellings dominate Wanneroo's dwelling stock with local distribution reflecting the predominance of the older 3 bedroom stock in the South compared with the greater presence of 4 bedrooms in the newer areas of the North West & North East





 Wanneroo and Joondalup's predominance of 4 bedroom dwellings is well above the overall Perth (32%) and State figures, reflecting the younger age of the housing stock in Perth's growth corridor and the contribution these LGAs have made to the shift in overall housing trends

Clearly, new housing activity in the City of Wanneroo and adjoining City of Joondalup over the past 10-15 years, with its increasing dominance of larger single detached dwellings is contributing to Perth and WA's changing housing stock.

4.4 Housing Tenure

Housing tenure indicates the status in which households occupy a dwelling. Research indicates strong linkages between household structure, age, income and tenure. Discussion on tenure trends within the City at 3.2 of the LHS provides a starting point but warrants more detailed examination to discuss the linkages, the comparative relationship within and beyond the City and probably more importantly, a more detailed examination of the rental tenure as this is an area of primary discussion on housing affordability.

Census custom tables from ABS allow for a more precise breakdown of rental tenure arrangements as there are several quite discrete groups within this category which have quite different aspects in terms of costs, benefits and security of tenure. ABS classifications within the rental tenure include:

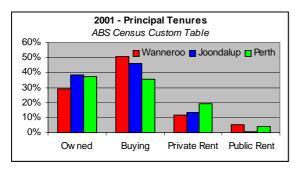
- **Public** this is the State Housing Authority where tenants are charged rent at 25% of income and have security of tenure whilst eligibility criteria is maintained.
- Community Housing covers a mix of providers from State funded groups and may also include others such as churches etc. For State funded providers, rent is notionally charged at 25% of income with tenants eligible for Commonwealth Rent Assistance (CRA)
- Employer covers both State and private employer housing which may be subsidised
- Private covers the largest part of the rental sector and captures those who rent either through an estate agent or landlord not living on the premises. This is the true rental sector as we know it where tenants are charged rent at market rates and are eligible for CRA
- Landlord Not Stated is a catch all for those not falling into these other groups.

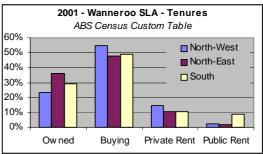
 All percentage calculations should exclude these from totals.

Other than specific regional circumstances such as the Pilbara or Kimberley where employer or community housing are dominant tenures, it is adequate to discuss the four principal tenures (owners, buyers, private renters & public renters) as these capture 95-97% of households in Perth. The accompanying graphics present relative comparisons in tenure arrangements.

In terms of external and internal comparisons, the City of Wanneroo has:

- As expected a significantly greater share of home buyers given its role as the primary growth local authority in Perth. The North West SLA with its strong growth in dwelling stock since 1991 has a marginally higher share of buyers within the City
- Conversely, the greater proportion of buyers reflects in lower levels of outright owners (29%) and private renters (12%) compared with the adjoining City of Joondalup and Perth Region





A marginally higher share of public housing (5%) compared with the overall Perth figure (4%). The South SLA currently dominates the distribution of public housing within the City but it is expected this will change over time as the 'New North' New Living program reduces the presence in the South and new public housing is 'salt and peppered' through the North West and North East SLAs

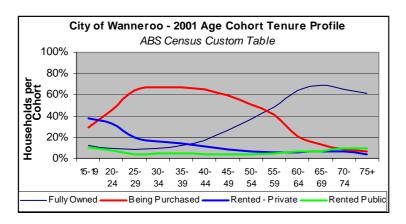
4.5 Housing Tenure by Age and Household Structure

Other relevant comparative measures of tenure arrangements that assist is understanding the dynamics of the housing market in the City of Wanneroo are:

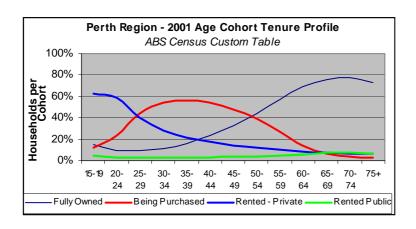
(A) Household tenure across age cohorts

The City of Wanneroo generally exhibits the typical pattern of housing careers as households shift to more secure tenure arrangements along the age spectrum and life cycle:

- young renters (although limited in Wanneroo) are replaced by home buyers in the early years
- outright ownership progressively replaces buyers in the older age cohorts



However the City does have some notable differences in the relative proportion of some tenure (namely buyers and private renters) within various age cohorts compared with overall Perth figures. These differences reflect the dominant influence of homebuyers and lower levels of private renters within Wanneroo. Also the transition of more owners to buyers is slightly older within Wanneroo (55-59 years) compared with the Perth figure (50-54 years) due to the continual and disproportionate inflow of new homebuyers into Wanneroo.

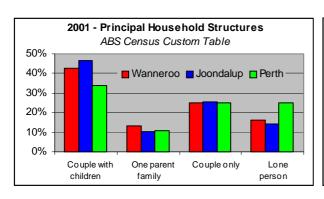


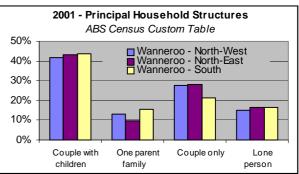
(B) Tenure arrangements and household structures

Primarily there are four dominant household structures (couple family with children (irrespective of age/dependence), single parent families, couple only and lone persons) that capture 95% of the households.

As expected, the growth role of the City creates some notable variations and attracts:

- a greater proportion of couple families with children
- slightly greater concentration of lone parents
- similar proportion of couple only who represent young home buyers and older empty nesters
- noticeably less lone person households

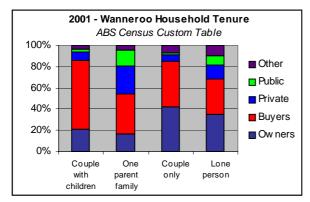


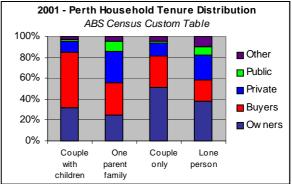


More specific SLA household structure arrangements for the City of Wanneroo indicate some variations across SLAs primarily in single parent and couple only households.

To round out the discussion on **household tenure arrangements**, ABS Custom Table data indicates that for the City of Wanneroo:

 85% of the dominant couple family with children are either outright owners or home buyers, the same as the overall figure for Perth. However the distribution is different with a greater proportion of these households as buyers (64%) in Wanneroo to Perth (53%) A greater proportion of **single parents** in the City of Wanneroo reside in public housing (15%) rather than **private** rental (26%) compared with Perth Metropolitan figures (10% public & 31% private). Whilst the combined level of single parents either owning or buying is similar between Wanneroo and Perth, the proportion buying (38%) is greater in Wanneroo

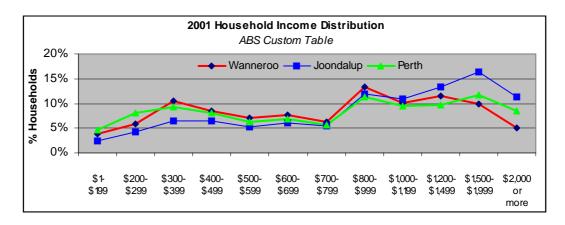




- Whilst the overall level of ownership/buying for couple only is similar between Wanneroo (85%) and Perth (82%), there is a greater proportion of buyers (43%) in Wanneroo compared with the overall Perth figures (30%). There is a lesser tendency for couple only households to rent privately in Wanneroo (6%) compared with Perth (12%) generally
- Significantly greater proportion of lone persons are buyers (33%) in Wanneroo which offsets those renting privately

4.6 Household Income By Tenure

Custom table analysis of median household incomes across tenures from the 2001 Census highlights that the use of crude household income measures for the total population (such as comments under Employment and Wealth at 3.1 of the Draft LHS) masks some significant variability in income levels across the community and give pointers to the economic rationale why households choose or reside in specific tenures.

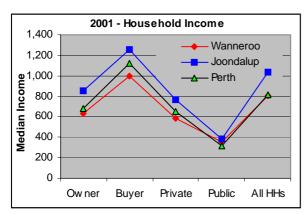


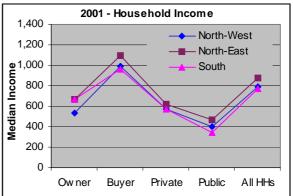
Crude analysis using the often-quoted median income of all households indicates:

- Wanneroo's median weekly household income (\$804) was marginally below the Perth Region figure (\$815) but significantly below the adjoining City of Joondalup figure (\$1,035)
- The distribution of household incomes indicate the City of Wanneroo had marginally higher proportions of income in the \$300-999 bracket, reflected some variability relative to Joondalup and Perth between \$1,000-1,499 and had less proportions beyond \$1,500

However, more specific median income analysis by tenure reveals:

- Home buyers have the highest median income and strongly influence the median income figure for all households as buyers represent the largest tenure, particularly in Wanneroo
- Lower median income of outright owners are influenced by older retired owners
- The median income of those in private rental suggests it is a tenure of necessity rather than a tenure of choice for many which also limits their capacity to transition into home purchase





 The low median income of public tenants reflects a high proportion of households receiving government transfer payments as their primary source of income

Comparative analysis indicates:

- Median income levels in Wanneroo across most tenures are consistently lower than Joondalup and Perth
- Within the City of Wanneroo, median income levels in the North East SLA are consistently higher than the other SLAs

Equally, whilst there is significant variation in household incomes across the tenures, there are also major variations of incomes within household structures within each of the tenures. The accompanying graphic gives an indication of some of these relationships for Wanneroo:

- Couple with children and couple only households are strong economic units dominating home purchase
- Couple only incomes fall away for older outright owners and those renting

 Aspiring single parent and lone person households in private rental have limited resources to support a mortgage and transition into home purchase in the absence of appropriate housing products

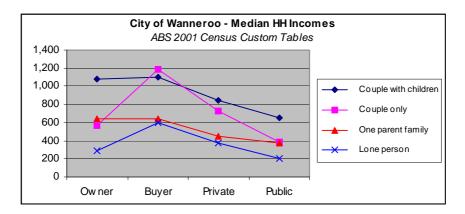


Figure 10. (A) Home Buyers

4.7 Housing Costs

Housing costs combined with household income form the basis for an assessment of housing affordability. Limitations of Census data restricts the capacity for a full analysis of housing affordability as data for income, mortgage repayments and rent is collected in data ranges and does not provide scope to capture other housing related costs such as rates and taxes or maintenance. ABS generally captures this more comprehensive data from *Surveys of Income and Housing Costs (SIHC Cat 6523)*, *Housing Occupancy and Costs (Cat 4130)* and *Household Income and Expenditure Surveys (HIES Cat)* and the *Australian Housing Survey (AHS Cat 4182)*. These surveys, unlike the Census, whilst providing a more accurate assessment, lack spatial clarity in terms of application to specific local authorities.

In terms of housing affordability and housing stress, the current nationally adopted definition is used as benchmark for analysis purposes. The benchmark is based on the notion that the proportion of *household income* spent on housing is reasonable and leaves sufficient income to meet other basic needs such as food, clothing, health, education and transport. Households in the lower income distribution with housing costs greater than the affordability benchmark are considered to be in *housing stress*.

Affordable Housing can be defined as housing that is available to the lowest two income quintiles (bottom 40% of the income distribution) without having to pay more than 30% of household income to meet housing costs."

Past ABS surveys have found that home buyers and private renters represent the two high housing cost tenures. Outright owners are free of mortgage costs and public housing tenants are quarantined by rent setting policy to a maximum of 25% of income. Therefore subsequent data presented will only focus on home buyers and private renters.

Given the passage of time that has now occurred since the 2001 Census and the real estate price rises that has occurred since, care needs to be taken in use of the data.

(A) HOME BUYERS

The accompanying table gives an indication of relevant median household income and median mortgage repayment figures from the 2001 Census. It provides an indication that homebuyers in the City of Wanneroo were committing a slightly higher proportion of income to housing. However this also needs to be put in context that the proportion of income to housing falls over time with wages growth and steady interest rate environment. Wanneroo's slightly higher ratios would reflect the continuing high level of households entering the market or upgrading their housing.

	Median Homebuyer Income	Median Monthly Repayment	Repayment to Income
North West	\$987	\$843	19.7%
North East	\$1,092	\$873	18.4%
South	\$959	\$771	18.6%
Wanneroo	\$996	\$826	19.1%
Joondalup	\$1,260	\$909	16.7%
Perth Region	\$1,122	\$858	17.6%

Ratio = Monthly Repayment divided by Median HH Income * 52/12

Analysis of 2001 Census Income and Mortgage Repayments indicates that most home buyers locate in areas commensurate with their income as banks set lending levels based on income. Generally speaking existing homebuyers should only fall into housing stress in the event of:

- Loss of income attributed to loss of employment or breakdown of the household unit
- Interest rate rises
- Major unbudgeted expenditure or abuse/overuse of credit

Whilst macro analysis of the 2001 data indicated a proportion of homebuyers were exceeding the 30% threshold, the incidence of households making accelerated repayments clouds the analysis. For the **North West Corridor**, the analysis indicated:

- Approximately 8% of home buyers were paying around 30% of income to mortgages
- A further 10% exceeded the 30% threshold

For those in the lower income distribution for homebuyers (second quintile for home buyers in the NW Corridor = \$1,001), 26% were paying more than the 30% threshold.

(B) PRIVATE RENTERS

The accompanying table drawn from ABS custom tables gives an indication of median incomes, and rents of private renters and also the published median rent in ABS data. The table highlights:

- Significantly higher commitment of income to rent for households with considerably less income
- Median private rents are generally higher than published median rent figures as the inclusion of lower public and community housing rents influence the figures as apparent in the South SLA where there is a high public housing presence

	Median Income	Median Private Rent	Rent to Income	Published Median Rent
North West SLA	\$567	\$147	25.9%	\$151
North East SLA	\$619	\$147	23.7%	\$145
South SLA	\$575	\$145	25.2%	\$119
Wanneroo	\$582	\$146	25.1%	
Joondalup	\$768	\$177	23.0%	
Perth Region	\$650	\$150	23.1%	\$142

In terms of private rental affordability, macro custom table analysis of 2001 Census household income and private rents for the North West Corridor indicates:

- Some 13% of all private renters were paying around 30% of income to rent
- A further 25% were paying more than 30% of income on rent

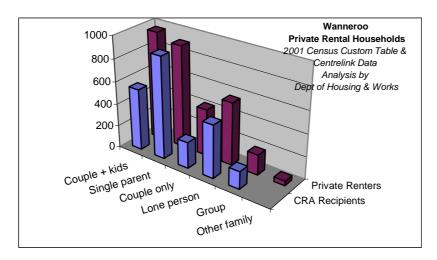
More specifically, for those private renters in the North West Corridor in the two lowest income quintiles (<\$588/week), some 63% were paying more than 30% of income to rent.

Provision of Commonwealth Rent Assistance

To meet high private rental housing costs, tenants are eligible (based on income and social security benefits) to access Commonwealth Rent Assistance to reduce the cost burden. Analysis of 2001 Census and Centrelink data found that just over half the private renters or approximately 10% of the State's households access CRA.

In the Perth's North West Corridor, some 60% of private rental households draw CRA which is above the overall Perth figure of 55%.

More specifically, in the City of Wanneroo, approximately 75% of the 3,080 private rental households captured in the 2001 Census were in receipt of CRA. The accompanying graphic provides an indicative distribution of private rental households and CRA recipients by household structure. It has assumed, based on Perth Region data that 40% of single person recipients are in a sharing arrangement as part of a group household. The data highlights a high proportion of single parents and lone persons drawing on CRA to meet the housing costs.



Shortfall in Affordable Private Rental Housing

Ongoing national monitoring and research of the private rental housing sector has highlighted the progressive loss and shortfall of low cost rental housing stock for lower income households since 1986.

Landmark research by the Australian Housing Research Fund found that between 1986 and 1996 there had been a 20% loss of some 11,000 units of low cost housing in Perth where a surplus of 8,000 in 1986 became a 3,000 shortfall in 1996. Regional WA experienced a more severe decline of 62%. More recent research by the Australian Housing and Urban Research Institute (AHURI) based on the 2001 Census found:

- Perth's shortfall of low cost rental housing had increased to 12,000 units
- A shortage of 700 low cost housing units in the City of Wanneroo

The specifics of the shortage of stock by income and rent is as follows:

	Income \$0-222 (Y1) Rent \$1-67 (R1)	Income \$223-334 (Y2)	Income \$335-446 (Y3)
	κοπ φ1-07 (κ1)	Rent \$68-100 (R2)	Rent \$101-134 (R3)
Wanneroo	200	300	200
Perth Region	6,000	6,000	-

Note: For Y3-R3 stock, Perth as an overall surplus despite the shortfall in Wanneroo

4.8 Summary

The analysis has highlighted the City of Wanneroo's role as the primary growth local authority in Perth and Western Australia, contributing around 3,000 or 18% of Perth's building approvals in 2003/04.

This high rate of new housing which is dominated by single detached dwellings (95%) and coupled with renewal of older public housing estates built in the 1960s and 70s contribute to the City having a predominantly modern albeit homogenous housing stock that has limited diversity.

Marketing of continually larger project homes that dominate WA's new housing sector has contributed to more than half of the City of Wanneroo's housing stock having four (48%) or more (6%) bedrooms at a time when household size is declining. The proliferation of the '4x2' and declining household size are contributing to WA's excess housing capacity although the City of Wanneroo (43%) and adjoining City of Joondalup (47%) have a greater share of couple families with children than the Perth average (34%). Larger housing also supports a marginally greater proportion of single parent families (13%) whilst couple only households (25%) who represent both new home buyers and empty nesters at either end of the age spectrum are consistent with overall Perth figures.

The extent of new housing activity contributes to the City having the highest proportion (51%) of homebuyers in Perth. Consequently this contributes to Wanneroo having a lower level of outright ownership due to the continual flow of new housing and homebuyers.

Equally, despite having a significantly lower level of private rental households (12%) than the overall level for Perth (19%) and a marginally higher level (5%) of public housing, research from the 2001 Census indicates a shortfall of 700 affordable low cost rental housing units in the City of Wanneroo. Analysis also shows that approximately 75% of the private rental households in the City of Wanneroo draw on Commonwealth Rent Assistance to assist in meeting their housing costs.

This highlights the need to ensure strategies for the provision of affordable housing extend beyond access to home purchase or the continued reliance on the State through the provision of public housing to more broader responses that include investors in private rental or the community housing sector. Ongoing construction and 'salt and peppering' of new public housing across the City will also provide some benefits.

Analysis of median households incomes across the major tenures in the City of Wanneroo are lower than the adjoining City of Joondalup and Perth Region generally. This is a vital component for consideration in framing future housing responses.

Equally, creating housing diversity as well as containing land production and housing construction costs as part of the housing affordability equation are paramount if the City of Wanneroo seeks to maintain its pre-eminent growth role.

Mechanisms that can deliver high early levels of amenity and services that reduce high ex-housing costs such as transport are also integral to the development of the Local Housing Strategy.

5.0

5.0LOCAL HOUSING
STRATEGY THEMES





5 Local Housing Strategy Themes

This section examines the Local Housing Strategy themes. The themes are broken into housing market demand and supply.



Housing Market (Supply)





Project Homes

Eg. Brighton Access Housing



Infill Homes

Eg. Girrawheen & Koondoola



Locational Considerations

Infrastructure

Quality Development

- Development contribution or special rate scheme for infrastructure
- Affordability Mandate lot size eg. Lots 240sqm. or smaller, no need for contribution or special rate scheme



Amenity

• Designed to be sympathetic to the neighbourhood character.



Economic

- Housing supply mismatching demand
- Timing 2010 to 2020 (amount of transitional housing required)

Transport Access

• Increase walkable access to public transport network.



Location

• Increase density near town & neighbourhood centres, employment and facilities.



Community

Community involvement in the design of areas selected for further housing.

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Housing diversity and choice, land use and infrastructure, environmental, social and community, economic and design principles were major themes driving the need for a Local Housing Strategy within the City of Wanneroo.

5.1 Housing Density, Diversity and Choice

The density of housing relates to housing choice because increased density to single residential allows the development of a wider range of housing types. For example, an R Coding of above R 20 is needed before semi detached houses are likely to be built. Townhouses require normally at least a density of R30 and flats R40 or above.

There can also be a variety of single houses – smart lots of less than 440 square metres will enable the construction of smaller homes that will suit retirees, singles and couples without children

The City of Wanneroo has an ageing population with a declining household size, which is very typical to that of Western Australia. Future housing stock needs to reflect this trend to accommodate the subsequent ageing population and anticipated smaller household size. Increasing State/Territory housing stocks within the City could increase housing affordability.

In addition, it could also be beneficial to understand how different areas within the City can attract/accommodate certain sections of the housing market. ID Consulting identified the following areas:

- Landsdale, Butler, Clarkson and Carramar-Banksia Grove are areas that have been recently developed for residential purposes and are attractive to couples and families seeking new housing opportunities.
- Rural areas are more attractive to mature families and empty-nesters/retirees seeking to upgrade to second or third houses. The rural areas offer this group a lifestyle and locational changes.
- Two Rocks-Yanchep are attractive to families and empty-nesters/retirees.
- A more affordable housing option should be provided within established areas such as Girrawheen and Koondoola.
- Quinns Rock is shifting away from being a predominantly holiday destination to a suburb for established families.
- Darch-Madeley and Hocking-Pearsall's population characteristics will change due to many of the market gardens being converted to residential developments.
- New green fields sites identified at Butler, Two-Rocks-Yanchep, Alkimos-Eglinton, Clarkson, Jindalee, Ridgewood, Tapping-Ashby-Sinagra, Darch-Madeley-Woodale, Landsdale, Carramar-Banksia Grove and Hocking-Pearsall.

5.2 Land Use and Infrastructure

Although the North West Corridor and in particular the City of Wanneroo is experiencing rapid population growth and urban expansion, established suburbs should also be considered for revitalisation because of existing zoned land and infrastructure.

The expansion of Perth has been largely based on motor vehicles being the primary means of transport including journeys to and from work. Metroplan sought to strike a balance between public and private vehicles. To support a higher level and more efficient operation of public transport and to reduce car dependency, Metroplan sought to promote the development of medium and higher density developments close to major urban facilities such as public transport nodes and railway station precincts. The idea of reducing vehicle dependency and promoting higher density development around major nodes is reflected in the "Dialogue with the City" and the draft "Network City Strategy for Perth".

There is presently a relatively limited public transport network within the City of Wanneroo. A train station located in Clarkson (the only one in the City) provides a transit for bus services to Joondalup Station from Mindarie, Quinns, Merriwa, Butler and Clarkson. There are limited east-west public transport routes available.

Based on this review, the following conclusions can be made:

- Established areas eg. roads, building and land with existing infrastructure should be considered for housing opportunities
- Infill development that provides greater housing choice should be encouraged to revitalise established suburbs
- Development providing greater housing choice and diversity should be encouraged around proposed transport centres and town centres.
- Housing options for the aged, people with disabilities and lower incomes should be encouraged around existing supporting facilities.

In relation to more diverse residential development around proposed major transport centres, a study prepared for the City by Syme Marmion & Co titled "Development in the North-West Corridor of Perth: Some Economic Issues" identified planning and economic benefits associated with this principle.

The issue with the Northern Suburbs railway line is that it is located within established residential areas where development patterns have been formed. The railway line was completed to Currambine in 1992. This line was extended further into the North-West Corridor to Clarkson and commenced operation in October 2004.

There has been poor urban land use and infrastructure integration on the existing railway line, resulting in major stations acting as transfer stations with high park and ride and bus transfer components. This contrasts the principles of walkability as encouraged in the Livable Neighbourhood Code. The provision of safe and direct pedestrian and cycling infrastructure including secure cycle parking integrated with public transport should be encouraged as a potential solution to address these issues.

The Syme Marmion study identifies the following benefits if future infrastructure such as rail lines were factored into land use planning:

- Significant potential to increase development diversity
- Increased development values
- Reduce rate of urban sprawl by one year.

The City should pursue greater integration of urban land use and infrastructure in particular with railway stations, which can influence future urban development patterns. The key issue is the optimal timing of future station development, as the later a station is built in greenfields, the less likely new subdivision and development will respond to it. With certainty of the timing of future construction, developers can respond with transit oriented development and increased densities that can be marketed with certainty to future purchasers.

Syme Marmion identified the benefits as:

- Reduced car dependency
- Reduced rate of urban sprawl
- Increased efficiency of use of rail infrastructure
- Improved efficiency of services infrastructure
- Increased efficiency of road infrastructure
- Increased efficiency of institutional infrastructure.

The review of the North West Corridor should look at implementation measures to fund the further extension of the North West rail line to Brighton as soon as possible to ensure a full transit oriented development response by the developer in accordance with existing structure planning. From Brighton northwards, the State Government should provide a mechanism for rail extensions to keep pace with frontal development of the North West Corridor.

The MDP-ULRP identified two key infrastructure issues affecting the North-West corridor, namely sewer and water supply. Sewer issues affect 14 project areas (4,999 lots) with the main suburbs being Alkimos, Landsdale, Madeley, Tapping, Two Rocks, Woodvale and Yanchep.

Water supply issues affect 25 project areas (11,235 lots) with the main suburbs being Alkimos, Banksia Grove, Butler, Carramar, Clarkson, Hocking, Jindalee, Madeley, Sinagra, Tapping, Two Rocks and Yanchep.

The North-West Corridor expands beyond the existing headworks front and will require significant additional infrastructure to support developments. The land developers involved and the Water Corporation are generally able to arrive at acceptable arrangements for the extension of the necessary headworks.

For other infrastructure and services required for new development areas, arrangements similarly need to be made between the planning and servicing agencies and the developers involved. This may include consideration of developer contributions and special rate schemes.

5.3 Environmental

Two key areas identified within Metroplan in regards to the protection of the environment include:

- Reducing the impact of development on the environment by planning a more efficient city;
- Conserving natural resources, particularly water and natural vegetation cover.

Based on a review of the Smart Growth Draft Strategy, the following conclusions can be made:

- The City of Wanneroo has retained a large proportion of its natural assets. According to the Smart Growth Draft Strategy approximately 33% (22,787 ha) of the area of Wanneroo is covered by Bush Forever Zoning. Of the total area, 1,384 hectares have native vegetation within reserves managed by the City of Wanneroo.
- The Smart Growth Draft Strategy states that areas of natural vegetation within the City of Wanneroo are being cleared for housing development and parks. This is primarily due to over 12,000 residential lots being created in the North-West Corridor between 1998/99 to 2002/03; many within large scale subdivision. In 2002/03 over 3,300 lots were created within the main centres of activities ie. Suburbs within the City of Wanneroo, such as Butler-Quinns Rocks, Madeley-Darch-Landsdale and Carramar-Tapping.

Consideration should be given to areas with sensitive and significant bushland when identifying future areas of urban expansion. To reduce the further loss of significant bushland, the City of Wanneroo should encourage more diverse residential development within established suburbs, activity centres and major transport nodes. Water sensitive urban design principles could be adopted to promote more efficient residential developments that blend with the natural environs and which could reduce developmental impacts on the environment.

There also needs to be a balance between urban development/expansion and the environment. Efficient urban development, including increased density, public transport access and appropriate standards can significantly reduce the rate of urban expansion and the clearing of natural areas.

The Syme Marmion report 'Development in the North West Corridor of Perth: Some Economic Issues' found that an increase from conventional 10 lots/ha to 17.4 lots/ha within 1 kilometre of future rail stations could reduce sprawl and provide an additional six years of corridor growth between Butler and Yanchep. Increasing gross density to 25.8 lots/ha within 800 metres of each station could reduce sprawl further and provide 8 years of additional corridor growth from Butler to Yanchep.

Increasing density increases public transport provision and services and employment at centres. In turn this increases walking and cycling and decreases reliance on private vehicle travel and the emission of greenhouse gasses.

5.4 Social & Community

Based on ID Consulting forecasts, the City's age and household structure profiled as follows:

- A large proportion of the City's population is aged between 0-14 and 55+ years.
- In 2001, the age group 0-14 made up 25.9% of the total population. By 2011 this age group will decrease slightly as a proportion to make up 24.3%, just under a quarter of the total population.
- In 2001, the 55+ age group made up 15.8% of the total population. By 2011 this age group will increase as a proportion by 2.6% to make up 18.4% of the total population.
- In 2001, 'Couple families with dependent' households made up 42.93% of the total households in the City. By 2011 this household group will decrease marginally as a proportion by 0.29% but will still be the dominant household structure at 42.64%.
- In 2001, 'Couples without dependents' households made up 25.89% of the total City households. By 2011, this household group will increase as a proportion by 1.98% to make up 27.87% of the total households.
- During the same period 'Lone parent families with dependents' and 'Lone person' households decrease marginally as a proportion.

From a planning point of view, it is important that the City of Wanneroo recognises the differing social and infrastructure needs of these groups in the future planning of new urban areas. This is most applicable when providing social spaces and community facilities in new urban development to ensure that it has the chance to be developed as socially cohesive communities. The social spaces and community facilities should be designed to provide a focal meeting point and to encourage social interactions between the users. The City of Wanneroo should pay more attention to the relationship between the physical planning and the community development aspects of new areas.

The design and density of development are import attributes to community. Increased density can support the viability of walking, public transport and local employment through being better able to support local services. Improved access to transport and services helps the large portion of the community who do not have access to a car; especially the young and the aged.

Adding housing or increasing housing to activity centres adds activity to the centres which improves safety and security.

In addition, the issue of housing affordability for the aged, people with disability, indigenous population and people on low income will also need to be taken into consideration with the development of the Local Housing Strategy.

Better subdivision design and housing products can enhance economic, social and environmental objectives and housing affordability. A range of housing densities will help facilitate the provision of more affordable land and housing, and this will support a greater range of lot types, lifestyle opportunities and housing choice.

DISABILITY

In line with the Disability Services Commission, disability should be a major consideration in the planning for all future residential developments and in redevelopments of existing areas. This is based on the following considerations:

- Disability affects 20% of the population.
- Disability affects 50% of the population over the age of 60.
- With an ageing population, the incidence of disability is anticipated to increase.
- Disability affects not only the person but family and friends as well.
- Advancement of choice requires consideration of all people of all ages and abilities.
- Enhancing community requires consideration of all people of all ages and abilities.
- It is a persons right to be able to remain in their community (ageing in place).
- The international trend is towards catering for the need of all ages and all abilities through the application of Universal Design principles.

The Disability Services Commission recommends that disability be included as a major demographic and driver of housing policy.

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5.5 Affordable and Public Housing

Land use planning, primarily through a planned framework for the provision of zoned land has been a key mechanism for ensuring housing costs in Perth are minimised for access, particularly to first home buyers to the housing market. In the past, people have been willing to take advantage of cheaper housing on Perth's fringe and trade-off accessibility to transport and services.

Standards for estates and houses through Town Planning Schemes, the R Codes and Building Code of Australia have generally been set to ensure that the cost of housing is minimised.

Affordable housing commonly uses a benchmark known as 'housing stress' wherein houses in the lower 40 per cent income bracket who pay more than thirty per cent of their gross income on housing costs, whether renting or buying are considered to be in 'housing stress'⁴.

The supply-side of the housing market is important to keep housing costs low and this has been achieved in Perth through an ample supply of zoned land, particularly in the North West Corridor.

The direct cost of a house, although the most significant outlay for most people, is not the only aspect of affordability to a household. Transport is a significant cost to households – having a second car costs the equivalent of a second superannuation to a household, as well as the cost of the additional time spent travelling.

Housing also has wider economic, social and environmental impacts and costs. The wider community bears some of the cost of delivering low cost houses to the fringe of Perth. These costs include the environmental costs of travel, the social costs of isolation where community formation may be inhibited because of a lack of facilities and services and the costs to the economy through underemployment in new communities and through long commutes.

The design of houses with respect to solar orientation, heating and cooling, and their impact on vegetation also has environmental consequences and costs.

Affordable housing needs to take into account the total cost of housing to a household, so that the cheap provision of land and a house is balanced against other household and community wide considerations including access to transport, services and employment and the wider environmental consequences of new suburban development.

Housing is included as an important factor in affecting crime levels. Providing housing that is both appropriate and affordable is one of a number of strategies for dealing with the problems of criminality in local areas.

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⁴ Affordable Housing Need in Australia, Pressing Need, Effective Solution. Affordable Housing National Research Consortium, September 2001.

Local government has important responsibilities that affect affordable housing. The administration of the planning and building system must be both *efficient* – a clear and easily applied rules and applications dealt with in a timely manner. Council's administration also needs to be *effective* – through the use of Smart Growth to overcome sprawl.

5.6 Economic

- Median vacant land prices are still relatively low within the North-West Corridor with the average being approximately \$140,000 for a vacant residential lot.
- The challenge for the City of Wanneroo is to retain affordability while still maintaining economic growth.
- The Local Housing Strategy should seek to regenerate activity centres, infill areas and major transport centres.
- The Local Housing Strategy should encourage flexible/Alternative uses within developments eg. Home based business.

5.7 Design Principles

The development of the LHS should be linked to best urban design principles with appropriate development densities for appropriate locations throughout the City. The main themes of urban design principles should encourage:

- An urban structure of walkable neighbourhoods with access to public transport, services and local jobs
- The creation of a network of pedestrian and cycling routes that connect various land use destinations and integrate with public transport
- Diverse residential development in and around activity centres, infill and major transport centres
- Neighbourhood character and a sense of community and local identity
- The promotion of water efficient and energy efficient design and subdivision layout
- Linkages, movability and accessibility for easy access to services facilities and transport stops and for safe vehicle movements (more efficient subdivision layout)
- Providing more diverse housing options for the different sections of the community
- Maximise land efficiency and promote accessible and affordable housing
- Enhance the surveillance of the public realm to improve personal safety
- Promote local employment, including home based business, especially in and around activity centres.
- Develop urban design standards that incorporate all the above principles to help assess future subdivision and urban developments.

6.0

6.0STRATEGY
DEVELOPMENT





6 Strategy Development

6.1 Existing City of Wanneroo Dwelling/Household Profile

Table 1. Existing Wanneroo Benchmark (dwelling mix percentages)

	Couple families with dependents	Couple families without dependents	Lone parents families with dependent	Other families	Lone Person households	Group Households	TOTAL
Separate House	97.37	88.98	88.20	87.87	73.15	90.67	90.15
Semi-detached, row/terrace, townhouse, etc	1.78	8.07	8.54	9.21	15.41	6.74	6.52
Flat, unit or apartment in one or more storey block	0.27	1.10	2.07	2.93	5.56	1.04	1.55
Flat, unit or apartment in a three storey block	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flat, unit or apartment in a four or more storey block	0.00	0.04	0.08	0.00	0.00	0.00	0.02
Other & Not Stated	0.58	1.81	1.10	0.00	5.88	1.55	1.76
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source: ABS Census Data 2001, ID Consulting Forecasts & MacroPlan Australia

Table 2. Existing Wanneroo Benchmark (dwelling mix numbers)

	Couple families with dependents	Couple families without dependents	Lone parents families with dependent	Other families	Lone Person households	Group Households	TOTAL
Separate House	14,426	8,278	3,705	496	3,747	610	31,263
Semi-detached, row/terrace, townhouse, etc	264	751	359	52	789	45	2,260
Flat, unit or apartment in one or more storey block	40	103	87	17	285	7	538
Flat, unit or apartment in a three storey block	0	0	0	0	0	0	0
Flat, unit or apartment in a four or more storey block	0	4	4	0	0	0	8
Other & Not Stated	86	168	46	0	302	10	612
Total	14,815	9,303	4,201	565	5,122	673	34,679

Source: ABS Census Data 2001, ID Consulting Forecasts & MacroPlan Australia

Scenarios

Two scenarios were developed based on the figures above, a review of housing issues within Perth and the City, policies and market feedback. In each of the scenarios, there is a dwelling mix break down that was developed taking into consideration the following criteria.

SUPPLY OF HOUSING

These criteria considered the net supply of dwellings and the density of dwellings. It was considered that a greater number of non-single residential housing types would provide a more sustainable housing mix.

Based on market feedback, developers were open to the suggestion of offering between 10 to 12% of their housing stock as affordable housing. There was some leaning toward group housing sites. Social and economic advantages derived from the triple bottom line (TBL) assessment will further reinforce the preferred location(s) for this type of housing.

It should be noted that the City of Wanneroo currently offers a significant stock of public housing compared to that of the Perth average. Although the City of Wanneroo may not require further action in increasing its proportion of public housing, it should have a role in the range of diversity and distribution of public housing being offered.

AGED HOUSING

The current aged housing within Wanneroo was reviewed against market feedback and trends. A significant proportion of this stock is in the form of retirement villages including the Royal Australian Air Force Retirement Village and Cambrai Retirement Village. On a national scale, only 4% of Australians retire in retirement villages whilst the Satterley group has seen a trend for 55+ group to take up separate housing on smaller lots. This was taken into account when breaking down the dwelling mixes for each case study.

DEMOGRAPHIC PROFILE

The demographic profile for each scenario (which is based on statistics prepared by ID forecast) is a dominant factor in the dwelling mix that would be demanded in 2021. Anticipated dwelling types based on household types are outlined in tables within each scenario.

SMART GROWTH PRINCIPLES

Wanneroo's Smart Growth introduces sustainable principles relating to housing choice, land and infrastructure use, environmental, social and environmental issues. These issues translate into considerations for each scenario and case study ie. lot sizes, location attributes, etc.

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6.2 Scenario A – "Status Quo"

Scenario A assumes a "Status Quo" situation where the population continues to grow at its forecast rates but housing mix provided continues to be of the housing mix currently existing in the City (or at least as at the 2001 Census).

	Couple families with dependents	Couple families without dependents	Lone parents families with dependent	Other families	Lone Person households	Group Households	TOTAL
Separate House	97.37	88.98	88.20	87.87	73.15	90.67	90.04
Semi-detached, row/terrace, townhouse, etc	1.78	8.07	8.54	9.21	15.41	6.74	6.58
Flat, unit or apartment in one or more storey block	0.27	1.10	2.07	2.93	5.56	1.04	1.56
Flat, unit or apartment in a three storey block	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flat, unit or apartment in a four or more storey block	0.00	0.04	0.08	0.00	0.00	0.00	0.02
Other & Not Stated	0.58	1.80	1.10	0.00	5.89	1.55	1.80
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Total Household Requirement 2021	Couple families with dependents	Couple families without dependents	Lone parents families with dependent	Other families	Lone Person households	Group Households	TOTAL
Separate House	31,289	19,419	7,444	1,034	8,468	1,301	68,956
Semi-detached, row/terrace, townhouse, etc	572	1,761	721	108	1,784	97	5,042
Flat, unit or apartment in one or more storey block	87	241	174	34	643	15	1,194
Flat, unit or apartment in a three storey block	0	0	0	0	0	0	0
Flat, unit or apartment in a four or more storey block	0	10	7	0	0	0	17
Other & Not Stated	185	394	94	0	682	22	1,376
Total	32,133	21,824	8,440	1,177	11,576	1,435	76,585

Source: ABS Census Data 2001, ID Consulting Forecasts & MacroPlan Australia

6.3 Scenario B - Ideal Mix

Scenario 2 assumes the "Ideal" mix where the population continues to grow at its forecast rates but the market is influenced by a smart growth housing development approach. The dwelling mix is based on Perth's 2001 dwelling mix because the forecast City of Wanneroo age profile in 2021 is similar to that of the 2001 Perth age profile.

Table 3. Perth 2001 Benchmark (dwelling mix percentages)

	Couple families with dependents	Couple families without dependents	Lone parents families with dependent	Other families	Lone Person households	Group Households	TOTAL
Separate House	94.86	82.38	81.76	69.99	52.58	65.00	82.52
Semi-detached, row/terrace, townhouse, etc	3.70	11.77	13.21	18.15	25.05	20.35	10.81
Flat, unit or apartment in one or more storey block	0.53	2.78	2.75	5.45	11.34	6.68	3.24
Flat, unit or apartment in a three storey block	0.23	0.99	0.85	3.26	4.89	4.12	1.34
Flat, unit or apartment in a four or more storey block	0.19	1.06	0.63	2.44	3.96	2.72	1.14
Other & Not Stated	0.48	1.02	0.80	0.71	2.19	1.13	0.95
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source: ABS Census Data 2001, ID Consulting Forecasts & MacroPlan Australia

Table 4. Ideal Wanneroo Total Dwellings 2021 (dwelling mix numbers)

Total Household Requirement 2021	Couple families with dependents	Couple families without dependents	Lone parents families with dependent	Other families	Lone Person households	Group Households	TOTAL
Separate House	30,483	17,979	6,900	824	6,086	933	63,204
Semi-detached, row/terrace, townhouse, etc	1,188	2,569	1,115	214	2,899	292	8,277
Flat, unit or apartment in one or more storey block	170	606	232	64	1,312	96	2,481
Flat, unit or apartment in a three storey block	75	215	71	38	566	59	1,025
Flat, unit or apartment in a four or more storey block	62	231	53	29	459	39	873
Other & Not Stated	155	224	68	9	253	16	725
Total	32,133	21,824	8,440	1,177	11,576	1,435	76,585

Source: ABS Census Data 2001, ID Consulting Forecasts & MacroPlan Australia

6.4 Net Household Growth 2001-2021

Net Household Growth 2001-2021	Scenario A	%	Scenario B	%
Separate House	37,693	89.95	31,942	76.22
Semi-detached, row/terrace, townhouse, etc	2,783	6.64	6,017	14.36
Flat, unit or apartment in one or more storey block	657	1.57	1,943	4.64
Flat, unit or apartment in a three storey block	0	0.00	1,025	2.45
Flat, unit or apartment in a four or more storey block	9	0.02	865	2.06
Other	764	1.82	114	0.27
Total	41,906	100.00	41,906	100.00

Source: ABS Census Data 2001, ID Consulting Forecasts & MacroPlan Australia NOTE: Net Household Growth 2001-2021 is calculated as the Total Dwelling Requirements for each Scenario in 2021 minus the existing Wanneroo dwelling numbers.

Smart Growth Assessment Tool Housing Targets

Syme Marmion has aligned the overall targets of the Local Housing Strategy with the Smart Growth Assessment Tool (SGAT) to determine housing targets for specific locations to be used in the SGAT.

The SGAT uses six geographic location types and the SGAT requires the target proportions of dwellings in each of these locations. The 2021 dwelling forecasts from ID Data were used and the total forecast dwellings by suburb were given an estimated distribution by geographic location type. The resulting proportions were then totalled to give the estimated total dwellings by location type for use in the SGAT. The results are:

Geographic Type	Proportion
Standard	30%
Within 400m of a coastal node	6%
Within 800m of a train/bus station or town centre with a transport hub	21%
Within 800m of a town centre (no transport hub)	21%
Within 400m of a neighbourhood centre	20%
Rural	2%

Source: Syme Marmion

The SGAT includes three housing types: Single Residential (low density), Semi Detached/Townhouse/Flat in 1 or 2 storey (medium density) and Apartments/Other/Flat in 3 storey (high density). The SGAT sets proportions for each of these dwelling types using Macroplan Local Housing Strategy 2021 dwelling forecasts as follows:-

Dwelling Type	Proportion
Singe Separate House on lot <440m²	26.7%
Singe Separate House on lot >440m²	49.5%
Semi Detached/Townhouse	14.4%
Flats/Units/Apartments/Other	9.4%

It should be note that these categories suit this high level analysis of likely future development, but that increased densities can be achieved by alternative urban forms. For example, whilst single residential is set out in the table as low density, small lot and zero-lot line houses can significantly increase densities, without becoming categorised as medium density.

The following table sets out the forecast dwelling types by geographic location for use in the SGAT:

Geographic Types	Standard	Within 400m of Coastal Node	Within 800m Train Station/Bus Station or Town Centre with Transport Hub	Within 800m Of Town Centre (no transport hub)	Within 400m of Commercial Neighbour- hood Centre	Rural	Overall Target
Gross Density (Dwellings per hectare)	10	20	25	25	20	5	
CoW Proportion of Dwellings by Location Type (2021)	30.0%	6.0%	21.0%	21.0%	20.0%	2.0%	100%
DIVERSITY HOUSE TYPES							
Single Separate House on lot $< 400 \mathrm{m}^2$	21.0%	23.0%	28.0%	28.0%	36.0%	4.0%	26.7%
Single Separate House on lot $> 400 \text{m}^2$	66.0%	52.0%	37.0%	37.0%	46.0%	90.0%	49.5%
Semi Detached/townhouse	10.0%	15.0%	20.0%	20.0%	10.0%	5.0%	14.4%
Flats/Units/Apartments/Other	3.0%	10.0%	15.0%	15.0%	8.0%	1.0%	9.4%
TOTAL	100%	100%	100%	100%	100%	100%	100%

Source: Syme Marmion

Liveable Neighbourhoods Version 3 (draft) specifies:

- 12-20 dwelling units/site hectare general residential neighbourhoods
- 20-30 dwelling units/site hectare within 250 meters of main bus routes and 400 meters of neighbourhood centres
- 30-40 dwelling units/site hectare within 400 metres of town centres and railway stations.

Recent planning for transit oriented development for rail stations in Perth suggests that even more density may be achievable – up to R60.

The gross density⁵ and housing types in the table above are broadly consistent with Liveable Neighbourhoods (noting that the above Liveable Neighbourhoods Version 3 (Draft) figures are based on site – i.e. net hectare, rather than gross hectare).

The same house type can achieve different net residential densities depending on the site layout and design. Street and block layout as well as lot dimensions and configurations will also affect density. Liveable Neighbourhoods promotes increased densities, particularly for single residential which can be located on small lots and zero lot lines, significantly increasing overall density within the same housing type.

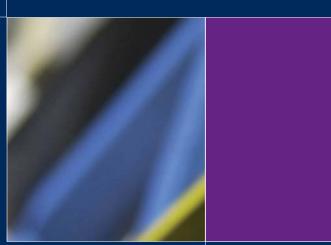
For the purposes of the Local Housing Strategy a distinction should be made for Single Residential between detached large lot $(440 \, \text{m}^2 +)$ and detached small lot (less than $440 \, \text{m}^2$). Where designs are able to achieve the same net residential density, small lot development should be able to substitute for a portion of medium density development such as semi-detached housing and town houses.

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⁵ 'Gross Density' is the number of dwelling units per hectare based on the gross site hecterage.

7.0

7.0 CASE STUDIES





7 Case Studies

The City of Wanneroo selected 5 case study areas to test the two scenarios. The areas include:

- Wanneroo Town Centre to be the large activity centre case study.
- Housing area adjacent to Ferrara Reserve, Girrawheen to be the rejuvenation/urban redevelopment case study.
- Banksia Grove (undeveloped portion) to be the typical greenfield development case study.
- Clarkson Station Precinct to be the transit orientated case study; and
- Capricorn Coastal Village, Yanchep to be the coastal precinct case study.

The objectives of the case studies are:

- To apply principles intended to be developed through the Wanneroo Local Housing Strategy through the consideration of the implications of different housing types on the design of the broader urban environment eg. Open space provision (public/private open space), streetscape (street widths, street trees) and carparking (visitor & resident).
- The identification of the opportunities and constraints associated with each case study areas in respect to the potential provision of future housing.
- To identify the possibilities of achieving increased housing diversity through design and development approaches by taking advantage of the opportunities identified and overcoming constraints associated with case study areas; and
- The identification and recommendation of housing typologies for each case study areas.

Full details concerning the case studies are provided in a separate report: "City of Wanneroo Local Housing Strategy: Case Studies" (MacroPlan Australia, Palassis Architects, Urbanizma). The following provides an overview of the case studies.

Assumptions

A number of conservative assumptions were applied to each of the case study areas as outlined below.

OPEN SPACE An open space ratio of 10% is applied to all

case study areas with the exception of the

Wanneroo Town Centre.

ROADS, EASEMENTS, AND

ENCUMBERANCES

An infrastructure ratio of up to 30% of gross land (minus open space) is applied to all case

studies.

SEPARATE HOUSING

Separate housing for Scenario 1 case studies

areas assumes a similar lot density currently being provided by the market. Separate housing in Scenario 2 case studies assumes a mixture of lot ranges ie. greater/less than 400

sqm.

WANNEROO TOWN CENTRE Approximately 60 to 70% of this case study is

absorbed and/or proposed for civic, retail, entertainment and commercial activities.

7.1 Town Centre: Wanneroo

Case Study Area



Location

Wanneroo Road, Church Street, Frederick Street, Keane Street, Hastings Street, Leach Road, Crisafulli Avenue, Ariti Avenue, Sinagra Street, Civic Drive and Dundebar Road bound the Wanneroo Town Centre (refer to attached plans). The Wanneroo Town Centre is approximately 22 km north of Perth.

The Wanneroo Town Centre has a gross developable area of 88 hectares with approximately 70% dedicated to commercial and associated businesses and civic uses.

Wanneroo Town Centre	Issue	Status
Access to Services	Employment	Extensive employment in retailing, local government and a range of other services.
	Facilities	East of Wanneroo Road: Civic Centre, Church. Library, Council Offices, Limelight Theatre
		West of Wanneroo Road: Police Station, Wanneroo Showgrounds, Lawn Bowls, Tennis and skateboard facilities.
	Schools	East of Wanneroo Road: St Anthony's Primary School, Pre-Primary School, East Wanneroo Primary School, Wanneroo Senior High School.
		West of Wanneroo Road: Wanneroo Junior Primary School, Wanneroo Primary School
	Shops	Wanneroo Town Centre is identified as a Regional Centre in the Centres Policy with a planned size of 30,000sq m NLA. It currently has in excess of 10,000sq m NLA and includes major supermarkets specialty retailing, banks and offices etc.
	Public Transport	The 468 bus connects the Wanneroo Town Centre to Joondalup and Whitfords train stations. The service is generally every half hour during the day on weekdays. The service in the evening, on Sundays and public holidays is much more restricted. Travel times to the two stations are 20minutes. Travel times from the stations to Perth are 25 and 20 minutes respectively.
Quality of the Public Realm	Quality/ Amenity	While considerable investment has been made in the public domain the quality is undermined by the fact that development does not, in many cases, orientate to the street. Unsleeved car parking exacerbates the problem.
	Legibility	Legibility of the public domain (both vehicular and pedestrian) breaks down towards the shopping centre.
	Walkability	Uses have not been structured to maximise pedestrian flows on the 'main street'.
	Public Open Space	The open space to the west of Wanneroo Road tends to be agrophobic. Opportunities of open space on Dundebar Road are not maximised.

	Safety and Security	Wanneroo Road is currently a substantive barrier between the two sections of the town centre. Lack of surveillance on streets is problematic.	
Housing Characteristics	Housing Mix	Housing mix has not been specified in any detail.	
	Housing Quality	No housing has been developed in the town centre to date.	
	Housing Form	Mixed use unlikely to work around Council parking area. The case study area should be expanded to the east to maximise proximity within the town centre catchment.	
	Affordability	Not determined at this stage	
	Solar Orientation	Currently proposed layout generally optimises solar orientation.	
	Open Space	Development will see substantial removal of existing bushland in the northern section.	
General Issues		Primary commercial, social and cultural centre for the City of Wanneroo. The west and eastern sections do not functionally operate as a single centre.	

7.2 Rejuvenation: Area adjacent to Ferrara Reserve, Girrawheen

Case Study Area



Location

Hainsworth Avenue, Brecknock Way, Ferrara Way and Winterton Way bound the Ferrara Reserve case study area (refer to attached plans). The Ferrara Reserve case study area is currently occupied by existing public housing that has the potential for redevelopment. Ferrara Reserve case study area is located approximately 11 km southeast of the Wanneroo Town Centre.

Area

The Ferrara Reserve case study area has a gross developable are of 4.25 hectares.

Ferrara Reserve: Girrawheen	Issue	Status	
Access to Services	Employment	No formal employment within case study area. Limited employment at Summerfield Shopping Centre approximately 800m to the west.	
	Facilities	Recreation Centre in Hainsworth Park and Sports Centre in Montrose Park. Public toilets in Ferrara Reserve and Hainsworth Park. Library located adjacent to Summerfield Shopping Centre. Two churches near Hainsworth Park.	
	Schools	Pre-Primary in Hainsworth Park. Hainsworth, Emmanual Christian, and Montrose Primary Schools and Girrawheen Senior High Schools are within the immediate vicinity (less than 1 kilometre)	
	Shops	Deli on Hainsworth Avenue and Summerfield Shopping Centre on Girrawheen Avenue (approximately 1	

		kilometre walk). In should be noted that this shopping centre is somewhat run down.
	Public Transport	Warwick is the nearest train station (approximately 5 kms west). 1km walk to get bus to train station. Bus route 372 on Hainsworth, with 365 and 375 on Girrawheen Avenue. – Limited service from Mirrabooka Bus Station to Kingsway City. No service Sunday or public holidays. Lack of public transport is seen as a major issue in the area.
Quality of the Public Realm	Quality/ Amenity	General amenity of the area benefits from the proximity of the park and many mature trees. It is undermined by the quality, and lack of continuity, of the existing internal road network.
	Legibility	Legibility is a major issue only partially resolved by current proposals. Cul de sacs and circuititious routes are a problem.
	Walkability	No footpaths are provided in the area. A major pedestrian footpath is provided on the western side of Hainsworth Avenue.
	Public Open Space	The area has extensive public open space. The low quality of much of this space and the fact that it lacks surveillance means that its potential is not maximised.
	Safety and Security	Lacks of surveillance of both the open space and on the internal roads are problems.
Housing Characteristics	Housing Mix	Currently the area has single storey duplexes, single storey terrace housing and double storey row housing. These are all in public ownership at present. Thus the diversity of the housing stock is not reflected in social diversity. The dominance of social housing in the area is contrary to current State Government policy.
	Housing Quality	The housing stock is, with the potential exception of the double storey row housing, in need of refurbishment.
	Housing Form	No logic to the location of two storey blocks. The current backs/fronts problem is not totally resolved by proposals for the area.
	Affordability	Housing affordability is, given current public ownership, not an issue.
	Solar Orientation	While orientation is not directly north/south the 20 to 30 degree deviation is acceptable and could be addressed in the design of residential units.
	Open Space	Much open space remains unkempt and unused.
General Issues		Access to health services is a general issue in the northern suburbs. In Girrawheen the lack of police in

	an area unfortunately experiencing rising drug related crime is seen as a major issue. The resourcing of public education and the creation of employment are also substantive issues.
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7.3 Standard Urban Greenfield: Banksia Grove

Case Study Area



Location

Pinjar Road, Flynn Drive and Joondalup Drive bound the Banksia Grove case study area. The Banksia Grove case study area is currently vacant. Banksia Grove is approximately 8 km north of the Wanneroo Town Centre

Area

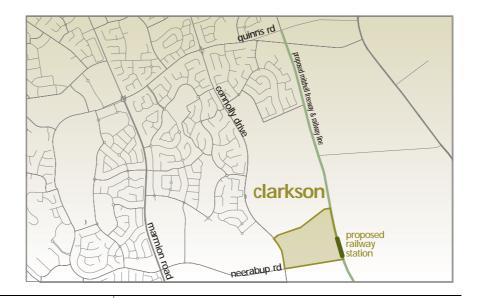
Banksia Grove has a gross developable area of 329 hectares.

Banksia Grove	Issue	Status	
Access to Services	Employment	Closest employment is in the Wanneroo Town Centre and Flynn Drive / Neerabup industrial area.	
	Facilities	Community Centre east of Joondalup Drive.	
	Schools	Currently no schools in the locality.	
	Shops	Closest shops are at Wanneroo Town Centre (approximately 6kms).	
	Public Transport	Bus 390 links to Joondalup Station. Half hour service in peak times with 1 hour service between peaks on weekdays. 1 hour service on Saturdays and no services on Sunday or public holidays. Trip to Wanneroo Town Centre requires change at Joondalup Station with travel time approximately 1 hour. Lack of public transport is a major issue.	
Quality of the Public Realm	Quality/Amenity	At is current stage of development the environment is somewhat sparse	
	Legibility	The planned layout is generally highly legible	

	Walkability	Village centres and primary schools once developed will be within 800m walk (ie 10 minutes). The High School will be within 800m for approximately 40% of the resident population.
	Public Open Space	Reasonable distribution of public open space
	Safety and Security	Difficult to judge possible outcomes at this stage
Housing Characteristics	Housing Mix	Zoning Plan suggests somewhat limited housing mix
	Housing Quality	Difficult to judge possible outcomes at this stage
	Housing Form	Predominantly R20 standard residential model
	Affordability	Housing prices would be moderate relative to other areas
	Solar Orientation	Predominant north/south orientation of street block does not maximise solar orientation.
	Open Space	Generally standard suburban single residential model.
General Issues		Current road standards are questionable (Ghost Gum Boulevard 14m paved surface for two lane road). Major north/south road does not maximize benefits for development. Minimum (not maximum) densities need to be enforced

7.4 Station Precinct: Clarkson

Case Study Area



Location The proposed Mitchell Freeway Extension, Connolly Drive and

Neerabup Road bound the Clarkson Station Precinct case study

area.

The Clarkson Station Precinct is approximately 8 km NorthWest of

the Wanneroo Town Centre.

Area The Clarkson Station Precinct has a gross developable area of

26.2 hectares.

Opportunities & Constraints

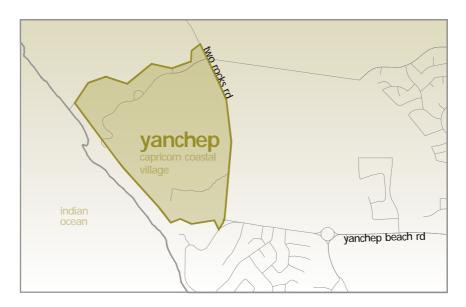
Clarkson Station Precinct	Issue	Status
Access to Services	Employment	Currently nearest employment is in Ocean Keys future regional centre (approximately 1.8kms)
	Facilities	Clarkson Youth Centre is located in Ocean Keys.
	Schools	St Andrew's Primary School, Clarkson Primary School, Clarkson Community High School. Other schools will no doubt be provided in closer proximity as development proceeds in the area. A future Primary School has been planned in the immediate vicinity of the station precinct.
	Shops	Nearest shops are presently located in Ocean Keys.
	Public Transport	MetroRail is currently being extended and the new service is scheduled to commence in October 2004.
Quality of the Public Realm	Quality/ Amenity	Station parking and bus access undermines the amenity of the station 'node'. Question the extent of proposed Landmark Buildings.
	Legibility	Vehicular movement particularly for cars and buses accessing the station does not appear particularly legible.
	Walkability	Pedestrian flows have clearly received consideration in planning the centre.
	Public Open Space	Open space in 'node' does not maximise added value for housing
	Safety and security	Current proposals incorporate passive surveillance of the public domain.
Housing	Housing Mix	Seeks to "provide a range of lot sizes and dwelling

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Characteristics		styles to facilitate a variety of lifestyle opportunities"
	Housing Quality	No housing has been developed in the town centre to date.
	Housing Form	Housing is unlikely to be developed in station parking areas in the medium to long term. Indeterminacy of land use plan is problematic.
	Affordability	Not determined at this stage.
	Solar Orientation	Dominant orientation maximises solar orientation
	Open Space	Potential concerns over structuring of private open space in block immediately adjacent to the station.
General Issues		Commercial development at Clarkson, if successful, is likely to undermine development at Ocean Keys. Timing of commercial development is an issue. The Clarkson 'node' does not contain any obvious housing 'attractor'.

7.5 Coastal Development: Yanchep

Case Study Area



Location

Two Rocks Road and the Indian Ocean bound the Yanchep case study area. Currently existing on site is the Capricorn Coastal Village resort. The Yanchep case study area is located 28.5 km northwest of the Wanneroo Town Centre.

Area

The Yanchep case study area has a gross developable area of 89 hectares with the Capricorn Coastal Village resort occupying 6 hectares.

Capricorn Coastal Village	Issue	Status
Access to Services	Employment	An Economic Development Initiatives Strategy will be developed and implemented for the project area in order to expand employment opportunities for the existing community. The Yanchep Sun City Preferred Framework provides for Direct Employment areas.
	Facilities	The Structure Plan makes reference to Civic Uses in the Mixed Use Activity Centre. No specific facilities are suggested.
	Schools	No schools are provided to the west of Two Rocks Road. To the east of this road two primary schools sites and one private high school site have been provided.
	Shops	The structure Plan allows for 4500 sq m NLA of retail development
	Public Transport	Perth MetroRail will be extended to serve the sub regional centre 2 kms to the north east of the coastal

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		node
Quality of the Public Realm	Quality/Amenity	Structure Plan suggests neighbourhood modules are based on the Liveable Neighbourhoods model. Difficult to judge possible outcomes at this stage. It would need to be demonstrated that the R5 zoning could in fact protect the dune system.
	Legibility	See above
	Walkability	See above
	Public Open Space	See above
	Safety and Security	See above
Housing	Housing Mix	Structure Plan objectives include
Characteristics		"Provide the opportunity for grouped and multiple dwellings in selected locations so that there is a choice in the type of housing available", and
		"Provide the opportunity for aged persons housing in most residential areas"
		Proposed densities vary between R20 and R80 (Stage 1 maximum density is R60)
	Housing Quality	Difficult to judge possible outcomes at this stage
	Housing Form	Difficult to judge possible outcomes at this stage
	Affordability	Difficult to judge possible outcomes at this stage
	Solar Orientation	While there is some variation the predominant orientation of blocks will provide reasonable solar access. In the R5 zones house orientation could address the issue.
	Open Space	Difficult to judge possible outcomes at this stage
General Issues		The distribution of densities could do more to strengthen the coastal node

8.0

8.0TRIPLE BOTTOM LINE ASSESSMENT





8 Triple Bottom Line Assessment

This section provides an outline of key indicators, which have been used by MacroPlan Australia to undertake the qualitative assessment of the two housing strategy scenarios scoped for the City of Wanneroo.

To assess the overall impact of each scenario in the context of different development, timing and locational circumstances, the analysis incorporates a range of case studies. This provides an understanding of the impacts of the scenarios across the City.

This section is set out as follows:

- Section 8.1: Assessment Approach provides an outline of how the various scenarios were compared.
- Section 8.2: Scenario Assessments outlines the relative assessments for each criterion received by each scenario.

8.1 Assessment Approach

This assessment of the scenarios follows a Triple Bottom Line approach and endeavours to provide for the full spectrum of project outcomes.

This analysis technique refers to a method of evaluating the level of accountability associated with a project at three levels - social, environmental, and economic.

This method is finding increasing and widespread international acceptance and one that is informing and transforming reporting practices. The notion of reporting against the three components (bottom lines) of economic, environmental, and social performance is directly tied to the concept and goal of sustainable development.

Triple bottom line reporting provides information that enables the level of sustainability associated with each scenario (and in turn the project) to be identified.

8.1.1 Methodology

To analyse the range of the benefits and costs associated with the project that cannot be assigned a value, a Qualitative Assessment Matrix was developed to provide for rating changes in a number of indicators (see 'Qualitative Indicators'). In this project a positive effect is rated between:

- 0 (representing no change), to
- +10 (representing a high benefit).

The ratings identified are averaged for each of the 'bottom lines' – Economic, Social and Environment.

Where 'No Change' is identified for an indicator, e.g. walkability - social interaction, this is excluded from the averaging process for the relevant bottom line (in this case Social). The outcome provides a basis for identifying the extent of benefit for each 'bottom line', and a hierarchy of 'bottom lines' for each scenario.

8.1.2 Qualitative Indicators

The indicators used in this analysis are:

Economic

- Supply and Density of Dwellings
- Use of Infrastructure
- Travel Convenience

Social

- Access to community services
- Housing choice
- Housing need match with existing demand

Environmental

- Energy efficient housing
- Water use
- Walkability

8.1.3 Description of Qualitative Indicators

Supply and Density of Dwellings

This criteria considers the total supply and density of dwellings. It is considered that a higher supply of dwellings allows for existing community facilities and infrastructure to be utilised more efficiently. In addition, a higher density of dwellings implies a more efficient use of resources, such as energy and water

Use of Infrastructure

This criteria considers how effectively the proposed development uses existing infrastructure and whether the development will require further infrastructure provision in the future, to service the needs of new residents. This is an important measure as it determines whether the housing development is located appropriately to existing infrastructure.

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Travel Convenience

This indicator considers ease of travel for residents at the proposed development in terms of direct access by public or private transport to surrounding recreational and commercial facilities. A higher score for travel convenience indicates that the proposed development will allow residents to more efficiently reach destinations.

Access to community services

This criteria focuses more closely on the access to key community facilities such as schools, civic centres, shopping, recreational facilities and open space.

Housing choice

This measure provides an assessment of the availability of dwellings by type. It considers whether the proposed development provides various opportunities for housing structure. A wider range of housing choice will encourage a more diverse and sustainable community.

Housing need - match with existing demand

This indicator considers whether the dwelling mix offered in the development is consistent with emerging demand for housing in Perth. It also takes into account consistency with the Wanneroo Smart Growth housing strategy.

Energy efficient housing

This measure considers whether the proposed dwelling mix is likely to have a relatively efficient use of energy including electricity and gas. It is assumed that medium density housing uses less energy on average than lower density housing. This assumption is based on MacroPlan's previous experience of the impact of dwelling types on energy use.

Water use

This criteria provides an assessment of the expected water use by residents at each proposed development. Detached dwellings are expected to have higher use of water than apartments and units as these style of housing types normally come with a larger garden.

Walkability

This measure provides a ranking of each development's location and design with regard to pedestrian access. Factors considered include: walking distance to transport & shops and other community facilities. The expected population of the development is also relevant as high populations encourage more pedestrian traffic and less car use.

8.2 Scenario Assessments

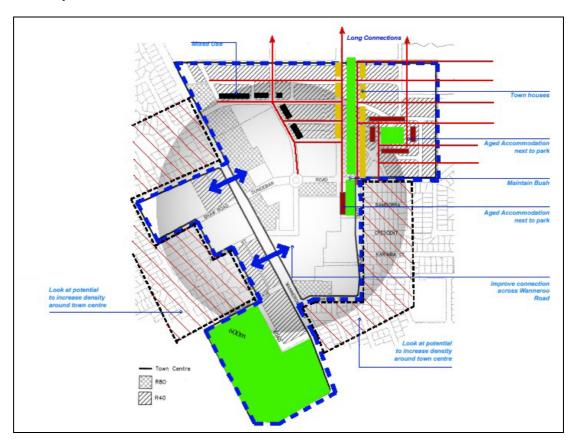
The five case studies referred to in section 6 are considered under the two sets of assumptions relevant to the two scenarios referred to in section.5.1.

The first scenario (Scenario A) assumes that dwellings are provided at each development in line with the current trends in dwelling mix that exist in Wanneroo. Under this assumption the proposed development scenarios are:

- Development 1A:Wanneroo Town Centre
- Development 2A: 'Ferrara Reserve'
- Development 3A:Banksia Grove
- Development 4A:Clarkson Station Precinct
- Development 5A:Capricorn Coastal

The second scenario (Scenario B) is that dwellings are provided at each development in line with the current trends in dwelling mix that exist in the Perth Metropolitan Region with higher proportions of medium and high density housing in an effort to achieve a varied mix of housing.

Development 1B: Wanneroo Town Centre



Source: Urbanizma and Palassis Architects

Urban design analysis suggests that there may be additional capacity for development in the Wanneroo Town Centre. Land zoned for housing in the North-East section of the town centre could yield over 2,000 dwelling units at a mixture of densities of R20, R40 and R60. It should be noted however that the Town Centre suffers from a number of structural urban design problems that need to be addressed to ensure its long term viability.

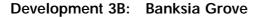
Development 2B: 'Ferrara Reserve'

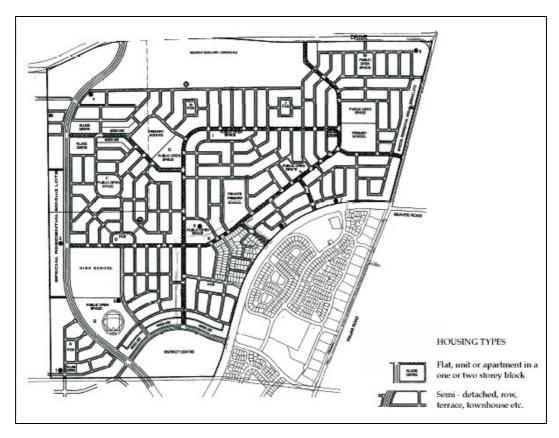


Source: Urbanizma and Palassis Architects

Urban design analysis suggests that the 2021 dwelling mix yield of 107 residential units is attainable. This includes 21 semi detached, row house and townhouse units. More consideration needs to be given to the potential of aged housing as well as the public/private mix of housing in the case study area. It should also be noted that the case study should also be part of a broader scope for the revitalisation of Girrawheen.

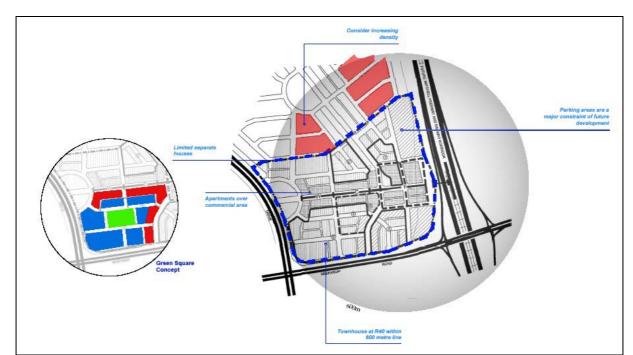
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Source: Urbanizma and Palassis Architects

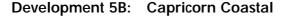
The case study mix for Scenario B included predominantly R20 standard residential with the development of village centres with smart lots within an 800m walk. The housing mix proposed is widely at variance with current practice. The development is well beyond the urban front, some 6 kilometres from the Wanneroo Town Centre. It has virtually no facilities and virtually no local employment. The urban design analysis suggests that development at these densities would meet significant industry resistance and be difficult to defend without improvement to transport availability and facilities.

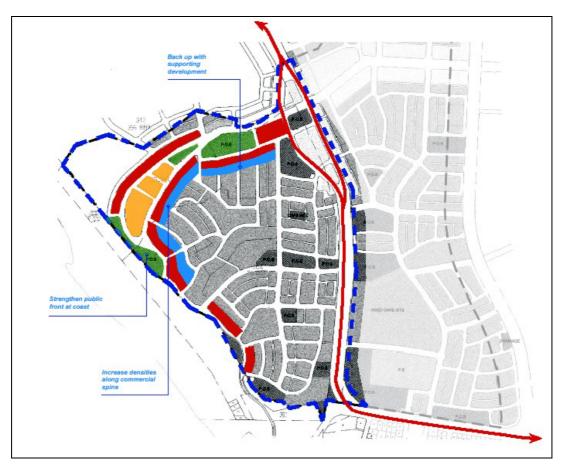


Development 4B: Clarkson Station Precinct

Source: Urbanizma and Palassis Architects

The preferred dwelling mix of R40 gives a yield of 520 dwelling units over a developable area of approximately 13 hectares. This includes an area identified as main street mixed use and a mixed use area in which there would be houses upstairs. Reconfiguration of public spaces may needed to achieve the preferred densities.





Source: Urbanizma and Palassis Architects

The 2021 coastal node market mix was tested and was found to be artificial. A design based approach undertaken for analysis provided for a similar outcome to the preferred housing mix but achieved it in different ways. For example, the dwelling mix could be steered towards separate houses on smart lots rather than trying to achieve 841 units in the semi-detached / row terrace townhouses. So it is important for Greenfield developments in new coastal nodes to be focussed rather than designed by formula towards the preferred mix.

All 10 scenarios have been rated consistently and fairly on the TBL assessment criteria.

The summary in section 8.2.1 highlights how development scenario B provides the highest economic, social and environmental benefit overall. Therefore the following strategy has been based on aiming towards achieving Scenario B.

8.2.1 Summary

Overall comparison			
Criteria	Scenario Rating Indicative rating between 0 - 10 (0 being no benefit, 10 being very high benefit) ### B		
Economic			
Housing Supply	4.4	5.8	
Use of Infrastructure	6	6	
Travel Convenience	5.4	6	
Social			
Access to community services	3.8	4	
Housing choice	3.4	6.4	
Housing need - match with existing demand	5.8	7.4	
Environmental			
Energy efficient housing	3.6	6.4	
Water use	3.6	6.4	
Walkability	4.4	5	
Average score	4.5	6.0	

8.2.2 Scenario 1A and 1B - Wanneroo Town Centre

Wanneroo Town Centre					
Criteria	Scenario Rating Indicative rating between 0 - 10 (0 being no benefit, 10 being 1A 1B		Comments		
Economic					
Housing Supply and Density	6	7	The Wanneroo development will supply housing on a relatively high average density and therefore receives a positive score for this criteria. Scenario 1B receives a higher score due to its larger number of dwellings.		
Use of Infrastructure	8	8	It was not considered that housing development at Wanneroo Town Centre would require significant expenditure on Infrastructure as residents can live and work in the one precinct.		
Travel Convenience	8	9	Travel costs are minimised by locating housing at Wanneroo Town Centre as residents who work in Wanneroo will have limited commuting time. However, travel costs by car to Perth are increased due to indirect access to Mitchell Freeway .Total travel time to Perth by public transport is 45 minutes.		
Social					
Access to community services	8	8	Community facilities are all located adjacent to the Wanneroo Town Centre development. There are five primary schools and one secondary college located near the development. The town centre is idnetified as a regional centre. The centres policy holds plans to expand to 30,000sqm. However, the relatively small size of the development will not signficantly boost economic activity at the town centre.		
Housing choice	4	5	In both scenarios for Wanneroo Town Centre, the housing mix is limited to semi detached and high density housing. However, scenario 1B provides a wider mix of high density dwellings.		
Housing need - match with existing demand	6	7	Both scenario 1A and 1B provide medium density housing, which is the housing type that many new residents to housing developments around Perth are demanding. The housing mix proposed for Wanneroo will therefore fill an important niche.		
Environmental					
Energy efficient housing	9	10	Scenario 1A and 1B received a high score for energy efficiency due to the large proportion of high density dwellings provided. Scenario 1B received a higher score than 1A due to the large number of medium density dwellings.		
Water use	9	10	Both scenarios received high scores for limiting water usage due to the large proportion of high density dwellings provided. Scenario 1B received a higher score than 1A due to the large number of medium density dwellings.		
Walkability	7	8	While pedestrian flows have not been designed to best use, residents will be living close to retailing and employment opportunities. Wanneroo Rd may be a barrier to some pedestrians with schools and some businesses located on the other side of the road. However the bulk of facilities are located adjacent to the proposed development.		
Average score	7	8			

8.2.3 Scenario 2A and 2B - Ferrara Reserve

Ferrara Reserve				
Criteria	Scenario Rating Indicative rating between 0 - 10	l (0 being no benefit, 10 being very	Comments	
Economic	SA	JD		
Housing Supply	4	4	The Ferrara Reserve development supply's only a small amount of housing on a high average density and therefore receives an average score for this criteria.	
Use of Infrastructure	8	8	Significant road infrastructure is already in place and the development will not require further upgrades due to the relatively low population numbers.	
Travel Convenience	3	3	The Ferrara Reserve development received a poor rating for travel costs. Public transport is extremely limited and employment opportunities are a significant distance from the development. The number of dwellings supplied is also low which will discourage associated additional development in the future. Access to the freeway and Perth by car is only selling point here.	
Social				
Access to community services	3	3	There are two primary schools and a secondary college located in the immediate vicinity. Retailing facilities are limited and run down. Community facilities are also limited. The provision of two storey housing overlooking the park provides passive survelliance and reduces anti-social behaviour.	
Housing choice	4	6	The current dominance of social housing in the area is inconsistent with State government policy. The housing mixes proposed under scenarios 3A will not significantly improve housing type diversity. However scenario 3B provides two storey housing near the park providing a wider choice for potential residents.	
Housing need - match with existing demand	4	6	Scenario 3A provides approximately 80% of total planned dwellings as separate houses on small blocks While the housing type offered here may be consistent with current dwellings, it is unclear whether it is appropriate for the market in the longer term. However the provision of medium density housing in 3B is more consistent with emerging demand in Perth.	
Environmental				
Energy efficient housing	3	3	Scenario 3A and 3B received low ratings for energy efficiency due to the high proportion of detached housing.	
Water use	3	3	Both scenarios received low ratings for water use due to the high proportion of detached housing.	
Walkability	2	2	No footpaths are provided in the area and there are long walks to public transport.	
Average score	4	4		

8.2.4 Scenario 3A and 3B - Banksia Grove

	Scenario Rating		
Criteria	•	\(\(\alpha\) \(\begin{array}{cccccccccccccccccccccccccccccccccccc	Comments
	Indicative rating between 0 - 10 4A	O (O being no benefit, TO being 4B	
Economic	.,,		
Housing Supply	5	8	The Banksia Grove development will supply a high number of dwellings on a relatively low average density and therefore receives a positive score for this criteria. 4B received a higher score than 4A due to the extra 450 dwellings supplied.
Use of Infrastructure	3	3	Infrastructure Costs associated with this development are high as roads would need to be improved and other facilities would need to be upgraded.
Travel Convenience	4	4	The Banksia Grove development received a poor rating for travel costs. Public transport is extremely limited as are roads, and employment opportunities are a significant distance from the development at Wanneroo. However, the number of dwellings supplied is high which will encourage retail development nearby in the future. Access to the freeway and Perth by car is limited.
Social			
Access to community services	2	2	There are currently no schools in the locality. The closest shops are at Wanneroo Town Centre. There is one community centre east of Joondalup Drive. The only advantage of this development is the relative number of dwellings that will eventually lead to the establishment of more community facilities.
Housing choice	3	7	Scenario 4B has a relatively wide mix of housing types with 60% detached, 26% semi detached and 13% apartment style. The 13% allocation of dwellings to apartments yields a total supply of apartments of more than 600. However, the propsed development at Banksia Grove has a zoning plan that limits the diversity of the housing mix.
Housing need - match with existing demand	7	8	Scenario 4A has 88% of proposed housing as separate houses, which falls in line with the likely demand from the Perth market for price sensitive detached housing. The provision of more medium density housing in 4B will meet some of the new demand for this type that is coming on in the Perth market.
Environmental			
Energy efficient housing	2	5	Scenario 4B received a relatively high score for energy efficiency due to the provision of significant numbers of semi detached and medium density housing.
Water use	2	5	Scenario 4B received a relatively high score for water use due to the provision of significant numbers of semi detached and medium density housing.
Walkability	3	3	Opportunities for walking to transport are limited. Proposed schools will be within walking distance once built.

8.2.5 Scenario 4A and 4B - Clarkson Station Precinct

Clarkson Station precinct					
Criteria	Scenario Rating Indicative rating between 0 - 10 (0 being no benefit, 10 being 2A 2B		Comments		
Economic		!			
Housing Supply	5	7	The Clarkson development will also supply housing on a relatively high average density under scenario 2B and therefore receives a high score for this criteria.		
Use of Infrastructure	8	8	Clarkson scores highly in constraining spending on new infrastructure by locating the residential development near a railway station.		
Travel Convenience	7	9	Limited employment is available at Ocean Keys Civic Centre, however a wider range of job opportunities are not available near the development. Access to Perth by rail will be excellent and travel costs will also be improved when the Mitchell Freeway is extended.		
Social					
Access to community services	5	6	Two primary schools and one secondary college are currently provided. There is a relatively limited but growing number of community and retail facilities, located nearby. 2B receives ahigher score due to the expected development of facilities associated with the higher number of dwellings.		
Housing choice	3	8	The Clarkson Station precinct under 2B provides a balanced mix of housing types, with dwellings available in detached, semi detached and apartment formats. Scenario 2A however, provides a more limited housing mix in line with the current patterns for housing in the area.		
Housing need - match with existing demand	5	8	Scenario 2B provides a wider mix of dwellings that will suit the location of the development adjacent to public transport. The provision of medium density living will be sought after by residents closer to Perth who still want access to the city and who may wish to 'cash out' but selling down to a cheaper property.		
Environmental					
Energy efficient housing	2	7	Scenario 2B received a high score for energy efficiencydue to the high proportion of apartments provided. Scenario 2A received a lower score due to the dwelling mix that was biased towards detached housing.		
Water use	2	7	Scenario 2B received a high score for limiting water usage due to the high proportion of medium density dwellings provided. Scenario 2A received a lower score due to the dwelling mix that was biased towards detached housing.		
Walkability	6	9	Scenario 2B receives a higher score due to the provision of more dwellings adjacent to public transport. This will encourage greater pedestrian flows and less car use.		
Average score	5.0	7.5			

8.2.6 Scenario 5A and 5B - Capricorn Coastal

Capricorn Coastal				
Criteria	Scenario Rating Indicative rating between 0 - 10 (0		Comments	
Economic	5A	5B		
Housing Supply	2	3	The Capricorn Coastal development will supply housing on a relatively low average density, particularly under scenario 5A, and therefore receives only an average score for this criteria.	
Use of Infrastructure	3	3	Infrastructure Costs associated with this development are high as roads would need to be improved and other facilities would need to be upgraded.	
Travel Convenience	5	5	The Capricorn Coastal development received a moderate rating for travel costs. Public transport is limited but will be provided to service the sub regional centre 2 kms to the North East. Employment opportunities are a significant distance from the development. However, an Economic Development Initiatives Strategy will be developed and implemented for the project area to expand employment opprtunity adjacent to the development.	
Social				
Access to community services	1	1	There are currently no retail facilities, shops or schools provided. However, the structure plan allows for 4,500sqm of retail development in the future. The area is particuarly isolated in terms of accesibility to nearby services.	
Housing choice	3	6	Scenario 5B provides a high proportion of housing as semi detached. In addition, there are more high density dwellings provided than those allcoated to a detached house style.	
Housing need - match with existing demand	6	9	Scenario 5A provides 88% of devlopments as separtae houses, which is in line with the preferences of various households in Perth and therefore was given a high ranking. Scenario 5B conversely had only 14% as separate houses, but was given a relatively high score as a result of the high proportion of semi detached houses destined for supply(68%) which could be viewed as a developing market in Perth.	
Environmental				
Energy efficient housing	2	7	Scenario 5B received a high score for energy efficiency due to the low proportion of detached hosuing (only 14%), however 68% of proposed housing is semi detached.	
Water use	2	7	Scenario 5B received a high score for limiting water usage due to the low proportion of detached hosuing (14%), however 68% of proposed housing is semi detached.	
Walkability	3	3	Currently no facilities are within walking distance of the proposed development. However neighbourhood centres are planned adjacent to the development in the future.	
Average score	3	5		

9.0

9.0 LOCAL HOUSING STRATEGY





9 Local Housing Strategy

9.1 Objectives of the Strategy

The objectives of the strategy are to:

- (a) Ensure that a wide range and choice of housing is provided to meet the changing social and economic needs of the community, and to understand the community's attitude to housing choice.
- (b) Ensure that an adequate supply of affordable housing is provided particularly for first home-buyers.
- (c) Promote innovative, cost-effective and well-designed forms of housing which incorporate environmentally beneficial features.
- (d) Promote appropriate forms of housing close to existing and proposed community facilities and services (eg. Employment centres, transport hubs) to enable more efficient and effective use of those facilities and services.
- (e) Ensure an overall density, which will improve the viability and range of transport alternatives.
- (f) Ensure that residential areas are designed for all people of all ages and abilities and that these areas are protected from inappropriate development.
- (g) Provide a greater degree of certainty to developers and the community in the development of new housing areas and the redevelopment of existing housing areas.
- (h) Provide the City for an improved basis for decision making in relation to development applications and rezoning proposals; and
- (i) Provide a component of a future Local Planning Strategy to support a future review of the City's district town planning scheme.
- (j) Promote universal design principles to ensure that all housing has a core of accessible features to the main living areas of the house.

9.2 Strategy Actions

9.2.1 Housing Types

Recommendation 9.2.1 (a)

That a housing mix for the City as a whole be pursued as per Scenario B described in Section 6 in order to implement housing diversity consistent with community needs and values in a way that minimises impacts on land and housing prices.

Housing Diversity Requirement: Wanneroo 2021

Net Household Growth 2001-2021	Preferred Scenario	% of Ttl Housing
Separate House	31,942	76.2
Semi-detached, row/terrace, townhouse, etc	6,017	14.4
Flat, unit or apartment in one or more storey block	1,943	4.6
Flat, unit or apartment in a three storey block	1,025	2.4
Flat, unit or apartment in a four or more storey block	865	2.1
Other	114	0.3
Total	41,906	100

Recommendation 9.2.1 (b)

Criteria for locating areas of higher density

That higher R-Codes be considered within areas that have easy access to, and/or within close proximity to:

- Public transport with a priority towards rail nodes and bus interchanges
- Major arterial routes
- Retail and employment centres
- Areas of high amenity including public open space and recreational facilities
- Educational institutions including primary, secondary and tertiary, and
- Community facilities including libraries and medical centres

It is recommended that housing in locations comprising of the above attributes be given development priority.

Recommendation 9.2.1 (c)

That the following table setting out the forecast dwelling types by geographic location for use in the SGAT be adopted by the City of Wanneroo as a guide to future development:

Geographic Types	Standard	Within 400m of Coastal Node	Within 800m Train Station/Bus Station or Town Centre with Transport Hub	Within 800m Of Town Centre (no transport hub)	Within 400m of Commercial Neighbour- hood Centre	Rural	Overall Target
Gross Density (Dwellings per hectare)	10	20	25	25	20	5	
CoW Proportion of Dwellings by Location Type (2021)	30.0%	6.0%	21.0%	21.0%	20.0%	2.0%	100%
DIVERSITY HOUSE TYPES							
Single Separate House on lot $< 400 \mathrm{m}^2$	21.0%	23.0%	28.0%	28.0%	36.0%	4.0%	26.7%
Single Separate House on lot $>$ 400 m^2	66.0%	52.0%	37.0%	37.0%	46.0%	90.0%	49.5%
Semi Detached/townhouse	10.0%	15.0%	20.0%	20.0%	10.0%	5.0%	14.4%
Flats/Units/Apartments/Other	3.0%	10.0%	15.0%	15.0%	8.0%	1.0%	9.4%
TOTAL	100%	100%	100%	100%	100%	100%	100%

^{*} Note: Single residential will comprise some 76.2% of all dwelling types by the year 2021. Of this total, standard lots (i.e. 550 to 650 sqm) will comprise 65% and smart lots (less than 440 sqm) will comprise 35%. It is expected that the smart lots will mainly be located in coastal nodes, in and around town and neighbourhood centres and close to train and bus stations.

Recommendation 9.2.1 (d)

That the City of Wanneroo be guided by the following density settings:-

- 12-20 dwelling units/site hectare general residential neighbourhoods
- 20-30 dwelling units/site hectare within 250 meters of main bus routes and 400 meters of small neighbourhood centres
- 30-40 dwelling units/site hectare within 400 metres of large neighbourhood centres
- 40 dwelling units/site hectare within 800 metres, and 60 dwelling units/site hectare within 200 metres of train stations and bus stations
- 40 dwelling units/site hectare within 800 metres of town centres

These densities are recommended as a range or minimum densities, rather than guides or maximum densities. The City of Wanneroo should see them as a basis for making recommendations to the Western Australian Planning Commission on Structure Plans or Applications for subdivision.

Recommendation 9.2.1 (e)

That consideration be given to developing guidelines for achieving different net residential densities through site layout and design, particularly for single residential which can be located on small lots and zero lot lines, significantly increasing overall density within the same housing type.

The guidelines should set out principles for small lot development such as overlooking and privacy, practice notes such as the use of common walls, shared driveways and case studies that show a range of examples of housing types on small lots.

Recommendation 9.2.1 (f)

The Network City Strategy would reduce the amount and rate of greenfields development and require higher density development on established areas.

Based on case studies, the Local Housing Strategy should place emphasis on innovative development solutions in greenfields sites to create housing choice and integrated transport oriented development forms as well seek urban regeneration for those suburbs in need of revitalisation. The provision of safe and direct pedestrian and cycling infrastructure integrated with public transport should be encouraged where possible.

It is recommended that approaches be further developed as set out in the table below for the following types of places in Wanneroo '(typologies'):-

- I. Greenfields: (including new neighbourhood and town centres)
- II. Existing Town and Neighbourhood Centres
- III. Existing Suburbs
- IV. Existing Suburbs renewal
- V. New centres around rail stations
- VI. Coastal Nodes

Area Typology	Tools Needed	Recommended R Coding	Projects and Pilots	Analysis Needed	
Residential Areas Mixed Use Town and Neighbourhood Centres	to housing of predominant town centre II. Higher urbat contained many provision III. Housing diversion and centre IV. A range of harmonic toward and services to the services to the services to the services. The subdivision adjoining an attructure over the service of the service of the service of the services to th	Workplaces, leisure facilities, schools and shops should be as close to housing as possible through an urban structure of predominantly residential neighbourhoods that cluster around a town centre in accordance with Liveable Neighbourhoods Higher urban densities to be achieved to support relatively self-contained mixed use centres and good levels of public transport provision Housing diversity through medium to higher density housing in major centres A range of housing types with residential densities that increase toward and within the centre is provided to give good access local services to the majority of people Town centre is in reasonable walking distance to most residents The subdivision layout is well connected internally and with adjoining areas to contribute to a more sustainable urban structure overall The lot layout should provide for a mix of housing types, lot sizes and densities. Smaller residential lots and higher density housing should be located in and close to town and neighbourhood centres, near public transport stops, and in areas with high amenity such as next			
	District and local structure plans comprising mixed use towns and neighbourhood centres Local structure plans detailing street blocks, land uses and the residential density R Coding	R 12.5 to R20 for residential areas in neighbourhood s (lower densities in areas further away from centres and public transport – but still with robust design capable of long term intensification) Areas remote from a centre should provide	Butler Brighton District Structure Plan Alkimos- Eglinton District Structure Plan Yanchep-Two Rocks District Structure Plan East Wanneroo District Structure Plan	Understand staging and timing and needed infrastructure Understand development of mixed use and main streets for new town and neighbourhood centres Guidelines for achieving different net residential densities	

Area Typology	Tools Needed	Recommended R Coding	Projects and Pilots	Analysis Needed
		for a range of medium density and small lot residential housing types adjacent to areas of higher amenity such as open space		
		R20 to 30 within 400meters of small neighbourhood centres and within 250 metres of bus routes		
		R 30 to 40 within 400 metres of large Neighbourhood Centres		
		R40 within 800 metres of Town Centres		
		R40 within 800 metres, and R60 within 200 metres, of rail stations and bus stations		
		R40 & R60 to be extended to 1.6km of Town Centres where safe direct access cycleways to Rail Stations can be demonstrated.		

Area Typology	Tools Needed	Recommended R Coding	Projects and Pilots	Analysis Needed			
Existing Town and Neighbourhood Centres	maximise earminimising of minimising of minimising of the control	Mixed uses and increased densities should be encouraged to maximise economic, social and environmental benefits whilst minimising compatibility problems. Larger centres should include a readily identifiable public transport 'hub' Development in and around centres should complement existing development in scale, form and character, while allowing development generally to intensify in size, mixed uses and/or density. Housing diversity through medium to higher density housing, including housing for aged persons, 'empty nesters' and students when relatively convenient to tertiary educational facilities. Include local amenity through provision of high quality public open space and meeting places Surrounding residential development should be protected from overshadowing or overlooking. Existing streetscape character should be complemented or enhanced. New development should contribute to personal safety on streets and building should front adjoining parks for passive surveillance. Buildings should be encouraged to be adaptable for different uses and types of occupancy over time. New streets or pedestrian links should be added into poorly connected areas where opportunities are available. Opportunities for shared car parking should be maximised, especially between uses with different demand peaks, and consideration should be given to reducing car parking standards where good public transport access is available or where there is easy walking access.					
	Design workshops – place based plans with community support Local Government design assistance Local employment attraction and	R40 within 100 metres of local neighbourhood centres R40 within 400 metres of large Neighbourhood Centres R40 within 800 metres of Town Centres	Wanneroo Town Centre	Development of mixed use guidelines			

Area Typology	Tools Needed	Recommended R Coding	Projects and Pilots	Analysis Needed
	facilitation			
Existing suburbs	III. Maintenance space III. Provision for IV. The selection • The tradif • The externew and V. The promotion	e of local shops, pr ageing population of R-Codes to tak tional pattern of de at to which some in I retained investme	fill or redevelopme ant and improveme sign principles to er	oublic open accommodation ples 1-3 and: ent will facilitate nts
	n/a	Most residential area are included in an R20 Code which should continue to afford protection of lifestyles whilst allowing some small additional numbers of dwellings to support local facilities and give opportunities for aged houses in existing suburbs	 Alexander Heights Marangaroo Landsdale Wanneroo Mindarie Clarkson Merriwa Ridewood 	n/a

Area Typology	Tools Needed	Recommended R Coding	Projects and Pilots	Analysis Needed		
Existing	Principles					
suburbs - renewal	Provide for a comprehensive economic, social and environmental planning framework					
	mix of uses	scope for mixed use and housing types, uildings to strength	with new developm	nent and re-use		
	housing affo	nat with changing dordability, it is impo n the private rental	rtant to promote o			
	as well as w	design and layout p eaknesses and how v buildings, landsco	v improvements ca	n be made		
	which is wel	Il areas which have I above that norma quality and reduce ck	lly provided in resi	dential areas,		
	VI. Provide for open spaces	adequate social am s	enities and facilitie	s and quality		
	public trans	nsities , particularly port, to make renev roved local services	val economically fe			
		or pedestrian links reas where opportu				
	including re	mix and diversity of tail, employment, e I new housing		•		
		lost low-cost housin ordable housing	ng stock is at least i	n part replaced		
	•	on of universal des e ground floor of al		nsure a core of		
	XII. Consider the	e capacity of existin	g infrastructure an	d services.		
	Design workshops – place based plans with community	Dual Coding R20/R40 R40 coding is	Koondoola Girrawheen Quinns Rocks	An examination of the suburbs to select an approach for revitalisation –		
	support Local Government design assistance	'switched on' following the adoption of a local structure plan following a design		commencing in specific pilot areas whose communities will support the City of		
	Local employment attraction and	workshop		Wanneroo		

Area Typology	Tools Needed	Recommended R Coding	Projects and Pilots	Analysis Needed
	facilitation			
New centres around rail stations	is the potent II. Provide for k service III. Establish a r railway static IV. Achieve 60% actual 800 r V. Concentrate densities clo attractors VI. Provide sma densities and VII. Identify land retail develo numbers of VIII. Ensure that to or open link catchment IX. Provide for i X. Provide for i precinct XI. The promoti	of the 800 metre metre walk to the retail and commense to the railway stall, high quality residuely workers	ge and mix of land esidents to maximis ary uses within 800 radius catchment the ailway station recial uses and high ation as these are the dential parks to support or regional commercialway precinct the occuses on the rails a railway station's services a ratios for the rails ign principles to ending the state of the rails ign principles to ending the state of the rails ign principles to ending the state of the rails ign principles to ending the state of the rails ign principles to ending the state of the rails ign principles to ending the state of the rails ign principles to ending the state of the rails ign principles to ending the state of the rails ign principles to ending the state of the rails ign principles to ending the state of the rails ign principles to ending the state of the rails ign principles to end the state of the rails ign principles to end the state of the rails ign principles to end the state of the rails ign principles to end the state of the rails ign principles to end the state of the rails ign principles to end the state of the rails ign principles to end the state of the rails ign principles to end the state of the rails ign principles ign principles to end the state of the rails ign principles ign principl	I uses se use of the rail metres of a o be within an er residential the main oport increased unity facilities or at attract high station and create s walkable way station
	R-Coding and planning scheme provisions to permit transitoriented development within 800 metres of the railway station Planning scheme to discourage caroriented uses establishing within 800 metres of the	40 dwelling units/site hectare within 800 metres, and 60 dwelling units/site hectare within 200 metres of rail stations	Butler Brighton District Structure Plan Alkimos- Eglinton District Structure Plan Yanchep-Two Rocks District Structure Plan	Transit-oriented development guidelines

Area Typology	Tools Needed	Recommended R Coding	Projects and Pilots	Analysis Needed
	Local structure plans detailing street blocks, land uses and the residential density R Coding			
Coastal Nodes	II. Create oppore related emp III. Provide for it advantage of the specifically of the specifically of the specifically of the specifical specifical specifical specifical specifical specifical mass to achieve vital to the specifical specific	ncreased densities of coastal amenity ghts should fit with controlled using diversity throu nsity housing. mixed use and dive of complementary	to support facilities the surrounding la ugh a combination rsity, including the uses such as hotel network connection	d activities and and take and take and take of low, medium need for a as and restaurants as to rail stations
	Local structure plans detailing street blocks, land uses and the residential density R Coding	R40 where developable Proposals that seek to retain existing environmental features through low density development should be carefully assessed for competence	Jindalee Eglinton Yanchep Beach Two Rocks	

Recommendation 9.2.1 (g)

Wanneroo rural areas: That in order to retain traditional family structures in rural areas of the City of Wanneroo, a second dwelling should be permissible on rural properties, subject to no further subdivision being available, except where it is otherwise permitted.

9.2.2 Affordable Housing

Recommendation 9.2.2 (a)

That the City of Wanneroo adopts the accepted benchmark for affordable housing wherein households in the lower 40 per cent income bracket who pay more than thirty per cent of their gross income on housing costs, whether renting or buying, are considered to be in 'housing stress'. The reason for this is to reinforce the City of Wanneroo's commitment to a more equitable standard of living for all of its residents in line with Principle 4 of its Smart Growth Policy & Strategy – Identity, Equity and inclusiveness.

Recommendation 9.2.2 (b)

That affordable housing is located within locations that provide access to public transport, employment and community services in line with Principle 4 of the Wanneroo Smart Growth Policy & Strategy – Identity, Equity and inclusiveness.

Recommendation 9.2.2 (c)

- That the City of Wanneroo have an integral role in the management of future redevelopment, redistribution and building format of existing affordable housing stock.
- II. Public/Private Sector Partnership: That innovative public/private sector housing similar to that of the Brighton Access housing project be encouraged to ensure that a proportion of housing with Wanneroo continues to be accessible to all sectors of the community.
- III. That the City of Wanneroo consider partnerships with community housing providers, including the use of Council owned land where appropriate.

Recommendation 9.2.2 (d)

That the City of Wanneroo investigate the merits of an incentive based policy including density/height bonuses and review of regulatory requirements to encourage provision of affordable housing.

Recommendation 9.2.2 (e)

That the City of Wanneroo ensures that District Planning Scheme, recreation and engineering standards have regard to their impacts on the efficiency of housing estates and do not unnecessarily add to housing costs.

Recommendation 9.2.2 (f)

To ensure that people are not priced out of their established areas through urban renewal programs, it is recommended that older housing stock should be retained wherever possible, or its replacement should be through the provision of housing types that can be produced at affordable prices.

Recommendation 9.2.2 (g)

The City of Wanneroo is a major contributor to public housing and contributes more than the minimum 10% public housing ratio. It is recommended that over time, public housing be redistributed from large public housing estates and in a dispersed fashion in appropriate locations in the municipality in accordance with the criteria in Recommendation 9.2.2 (b).

Recommendation 9.2.2 (h)

That the following guidelines be considered to provide wider access to housing in Wanneroo for a broader spectrum of the community. When using the table, household types should be borne in mind, for example, singles and retirees may also be low income households who are renting.

Housing Group/Issue	Public Sector Role	Private Sector Role
Trade-up Buyers		
(families looking for a dream home or empty nesters looking to downsize)		
	State Government	Catered for in existing hosing
	Policy Framework – Liveable Neighbourhoods	production system Range of product types
	Local Government	
	Diversity in Local Housing Policy	
	Response to structure plans	
First Home Buyers		
	State Government	Affordable housing eg. Access
	Subsidies	Housing
	State Government Schemes	Range of product types
Single		
	Local Government Requirements in District and Local structure plans for housing diversity and small lot provision	A new product is required – based on industry/market feedback and case studies.
Retirement		
	Local Government	Range of product types
	Policy for a range of housing	

	should include in appropriate locations	
Low Income		
	State Government	Access Housing
	Facilitate public private partnerships	
	Local Government	
	Partnerships with community housing providers, including the use of Council owned land where appropriate	
Rental		
	State Government	From a policy perspective, the
	Rental Assistance	current settings are adequate.
	Purchase Assistance	
	Upgrade existing stock.	
	Local Government	
	Group housing sites provision	
	Retention of older dwelling stock or its replacement with affordable housing units	

9.2.3 Aged Persons Housing

Recommendation 9.2.3 (a)

That the City of Wanneroo provide for housing (including residential care facilities) for seniors and people with disabilities to increase the supply and diversity of residences that meet their needs, make efficient use of infrastructure, and are of good design.

Recommendation 9.2.3 (b)

That the range of housing should include in appropriate locations:

- Large scaled development on the urban fringe; and
- Infill self-care housing, and serviced self care that will allow seniors to 'age-inplace' and stay in the area that they know;
- 'Granny-flats' on appropriate sized lots with a review of eligibility to possibly widen allowable occupancy to extended family
- Student accommodation in and around tertiary institutions in studios
- Assisted living in hostels and residential care facilities
- Affordable housing options, such as retirement villages and multi-story residential complexes

Hostels

Recommendation 9.2.3 (c)

That aged accommodation be encouraged in neighbourhoods with:

- Good public transport accessibility
- Walking distance of shops
- Proximity to health services

Typical locations would be:

- Within 800 meters of rail stations or bus stations
- Within 400 metres of local shops and 800 metres of district shops
- Along bus routes

Recommendation 9.2.3 (d)

That retirement complexes be encouraged to be located close to town and neighbourhood centres, and to incorporate denser components to achieve sufficient yield on relatively small sites.

Recommendation 9.2.3 (e)

That, where possible, retirement complexes be designed to be integrated into the local community, for example a complex could form the core of a neighbourhood centre and facilities could be shared.

Recommendation 9.2.3 (f)

That adaptable housing be provided as it is more cost effective (1%to5% of construction costs compared with 12% to 35% adapting an existing dwelling) and fits well with preferences for seniors and people with a disability for independent living and avoids the need for relocation.

9.2.4 Accessible Housing

Recommendation 9.2.4 (a)

That the City of Wanneroo promote the incorporation of universal design principles in all residential developments to provide a core of access to the ground floor of all houses. This should include access to the entrance, an accessible entrance, access to major areas of use such as kitchens and living areas, toilet and shower/bath facilities large enough to be adapted for future access and access to one room of the ground floor able to be used as a bedroom.

9.2.5 Other Housing Types

Recommendation 9.2.5 (a)

That other denser housing types such as studios, student accommodation be best located in and within walking distance of town and neighbourhood centres or close to the facility that gives rise to the need for them.

Recommendation 9.2.5 (b)

That larger lot housing be provided in peripheral neighbourhood locations in environmentally sensitive areas where larger lots are needed to retain vegetation. These lots should be capable of catering for people with larger space consuming requirements such as parking of boats and caravans.

9.2.6 Urban Design Guidelines

Recommendation 9.2.6 (a)

That the City of Wanneroo adopt the following principles for housing development in structure plans:

- Provide for a mix of housing types and tenures including the provision of affordable housing for both home purchase and rental to meet local housing needs;
- Seek to build sustainable communities by incorporating essential social, educational, local shopping, recreational, and community facilities or by complementing existing local facilities;
- Provide local and accessible employment opportunities;
- Maximise the potential for public transport provision, walking and cycling;
- Enhance local character and distinctiveness;
- Provide a mix of adaptable public and private open spaces and facilities; and
- Ensure a human scale designed around pedestrian priority access and movement.
- Promote universal design principles to ensure a core of access to the ground floor of all housing.

Liveable Neighbourhoods sets out design guidance to achieve these principles.

Recommendation 9.2.6 (b)

That the City of Wanneroo adopt the following considerations for housing design:

- 1. DENSITY
- Higher density should be located in accordance with Recommendations 9.2.1(b),
 (c), (d), (f) and (g)

- The density of dwellings should reflect site issues such as street frontage, slope, area, shape and site features, the size of dwellings and impact on neighbours
- Higher densities should be located on larger sites
- Larger developments should provide a range of dwelling sizes and types
- Incentives should be considered for smaller pockets of redevelopment through split R Codes in which a higher degree of design input is required to achieve a higher density
- A comprehensive approach through structure planning will be required for fragmented land holdings such as East Wanneroo.

INFRASTRUCTURE

- The development should not overload the capacity of public infrastructure, including reticulated services, streets, open space, and social and community services
- The design and layout of dwellings should provide sufficient space for facilities and services to be installed and maintained

3. NEIGHBOURHOOD CHARACTER

- Medium density development in among established housing should be designed to respect the character of the neighbourhood
- Developments should integrate well with the neighbourhood, enhance existing streets, maintain amenity for adjacent residents and provide a sense of address and privacy
- Significant changes of building height between existing dwellings and new development should be graduated
- Developments should visually address public streets and layouts should provide for the safety and security of residents and property.

4. ENERGY AND WATER EFFICIENCY

- Orientation and layout of developments should reduce fossil fuel energy use and make the most use of natural ventilation, daylight and solar energy by orienting along north-south/east-west axes to maximise solar control
- Developments should be designed and constructed to reduce winter heat loss and make use of solar energy
- Specific design suggestions include:-
 - Sharing floors and walls between dwellings through multi-story or attached construction
 - Provide for out-door clothes drying where possible
 - Locate living areas on the north side of the dwelling
 - Set back dwelling walls from northern boundaries and structures
 - Protect widows from direct summer sun and allow access to winter sun
 - Locate windows for cross ventilation

 Dual flush toilets are compulsory and other housing water saving opportunities should be pursued including water efficient appliances

BUILDING SETBACKS

 Building setbacks, coverage and building bulk should be acceptable to the neighbourhood setting in accordance with the recommended R Coding in Recommendation 9.2.1(f)

6. CAR PARKING AND VEHICLE ACCESS

- Resident and visitor parking should be provided to take account of likely resident and visitor needs
- On site provision can be reduced where of on-street parking or nearby parking is available, or where car parking can be reciprocated
- Car parks should be designed for efficient use and management, safe and efficient vehicle movements and connections to the street network

9.3 Implementation of Strategy Actions

9.3.1 Staging of Implementation

A shift is needed from Business as Usual to achieve the housing mix for City of Wanneroo as set out in Scenario B. This is a 16 year program to 2021 that will require sensible implementation in order to achieve the proposed housing types in the recommended locations in Recommendation 9.2.1.

Recommendation 9.3.1 (a)

It is recommended that:

- the densities recommended in 9.2.1(f) be pursued immediately for District and Local structure plans for Greenfields and for New Centres around Railway Stations;
- II. as part of the preparation of a Local Planning Strategy the principles set out recommendation 9.2.1(f) be considered for the selection of existing town and neighbourhood centres for increased densities and mixed uses, and also for locations in nominated suburbs for renewal
- III. that the principles in 9.2.1(f) for Coastal Nodes be applied in response to developer led proposals
- IV. The R20 Code should continue to afford protection of lifestyles in existing suburbs, whilst allowing some small additional numbers of dwellings for aged houses and to support local facilities and give opportunities

Recommendation 9.3.1 (b)

That the forecast dwelling types by geographic location in the SGAT be monitored by the City of Wanneroo as a guide to strategy implementation.

Recommendation 9.3.1 (c)

That the City of Wanneroo consider producing density and design guidelines to support the local hosing strategy. The guidelines should show what various densities look like by way of pictures and include different styles of smart lot hoses, and medium density; cluster housing vs. town houses etc., using as much as possible well accepted local examples from within the Shire.

9.3.2 Infrastructure

Recommendation 9.3.2

It is recommended that the City of Wanneroo make representations to the State Government for investment in transport infrastructure, particularly rail, to be delivered ahead of or at the same time as development occurs in order to:

- I. Reduce the rate of sprawl;
- II. Enable communities of sufficient size and scale can be developed in a way that allows for employment, services and mixed land uses and a much wider variety of housing to be developed, including smaller and more affordable housing.

9.3.3 Regulatory Framework

Recommendation 9.3.3 (a)

In order to achieve the strategy, amendments to the City of Wanneroo Town Planning Scheme are needed.

MINIMUM R-CODE

The District Planning Scheme should establish minimum lots per hectare rates. The current R-Codes prescribe a maximum rate that has resulted in areas of Wanneroo not achieving full development potential.

SPLIT R CODES

A dual Coding R20/R40 should be applied for the renewal of existing suburbs. The R40 coding is 'switched on' following the adoption of a local structure plan following a design workshop.

Split R Codes could also be introduced as an incentive for more comprehensive redevelopments in existing areas. To ensure certainty, it is recommended that this split code be introduced with the requirement that applicants provide 'block' or 'local area' plans.

PROVISION FOR AGED AND PEOPLE WITH A DISABILITY

Criteria and standards should be developed for housing for aged persons and for people with a disability. Special provisions should be made in the District Planning Scheme to provide for the setting aside of planning controls that would prevent the development of housing for aged persons and for people with a disability. For example, specific criteria could be established in relation to the design of new non-standard building form, level of site saturation, site dimension/specifications.

Recommendation 9.3.3 (b)

City of Wanneroo District Planning Scheme No. 2

The Wanneroo LHS introduces a number of new and innovative housing solutions to meet the anticipated community profile in 2021. These include new urban form, increased housing diversity and planning responses to specific development forms. To facilitate the effective implementation of the Wanneroo LHS, a number of amendments are recommended to the district planning scheme as outlined below.

1.6 SCHEME AIMS AND OBJECTIVES

Local Planning Framework

Change clause (b) to read:

To encourage and facilitate development of the City in accordance with the City of Wanneroo Strategic Plan 1999/2002 (currently under review – as modified), City of Wanneroo Local Housing Strategy 2005 and subsequent updates.

Land Use & Development

Add points to clause (f):

- encourage housing lot and building diversity to suit community needs
- promote higher housing densities close to employment and transport nodes
- ensure the achievement of specified R Codes for all new Greenfields development

3.4 THE RESIDENTIAL ZONE

It is recognised that clause 3.4.2 supports the principal objectives of the Wanneroo LHS.

Add an objective to 3.4.3:

Provide a range of densities with a variety of housing to meet the needs of different household types identified in the Wanneroo Local Housing Strategy.

3.5 THE MIXED USE ZONE

Although clause 3.5.3 (a) implies that with varying housing types there may be higher density, although this is not clearly stated. It is recommend that 3.5.3(a) read:

(a) provide for a diversity of land uses and medium density housing types

Mixed use areas should be subject to comprehensive structure planning by either the City of Wanneroo or at the specification of the Council for particular sites, the private sector. Clause 9.1 Council May Require Structure Plan should be expanded to include a new sub-clause

(d) the Council's approval of an application for development in a Mixed Use zone.

3.13 CENTRE ZONES

Change clause 3.13.2 (b) to read:

Ensure that the City's commercial centres are integrated and complement one another in the range of retail, commercial, entertainment, residential, community services and activities they provide for residents, workers and visitors.

3.14 THE URBAN DEVELOPMENT ZONE

In considering appropriate development, this clause does not have regard to dwelling requirements to achieve a balance community profile.

Change clause 3.14.1 to read:

...In considering applications for development and changes to residential density codings in areas near existing and proposed future railway stations and other nodes the Council will have due regard to the desirability of higher residential densities and the actual achievement of the specified R Coding, transit related development and good pedestrian and vehicular access to stations in order to promote public transport usage.

4.4 RESIDENTIAL PLANNING CODES

4.4.6

The use of agreed Structure Plans are recognised as provisions to vary R Code requirements to suit the objectives for nodes within the LHS. ie. coastal nodes, station, regional centre. None the less, it is recommended that this clause remain in its current form.

6.8 MATTERS TO BE CONSIDERED BY COUNCIL

Add a new sub-clause

(x) the need for sustainable lots for dwelling mix to achieve a balanced community profile.

TABLE ONE - THE ZONING TABLE

It is noted that the Special Use Zone, Marina Zone, Urban Development Zone and Centre Zone are determined using other provisions and Agreed Structure Plans. The following residential based uses were assessed and found to be suitable in relation to their current permissibility codes:

- Aged or Dependent Persons' Dwelling
- Ancillary Accommodation

- Holiday Village/Resort
- Park Home Park
- Residential Building
- Retirement Village

It is recommended that the permissible code for Grouped Dwelling and Multiple Dwelling be changed from "D' to "P" in the Mixed Use Zone.

CLAUSE 4.14 - CAR PARKING STANDARDS

One of the principles of the Wanneroo LHS is to encourage housing close to employment and transport nodes. This would encourage walkability and the use of public transport resulting in the reduction of vehicle trip generation and travel distances.

It is therefore recommended that a new sub-clause be included as follows

4.14.3 The Council may at its discretion, permit car parking concessions to the standards specified in Table 2 for developments located in centres, at railway station precincts and for coastal nodes where reciprocal parking can be achieved or a lesser standard can be justified by a formal traffic assessment.

SCHEDULE 1 - GENERAL DEFINITIONS

Insertion of the definition for "Node""

Means a spatial concentration of services, employment and social interaction where people can work, live and/or recreate. A node can vary in size and use-diversity and is generally serviced by public transport.

SCHEDULE 7 - STRUCTURE PLANS: MATTERS TO BE INCLUDED

PART A - PLANS AND WRITTEN TEXTS

It is considered that the proposed Agreed Structure Plans should address Wanneroo LHS issues during the earlier stage of the planning process. It is therefore recommended that matters relating to design and development responses are addressed in Schedule 7.

Insert a sub clause:

Justification of the proposed residential dwelling types and densities in response to the Wanneroo LHS.

9.4 Development Contributions

Objective: Ensure that development infrastructure is financed in a timely manner without adverse impacts on land price competitiveness.

Recommendation 9.4.1

That the City of Wanneroo investigates the role of the developer contributions in assisting to meet the increasing financial burdens being placed upon the City through the development of new urban areas and their related hard and soft infrastructure requirements, and that this is undertaken in consultation with relevant State agencies and in the context of the Network City proposals and the findings and recommendations of the Public Accounts Committee Inquiry into Developer Contributions for Costs Associated with Land Development (Report No.8 of 2004).

9.5 Monitoring the Strategy

Recommendation 9.5.1 (a)

On-going monitoring of housing supply, demand, trends, and related issues are crucial in making future strategic housing decisions. As part of reviewing housing targets, it is recommended that the City of Wanneroo continue to monitor the objectives of this housing strategy through a number of initiatives including developer briefings and market research.

Recommendation 9.5.1 (b)

From a supply perspective, developer feedback would provide insight into how planning regulations, policies, etc. can be amended to maximise good planning practice and housing outcomes. On-going developer briefings would provide this information whilst strengthen the developer/City of Wanneroo co-operative relationship. Developers can also provide an insight into market demands, trends and needs.

Recommendation 9.5.1 (c)

From a demand perspective, on-going market research would reinforce the City of Wanneroo's edge on strategic housing development. Housing densities, formats, requirements, etc. could be altered on an ongoing basis to avoid an oversupply of unsuitable housing in 2021.

9.6 Relationship of Recommended Actions to LHS Objectives

Recommendation No.	LHS Objectives									
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
9.2.1(a)	*									
9.2.1(b)				*						
9.2.1(c)				*						
9.2.1(d)							*			
9.2.1(e)	*									
9.2.1(f)	*	*		*	*	*	*	*		*
9.2.1(g)							*	*		
9.2.1(h)	*									
9.2.2 (a) – (g)	*	*								
9.2.3 (a) - (f)	*			*						
9.2.4 (a)	*									*
9.2.5 (a) (b)	*									
9.2.6 (a) (b)						*		*		*
9.3.1 (a) (b)						*	*	*	*	
9.3.2 (a)			*							
9.3.3 (a) (b)							*	*		
9.4.1 (a)			*							
9.5.1 (a) (b) (c)								*		

10.0

10.0 REFERENCES





10 References

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Western Australian Planning Commission, Metropolitan Development Program – Urban Release Plan 2003/2004 to 2007/2008.

11.0

11.0 APPENDICES: STATE, METROPOLITAN AND LOCAL PLANNING POLICIES





11 Appendices: State, Metropolitan and Local Planning Policies

11.1 Dialogue with the City: Working together to make Perth the World's most liveable city

Key findings from the forum are set out in below:

Important Issues

- 79% of participants wanted to protect natural waterways from development that could damage its long-term viability.
- 69% wanted to protect natural bushland from future development.
- 61% wanted enough public transport to be made available so that it is within walking or cycling distance for people.
- 56% wanted to encourage people to use public transport as much as possible.
- 58% wanted to reduce Perth's dependency of private vehicles.
- 32% wanted to offer a range of lower and higher density living options to be made available to people.
- 19% thought it was very important to encourage suburbs to have a mix of houses, units and flats.
- Only 22% of people thought it was very important to have a defined urban boundary for Perth.

Performance

- 60% thought that Perth was not doing enough to protect natural waterways from development.
- 61% thought that Perth was not doing enough to provide public transport within walking or cycling distances.
- 63% indicated that not enough was being done to encourage the use of public transport.
- 62% indicated that not enough was being done to reduce car dependency in Perth
- 57% stated that Perth had got it right when it came to providing a mix of lower and higher living options for Perth's people.
- 59% stated the Perth had got it right when it cam to encouraging suburbs that have a good mix of houses, units and flats.
- 51% stated that Perth had got it right when it came to defining the urban boundary, while 30% stated that not enough was done in regards to defining the urban growth boundary.

Trends to be Encouraged

- 93% wanted environmental protection to be of the same importance as economic growth.
- 88% wanted public transport to reduce private car dependency.
- 82% wanted planning outcomes to be made with needs of the whole of Perth in mind.
- 65% wanted growth in Perth to be encouraged in established areas and greenfield sites to remain undeveloped.
- 61% wanted every suburb to have some form of lower and higher density residential development rather than few specific areas for higher residential development.

Budget Trade Off

- 32% wanted the Government to spend less on building new roads.
- 31% wanted the Government to increase funding on maintaining and upgrading existing roads.
- 30% wanted the Government to increase funding on the construction of new passenger rail lines.
- 26% wanted the Government to increase funding on the construction of infrastructure (roads, hospital etc) for continued development at the fringes.
- 28% wanted the Government to increase funding on providing more housing for socio-economic disadvantaged, aged and disabled members of the community.
- 44% wanted to spend less money on providing attractive low income housing closer to the city centre.

Alternative Futures

- 55% would like to see Perth continue to expand outwards while providing 'green' buffers in contrast to 45% who wanted to see development being filled within the existing Metropolitan area prior to further outward expansion.
- 74% would like to see the Government focus more on increasing the use of public transport in contrast to 26% whom wanted Government to focus on building more and better roads.
- 66% wanted Perth to concentrate more on redevelopment while 34% wanted Perth to concentrate its growth on the Fringes.
- 90% wanted a city that is developed within several major regional areas rather than being concentrated within the CBD.
- 65% wanted a city that is developed along corridors with transport routes in contrast to 35% who wanted a city that grows evenly in all directions.
- 75% wanted all suburbs to have a share of affordable rental housing in contrast to 25% whom wanted affordable rental housing to be concentrated in specific suburbs.

Where People Want to Live

- Over 40% found that living in the middle suburbs quite attractive.
- Over 50% found living near the beach/coast very attractive.
- Over 40% of people found low population density area very attractive.
- Over 30% found medium population density area quite attractive.
- Over 50% found high population density very unattractive.
- Over 60% found stand alone house block very attractive.
- Just over 20% found apartments, units or townhouse quite attractive.
- Over 40% found block sizes between 500 m² to 800 m² quite attractive.
- Approximately 40% found blocks over 800 m² very attractive to live in.
- Over 60% found blocks with small courtyards unattractive to live in.

11.2 North West Corridor Structure Plan (1992)Urban and Urban Deferred Zones Capacity

Urban and Urban Deferred Zones

Category A1	Land assessed as having no constraints to urban development in the short term, generally within five to ten years.					
Suburb	Area (ha)	Potential Dwelling	Potential Population			
Clarkson/Butler	2,090	18,810	56,430			
Neerabup	810	7,290	21,870			
Wanneroo	450	4,050	12,150			
Landsdale	445	4,005	12,015			
Alkimos	235	2,115	6,345			
Category A2	Land assessed as having constraints to immediate urbanisation but which should become available after ten to fifteen years.					
Suburb	Area (ha)	Potential Dwelling	Potential Population			
Neerabup	340	3,060	9,180			
Wanneroo	200	1,800	5,400			
Landsdale	325	2,925	8,775			
Category B	Other areas suitable for urbanisation which have been identified as having major constraints but which may become available for development prior to 2021.					
Suburb	Area (ha)	Potential Dwelling	Potential Population			
Alkimos/Eglinton	1,300	11,700	35,100			
Yanchep	2,755	24,795	74,385			

11.3 The Network City: Perth's Planning Strategy 2004-2030 (draft)

Table 1: Projected distribution of additional dwellings by sector, over time, to achieve 60 per cent of all new dwellings in existing urban areas

Planning Sector	New Dwellings	New Dwellings	New Dwellings
	2002 to 2010	2002 to 2020	2002 to 2030
Inner and Middle	10 400	27 000	65 000
North West	2 300	14 000	26 000
East	400	7 000	15 000
South East	1 600	15 000	29 000
South West	2 250	17 500	31 500
Peel	1 000	13 000	26 000
Total	17 950	93 500	192 500

Table 2: Distribution of additional dwellings by sector to achieve 40 per cent of all new dwellings in new growth areas.

Planning Sector	New Dwellings 2002 to 2010
North West	106 000
East	30 000
South East	63 000
South West	46 000
Peel	30 000
Total	249 000

11.4 Metropolitan Development Program – Trends and Projections 2002/2003 to 2006/2007

This MDP – Trends and Projections 2002/2003 to 2006/2007 includes the existing and projected drivers and characteristics of the demand for residential lots and dwellings and the related services and infrastructure for the MDP region. The key demand drivers and housing affordability issues are summarised below.

Demand Drivers

POPULATION

A key driver of demand for residential lots and dwellings is population growth. It was stated that Perth's population grew from 1.2 million in 1991 to 1.45 million in 2001 representing an average annual rate of 1.7%, which added approximately 23,035 persons per annum to the MDP region during this period.

The North-West Corridor with a total population of 240,368 persons (2001) is the second most populated sector within the MDP. From the period of 1991 to 2001, the North-West Corridor recorded the highest growth of persons per year, averaging 6,502 per year. The availability of land supply, the attraction of the coast and housing affordability could be a main contributor to the population growth within the North-West Corridor.

AGE STRUCTURE

While the age cohorts of 15-19, 35-39 and 44-49 still remain the largest groups within the MDP in 2001. There was significant growth within the 50-54 and 55-59 age cohorts recorded from 1996 to 2001. The 50-54 age group recorded an increase of 26,300 and the 55-59 age group recorded an increase of 14,700 between 1996 to 2001 respectively.

The North-West Corridor has a high proportion of 0-14 age group. The age cohorts of 30-44 and 45-59 also make up a large proportion of the population. It is anticipated that the age group over 60 will increase significantly for the North-West Corridor.

Table 5. Projected Annual Average % Change in Age Cohorts 2002-2007

	0-14	15-29	30-44	45-59	60-74	75+
North-West	1%	0.3%	2.7%	-0.2%	8%	5.3%

The aging of the population will impact on housing and the associated timing and delivery of services and infrastructure.

HOUSEHOLDS AND FAMILIES

It was estimated that in 2002, the MDP region has a total household of 586,495, with family households significantly higher then lone-persons and group households. The total households number is estimated to increase to 646,264 by 2007 with family households still to dominate. Lone person will make up a larger proportion of households by 2007.

It was also stated in 2002 that couple family with children was the dominant family by types over couple family without children and one-parent family. It is estimated that by 2007 couple family without children will increase significantly within the MDP region.

It is estimated that the North-West Corridor will record the highest number of new household growth between 2002 and 2007, averaging 2,611 per year at an average growth rate of 2.8%. The North-West Corridor is dominated by family households, accounting for 83% of all households. The growth of lone person households is forecast to be strongest within the North-West Corridor, with an average annual growth rate of 4.3% for the period of 2002 to 2007.

Forecast for the North-West Corridor indicates that it will record the highest rise in family couple with children (3,424 families) within the MDP from 2002 to 2007. The North-West Corridor is also predicted to see the biggest rise in couple family without children, with an average of 1,058 families at annual growth rate of 4.2%. It has also been forecast that the North-West Corridor will experience strong growth in one parent family with an average annual growth rates of 2.2%.

HOUSEHOLD INCOMES

The North-West Corridor has a high proportion of high income households, with 31% of households earning \$1,200 per week and above. The majority of households (over 40%) have a weekly income of between \$400 to \$1,199.

LABOUR FORCE AND EMPLOYMENT

The North-West Corridor has a high proportion of full time employment, accounting for 19% of the MDP and being second only to the Middle Sector. The North-West Corridor also recorded lowest average unemployment rate of 5.5%.

11.5 Metropolitan Development Program – Urban Land Release Plan 2003/2004 to 2007/2008

Findings in relation to the North West Corridor include:-

- A total of 9,756 lots in residential subdivisions (5 lots or more) that have been approved or pending approval for the period of 2003/2004 to 2007/2008 include:
 - 4,959 lots in residential subdivision approvals
 - 291 lots in residential other residential subdivision approvals, and
 - 4,506 lots in residential subdivision applications pending approval.

- A total of 17,719 indicative lots are anticipated for the North-West Corridor for the period of 2003/2004 to 2007/2008 in the form of 17,478 single dwelling lots and 241 group dwelling lots yielding 19,022 dwellings.
- Land development and approvals pipeline for 2002/2003 for the North-West Corridor includes:
 - 8,800 lots within MRS Urban Deferred zoning (no TPS zoning)
 - 16,927 lots within MRS Urban zoning (no TPS zoning)
 - 66,772 lots within TPS Residential zoning (+ MRS zoning)
 - 19,643 lots within TPS Residential and R-Coded (+ MRS Urban)
 - 4,506 lots with pending subdivision application as of 30 June 2003
 - 4,645 lots granted preliminary approval during 2002/2003
 - 5,250 lots with preliminary approval as of 30 June 2003
 - 3,305 lots granted subdivision approval during 2002/2003
 - 2,946 lots sold during 2002/2003, and
 - 3,385 dwellings given building approval during 2002/2003

Key Infrastructure and Upgrades for the North-West Corridor

The following key infrastructure and service upgrades are listed in the MDP-ULRP from 2003/2004 to 2007/2008 and include recent updates from the Water Corporation:

- The Beenyup Wastewater treatment plant upgrade
- New Western Power substations for Clarkson and Padbury
- A primary school for Butler (Brighton) to open by 2004
- Primary schools for East Marangaroo, Darch, Carramar and Wanneroo to open by 2005
- A possible interim school to open in East Clarkson (Somerly) by 2004/2005
- An upgrade to Girrawheen high school is scheduled
- Sewerage infill programmed for Sorrento, Duncraig, Mullaloo, Quinns Rocks (scheduled for 2008/2010) and Yanchep. The timing of Yanchep will be deferred and will be reviewed after the construction of the interim waterwater treatment plant between Yanchep and Two Rocks.
- Carabooda Reservoir and associated pipework by 2006/2009
- Yanchep/Two Rocks interim wastewater treatment plant by 2009
- Alkimos wastewater treatment plant by 2010
- The Northern Rail line is programmed to have services operational to Clarkson by September 2004 and potentially up to Butler by 2007/2008. A new railway station is commissioned for Greenwood and upgrades for Joondalup and Currambine stations
- Major road projects include the Mitchell Freeway extension to Shenton Avenue and in the longer term to Burns Beach Road

- Likely development fronts to push into Mindarie, Quinns Rocks and Butler
- The Department of Housing and Works has continuous works programmed for Girrawheen as part of its urban renewal program, and
- Upgrades to the Wanneroo police station.

City of Wanneroo

Indicative lot release figures for the City of Wanneroo for 2003/2004 to 2007/2008 indicates that:

- 2,900 lots created in 2002/2003
- 4,825 lots received preliminary approvals
- 3,102 lots scheduled for development in 2003/2004
- 2,608 lots are expected to be created in 2004/2005
- 2,830 lots are expected to be created in 2005/2006
- 3,203 lots are expected to be created in 2006/2007
- 3,003 lots are expected to be created in 2007/2008
- 1,654 lots are to be created within an unspecified year
- A total of 16,400 lots are anticipated for the City for 2003/2004 to 2007/2008 in the form of 16,235 single dwelling lots and 165 group dwelling lots yielding a total of 17,417 dwellings.
- The City contains the four highest lot-production suburbs (2003/2004 to 2007/2008) within the North-West Corridor. These suburbs are:
 - Butler (2,550 lots)
 - Alkimos (1,900 lots)
 - Yanchep (1,880 lots)
 - Tapping 1,570 lots.

11.6 Liveable Neighbourhoods – Elements relevant to the City of Wanneroo Local Housing Strategy

Community Design

Objective 2:

'To provide safe, convenient and attractive neighbourhoods and towns that meet the diverse and changing needs of the community and offer a wide range of housing, leisure, local employment opportunity and associated community and convenient facilities'.

Requirements for Town and Neighbourhood Structure:

'R3 Neighbourhood structure should have the following characteristics:... range of residential densities that increase toward the neighbourhood and town centres.'

R4 Town structure should have the following characteristics:...a range of housing types with residential densities that increase towards the centre and can, over time, support population to foster self-containment'.

Requirements for mix of lot size:

'R 13 The lot layout should provide a mix of housing types, lot sizes and densities, with small residential lots and higher density housing in areas close to neighbourhood and town centres, public transport stops and in areas of high amenity such as next to parks'.

Lot layout

Objectives

O1: To provide a range of residential lot sizes to suit the variety of dwelling and household types in Western Australia with are and dimensions that meet user requirements.

O5: To facilitate development which uses land and infrastructure efficiently, and which encourages cost savings in housing to benefit the economy and the environment.

O6: To provide for smaller lots and lots capable of supporting higher density development in and around town and neighbourhood centres and public transport stops, and adjacent to higher amenity areas such as parks.

Requirements for lot size and diversity

'R7 The subdivision should maximise the lot yield for the relevant R Coding unless it can be demonstrated that:

- an overall structure plan has been approved that achieves the R Code density, while specifying a lower density which must be met for the subdivision/precinct; or
- the site analysis demonstrates that the R Code density is inconsistent with satisfaction of other provision of Liveable Neighbourhoods; or
- the R Codes are indicative of a density associated with a future town cent or railway station, and the development substantial precedes these facilities. In this case, a subdivision may be approved provided that incremental intensification of the first age of development to the R Code density can occur without significant demolition'.

Development near centres and stations

'R 10 In areas close to town centres, railway stations and major bus stops, lot sizes should be provided which enable adequate medium density housing to be provided to support the facilities and/or public transport service. This may be achieved by:

- providing for housing density of at least 25 dwellings per hectare within 400m of railway stations, and at least 15 dwellings per hectare from 400 m to 800 m of stations;
- ensuring housing densities of at least 15 dwellings per hectare within 400 m of major bus stops; and
- locating housing close to public transport stops for those groups in society dependent on such forms of transport'.

11.7 Residential Design Codes of Western Australia (R Codes) WAPC, 2002

The R Codes are gazetted as Statement of Planning Policy No1. Through local government, they control residential development throughout Western Australia.

The design controls cover 10 Design Elements: housing density, streetscape, boundary set-backs, open space, access an car parking, site works, building height, privacy, design for climate and incidental development.

The aims of the R Codes are:

- 'encouraging the widest possible range of dwelling types to meet community desires;
- encouraging innovative design solutions;
- ensuring that new developments incorporate adequate standards of access and amenity including for people with a disability;
- ensuring that adverse impacts on neighbouring residents are minimised;
- ensuring that new developments contribute positively to the streetscape and locality of which they form a part;
- aiding fair, efficient, straightforward and timely approvals'.

Local government, with the approval of the Minister, sets R codes for locations via their District Planing Scheme. The R Codes offer the following guidance:-

- 'the right mix of codes, to match the needs of existing and intended future community;
- relating housing type and density to the overall pattern of development for the municipality, including public transport, shops and schools; and
- matching the selected codes to existing local conditions, so that the intended outcome – whether retention of existing dwellings, or their replacement over time, for example – actually occurs.

The R Codes refer to the following issues that should be considered n the housing component of a Local Planning Strategy:-

- 'recognition of the regional demand for a range of densities and dwelling types;
- socio-economic and demographic profiles, both existing and likely in the future;
- existing lot sizes;
- current and future infrastructure, including the road network, sewerage, water supply, power, significant employment centre, social and recreation facilities and public transport;
- the age and the condition of existing housing stock
- the existence of sites suitable for new housing development, redevelopment or infill;

- trends in market demand for various forms of housing;
- heritage and streetscape values;
- the existing and desired character of particular precincts; and
- land values and the effect of proposed density changes on them'

11.8 Regional Residential Density Guidelines for the Perth Metropolitan Region, 1994 Department of Planing and Urban Development

These guidelines are somewhat dated. They were intended to be implemented by local governments through the preparation of local housing strategies and incorporated into district planning schemes.

They seek to:-

'provide opportunity for a wider range of housing types throughout the metropolitan region while protecting the preferred traditional lifestyles, housing and density in established suburbs'

11.9 WAPC Policy No. DC 1.6:

A key objective of this policy is:-

'To ensure the optimal use of land close to railway stations, bus terminals, transport interchanges and routes containing frequent public transport services for residential, commercial and other intensive uses'.

Policy measures relevant to housing are:

- 4.1 and 4.2 Higher density housing to be encouraged within Strategic Regional Centres and public transport precincts (within 800 m of a railway station), in particular, medium to high density residential development and accommodation for groups dependent on public transport such as the aged, socioeconomically disadvantaged and those with disabilities.
- 4.3 Medium to high residential densities should be encouraged in public transport precincts and on land within 200 m of identified frequent public transport services. A range of housing should be encouraged to provide for the various household types.
- 4.13 Encourage aged persons housing within 100m of a bus stop.

11.10 Guidelines for the preparation of Local Structure Plans for Urban Release Areas:

The Guidelines state that with respect to the location and density of housing areas, structure plans should:-

- 'provide for a variety of housing types at different densities reflecting demographic profiles and population targets for the local authority area'
- include medium and higher density housing sites particularly near significant employment locations, public transport routes, commercial centres, education facilities and recreation area

11.11 Local Level Regulatory Systems

11.11.1 City of Wanneroo Our People Our Future: Strategic Plan 2002-2005

The City's strategic vision is:

'By the year 2007, the City of Wanneroo will be a vibrant centre of creative growth known for the quality of lifestyle choices and development patterns, which enhance sustainability.'

To achieve this vision, four goals are set, with Goal Two being relevant to the housing issue:

'Healthy Communities

To foster an identity that promotes lifestyle choice and provision of quality services and infrastructure'.

11.11.2 City of Wanneroo District Planing Scheme No. 2 (DPS2)

Within the framework of the Metropolitan Region Scheme, DPS 2 zones land that directs where housing may be permitted.

Most existing housing is included in the Residential zone. Relevant DPS 2 provisions are:-

3.4.1 'The Residential Zone is intended primarily for residential development in an environment where high standards of amenity and safety predominate to ensure the health and welfare of the population.

- 3.4.2 Residential development is provided at a range of densities with a variety of housing to meet the needs of different household types. This is done through application of the Residential Planning Codes (R Codes), and the allocation of a residential density code to an area of land.
- 3.4.3 The objectives of the Residential Zones are to:
 - a) Maintain the predominantly single residential character and amenity of established residential areas;
 - b) Provide the opportunity for grouped and multiple dwellings in selected locations so that there is a choice in the type of housing available within the City;
 - Provide the opportunity for aged persons housing in most residential areas in recognition of an increasing percentage of age residents within the City; and
 - d) Provide for compatible support services.

Most residential areas are included in an R20 Code – for example Girrawheen and Koondoola are almost totally coded R 20. More recently planned and developed areas have more higher density sites shown.

An Urban Development zone is applied to most new housing development areas, and all future housing development areas.

Structure plans are required to be prepared and approved prior to any subdivision or development being approved on land zoned for Urban Development. Most of the current urban development areas are subject to Urban Development zoning, with approved Structure Plans.

The Structure Plans include use-permissibility provisions – through a 'zoning plan'; and density requirements through an 'R-Code Plan'. R 20 is the normal code, with areas of higher coding corresponding with centres, areas of high amenity, public transport nodes and special facilities such as marinas.

DPS 2 includes a Mixed Use zone with an objective of providing a diversity of land use and housing types.

DPS 2 also provides for new development around existing railway stations. Under Clause 3.24, to encourage public transport use, Council shall encourage appropriate transit-related development to take place around existing railway stations on both public and private lands.

11.11.3 Building Licenses

S. 374 of the Local Government Act (Miscellaneous Provisions) Act and the Building regulations 1989, require that a Building Licence be obtained prior to the commencement of any building.

The City's assessment of building licence application in respect of housing addresses the detailed design, including orientation, energy efficient sustainable design, construction details, materials and compliance with relevant legislation.







