

MONASH HOUSING STRATEGY

Prepared for the City of Monash
By Essential Environmental Services

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Essential Environmental Services

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EXECUTIVE SUMMARY

The *Monash Housing Strategy 2004* provides a strategic basis for the future of housing development in Monash, within the wider context of the south eastern metropolitan region.

The City of Monash, like the rest of metropolitan Melbourne, is experiencing a change in the housing structure and dwelling requirements of its population. State Government estimates suggest that previous predictions for population growth within the municipality are likely to underestimate actual growth and consequently changes in housing preferences may not be adequately planned for.

Council's *Business Plan 2003 – 2004* identifies the development of the Monash Housing Strategy as a priority. Development of this strategy has included a review of Monash's previous housing strategy, the *Monash Future Housing Directions Paper 1997*, and has involved an analysis of recent demographic data for the municipality, the region and for metropolitan Melbourne.

This Strategy focuses on all aspects of housing including public and private accommodation and considers current and future housing needs. It presents the broad objectives of Council with respect to housing, and proposes recommendations for strategies and actions of Council to achieve the objectives, thereby addressing the identified housing needs.

The *Monash Housing Strategy* proposes objectives, strategies and implementation recommendations in the key areas of housing diversity, neighbourhood character, environmentally sustainable development, activities centres, access and safety and greater affordability of housing.

Development of this Strategy has been guided by Council's Vision, Values and Objectives for the Monash Community. The Strategy is generally consistent with State Government Policy *Melbourne 2030* and will be referenced in the Monash Planning Scheme.

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1 INTRODUCTION

The City of Monash is a well-established, residential and business region in the city of Melbourne. It has suburban characteristics with identified heritage areas and an urban character enjoyed by the community.

Like the rest of metropolitan Melbourne, the City of Monash is experiencing a change in the housing structure and dwelling requirements of its population, with a noticeable shift towards increased density forms of housing, generally characterised by multi-unit dwellings.

In addition, Monash's population is noticeably ageing and there is a clear preference for older people to remain in familiar environments within the City. This changing demographic will require strategies to ensure there is appropriate accommodation, such as small, single storey units and purpose built housing available now and into the future.

The age of the dwelling stock within the municipality, which generally increases as distance from the city decreases in an easterly direction, lends itself to renewal. Existing blocks tend to be greater than 650 m². This facilitates development of dual occupancy or even more intensive redevelopment. Accordingly there is considerable scope for change of housing stock and style.

Development of the Monash Housing Strategy allows Council to plan proactively and strategically for the future housing needs of its residents, rather than act reactively to development proposals and other key planning issues. It will also provide greater certainty for the community and the development industry regarding the location and type of future residential development.

This Strategy aims to identify likely housing needs of the City of Monash for the next 20 years and develop a process to meet these emerging needs, having consideration of critical issues such as neighbourhood character, environmentally sustainable development, access and safety, and greater affordability.

1.1 Background

The City of Monash articulates its current vision and objectives for housing in the *Monash Future Housing Directions Paper* (hereafter referred to as "Future Directions") which was released in August 1997. This paper identifies key housing influences in the City of Monash including demographic trends, household characteristics and housing stock and proposes a housing vision, key housing objectives and achievement strategies. It recognises the need for local variation within residential areas and identifies three preferred areas for medium density development.

Future Directions is considered still to be relevant to the municipality; however it lacks direction with regard to increased density dwellings and requires updating to

reflect current housing trends and new State Government policy. The medium density development areas proposed in *Future Directions* are not consistent with the direction of the State Government policy *Melbourne 2030 Planning for Sustainable Growth* (State of Victoria, 2002), which locates this type of development in activity centres, as the areas identified in *Future Directions* do not always abut activity centres.

The *Three-Year Review of the Municipal Strategic Statement* (City of Monash, 2003a) identified the need to address specific housing issues within the municipality, primarily design and location of increased density development, the changing demands of an ageing population and maintaining the garden city character of the neighbourhood.

The population of Monash is ageing at an increasing rate. The *Monash Strategy for an Ageing Community 2002 –2011* (City of Monash, 2002) advocates a policy of “ageing in place”. This will require different forms of development to accommodate the changing needs of the population such as smaller, lower maintenance, single storey and flat/apartment-style residences, as well as supported residential accommodation and purpose built complexes. Strategies that require developers to accommodate a range of dwelling types in development proposals need to be explored to address this issue.

Estimates proposed in *Melbourne 2030* (State of Victoria, 2002) suggest that previous predictions for population growth within the municipality are likely to underestimate actual growth and that changes in housing preferences may not be adequately planned for.

Melbourne 2030 proposes that 50% of the expected increase in dwellings in the Eastern Region are to be accommodated in strategic redevelopment sites and activity centres. This suggests that a significant proportion of the new dwellings will be some form of medium to high density housing and accordingly the City of Monash needs to develop a strategy that addresses this likelihood. Consideration of appropriate locations for development, interface issues with surrounding neighbourhoods and maintenance of neighbourhood character are crucial to developing a successful approach to this issue.

An up-to-date strategy will enable future housing development to be consistent with the principles and policies of Council and the State Government as identified in *Melbourne 2030*, and ensure future housing needs can be met within the municipality.

The Monash Housing Strategy includes objectives and proposes recommendations for strategies to achieve the objectives in the key areas of housing diversity, neighbourhood character, environmentally sustainable development, activity centres, access and safety, and greater affordability.

1.2 Vision

The *City of Monash Council Plan 2003 – 2006* (City of Monash, 2003b) identifies the Vision, Values and Objectives for the municipality in order to achieve the primary aim of encouraging and nurturing “a thriving community”. It provides the strategic focus for delivery of Council services and facilities, and achievement of actions and outcomes to meet the current and future needs of the community.

Through the development of the *City of Monash Council Plan 2003 – 2006*, the vision for Monash was determined as follows:

Our City will be a sustainable, quality environment where the community is actively encouraged to participate in community and civic life to enrich the cultural, social, environmental and economic viability of our City.

This Vision is supported by five key objectives for the Monash community. They are:

1. An inclusive and connected community
2. A supportive community
3. A prosperous community
4. A liveable city
5. Responsive corporate governance

The development of *Monash 2012 – A Strategy for the Future* (City of Monash, 2003c) was a vital step in the development and identification of the vision and objectives for the City of Monash. *Monash 2012* is the first long-term community-developed strategy and it provides strategic guidance for Council’s future planning and activities. It identifies ten main themes that will need to be addressed as a priority over the next ten years. One of these key areas is that of Residential Development.

The Monash Housing Strategy will be guided by statements in *Monash 2012* particularly regarding Residential Development. Other related themes include aged services and district and activity centre development, and to a lesser extent, the remaining themes of youth and family services, transport and traffic management, the environment, community, economic development, cultural diversity and council facilities.

The *Monash 2012* goal for Residential Development is to “*plan for attractive and environmentally sound use of land that allows for diversity while remaining sympathetic to existing neighbourhood character.*” This goal is supported by several Key Strategic directions outlined in the *City of Monash Council Plan 2003 – 2006*, one of which is to “continue to use the Monash Planning Scheme to guide development in the city, including preservation of neighbourhood character where appropriate.” Priorities identified under this direction include the exploration of “opportunities for higher density developments in keeping with State Government policy” and the “review and preparation of the Monash Housing Strategy”.

1.3 Role and Scope of Strategy

This Strategy focuses on all aspects of housing including public and private accommodation and considers current and future housing needs. It presents the broad objectives of Council with respect to housing, and proposes recommendations for strategies and actions of Council to achieve the objectives, thereby addressing the identified housing needs.

Development of this Strategy is guided by Council's Vision, Values and Objectives for the Monash Community.

The Strategy makes reference to the many existing Monash initiatives of relevance to housing. It has been generated through an assessment of existing strategies and guiding documents, together with an analysis of demographic and other related information. This assessment, together with consultation undertaken for Monash 2012 has provided a solid foundation for the identification of areas of focus – the key objective areas, and for identification of strategies to address these issues.

Continued consultation is required to ensure that the recommended actions arising from the strategy appropriately address housing issues within Monash. Community feedback on the Draft Housing Strategy will be considered and incorporated into the final Monash Housing Strategy as part of the Planning Scheme amendment process.

1.4 Role of Council in Housing

Council decisions and actions are able to influence housing outcomes in the areas of quality, diversity, mix, affordability and accessibility. Council also provides clear direction in the form of policy statements to guide future housing development within the municipality. These statements should reflect the needs and wants of the community, whom Council has been elected to represent.

Council also influences housing through its role in liaising with developers, community agencies and other levels of government to achieve housing outcomes that best address the social, cultural and economic needs of the residents. Through leveraging of funds for infrastructure such as drainage and open space and facilitation of development opportunities it can create appropriate housing opportunities. Furthermore, as Council is a key land owner within the City particularly in certain activity centres, it is able to directly influence the market for housing to achieve the objectives of this Strategy.

A revised Housing Strategy that addresses both social and physical land use issues will provide a framework within which housing development will be managed to meet the current and future housing needs of the community.

2 PROFILE OF THE CITY OF MONASH

The City of Monash, with an estimated 162,000 residents*, is one of Melbourne's most populous municipalities. It is a well established largely residential municipality, located 20km to the east of the Melbourne Central Business District.

The City of Monash includes the suburbs of Ashwood, Ashwood, Burwood, Chadstone, Clayton, Glen Waverley, Hughesdale, Huntingdale, Jordanville, Mount Waverley, Mulgrave, Nottinghill, Oakleigh, Syndal and Wheelers Hill.

Monash is home to some of Melbourne's best known land marks, including Monash University, the Monash Medical Centre, the Victoria Policy Academy and Jells Park. The City of Monash, although largely zoned for residential use, has significant areas for industrial and commercial development as well as recreation and open space. Monash has excellent public and private sporting facilities catering especially for cricket, swimming, basketball, soccer, netball, softball, baseball and golf.

One of the most notable areas for industry is the Monash Technology Precinct and the adjacent Science Technology Research and Innovation Precinct and Technology Park at Monash University, where the proposed Synchrotron facility is to be built. This area has been designated as a Special Activity Centre in *Melbourne 2030* and is subject to a study which will, among other things, identify residential opportunities.

Monash is recognised for having regional retail and entertainment functions. The principal activity centre of Glen Waverley contains substantial retail outlets and entertainment facilities such as cinemas, hotels, cafes and restaurants. Other major activity centres include Oakleigh, Clayton, Brandon Park and Mt Waverley, which also have significant retail and commercial uses and community facilities.

Monash is a key municipality in the group of local government areas that make up Melbourne's Eastern and South Eastern Regions. It is working within the region on a coordinated approach to housing across this area. Monash contributes significantly to the employment base of the region, providing employment to people both within its borders and also in other parts of the region. The City of Monash is a major generator of wealth within the region and provides a high level of public services, such as health and education, to its residents and neighbours. The population of Monash are highly skilled and well educated, with nearly 15% of the workforce having a degree or higher education.

Monash is a very multicultural area, with 36% of its residents originating from over 30 different countries, many of them non-English speaking. It has a high proportion of families with dependent children although the number of households comprising couples with no children is increasing.

* figure of 161,841 is the estimated residential population for 2003 from ABS, Catalogue No 3218.0.

The Garden City Character, distinguished by canopy trees found in many private gardens including front setback areas, is a defining feature of the municipality, including the newer, planned business parks, other commercial centres and along major arterial roads.

Monash is well serviced by major arterial roads, such as the Monash Freeway, Princes Highway and Springvale Road. It has access to good public transport in the form of extensive bus routes and the Glen Waverley and Pakenham/Cranbourne train lines.

Infrastructure within some areas of the City of Monash is ageing and there are increasing opportunities for revitalisation and renewal. This, together with the changing housing preferences and needs of the population, presents a significant opportunity for the City to develop an integrated approach to ensure these changes result in improved social, cultural, environmental and economic outcomes for the community.

2.1 Residential areas

The City of Monash is characterised by its leafy suburbs (Garden City Character) with vegetated front and private gardens and wide streets with street trees in most areas. Except for areas to the south west where some precincts are of heritage significance, Monash's residential areas have been generally developed with single detached housing on large blocks.

The character of Monash's urban areas is expressive of the values of the community and the historical development of the area. It therefore has strong cultural and community significance for Monash residents although it is recognised that future needs will require incremental change.

The bulk of the City was developed between 1945 and 1965 and has a relatively homogenous and intact physical and social character with similar patterns of subdivision, detached housing style and bulk, front garden treatment and generous landscaped setbacks. Housing stock in Monash is older in the western and south-western parts of the municipality dating from the late 1800s, particularly around Oakleigh, where substantial heritage precincts are identified. These precincts are protected under the Planning Scheme and are valued by the community.

Grid subdivision patterns dominate until east of Springvale Road and north of High Street Road, where housing is generally dated in the 1960s and 1970s, often with a curvilinear cul-de-sac street pattern.

Throughout the municipality, 'greenfield' sites such as Waverley Park and redundant school sites have been redeveloped to accommodate housing of a different form – more dense in nature with predominantly two-stories and often built to the boundaries of each lot.

In addition to the strategic redevelopment sites, the older areas within the municipality support residential renewal, as home owners are investing in properties to renovate and improve to meet changing needs.

Neighbourhood Character is an important element to the Monash community. The City of Monash pioneered the introduction of character based guidelines into the planning scheme, as they are included in the Municipal Strategic Statement and are a key tool for the implementation of the Residential Development and Character Policy. The *Monash Urban Character Study* (Gerner Consulting, 1997), described five (5) residential Character Types. A sixth type was added as a result of the *Waverley Park Concept Plan* in 2002.

In 2002, Council resolved to review the Neighbourhood Character provisions as it was considered that the Character Types, which were based primarily on era of development were very broad. The scope of the review was to permit a refinement of the existing character provisions having regard to emerging housing needs for greater dwelling diversity and design flexibility whilst maintaining aesthetic compatibility with streetscapes.

The Review found that the number of character areas could be reduced to a more manageable level, enabling a useful description of the preferred character of each area to be used on a regular basis by the Council, its planners and applicants in the planning approvals process. In addition the aggregated Character Types were revised to ensure that the Types were based on the form of development, rather than its era.

Council has noted the findings of the Neighbourhood Character review and has modified its Residential Development Guide accordingly.

2.2 Regional context

The City of Monash is surrounded by the municipalities of Knox, Glen Eira, Stonnington, Boroondara, Kingston, Whitehorse and Greater Dandenong. It is located in the middle eastern region of Melbourne, approximately 20km from the CBD.

Council developed its Municipal Strategic Statement to link with the objectives of neighbouring municipalities to ensure that all Councils work towards a complementary regional planning framework. This requires the identification of issues that cross Local Government boundaries and the development of appropriate management strategies. The critical common land use issues relate to open space, transport linkages, provision of appropriate housing and industrial uses, drainage catchment health and environmental works both upstream and downstream of the municipality, interface between conflicting land uses and linkages to key educational facilities.

The City of Monash, in undertaking planning decisions on its boundaries, has regard for neighbouring Councils' approaches to development. It is acknowledged that each

Council has slightly different approaches to housing, although all encourage medium density development in designated business activity centres (shopping centres), consistent with State Government policy.

3 EXISTING POLICY FRAMEWORK

3.1 State Government

The State Planning Policy Framework (SPPF) contains a comprehensive set of land use and development planning policies and practices which aim to integrate relevant environmental, social and economic factors within the planning system in the interests of net community benefit and sustainable development.

These policies cover topics such as settlement, environment, housing, economic development, infrastructure and particular uses and development. The policies are applied where appropriate by the City of Monash during the processing of planning and development applications. Where circumstances within the municipality require additional policy guidance, local planning policies have been developed to provide such guidance.

Melbourne 2030: Planning for Sustainable Growth is a draft State Government strategic plan that was released in October 2002. *Melbourne 2030*, also known as the Metropolitan Strategy, proposes a vision and principles that are proposed to lead the growth and development of the metropolitan area for the next 30 years. Its Key Directions and Key Initiatives identify and address many of the major issues faced by planning today.

The package of policies and actions contained within *Melbourne 2030* should, if implemented across metropolitan Melbourne, result in a more liveable, environmentally responsible, equitable and efficient city.

Melbourne 2030 is supported by six implementation plans. Implementation Plan 3 (IP3) focuses on housing by discussing the nature of the housing market and the issues that affect housing. It then makes recommendations for specific actions that will address housing issues, in the following areas:

- Plan to meet our housing needs;
- Pursue affordability in housing; and
- Lead by example.

This Strategy fulfils the identified task of “develop local housing strategies, policies and controls” that is allocated to Local Government in IP3. It also addresses the other action areas of affordability (see Section 5.6) and leading by example, as Section 5.4 contains recommendations to make best use of surplus government land.

3.2 Local Government

The Municipal Strategic Statement (MSS) for the City of Monash provides the overall land use planning vision for the municipality and identifies the issues that should be considered when making land use decisions. The MSS provides the rationale for land use zonings, overlays and local planning policies.

The City of Monash's MSS provides policy direction on a range of issues under the following headings:

- 21.01 Municipal profile
- 21.02 Key influences
- 21.03 Strategic framework plan
- 21.04 Residential
- 21.05 Economic development
- 21.06 Retail
- 21.07 Industry
- 21.08 Transport and traffic
- 21.09 Key regional assets
- 21.10 Open space
- 21.11 Physical infrastructure
- 21.12 Environment and heritage
- 21.13 Monitoring and review

The Scheme also contains 7 local planning policies:

- 22.01 Residential development and character policy
- 22.02 Monash Technology Precinct policy
- 22.03 Industry and business development and character policy
- 22.04 Stormwater management policy
- 22.05 Tree conservation policy
- 22.07 Heritage policy
- 22.08 Outdoor advertising policy

The City of Monash's MSS was reviewed in 2003. One of the findings was that due to increases in applications for unit and apartment-style development, guidelines for the location and design of higher density development should be developed. Another recommendation was to undertake a study to define the Monash Technology Precinct Specialised Activity Centre and assess the relationship of this centre with Clayton, Oakleigh, Monash Hospital and Monash University.

3.3 Investigation Areas and areas for higher density development

The MSS identifies the need to encourage the provision of a variety of housing styles and sizes to reflect declining household size, population changes and to accommodate future housing needs. It proposes strategies to increase diversity and density of housing within the municipality including nomination of "Investigation Areas" where substantial change such as higher density development may be expected. The MSS identifies these areas as being located generally west of the Glen Waverley Activity

Centre, generally north east of the Clayton Activity Centre and west and south of Monash University.

The MSS proposes that the Investigation Areas “have the potential to be improved by promoting high quality, higher density development, distinctively different to the type of medium-density development to be found in other parts of the municipality.” This is justified by the statements that “Demand is high for student accommodation around the Monash University precinct. Apartment and serviced apartment living is sought after around the Monash Medical Centre and the Glen Waverley Regional Activity Centre.”

The MSS also states that “The form of development should be site-responsive design. It is likely to have greater scale than traditional forms of multi-dwelling development and be on larger sites. It will also exhibit greater articulation while achieving high quality design standards, quality residential environments and enhanced local amenity. Specific design standards will apply to developments in these areas.”

Preliminary guidelines for design and development within the Investigation Areas were prepared in mid-2000, although these were never released for public comment or discussed by Council. Council deferred consideration and progressing of the Investigation Areas at the request of the Department of Infrastructure, due to timing and progress of the State Government’s *Metropolitan Strategy*.

Subsequently, the State Government has released *Melbourne 2030*, which proposes that increased density development is located in and around activity centres. This is largely consistent with the Investigation Areas, although they are more substantial in area and extend further from the activity centres than would be supported by the State Strategy.

The review of the *Monash Future Housing Directions Paper* undertaken in preparation of development of this Strategy suggested that the Investigation Areas should be removed from the MSS. Areas for future higher density development can then be identified based on the following criteria:

- i) Existing clustered mixed use development with a significant variety of uses bringing social, economic and environmental benefits to the community. This translates into increased access to a wider range of goods and services, employment opportunities, entertainment and community facilities;
- ii) High degree of access to good quality public transport such as a rail station and/or bus interchange;
- iii) Opportunities for walking and cycling along with an interconnected, pedestrian-friendly layout that enhances personal safety and perceptions of safety;
- iv) Links and connections to adjoining neighbourhoods; and
- v) Well located open space that provides parks and recreation areas that offer a variety of safe, appropriate and attractive leisure opportunities.

Council resolved at its meeting of 28 January 2003 to indicate its support for higher densities in and around activity centres in accordance with Melbourne 2030, and indicated that the future status of the Investigation Areas required further consideration. Subsequently on 18 May 2004, Council resolved that reference to the Investigation Areas in the Monash Planning Scheme be deleted as part of the review of the MSS. Council at this meeting also resolved to reference the draft *Guidelines for Multi Storey Development of Three Storeys and Above in the City of Monash* (City of Monash, 2004a) in this Strategy.

Within the City of Monash, the areas that fulfil the characteristics for higher density development are generally around the existing Business Activity Centres identified in the MSS, which correspond to principal, major and local activity centres identified under *Melbourne 2030*. Development of apartment-style housing is considered appropriate within the business zone areas, as well as on land that is in the 'immediate vicinity' of an Activity Centre, i.e. land abutting, opposite or adjacent to a designated Activity Centre which has sufficient land area to permit development.

The potential for each of the Activity Centres to absorb apartments is summarised as follows:

- **Glen Waverley:** Glen Waverley is the Principle Activity Centre for the municipality. It satisfies all the criteria for locating medium density residential development including apartments and is the preferred option to absorb future demand in the medium and longer terms. The estimated capacity is approximately 600 households.
- **Monash University/Health Precinct:** The primary purpose of the Specialised Activity Centre (SAC) is economic development and job creation, as this centre contains Australia's largest cluster of high technology companies. Due to its close proximity to the major activity centre of Clayton, it is considered that this area also meets the criteria outlined above. Housing developments should include student housing and serviced apartments; however, the current zone provisions create a significant hurdle to this type of development. Permitted uses in Business 3 Zones are expected to be addressed as part of the Department of Sustainability and Environment (DSE) funded study of the SAC Precinct.
- **Oakleigh:** Oakleigh contains substantial areas of heritage buildings, which affect the potential for higher density development. The capacity of Oakleigh to further absorb apartment development is acknowledged in the Oakleigh Urban Design Framework (Context Conybeare Morrison *et al*, 2002), which aims to maximise the development capacity of the Centre while protecting the valued heart of Oakleigh. Council is supportive of the development of "shop top" housing in Oakleigh, particularly as this will enhance the vitality of the centre. Residential development proposed as part of the Hometime proposal in Oakleigh is consistent with Melbourne 2030 policy;
- **Clayton:** This Major Activity Centre has limited potential for higher density development. Local demand is likely to be absorbed by expected development associated with the nearby University/Health Specialised Activity Centre.

- **Mount Waverley:** The nature and character of the activity centre, combined with land use and ownership patterns, suggests limited potential for higher density development in Mt Waverley. Nearby Glen Waverley is considered to be the logical location to encourage apartments.
- **Brandon Park:** There is some potential for an integrated higher density development proposal subject to the former secondary college site becoming available. Otherwise, this activity centre is not considered to be a priority location.
- **Pinewood, Wheelers Hill, Syndal, Waverley Gardens, Hughesdale** are neighbourhood activity centres. These locations may attract some small scale apartments, but they generally lack sufficient community infrastructure and/or land parcels large enough to warrant substantial apartment development.

Council has developed draft *Guidelines for Multi Storey Development of Three Storeys and Above in the City of Monash* (City of Monash, 2004a). These guidelines provide additional information on design considerations such as provisions for setbacks, streetscape, car parking, open space, amenity and sustainability.

In addition, the State Government has released *Draft Design Guidelines For Higher Density Housing* (DSE, 2004). The draft Monash guidelines generally accord with the principles contained in the DSE draft Guidelines.

In summary, Council's current position is that higher density development will be encouraged at Glen Waverley, in the Monash University/Health Precinct and in areas that comply with the criteria stated above such as in the immediate vicinity of other activity centres. This position is consistent with the objectives and recommendations of *Melbourne 2030*. In developing this position, consideration has also been given to community opinion, which is generally opposed to increased density development which does not respect existing neighbourhood character.

It is proposed that the recommendations outlined above will be translated into the MSS during its revision this year.

3.4 Garden City Character

The Garden City Character is an important element in the City of Monash both to Council and to residents. It has evolved through the consistent development of generous residential and industrial frontage setbacks, the retention of existing vegetation and extensive new plantings, both on public and private lands.

This character has been recognised by the community in numerous studies as being an important element to retain within the neighbourhoods of the municipality.

4 KEY HOUSING INFLUENCES FOR MONASH

There are many factors that influence residential development and housing. These factors include the global drive for more sustainable living conditions; regional changes in demographics, lifestyle choices and housing markets; and local conditions, such as the importance of neighbourhood character, cultural elements, heritage, the location of employment and level of economic development.

Other important elements to note include the current suburban form of predominantly single dwellings on large blocks, the extent to which population renewal will be able to occur due to rising house prices and the continued presence of and activities associated with the Monash University and hospital precinct, and the extent to which these institutions might play a role in future change in the City.

The key housing influences for Monash are discussed in the following sections.

4.1 Drivers of change

Like the rest of metropolitan Melbourne, Monash is experiencing a change in its housing and household structure. Figures show a drop in the number of persons per household and this, together with the ageing of the population and changes in lifestyle away from nuclear family households, is likely to result in a demand for additional dwellings in the City of Monash.

The main changes expected in the City are considered to be not so much driven by macro-economic impacts but rather from changes in structural demand resulting from demographic and socio-economic changes. However, rising housing prices (and potentially an upwards trend in interest rates) may have an impact on the demographic makeup of the City in the future.

The key drivers of change for housing in the City of Monash include:

- the current and future age structure of the population;
- the downward trend of household size; and
- changes in lifestyle choices and habits of residents.

4.2 Population and Household trends

Monash's population has risen by just under 3,500 since 1996¹. The increase in population has been accommodated in new residential areas that have been rezoned and developed, as well as in existing residential areas through dual occupancy and other infill development.

¹ All data in this report has been obtained from ABS 2001 census data.

4.2.1 Population Changes and Projections

Monash has experienced a relatively stable population size over the past fifteen years with growth of 0.6% from 1996 to 2001 reversing a slight downward trend of -0.7% since 1986 (Figure 4.1).

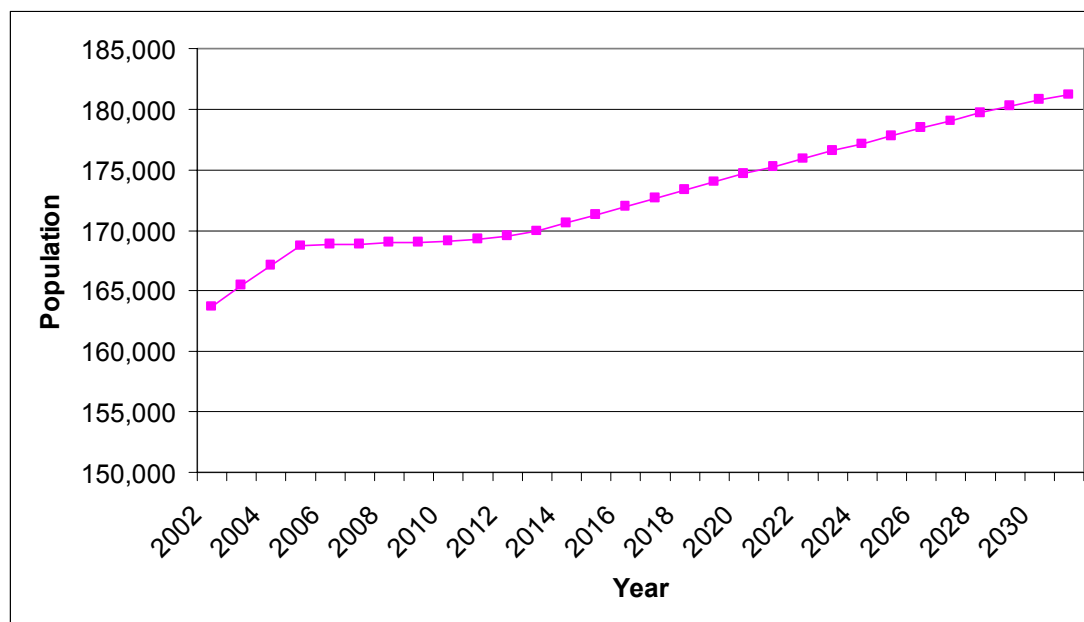


Figure 4.1 Predicted population growth in Monash.

Source: DSE, Urban and Regional Research Branch, 2003

The short and medium term outlook is for continued moderate growth leading to a 2021 population estimate of approximately 172,000, however the predicted rate is slightly less than broader population growth estimates for Melbourne and the State.

Melbourne’s population is expected to increase at a rate of approximately 16.2% from 3,284,007 at the time of the 1996 Census to 3,934,878 in 2021. Most of this growth is expected to occur primarily in fringe areas. The middle and outer suburbs will also experience mild growth as they are home to the majority of Melbourne’s population and have the capacity to absorb future increases in populations through infill development and redevelopment.

Current projections for the broader Melbourne area indicate a trend of higher growth in the fringe suburbs compared with growth around activity centres. The intention of the Metropolitan Strategy is to attempt to change this trend to reduce the ‘spread’ of the city which may positively impact Monash’s population growth.

The rate of population growth over the period 2017 to 2031 is expected to slow as a result of an ageing population and declining fertility rates. As the population ages, the number of deaths is projected to marginally increase and, with declining fertility, the number of births is projected to decline. However the extent of internal and external net migration is unknown and it is assumed that its impact will be marginal.

4.2.2 Age structures

The population in Monash is noticeably ageing, with a large proportion of the population over 55. Fig 4.2 highlights a significant trend evident in the Monash population’s age structure with recent population increases largely driven by older age groups, particularly the 70 to 84 age group at the expense of some falls in the populations of younger age groups.

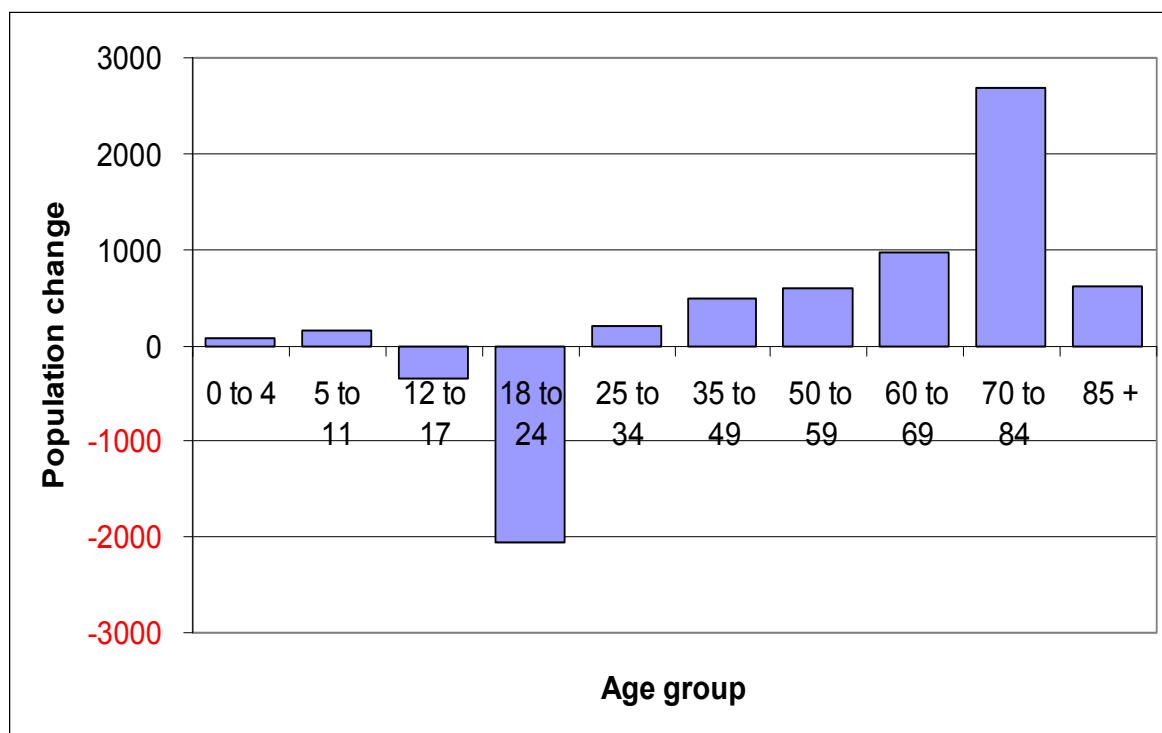


Figure 4.2 Changes in the age structure of Monash’s population from 1996 to 2001.

A decline in the number of persons aged 25 – 39 is observable in recent years. This change is attributed in part to the rapidly increasing house prices over the past few years, which have prevented this group (most often first home buyers) from purchasing in the City. This trend is therefore thought to continue within the municipality with many in this group establishing new households in the outer areas where land prices are more affordable.

4.2.3 Household and Family structure

Changing lifestyle decisions of the population whereby more couples are having children much later in life or choosing not to have children at all are resulting in changing household and family structures. With respect to household formation, the long-term trend is for a smaller number of occupants per household. This translates to an increase in the number of dwellings required to house any given population compared with the past (DSE, 2003).

Traditionally the ‘couple with children’ household type has been dominant in Melbourne. However this dominance has been declining, from 42.9% in 1991 to

36.8% in 2001. This decline has seen growth in smaller household types such as couples without children, which has increased from 21.9% to 23.5% and lone person households, which has increased from 19.4% to 23.2% (Figure 4.3).

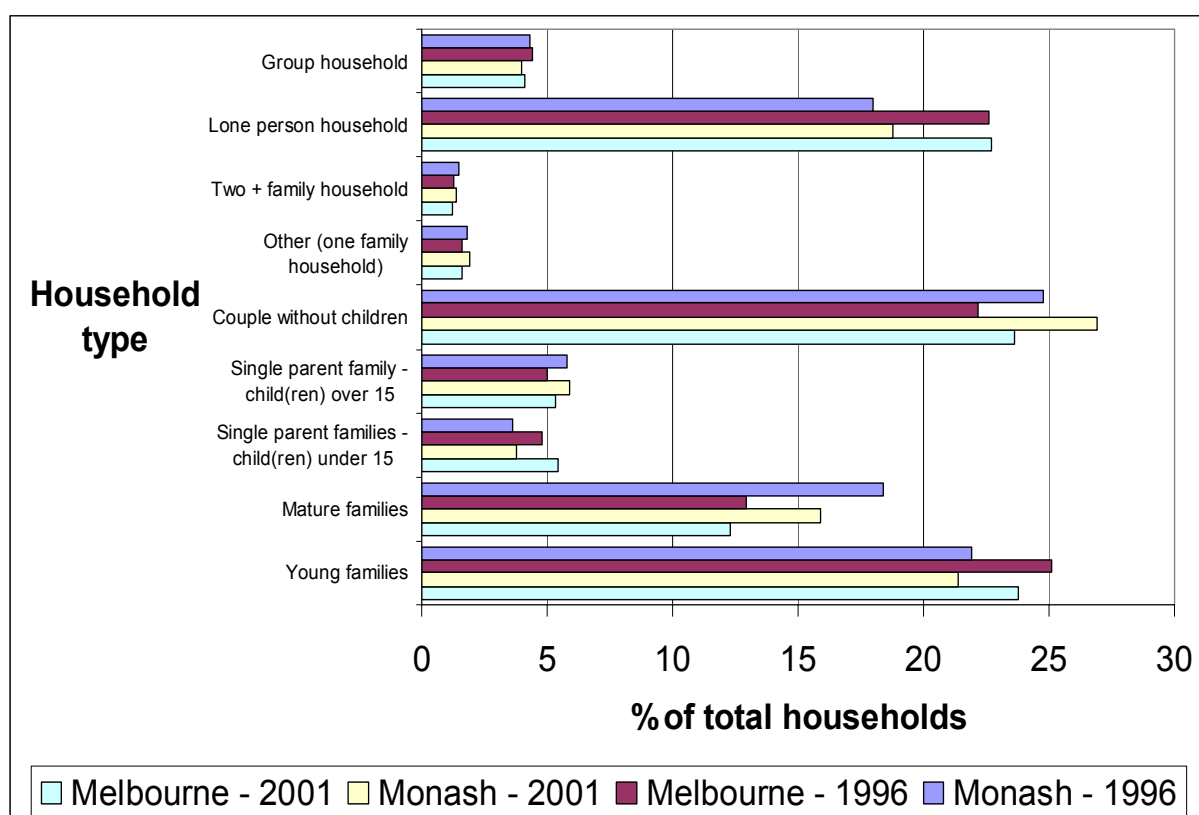


Figure 4.3 Household and family type in Monash and Melbourne, 1996 and 2001.

The combination of family and non-family household types in Monash in part reflects the diverse household structure of the area in 2001. The basis for the mix of household types relates to the variety of dwellings and age structure of the area.

The most significant features of Monash as compared to broader Melbourne data in 2001 were:

- a lesser share of lone person households;
- a greater proportion of couples without children;
- more mature families; and
- less young families.

The mix of household types remained relatively stable between 1996 and 2001 with the most significant shift being in mature families (i.e. couples with children over 15) whose proportion of the population decreased from 40.3% to 37.4% over this period.

Whilst proportions of the total populations remained relatively stable increases in the number of household/family types occurred and are largely explained by the general population growth over this period.

4.2.4 Household Size

The mean household size in Monash is 2.7.

Approximately 15,300 of the almost 18,700 two person households illustrated in Figure 4.4 comprise couples without children, reflecting the significant proportion of ‘empty nesters’ present in the City during 2001.

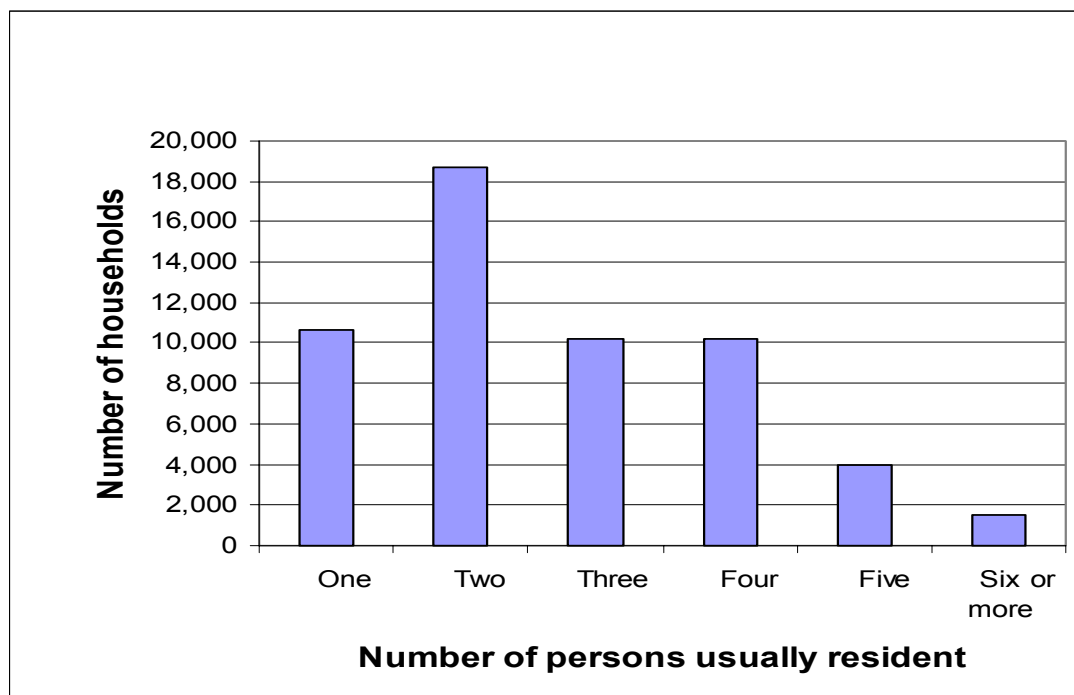


Figure 4.4 Household size in Monash in 2001

4.2.5 Dwellings

Predictions by the DSE suggest that by 2017, an additional 406,000 dwellings will be required in Metropolitan Melbourne and 684,000 by 2031. This translates to an estimate of 87,000 additional dwellings for the Middle Eastern region, in which Monash is one of a group of eight Councils. Due to the largely developed nature of this region and the fact that there is little fringe urban growth area, the majority of the additional housing is anticipated to be located in and around activity centres and strategic redevelopment sites.

The DSE projections suggest that there will be a reduced growth in demand for additional dwellings after 2017 (DSE, 2003).

This prediction is supported by research into the determinants of household formation and size, and dwelling type and locational preferences. The determinants include longer survival of elderly couples and widowed singles, preferences of young adults to live alone or defer having children; locational choices relative to services, work, and leisure activities; preferences for semi-detached and attached dwellings; and preferences to rent compared with home ownership.

Combined, these determinants are expected to increase the demand for semi-attached and attached dwellings in established areas relative to detached dwellings on the urban fringe.

4.2.6 Housing Type

There are a significant proportion of separate houses in Monash, consistent with a greater degree of uniformity in residential land uses. The proportion of separate houses was higher than that for Melbourne with the proportion of attached dwellings or apartments lower (Figure 4.5).

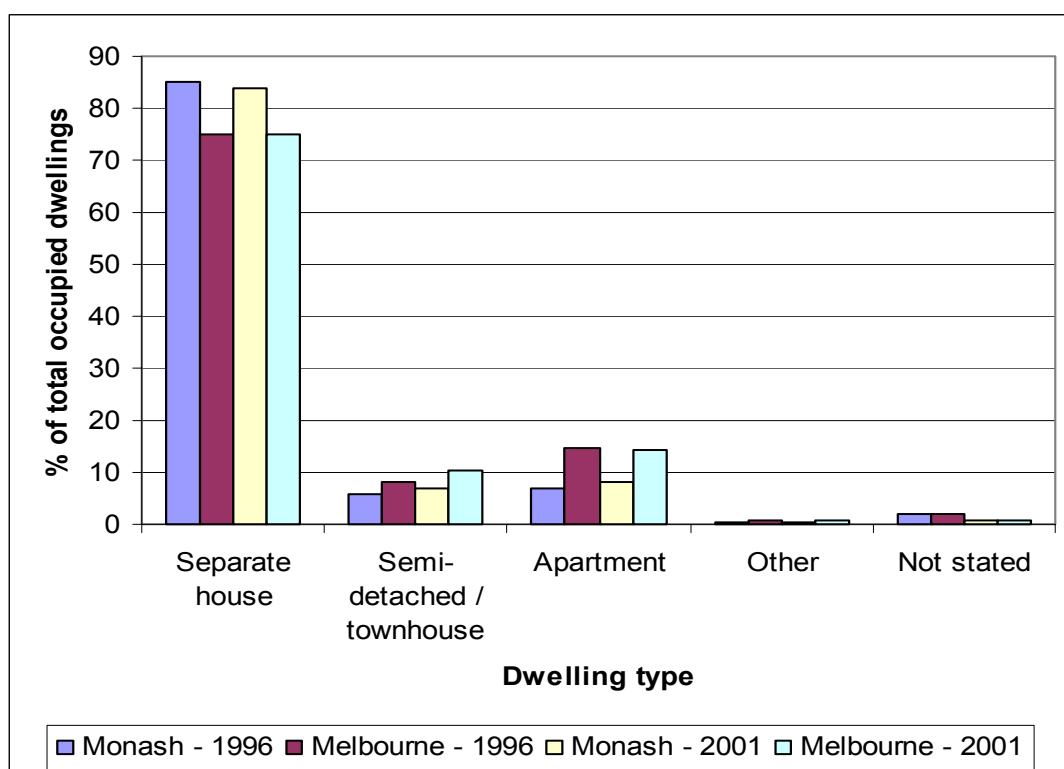


Figure 4.5 Dwelling structure in Monash and Melbourne 1996 and 2001.

The slight decrease in the proportion of separate houses in Monash between 1996 and 2001 was consistent with broader patterns of conversion to higher density dwellings and a reduced rate of construction of separate dwellings over this period.

This high proportion of detached homes reflects the proportion of family household types that exists in Monash and the established nature of the area and is expected to continue to appeal more to families looking to move to the area.

4.2.7 Housing Tenure

There was a mix of housing markets in Monash during 2001, with a range of different tenure types. The greatest share of households consisted of homeowners (52.5%), followed by home purchasers (22.3%) and private renters (17.2%) (Figure 4.6).

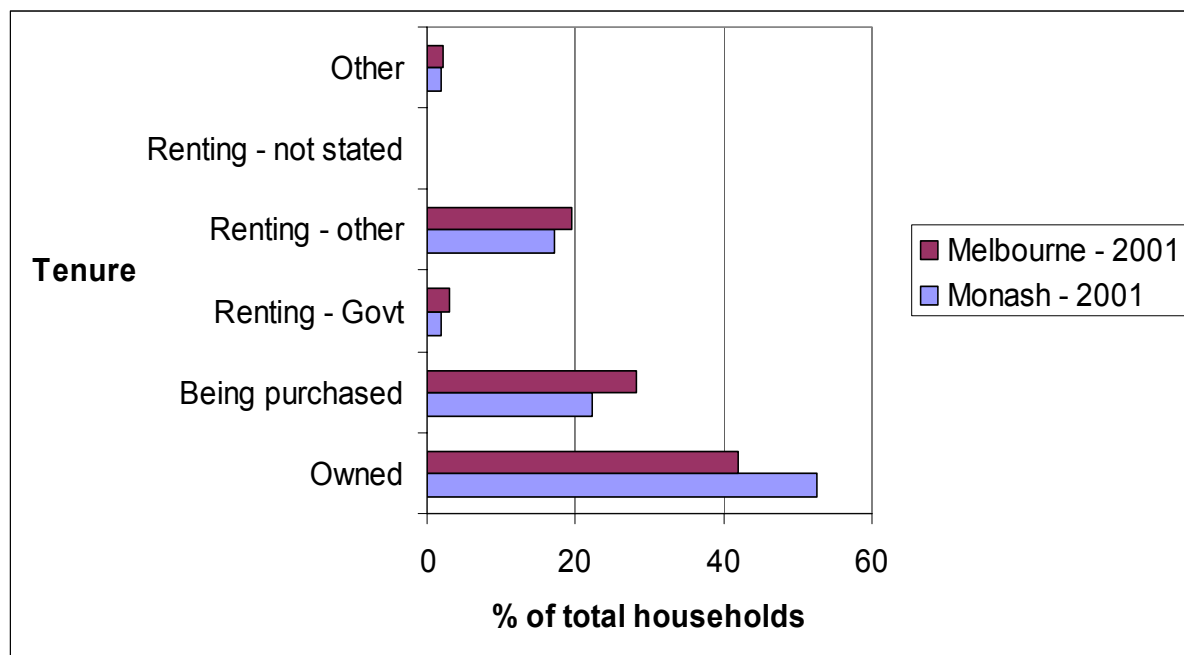


Figure 4.6 Housing tenure for Monash and Melbourne 1996 & 2001.

Monash had a significantly greater proportion of home owners as compared to the broader Melbourne area. This is supported in part by the established nature of the area and its residents, slightly above average income levels and a greater proportion of separate houses in Monash which tend to be the more likely focus for prospective owners.

There were also a greater proportion of private renters than public renters. There was little variation between 1996 and 2001 in the proportions between tenure types reflecting Monash’s generally stable population base.

4.2.8 Housing Activity

The City of Monash has also noted a shift in the types of dwellings being built within the municipality. The trend in Monash is that for every 100 dwellings built, 50 are part of a dual occupancy development, 30 are part of 3 or more dwellings, 15 are detached dwellings on one site (eg replacement & former school sites etc), and 5 are 'other' such as shop tops and apartments granny flats etc.

For the decade from 1991 to 2001 a higher proportion of dwellings constructed within Melbourne were of types other than traditional single houses. Nearly 45% of all new dwellings were medium or higher density such as attached or semi-detached dwellings.

It could be concluded that Melbourne’s population are moving towards occupying smaller dwellings. However recent analysis by the DSE indicated that this is not necessarily the case. Research suggests that as the number of people per household decreases and the propensity for medium density housing increases, the strongest

growth has been in separate houses of at least 3 or more commonly 4 or more bedrooms as well as attached or semi-detached dwellings of at least 2 – 3 bedrooms. The trend in new dwelling construction is for larger dwellings with a smaller outdoors component and therefore less maintenance.

4.2.9 Dwelling Stock

Due to the established nature and age of dwellings in the area, housing in Monash is undergoing some degree of change. There is considerable renewal in housing stock, and the age structure of the population suggests that younger couples without children are moving in – although housing prices are high enough to preclude most first home buyers. This will ultimately change housing types and the built form.

Whilst the apartment market has been mainly limited to the inner city and a few suburban locations, *Melbourne 2030*, the State Government Strategy, aims to promote a greater dispersion of apartment development across Melbourne through establishing principles for strategic planning.

Council’s aim with regards to dwelling stock is to see a balance of residential development occur in the City, including dual occupancies, apartments, retirement villages and other forms of aged care accommodation, to address the emerging trends and housing demands.

4.2.10 Development Trends

Monash has been significantly impacted by recent growth in property prices with house prices almost doubling (95.3%) between 1996 and 2001 as compared to 42% for Melbourne over the same period (Figure 4.7).

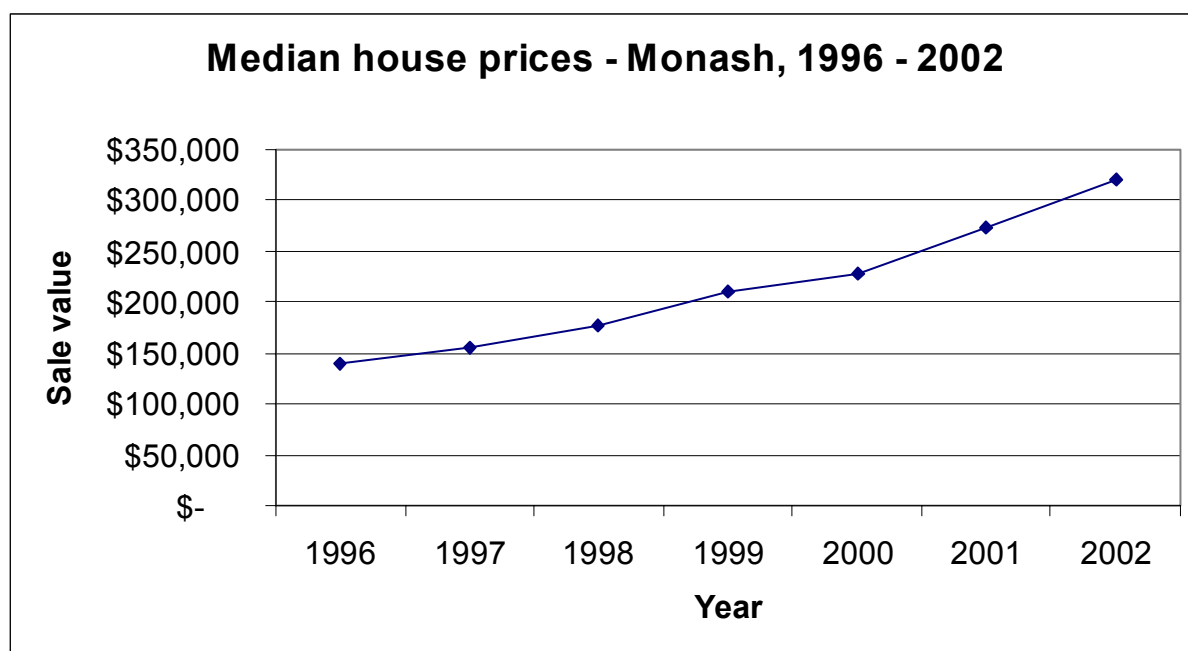


Figure 4.7 Median house prices in Monash from 1996 to 2002

Strategic planning within Monash will encourage multi unit/apartment style housing within activity centres, focussing on Glen Waverley, Oakleigh and possibly Brandon Park and around Monash University and Monash Medical Centre.

Some housing may take the form of transitional accommodation for tourists and visiting academics to the University, as well as other diverse forms of accommodation to cater for students and other transitional residents.

The following is a list of major developments that are approved or have potential as sites for residential development.

Site	Timeframe	Number of dwellings
Waverley Park	Commenced	1500 dwellings
Former Arnott's site	Commenced	240 dwellings
Former Rusden site	Commence 2004	300 dwellings approx
Sienna Falls	Not determined	118 dwellings
Brandon Park site	Not determined	Not determined
Oakleigh Activity Centre	Not determined	118 dwellings
Glen Waverley Activity Centre	Not determined	600 dwellings approx
Talbot Road site (former quarry)	Not determined	Not determined

Waverley Park is considered to be the only 'greenfield' site in the municipality with a capacity for 1500 dwellings built over a 10 year period. The former Arnotts & Rusden sites, in Burwood and Notting Hill respectively, account for most of the early estimates for growth with the capacity & timing of a number of sites unknown. These figures may increase depending on the specific circumstances of the proposals including future mix of uses within the Glen Waverley & Monash Special Activity Centres.

4.2.11 Housing Markets

A sustained period of strong housing demand has dominated the residential property market in Melbourne in all regions over the past six years. Dwelling approvals have increased substantially over this time, buoyed by strong metropolitan population growth, robust economic performance, low interest rates, flexible home lending policies and the first home-buyer grant (DSE, 2003).

The housing market in the City of Monash is expected to be more diverse in the future. Relative growth of one and two person households is expected, particularly for professionals and retirees as residents are tending towards 'ageing in place'. Consequently aged care accommodation is likely to be a growing market. Whilst there are no specific proposals in the pipeline, Council, through the actions identified in the

Strategy, will encourage this kind of development of aged person's accommodation in the future.

4.2.12 Implications for housing

Demographic changes such as changes to the age structure of the population and diminishing household sizes have a significant impact on housing in the region.

Due to the established nature of the suburban area, Monash has a generally older population that is ageing in place with almost one fifth aged over 60 (9.9% of the City population is aged 60 – 69, 8.8% aged between 70 -84 and 1.5% aged 85). The population's average age is increasing, with older empty nesters preferring to remain in the family home, or requiring aged accommodation. The age structure of Monash, declining household sizes and changes in household structures are regarded as key drivers of future change.

There is an increasing demand for a variety of different housing styles to cater for changing household sizes and structures. State Government policy encourages higher housing densities near transport hubs and activity centres, such as Glen Waverley and Oakleigh, however many residents are opposed to higher density developments in their neighbourhood area. Furthermore, the potential for increased density in Oakleigh is constrained by the presence of heritage areas.

Rising housing prices will also affect the extent of population renewal that will occur. There is a perceived conflict between land values in the City and the needs of the population. Investment yields and design trends are moving development beyond single storey dwellings. This form of housing is generally inappropriate for aged accommodation however, and often conflicts with the neighbourhood character of the area.

4.3 Environmental Issues and Sustainability

Much of the City of Monash was cleared throughout the 1900s for firewood and agricultural activities, yet areas of environmental significance such as Jells Park, Damper Creek, Gardiners Creek, Dandenong Creek and Scotchmans Creek have been retained, revegetated and restored, and are protected under the Monash Planning Scheme

Council cares for over 244 hectares of passive open space and 332 hectares of recreational reserves. Many of these sites are ecologically important and significant, including bushland creeks and wetlands which are seeing a return of native fauna to the municipality.

There is a growing global awareness for the need to live in a more sustainable manner to preserve our environments for future generations. Council recognises the need to *“apply the principles of sustainability in all of its operations and to continually*

improve the natural environment within the City” (Monash 2012, City of Monash, 2003c).

The *Monash Conservation and Environment Strategy* (City of Monash, 1997b) provides an environmental management framework for the City. It aims to protect, enhance and develop the physical environment as a place where people prefer to live, work and conduct business.

Council has adopted a Waste Management Strategy aimed at reducing the amount of household waste going to landfill by directing more material into the recycling stream. It also aims to reduce energy consumption and greenhouse gas emissions generated by Council operations.

4.3.1 Implications for housing

Sustainable urban development requires consideration of better design and building practices such as incorporation of water sensitive urban design; minimisation, re-use and recycling of construction materials; improved waste management; and energy efficient design of buildings, recreational areas, subdivisions and activity centres.

As private open space is reduced in new smaller housing lot sizes, there is likely to be a greater demand for quality public open space. Opportunities to expand open space in the city are limited by lack of available land and/or the exorbitant cost of large parcels set at market value. Monash, in its draft *Guidelines for Multi Storey Development of Three Storeys and Above in the City of Monash* (City of Monash, 2004a), acknowledges the need for good communal open space in apartments, and will ensure that standards of amenity in new developments remain high.

4.4 Employment

Monash caters for approximately 90,000 full time jobs, primarily in white collar occupations in approximately 11,500 businesses operating within the City. Growth is expected in Monash’s employment base which may affect demand for available and appropriate housing in the City.

The most prominent occupations in Monash during 2001 were mostly ‘white collar’ and included clerical, sales and service workers, professionals and associate professionals. This implies a relatively diverse employment base covering higher and lower skill occupations.

Growth in employment for professionals is anticipated, particularly in the high technology and service industries as a result of development in the Monash Technology Precinct and the Monash University Science, Technology, Research and Innovation Precinct (STRIP).

The \$206 million Synchrotron Project is currently under construction. This is expected to provide approximately 1,000 construction, scientific and related jobs over a period

of two to three years as well as invite substantial investment. The potential level of this investment and its consequent benefits are not known and will be influenced by such factors as how many of the workers on these projects move into the City to live.

Toyota Motor Company – Research and Development have also declared an intention to locate in the City. Employment is expected to be approximately 100 initially with final figures yet to be made available.

4.4.1 Implications for housing

Monash has a stable population and low anticipated growth. Employment trends are similarly stable, though a slight increase in residents not in the workforce reflects its ageing status. It is largely due to this stability that few implications for housing directly related to employment are recognised.

People are attracted to live and work in Monash primarily due to the availability of local employment, proximity to good public transport, and the lifestyle attributes of the suburban areas within the City. This is unlikely to shift over the short or medium term.

Focused population and employment growth opportunities exist as a result of the increasing development occurring within the Technology Precinct and the Monash University STRIP, such as the proposed Toyota and Synchrotron projects. These may invite specific housing needs both in terms of the location and type of dwellings required. Council will remain abreast of timing and employment requirements of these and other projects so that detailed and timely responses can be developed, including identification of any special housing requirements, such as transitional accommodation.

4.5 Population Mobility and Car Ownership Patterns

Car ownership patterns in Monash are broadly in line with Melbourne levels, with over two thirds of all households owning one or two vehicles. In 2001 there was a slightly higher percentage of households that owned two or more vehicles compared to Melbourne proportions. This may be attributed to a greater percentage of larger households with two or three adults (such as those with young adults) and a preference for private over public transport.

Consistent with Melbourne patterns, the dominant mode of transport in Monash is by private vehicle. Approximately 10% of the working population in Monash use public transport, primarily the train (8.9% in 2001).

Changes from 1996 to 2001 included a slight reduction in the share of vehicle passengers (-0.6%), and train (-0.4%) and bus (0.3%) users.

4.5.1 Implications for housing

Modes of travel of Monash's population are largely car-based and public transport where used is primarily by train. However, for those who cannot, or are no longer able to drive such as the young, disabled and elderly, suitable alternate means of transport are critical to their quality of life. It is vitally important, therefore to locate appropriate housing in areas that have access to good quality public transport.

4.6 Cultural Diversity

Monash is a culturally and ethnically diverse population with over a third (36.2%) of resident born overseas - almost 30% (29.7%) being from non-English speaking backgrounds, as over 56,000 residents spoke a language other than English in 2001. Whilst these residents were from a wide range of countries, the most prominent represented were the United Kingdom, Greece and China. Of the residents born in Australia only 292 were of Aboriginal or Torres Strait Islander descent in 2001.

New ethnic communities are arriving in Monash from places such as the Middle East and north and east Africa. In the five years to 2001, China and India were the largest sources of overseas-born population in Monash. These groups are expected to require high levels of support to assist them to settle in to their local communities.

An increase in younger overseas born households is likely in the future as these people are particularly attracted to good access to educational facilities which Monash provides. This highlights the importance of planning for the Monash University/Medical Centre precinct and to encourage diverse housing accommodation for an increasingly diverse market.

4.6.1 Implications for housing

A link exists between the culture of residents and the style of housing and surrounds preferred. Thus there may be aspects of housing related to neighbourhood character and type of housing that influence the appeal of the City to certain cultural groups.

Furthermore, new residents to the City may tend to be growing families, with lower income generation and limited support networks. These residents are likely therefore to have specific requirements regarding size, location and cost of housing.

It is therefore necessary to explore the needs and wants of new residents to ensure the City maintains its appeal to cultural groups, including the need for language assistance services for housing information. Care should also be taken to ensure that existing cultural aspects of housing are protected.

4.7 Neighbourhood Character

Increasing pressure to redevelop and consolidate residential areas raises the issue of potential impacts on the character and amenity of the local neighbourhood. Successful medium density redevelopment requires consideration of the neighbourhood character

of an area together with the residential amenity of adjoining property owners to achieve a balance between meeting the needs of the developer or prospective homeowner and the wishes of the community.

Community consultation exercises for *Monash 2012* and other specific planning proposals clearly identify the need for maintenance of existing neighbourhood character. It appears that substantial community concern exists regarding the scale and character of new residential development and its relationship to the established streetscape.

Neighbourhood Character within the City of Monash is described in the draft *Design Guidelines for Neighbourhood Character in Monash* (City of Monash, 2003d). These Guidelines are additional to the *Guide to Residential Development in Monash* (City of Monash, 2004b) and provide information about neighbourhood character, a description of neighbourhood character types in Monash, and identify key characteristics and preferred character elements. Design Guidelines for the retention of neighbourhood character are also included.

4.7.1 Implications for housing

In meeting future housing needs, the challenge is to provide for site responsive residential development in appropriate locations that respect the residential character and amenity valued by existing residents. This suggests the need to maintain the 'status quo' in the majority of the residential areas of the City, permitting changes to neighbourhood character only where considered appropriate in terms of achieving a good and reasonable planning outcome.

4.8 Heritage

Housing styles and characteristics in and around Oakleigh vary from workers row housing to larger homes, some with leadlight windows and extensive exterior decorations. These heritage buildings and areas are identified for conservation to ensure the neighbourhood character is maintained and complemented by any infill development.

Heritage areas within Monash were identified through the *Monash Heritage Study* (City of Monash, 1999), which resulted in planning scheme provisions to conserve buildings and places of heritage significance, including several windrows and trees of recognised cultural significance. Various precincts have heritage overlay controls (eg, central Oakleigh) and some have restrictive covenants (eg, parts of Brandon Park). Both forms provide appropriate protection to ensure retention of identified heritage values.

The review of heritage areas and properties within the City is ongoing.

4.8.1 Implications for housing

Heritage areas are clearly identified in the City of Monash Planning Scheme. These areas are unlikely to support new forms of housing, however it should be recognised that redevelopment, if done sensitively, may also be a feasible option to preserve these areas.

4.9 Infrastructure

Physical infrastructure is a key element in the achievement and maintenance of lifestyles for individuals, businesses and organisations. It includes all utility services, both overhead and underground, as well as all telecommunication facilities and roads.

Physical infrastructure by its appearance, function and location should positively contribute to the visual amenity and well being of the City, while providing a reliable, efficient and safe range of services. It is important to ensure that the social fabric of the community remains intact by protecting levels of service and encouraging increased use and enhancement of existing infrastructure, to minimise the social costs.

Monash has a legacy in some areas of inadequate stormwater infrastructure. Development of the municipality including an increase in dwelling density has resulted in a consequent increase in hard surface area that has contributed to the drainage system surcharging on a more frequent basis.

This has had an adverse impact on areas of significant natural resources, such as the open space network along creeks and wetland areas, in Monash. This is being addressed through the development of Stormwater Management Plans for various catchments in Monash which will be referenced in the Monash Planning Scheme. Existing stormwater infrastructure requires on-going upgrading and maintenance to ensure that catchment and water quality problems are managed.

4.9.1 Implications for housing

No significant infrastructure constraints or impacts have been identified in areas where housing development is most likely to occur, however the environmental capacity of neighbourhoods to absorb additional development in respect of drainage infrastructure, overland flow paths and road traffic will need to be assessed as part of consideration of planning applications.

5 HOUSING STRATEGY

The Monash Housing Strategy recognises that housing is a basic and important need for all its residents.

Council's goal is for residential development in the City to be balanced in providing a variety of housing styles while also remaining sympathetic to existing neighbourhood character (Monash 2012 – A strategy for the future, City of Monash, 2003).

The Monash Housing Strategy sets out a framework for the achievement of the above goal by making recommendations for the management of housing and residential development within the municipality. The Strategy will provide increased certainty for the community and the property development industry with regards to how housing and residential development activities and proposals will be considered by Council.

The Monash Housing Strategy proposes a series of objectives that identify the general aims for the future for housing in the City. These objectives will be achieved through implementation of recommended strategies and actions via a combination of Council activities, community action and changes to the Monash Planning Scheme. The identification of objectives provides greater certainty for the community and urban developers as it highlights the issues considered important to Council, where change is more likely to occur and therefore where guidance is required.

It is anticipated that implementation of the Strategy will be staged, as Council does not have the resources required to undertake all activities immediately. Priorities will be identified and ratified through consultation on this draft Strategy.

Based on an assessment of elements that are important to the Monash community, State Government policy and the key drivers of change, six (6) key areas have been identified that require specific action in order to achieve the overall goal of the Strategy. They are housing diversity, neighbourhood character and amenity, sustainable development, activity centres, safety and access, and greater affordability of housing.

5.1 Housing diversity

In order to address the changing nature of the population within Monash, together with changing housing preferences and needs, strategies will need to be developed to achieve housing diversity across the City. Ensuring a range of housing types will address the needs of the ageing population – people seeking smaller homes that require less maintenance and that wish to remain in their local area, as well as people with preferences for housing of a more intense nature, close to shops, restaurants and other commercial and community services and facilities.

This is supported by the MSS, which recognises the need to provide a “variety of housing styles and sizes to reflect declining household size, population changes and to accommodate future housing needs and preferences that complement and enhance the Garden City Character of Monash.” It also identifies the need to “provide accommodation for a diverse population with a multi-cultural component, different lifestyle preferences, variety of residential environments and urban experiences.”

Implementation of the strategies outlined below will aid in the achievement of the following objective for housing diversity.

5.1.1 Objective

The objective with regards to housing diversity is to *ensure that a range of housing is available to meet the current and future needs of the population.*

5.1.2 Strategies

In order to meet this objective, the following strategies are proposed:

- Encourage housing which caters for the needs of residents at various stages of their lives and with different needs, having consideration of multiculturalism and variations in lifestyle preferences across key demographic groups.
- Encourage the development of single storey and purpose built accommodation to cater for the needs of the ageing population.
- Encourage the provision of high quality student accommodation close to Monash University that does not conflict with neighbouring uses.
- Encourage and facilitate public and private sector and community involvement in the development of housing to ensure a range of housing types is available now and into the future.
- Promote higher density developments within and adjacent to major activity centres that will accommodate different forms of housing.
- Encourage residential development of varying forms on former public purpose sites no longer required, such as former school sites and former industrial premises that are surrounded by residential areas and are serviced by public transport and other infrastructure.
- Ensure that multi-story and unit developments achieve high quality architectural and urban design outcomes that positively contribute to neighbourhood character, consistent with the Draft Guidelines for Multi Storey Development of Three Storeys and Above in the City of Monash (City of Monash, 2004a).
- Encourage site consolidation where this will facilitate higher density development in appropriate locations and maintain high design standards.

- Maintain an understanding of the adequacy of housing around employment centres to ensure that appropriate and timely responses can be developed to meet any future changes.

5.1.3 Implementation

- Monitor development approvals to determine whether increases in housing types are occurring in appropriate locations
- Incorporate the criteria for higher density development into the MSS through initiation of a Planning Scheme Amendment and make reference to the draft Guidelines for Multi Storey Development of Three Storeys and Above in the City of Monash (City of Monash, 2004a).
- Investigate a range of planning incentives to encourage more single-storey dwellings in multi unit and medium density developments.

5.2 Neighbourhood character and amenity

Neighbourhood character is an important element of the residential areas within the City of Monash. Competing interests of the need for housing diversity and maintenance of existing neighbourhood character require considerable planning to ensure that development outcomes are of a high quality design standard and are sympathetic to neighbourhood character and streetscape.

It is proposed that the neighbourhood character of the majority of the residential areas is preserved by ensuring infill development, including two-storey housing, is consistent with the key characteristics and preferred character elements specific to the particular neighbourhood character types. Information about neighbourhood character is contained in the draft *Design Guidelines for Neighbourhood Character in Monash* (City of Monash, 2003d).

Retention of neighbourhood character will be achieved by identifying preferred areas for higher density development within the City. It is acknowledged that the character of these areas will develop over time in response to the form of increased intensity development that occurs. Guidance on design elements of higher density forms of development such as apartments are contained in the *Draft Guidelines for Multi Storey Development of Three Storeys and Above in the City of Monash* (City of Monash, 2004a).

An important element contributing to neighbourhood character in most areas is the Garden City Character, which describes the tree-lined and vegetated aspect of the municipality. The Vegetation Protection Overlay (VPO), which identifies existing treed environments where the special leafy character valued by the community is protected, is currently undergoing a review. This review will ensure that the objective of the VPO, which was also to stop development sites from being “moonscaped” before planning applications were submitted, is achieved.

Public and private amenity are also significant issues that should be addressed. Care must be taken to ensure that adverse impacts from development on neighbouring properties, such as from overshadowing, overlooking, loss of daylight to windows, and noise are minimised and managed where necessary. Standards for these elements of design are contained within ResCode (Clauses 55 and 56 of the Planning Scheme), and additional guidance is provided in the *Guide to Residential Development in Monash* (City of Monash, 2004b) and the *Draft Guidelines for Multi Storey Development of Three Storeys and Above in the City of Monash* (City of Monash, 2004a).

5.2.1 Objective

The objectives for neighbourhood character and amenity are:

- ◆ *Maintain and enhance Monash's Neighbourhood and Garden City Character, particularly streetscapes; and*
- ◆ *Enhance and protect the liveability and amenity of residential areas within Monash.*

5.2.2 Strategies

In order to meet these objectives, the following strategies are proposed:

- Maintain the predominantly single detached dwelling style in urban areas not identified for higher density development by promoting low intensity development as the preferred character for the majority of the residential areas within the City, except where special circumstances exist.
- Recognise that the potential for higher density development is diminished in identified heritage areas.
- Ensure that development enhances the Garden City and landscaped streetscape character of the neighbourhood, responds to the features of the site and surrounding area and promotes good streetscape design.
- Ensure that new residential development enhances the character of the neighbourhood, having regard to the preferred character statements contained within the draft Design Guidelines for Neighbourhood Character in Monash (City of Monash, 2003d).
- Encourage the retention of existing dwellings that contribute significantly to the character of the surrounding neighbourhood.
- Ensure that development does not adversely impact places of cultural heritage significance.
- Ensure that new residential development provides a high level of amenity including personal privacy for occupants and neighbours.
- Ensure development in residential areas enhances the Garden City Character by preserving existing vegetation such as semi-mature and mature canopy trees, providing new vegetation and landscape treatments in

open space areas and along boundaries and incorporating garden setbacks in which upper canopy trees can develop.

- Discourage the practice of “moonscaping” areas proposed for urban development.
- Identify neighbourhoods or areas of cultural interest within the City to establish any social and cultural housing requirements and/or precedents.
- Maintain a strong sense of place through neighbourhood development that emphasises existing cultural heritage values, utilising culturally suitable and attractive built form and landscape character.

5.2.3 Implementation

- Amend the Monash Planning Scheme to incorporate the findings of the Neighbourhood Character Review.
- Finalise the revised Vegetation Protection Overlay.
- Investigate improving the public realm of the City by directing street tree planting, with priority given to areas of greater housing diversity.
- Periodically undertake a review of identified and potential heritage locations within the City.

5.3 Sustainable development

Sustainable development is about achieving environmental, social and economic sustainability. It is about enabling a community to reach full economic growth, provided that the growth is balanced with conservation and enhancement of the natural environment and that provides a better quality of life for the present and future population.

There is a global push towards sustainability which addresses not only environmental elements, but also economic and social aspects of the environment and how we use it. The *Monash Conservation and Environment Strategy* (City of Monash, 1997b) is now outdated, as significant progress and innovation in this area has occurred over the past several years.

Development of *Monash 2012* identified the need to “*apply the principles of sustainability in all of its operations and to continually improve the natural environment within the City*” (City of Monash, 2003c), however Council has yet to develop a sustainability framework for its operations.

In terms of residential development, issues to be addressed include:

- energy efficient building design that focuses on both water and electricity usage;

- water sensitive urban design that addresses stormwater management, water conservation and water recycling;
- appropriate location of higher density development to facilitate increased use of public transport, walking and cycling;
- retention and revegetation of areas of open space for passive recreation that contain native remnant vegetation and fauna habitat;
- construction materials and practices; and
- sustainable lifestyle practices.

5.3.1 Objective

The objectives with regards to sustainable development are therefore to:

- ◆ *Attain environmentally sustainable residential development through efficient use of resources such as energy, land and water; making our lifestyles more sustainable through minimising our impact on the environment; and reducing the impact of housing development on natural systems;*
- ◆ *Reach social sustainability through the achievement of development that responds to social changes and facilitates the creation of vibrant, accessible, safe and self-reliant communities; and*
- ◆ *Achieve economic sustainability through encouraging development and renewal of activity centres, supporting the economic growth of the building industry and promotion of forms of business that are directly compatible with urban development such as home based business and shop top developments.*

5.3.2 Strategies

In order to meet these objectives, the following strategies are proposed:

- Locate higher density development in areas with access to good quality public transport such as a rail station or bus interchange; that contain existing clustered mixed use development with a significant variety of uses bringing social, economic and environmental benefits to the community; that provide opportunities for walking and cycling and possess an interconnected, pedestrian-friendly layout that enhances personal safety and perceptions of safety; and that provide links and connections to adjoining neighbourhoods.
- Exclude higher density developments from areas that do not have direct access to good quality public transport or a significant variety of uses that provide social, economic and environmental benefits to the community.
- Encourage building practices and dwelling preferences that are energy efficient and sustainable, such as maximising the climatic opportunities presented, making appropriate use of daylight, solar access, shading and prevailing breezes, and minimising energy use for heating in winter and cooling in summer.

- Ensure that design takes into account environmental constraints including soil erosion, urban water management and bushfire risk.
- Encourage landscape design and use of construction materials that minimise environmental impacts in residential areas.
- Encourage residents and developers to reduce, re-use and recycle household and construction materials.
- Minimise the environmental impact on waterways within the catchment through adoption of best practice water sensitive urban design techniques and practices which result in improved stormwater management, water conservation and waste minimisation.
- Ensure that development that places an additional burden on existing infrastructure contributes to the upgrading of that infrastructure.
- Require all development proposals to demonstrate that there will be no detrimental affect on physical infrastructure in respect of its appearance, function, location, visual amenity, reliability, efficiency or safety.

5.3.3 Implementation

- Develop guidelines for environmentally sustainable development that address the planning, design, siting and construction of housing.
- Develop and implement a sustainable development training program for City of Monash planning officers that addresses sustainable building and design, including use of the Sustainable Energy Authority of Victoria “First Rate” system or equivalent.
- Continue to participate in the Monash University Integrated Transport Study and implement the findings and recommendations as appropriate.
- Investigate the potential benefits to the Monash community from developing and implementing water sensitive urban design guidelines for urban drainage.
- Compile promotional displays and provide educational material to community members and proponents regarding sustainable housing design, construction and lifestyle practices.

5.4 Activity centres

“Activity centres provide the focus for services, employment and social interaction in cities and towns. They are where people shop, work, meet, relax and live. Usually well-served by public transport, they range in size and intensity of use from local neighbourhood strip centres to traditional universities and major regional malls. They are not just shopping centres, they are multifunctional.” Melbourne 2030 IP4, pp3

Activity Centre policy forms a key component of Monash's MSS. The "Hierarchy of Business Activity Centres" is consistent with the activity centres framework proposed in *Melbourne 2030*. Monash's MSS identifies Regional, Sub-regional, Neighbourhood (large and other centres) and Local Activity Centres throughout the municipality, together with key characteristics or areas of primary focus and appropriate strategic directions for each. The MSS notes that the centres "provide attractive environments and a focus for community activities and social life within Monash, providing jobs, investments and goods and services for residents and business". However the focus is largely on retail and other commercial uses such as entertainment, rather than on residential uses.

Consistent with all planning schemes, Monash Planning Scheme contains Residential, Business, Industrial, Special Use and Public Use zones. It also contains a Mixed Use zone, however this has been applied in only a few circumstances. The Business zones (1 to 4) form the core of the Activity Centres identified in the municipality and these are generally surrounded by Residential and Special Use zones. The Business 3 and 4 Zones do not permit residential activity and a permit is required in the Business 2 Zone, which poses significant problems for inclusion of this type of use within the core of the activity centre.

Monash's principal activity centre of Glen Waverley has experienced major renewal and development in the past few years that has revitalised the centre. Other major activity centres in Monash are Oakleigh, Clayton, Mt Waverley and Brandon Park.

The community is also supported by smaller neighbourhood centres such as Pinewood, Wheeler's Hill, Syndal, Waverley Gardens, and Hughesdale. The City also possesses one of the few specialised activity centres in Melbourne - the Monash Technology and Medical Research Precinct which is situated around Monash University, Monash Medical Centre and the Monash Technology Precinct.

Revitalisation of Monash's activity centres will be facilitated through incorporation of residential development within or in the immediate vicinity (land abutting, opposite or directly adjacent) of existing shopping centres. Council's current position with regards to increased density development is that higher density development will be encouraged at Glen Waverley, in the Monash University/Health Precinct and in the immediate vicinity of other major and local activity centres as appropriate.

Locating residential development in activity centres facilitates the creation of safer, more attractive and lively community hubs. It increases the population base utilising the services of the centre, which in turn creates the opportunity for increased employment and installation of a wider range of services and facilities.

As activity centres facilitate walking and cycling to destinations and are well located in terms of public transport, residents are able to reduce their reliance on cars for transport, resulting in significant benefits to the environment.

5.4.1 Objective

The objective for housing in activity centres is to *ensure the revitalisation of Monash's activity centres through appropriately dimensioned, located and designed residential development.*

5.4.2 Strategies

In order to meet this objective, the following strategies are proposed:

- Direct higher density developments towards areas such as activity centres that are well serviced by public transport, commercial, recreational, community and educational uses to make optimum use of facilities and services available.
- Ensure higher density development is consistent with the draft Guidelines for Multi Storey Development of Three Storeys and Above in the City of Monash (City of Monash, 2004a).
- Encourage a mix of housing types including mixed use developments of higher density within or directly adjacent activity centres.
- Promote and facilitate housing projects such as “shop top” dwellings within the retail and commercial centres of activity centres, as well as over car-parks and other appropriate areas.
- Address the interface between activity centres and residential areas through innovative and high quality architectural design, appropriate setbacks and landscaping.
- Ensure residents within activity centres are aware of differences in amenity expectations between commercial and residential areas.
- Maintain the vibrancy of the street by encouraging “active frontages” with retail, leisure and cultural facilities.
- Explore opportunities for the development of Council owned and controlled land for strategic commercial and residential development for community benefit with particular emphasis on the Clayton, Oakleigh and Glen Waverley Activity centres
- Incorporate a retail, entertainment or other approved business use on the ground floor of a multistorey development where the location of the development is in a core retail or business area of the activity centre.
- Work with Transport Authorities to improve the operation and amenity of transport hubs in the City, focussing on Oakleigh and Glen Waverley.
- Ensure that higher density developments within activity centres do not create traffic or car parking problems.
- Encourage hospitality and entertainment precincts in activity centres to meet demand and maximise employment opportunities in these industries.

- Require higher density development to provide useable recreational areas, including private, communal and secluded open space areas that are well designed, integrated, functional, safe, solar oriented, well ventilated and meet the needs of future residents.

5.4.3 Implementation

- Update the MSS, particularly Clause 21.06, to reflect the new State Government Activity Centre framework.
- Develop urban design frameworks and/or structure plans for key activity centres in Monash including the Monash University/Technology Precinct Specialised Activity Centre.
- Urban design frameworks and structure plans should address:
 - opportunities for shop top housing and other mixed use development;
 - inclusion of various forms of housing including more affordable housing;
 - the interface between activity centres and residential areas;
 - local traffic impacts and parking requirements;
 - pedestrian and cycling access and linkages to public transport, shops and other community facilities;
 - improvements to streetscape, public open space and other public areas.
- Promote good examples of shop top housing, particularly in Oakleigh.
- Develop guidelines for shop top housing.
- Request the DSE to investigate the benefits of broadening the range of permissible uses within Business zones to permit mixed-use development and residential uses.

5.5 Safety and access

Housing must be designed so that it is physically accessible, safe to live in and promotes independent living. The issue of accessibility is particularly important when considering the significant and growing proportion of the Monash population aged over 65. In addition, approximately 16.5% of Australia's population suffer from arthritis. As such there is a significant and potentially growing proportion of Monash's population that have limited mobility.

Residential buildings should be designed in order to be accessible by all sectors of the community including people with a disability or limited mobility, and people with prams, so that dwellings can meet the general needs of all age groups over a lifespan. Features of design that should be considered in terms of accessibility include the approach to a dwelling, minimising the use of steps and stairways and wide doorways and halls. Buildings that enable equity of access by all groups of the community go a step towards achievement of a socially cohesive and fair community.

In terms of safety, front entries to buildings should be visible and easily identifiable from the street and from within the development. They should be designed to enable supervision by residents of the street as well as the internal access ways. Open space areas should be well illuminated, be able to be observed from the street, other public spaces or residential windows, and be protected from inappropriate public use. Requirements for residential development to address safety of residents and visitors are contained within ResCode (Clauses 55 and 56 of the Planning Scheme). Additional guidance is provided in the *Guide to Residential Development in Monash* (City of Monash, 2004b) and the *Draft Guidelines for Multi Storey Development of Three Storeys and Above in the City of Monash* (City of Monash, 2004a).

There is a perceived conflict between land values in the City, which, in order to maximise development yield, promote developments higher than single storey, and the needs of the community. Multistorey developments are often inappropriate accommodation for people with limited mobility such as the aged and people with disabilities. It is important that the development of accommodation appropriate for people with limited mobility be promoted, as the older population is expressing a desire to remain in the City even if they move out of their family homes.

5.5.1 Objective

The objective with regards safety and access is to *ensure that housing in Monash is responsive to the access needs of the community including people with limited mobility and older persons, and provides a degree of personal safety.*

5.5.2 Strategies

In order to meet this objective, the following strategies are proposed:

- Accessibility, both within and around a dwelling, should be included as an issue for consideration when assessing a residential development application.
- Consider the needs of people with limited mobility in the design of multi-storey developments by providing disabled access to both an on-site car park area and the entry to ground floor dwellings and/or the inclusion of lift access.
- Recommend that a lift is installed in any higher density residential development greater than three storeys and containing more than 20 apartments to ensure an appropriate level of access is provided.
- Refer plans for new major works and redevelopment projects of public interest, to professional access advisors for appraisal.
- Investigate joint venture possibilities with the Office of Housing to increase the supply of housing for people with limited mobility.

- Encourage the construction of single storey one and two bedroom dwellings near existing or proposed aged care facilities, and near public transport and other facilities.
- Coordinate housing information sources and relevant agencies that assist people to remain in their homes.
- Promote the State Government's Home Renovation Service to older persons living in the City (<http://www.land.vic.gov.au/build-renovate>).
- Promote the programs of the Department of Human Services Disability Services Division (<http://hnb.dhs.vic.gov.au/ds/disabilitysite.nsf>) to people with disabilities living in the City.
- Provide information to older persons regarding their housing choices (e.g. nursing homes and support services).
- Support local agencies and developers seeking to meet aged care housing needs in the municipality.
- Strengthen links between Council aged care support services, the Department of Human Services, the Office of Housing and public housing elderly person's estates.
- Promote awareness of the Yooralla Independent Living Centre (<http://www.yooralla.com.au/ilc>) to people with limited mobility and/or disabilities living in the City.

5.5.3 Implementation

- Implement the *City of Monash Mobility and Access Action Plan 2000 - 2005* (City of Monash, 2003e), which incorporates actions to improve access in private and public dwellings.
- Implement the *Monash Strategy for an Ageing Community* (City of Monash, 2002) to direct future planning and development of aged person's accommodation.
- Develop and implement an 'Access Development Control Plan' to provide the framework for addressing access issues in development appraisals.
- Devise a Buildings and Facilities Access Checklist for planning officers and developers to inform them of issues to consider when lodging or assessing a planning permit application and to promote compliance with access standards and guidelines
- Advocate to the Building Practitioners Board and the ArchiCentre regarding the development of a listing of builders specialising in accessible building design and construction

5.6 Greater affordability

The Ministerial Advisory Committee working on the Victorian Homelessness Strategy has adopted the following measure of affordability: “Housing that costs up to 25% of total household income”. Office of Housing data shows that, against this definition, approximately 53% of low-income households renting in the private market pay ‘unaffordable rents’ and hence experience what has been termed “housing stress”. Whilst many simply trade off this cost against other household expenditure items almost one in eight are paying in excess of 50% of income in housing costs.

Statistics show a growing shortage of affordable housing across Melbourne. Research on low-cost rental indicates an absolute decline in the number of affordable private rental dwellings in Melbourne between 1986 and 1996. Recent market conditions are unlikely to have reversed this trend. In addition, the proportion of households deemed to be suffering housing stress has risen, and ABS figures indicate a declining rate of home purchase among those aged below 35 years.

The *City of Monash Council Plan 2003 – 2006* identifies the need to encourage developers to build a variety of housing types that are available to all socio-economic groups in the Monash community. It proposes the need to investigate options for development of a wide range of housing types.

One avenue being explored is urban renewal. The City of Monash is an active participant in the State Government’s Urban Renewal Project for the Ashburton, Ashwood and Chadstone areas.

5.6.1 Objective

The objective for greater affordability of housing is to *ensure appropriate housing is available to suit the social and economic needs of the community.*

5.6.2 Strategies

In order to meet this objective, the following strategies are proposed:

- Promote a variety of dwelling sizes and types to promote greater affordability of housing and choice in medium and large urban developments.
- Locate social housing or housing that meets special needs close to public transport and retail and community facilities.
- Investigate affordable housing options that can be promoted in the City, including joint ventures with developers and/or other government agencies.

5.6.3 Implementation

- Monitor supply and demand in affordable housing and evaluate examples of best practice in the provision of well-designed affordable housing.
- Continue the redevelopment and renewal of public housing stock in Ashwood through participation in the Office of Housing's Neighbourhood Renewal Strategy.
- Investigate the need for a detailed strategy that will encourage the private sector to develop affordable housing and affordable supported aged care residential facilities for older people and people with disabilities.

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ACTION TABLE

Action Area	Objective	Strategies	Implementation
Housing diversity	<i>Ensure that a range of housing is available to meet the current and future needs of the population</i>	<ul style="list-style-type: none"> • Encourage housing which caters for the needs of residents at various stages of their lives and with different needs, having consideration of multiculturalism and variations in lifestyle preferences across key demographic groups. • Encourage the development of single storey and purpose built accommodation to cater for the needs of the ageing population. • Encourage the provision of high quality student accommodation close to Monash University that does not conflict with neighbouring uses. • Encourage and facilitate public and private sector and community involvement in the development of housing to ensure a range of housing types is available now and into the future. • Promote higher density developments within and adjacent major activity centres that will accommodate different forms of housing. • Encourage residential development of varying forms on former public purpose sites no longer required, such as former school sites and former industrial premises, that are surrounded by residential areas and are serviced by public transport and other infrastructure. • Ensure that multi-story and unit developments achieve high quality architectural and urban design outcomes that positively contribute to neighbourhood character, consistent with the <i>Draft Guidelines for Multi Storey Development of Three Storeys and Above in the City of Monash</i> (City of Monash, 2004a). • Encourage site consolidation where this will facilitate higher density development in appropriate locations and maintain high design standards. • Maintain an understanding of the adequacy of housing around employment centres to ensure that appropriate and timely responses can be developed to meet any future changes. 	<ul style="list-style-type: none"> • Monitor development approvals to determine whether increases in housing types are occurring in appropriate locations • Incorporate the criteria for higher density development into the MSS through initiation of a Planning Scheme Amendment and make reference to the draft Guidelines for Multi Storey Development of Three Storeys and Above in the City of Monash (City of Monash, 2004a). • Investigate a range of planning incentives to encourage more single-storey dwellings in multi unit and medium density developments.

Action Area	Objective	Strategies	Implementation
Neighbourhood character	<i>Maintain and enhance Monash's Neighbourhood and Garden City Character, particularly streetscapes; and Enhance and protect the liveability and amenity of residential areas within Monash</i>	<ul style="list-style-type: none"> • Maintain the predominantly single detached dwelling style in urban areas not identified for higher density development by promoting low intensity development as the preferred character for the majority of the residential areas within the City, except where special circumstances exist. • Recognise that the potential for higher density development is diminished in identified heritage areas. • Ensure that development enhances the Garden City and landscaped streetscape character of the neighbourhood, responds to the features of the site and surrounding area and promotes good streetscape design. • Ensure that new residential development enhances the character of the neighbourhood, having regard to the preferred character statements contained within the draft Design Guidelines for Neighbourhood Character in Monash (City of Monash, 2003d). • Encourage the retention of existing dwellings that contribute significantly to the character of the surrounding neighbourhood. • Ensure that development does not adversely impact places of cultural heritage significance. • Ensure that new residential development provides a high level of amenity including personal privacy for occupants and neighbours. • Ensure development in residential areas enhances the Garden City Character by preserving existing vegetation such as semi-mature and mature canopy trees, providing new vegetation and landscape treatments in open space areas and along boundaries and incorporating garden setbacks in which upper canopy trees can develop. • Discourage the practice of “moonscaping”, areas proposed for urban development. • Identify neighbourhoods or areas of cultural interest within the City to establish any social and cultural housing requirements and/or precedents. • Maintain a strong sense of place through neighbourhood development that emphasises existing cultural heritage values, utilising culturally suitable and attractive built form and landscape character. 	<ul style="list-style-type: none"> • Amend the Monash Planning Scheme to incorporate the findings of the Neighbourhood Character Review. • Finalise the revised Vegetation Protection Overlay. • Investigate improving the public realm of the City by directing street tree planting, with priority given to areas of greater housing diversity. • Periodically undertake a review of identified and potential heritage locations within the City.

Action Area	Objective	Strategies	Implementation
Sustainable development	<p><i>Attain environmentally sustainable residential development through efficient use of resources such as energy, land and water; making our lifestyles more sustainable through minimising our impact on the environment; and reducing the impact of housing development on natural systems;</i></p> <p><i>Reach social sustainability through the achievement of development that responds to social changes and facilitates the creation of vibrant, accessible, safe and self-reliant communities; and</i></p> <p><i>Achieve economic sustainability through encouraging development and renewal of activity centres, supporting the economic growth of the building industry and promotion of forms of business that are directly compatible with urban development such as home based business and shop top developments.</i></p>	<ul style="list-style-type: none"> • Locate higher density development in areas with access to good quality public transport such as a rail station or bus interchange; that contain existing clustered mixed use development with a significant variety of uses bringing social, economic and environmental benefits to the community; that provide opportunities for walking and cycling and possess an interconnected, pedestrian-friendly layout that enhances personal safety and perceptions of safety; and that provide links and connections to adjoining neighbourhoods. • Exclude higher density developments from areas that do not have direct access to good quality public transport or a significant variety of uses that provide social, economic and environmental benefits to the community. • Encourage building practices and dwelling preferences that are energy efficient and sustainable, such as maximising the climatic opportunities presented, making appropriate use of daylight, solar access, shading and prevailing breezes, and minimising energy use for heating in winter and cooling in summer. • Ensure that design takes into account environmental constraints including soil erosion, urban water management and bushfire risk. • Encourage landscape design and use of construction materials that minimise environmental impacts in residential areas. • Encourage residents and developers to reduce, re-use and recycle household and construction materials. • Minimise the environmental impact on waterways within the catchment through adoption of best practice water sensitive urban design techniques and practices which result in improved stormwater management, water conservation and waste minimisation. • Ensure that development that places an additional burden on existing infrastructure contributes to the upgrading of that infrastructure. • Require all development proposals to demonstrate that there will be no detrimental affect on physical infrastructure in respect of its appearance, function, location, visual amenity, reliability, efficiency or safety. 	<ul style="list-style-type: none"> • Develop guidelines for environmentally sustainable planning, design, siting and construction of housing. • Develop and implement a sustainable development training program for City of Monash planning officers that addresses sustainable building and design, including use of the Sustainable Energy Authority of Victoria "First Rate" system or equivalent. • Continue to participate in the Monash University Integrated Transport Study and implement the findings and recommendations as appropriate. • Investigate the potential benefits to the Monash community from developing and implementing water sensitive urban design guidelines for urban drainage. • Compile promotional displays and provide educational material to community members and proponents regarding sustainable housing design, construction and lifestyle practices.

Action Area	Objective	Strategies	Implementation
<p>Activity centres</p>	<p><i>Ensure the revitalisation of Monash's activity centres through appropriately dimensioned, located and designed residential development.</i></p>	<ul style="list-style-type: none"> • Direct higher density developments towards areas such as activity centres that are well serviced by public transport, commercial, recreational, community and educational uses to make optimum use of facilities and services available. • Ensure higher density development is consistent with the draft Guidelines for Multi-Storey Development of Three Storeys and Above in the City of Monash (City of Monash, 2004a). • Encourage a mix of housing types including mixed use developments of higher density within or directly adjacent activity centres. • Promote and facilitate housing projects such as "shop top" dwellings within the retail and commercial centres of activity centres, as well as over car-parks and other appropriate areas. • Address the interface between activity centres and residential areas through innovative and high quality architectural design, appropriate setbacks and landscaping. • Ensure residents within activity centres are aware of differences in amenity expectations between commercial and residential areas. • Maintain the vibrancy of the street by encouraging "active frontages" with retail, leisure and cultural facilities. • Explore opportunities for the development of Council owned and controlled land for strategic commercial and residential development for community benefit with particular emphasis on the Clayton, Oakleigh and Glen Waverley Activity centres • Incorporate a retail, entertainment or other approved business use on the ground floor of a multistorey development where the location of the development is in a core retail or business area of the activity centre. • Work with Transport Authorities to improve the operation and amenity of transport hubs in the City, focussing on Oakleigh and Glen Waverley. • Ensure that higher density developments within activity centres do not create traffic or car parking problems. • Encourage hospitality and entertainment precincts in activity centres to meet demand and maximise employment opportunities in these industries. • Require higher density development to provide useable recreational areas, including private, communal and secluded open space areas that are well designed, integrated, functional, safe, solar oriented, well ventilated and meet the needs of future residents. 	<ul style="list-style-type: none"> • Update the MSS, particularly Clause 21.06, to reflect the new State Government Activity Centre framework. • Develop urban design frameworks and/or structure plans for key activity centres in Monash including the Monash University/Technology Precinct Specialised Activity Centre. • Urban design frameworks and structure plans should address: <ul style="list-style-type: none"> • opportunities for shop top housing and other mixed use development; • inclusion of various forms of housing including more affordable housing; • the interface between activity centres and residential areas; • local traffic impacts and parking requirements; • pedestrian and cycling access and linkages to public transport, shops and other community facilities; • improvements to streetscape, public open space and other public areas. • Promote good examples of shop top housing, particularly in Oakleigh. • Develop guidelines for shop top housing. • Request the DSE to investigate the benefits of broadening the range of permissible uses within Business zones to permit mixed-use development and residential uses.

Action Area	Objective	Strategies	Implementation
<p>Safety and access</p>	<p><i>Ensure that housing in Monash is responsive to the access needs of the community including people with limited mobility and older persons, and provides a degree of personal safety</i></p>	<ul style="list-style-type: none"> • Accessibility, both within and around a dwelling, should be included as an issue for consideration when assessing a residential development application. • Consider the needs of people with limited mobility in the design of multi-storey developments by providing disabled access to both an on-site car park area and the entry to ground floor dwellings and/or the inclusion of lift access. • Recommend that a lift is installed in any higher density residential development greater than three storeys and containing more than 20 apartments to ensure an appropriate level of access is provided. • Refer plans for new major works and redevelopment projects of public interest, to professional access advisors for appraisal. • Investigate joint venture possibilities with the Office of Housing to increase the supply of housing for people with limited mobility. • Encourage the construction of single storey one and two bedroom dwellings near existing or proposed aged care facilities, and near public transport and other facilities. • Coordinate housing information sources and relevant agencies that assist people to remain in their homes. • Promote the State Government's Home Renovation Service to older persons living in the City (http://www.land.vic.gov.au/build-renovate). • Promote the programs of the Department of Human Services Disability Services Division (http://hnb.dhs.vic.gov.au/ds/disabilitysite.nsf) to people with disabilities living in the City. • Provide information to older persons regarding their housing choices (e.g. nursing homes and support services). • Support local agencies and developers seeking to meet aged care housing needs in the municipality. • Strengthen links between Council aged care support services, the Department of Human Services, the Office of Housing and public housing elderly person's estates. • Promote awareness of the Yooralla Independent Living Centre (http://www.yooralla.com.au/ilc) to people with limited mobility and/or disabilities living in the City. 	<ul style="list-style-type: none"> • Implement the City of Monash Mobility and Access Action Plan 2000 - 2005 (City of Monash, 2003e), which incorporates actions to improve access in private and public dwellings. • Implement the Monash Strategy for an Ageing Community (City of Monash, 2002) to direct future planning and development of aged person's accommodation. • Develop and implement an 'Access Development Control Plan' to provide the framework for addressing access issues in development appraisals. • Devise a Buildings and Facilities Access Checklist for planning officers and developers to inform them of issues to consider when lodging or assessing a planning permit application and to promote compliance with access standards and guidelines • Advocate to the Building Practitioners Board and the Archi-Centre regarding the development of a listing of builders specialising in accessible building design and construction.

Monash Housing Strategy

Action Area	Objective	Strategies	Implementation
Greater affordability	<i>Ensure appropriate housing is available to suit the social and economic needs of the community.</i>	<ul style="list-style-type: none"> • Promote a variety of dwelling sizes and types to promote greater affordability of housing and choice in medium and large urban developments. • Locate social housing or housing that meets special needs close to public transport and retail and community facilities. • Investigate affordable housing options that can be promoted in the City, including joint ventures with developers and/or other government agencies. 	<ul style="list-style-type: none"> • Monitor supply and demand in affordable housing and evaluate examples of best practice in the provision of well-designed affordable housing. • Continue the redevelopment and renewal of public housing stock in Ashwood through participation in the Office of Housing's Neighbourhood Renewal Strategy. • Investigate the need for a detailed strategy that will encourage the private sector to develop affordable housing and affordable supported aged care residential facilities for older people and people with disabilities.

APPENDIX A : DEMOGRAPHIC CHARACTERISTICS

Note: All data has been drawn from Australian Bureau of Statistics Census unless other wise noted. Analysis of that data has been largely drawn from *City of Monash Community Profile* (id consulting, 2002).

OVERVIEW

Located in Melbourne's south eastern suburbs the City of Monash had a population of over 150,000 in 2001 (155,061) and may be described as a 'middle ageing' suburb, with notable increases in the number of people over 45 years of age living in the City.

The City of Monash exhibits the following general characteristics, as summarised in Table A1.

- A slightly older age profile with a large proportion of the population in the 'empty nester' age groups (50 - 59, 60 - 69).
- The relatively stable combination of family and non-family household types in Monash is indicative of the diverse household structure of the area in 2001.
- A culturally diverse population with over a third of the population born overseas (36.2%), with most (82%) of these born in non-English speaking countries. This represents a substantially higher proportion than the Melbourne Statistical District (MSD), which equates to the Melbourne metropolitan area.
 - In the five years to 2001, China and India were the largest sources of overseas born population.
 - A substantially higher proportion of Chinese (8.4% of the City population) and Greek (7.6% of the City population) language is spoken in homes within the City than in the MSD.
- Household income is largely consistent with MSD averages and has remained comparable with 1996 levels. This implies maintenance of socio-economic status in the area.
- Households around the Clayton activity centre are at the lower end of the economic scale. These areas have a higher proportion of overseas born households where English is a second language. These areas also contain the majority of middle aged people, as the proportion of children and aged in Clayton is significantly below the metropolitan average.
- Over half (52.5%) of the households in the City are homeowners.
- Almost 84% of dwellings in the City are separate houses.
- The distribution of educational qualifications across the population in 2001 suggests a highly educated workforce with significant skills. Approximately 41% of the population reported having some form of qualification. A higher proportion of the population than MSD averages attends university (7.4% compared with 4.9%), though a lower proportion are attending primary school.
- Monash's labour force comprised 78,092 persons and has remained relatively stable as a percentage of the population since 1996.
 - Unemployment and participation rates are in line with MSD data.

- A slight shift towards part-time employment is in line with broader Melbourne trends.
- Workers cover a relatively diverse employment base, with a mix of both higher and lower skill occupations although workers within Monash are more heavily involved in white collar employment than in 1996.
- Computer and internet usage patterns support the reported substantial up-take of new information technology in the area.
- A higher proportion of households owning 2 or more cars suggests that there may be a proportion of larger households with two or three adults.

Table A1: Selected characteristics of Monash and Major Activity Centre suburbs

	Clayton	Glen Waverley	Mount Waverley	Oakleigh	Monash	Metro Melbourne
Population	13,702	37,093	29,479	6,767	155,061	
Age Structure						
Proportion under 15	12.3%	16.0%	15.8%	18.9%	16.0%	19.1%
Proportion 65 plus	6.0%	14.1%	17.9%	13.9%	14.7%	12.4%
Household income						
Proportion of household with < \$25,000	33%	20%	16%	25%	23.2%	24.5%
Proportion of household with between \$25,000 to \$50,000	28%	22%	21%	25%	23.4	25%
Proportion of household with > \$50,000	28%	46%	39%	38%	41.6%	39%
Proportion own house outright	35%	58.3%	58.0%	42.4%	52.5%	41.9%
Education						
Degree, diploma or associate diploma	23%	32.2%	31.9%	23.6%	27.9%	22.6%
Ethnicity						
Proportion of overseas born	48%	37%	30.1%	32.0%	36.2%	28.6%
Proportion of households with Non-English language spoken	46%	31.7%	26.8%	33.7%	34.0%	25.8%
Main NESB language spoken at home	Chinese–11%	Chinese–13.5%	Greek-6.9% Chinese -6.5%	Greek –14.8%	Chinese -8.4%	Chinese -3.3%

1 POPULATION

The City of Monash has an estimated 162,000 people as at 2003, making it one of Melbourne most populated suburbs.

The population of Monash can be described in terms of age and sex structure and trends evident between the census periods of 1986 and 2001. There has been a recorded decrease in the population over this time of 7,605, though the population did increase from 1996 to 2001 by 3,388 (2.2%). Table A2 shows changes in population figures since 1986, taken from the 1986, 1991, 1996 and 2001 census.

Table A2: Demographic Summary 1986 – 2001

	1986	1991	1996	2001	Change 1996 - 2001	% Change 1996 - 2001
Males	81,239	78,062	74,714	76,221	1,507	2.0%
Females	81,427	79,266	76,959	78,840	1,881	2.4%
Persons	162,666	157,328	151,673	155,061	3,388	2.2%
Age 0-17 % of pop'n	-	-	20.5	20.0	-98	-0.3%
Age 18 - 59 % of pop'n	-	-	61.5	59.8	-790	-0.8%
Age 60+ % of population	-	-	18.0	20.2	4,276	15.7%

Monash's age structure suggests that families tend to comprise two parents plus children in their late teens and twenties, many of whom would be expected to leave home in coming years.

Another significant proportion of the population are in the 'empty nester' age group (50 – 69) with this segment contributing to the population growth shown between 1996 and 2001 despite moderate net declines in younger age groups.

1.1 Population Projections

The projections presented in Table A3 indicate an average annual growth rate of approximately 0.5% (0.56%) between 2001 and 2031 and are based on preliminary estimates from the ABS 2001 Census of the population as at 30th June 2001 and are based on the continuation of current trends.

Table A3: Population Projections, 1996 – 2021

Year	Population	Period	Average Annual Change (%)
1996 (actual)	151,673	-	-
2001 (actual)	155,061	1996 - 2001	+2.2%
2002	163,720	2001 - 2002	+5.6%
2006	168,803	2002 - 2006	+3.1%
2011	169,200	2006 - 2011	+0.2%
2021	175,258	2011 - 2021	+3.6%
2031	181,251	2021 - 2031	+3.4%

Source: DSE, Urban and Regional Research Branch, 2003.

Some of the outcomes expected in the Melbourne Metro Strategy were taken into account where they were apparent in current trends. However, part of the intent of the Metro Strategy is reported to be to change the outcomes that the projections would suggest – particularly with respect to slower growth in the fringe suburbs and significantly higher growth around activity centres.

It is reasonable to expect that population growth rates within Monash over this period will vary between activity centres and other areas within the City.

1.2 Age Structure

The population of Monash is noticeably ageing, with a large proportion of the population over 55 (see Table A4).

Table A4: Age Structure, 1996 – 2021

Percentage of Population	1996 (actual)	2001 (actual)	2011	2021
0 – 4 years	5.1	5.0	4.5	3.9
5 – 17 years	15.4	15.0	14.4	13.0
18 – 24 years	13.3	11.7	9.0	9.9
25 – 34 years	14.6	14.4	10.4	10.3
35 – 49 years	20.7	20.6	22.3	18.8
50 – 59 years	13.0	13.1	12.6	14.9
60 – 69 years	9.5	9.9	12.3	11.1
70 – 84 years	7.3	8.8	11.9	14.2
85 years plus	1.2	1.5	2.7	3.8

Source: ABS; Department of Infrastructure, Victoria in Future, 1996.

Fig A1 highlights a significant trend evident in Monash’s age structure with recent population increases largely driven by older age groups, particularly the 70 to 84 age group, at the expense of some falls in the populations of younger age groups.

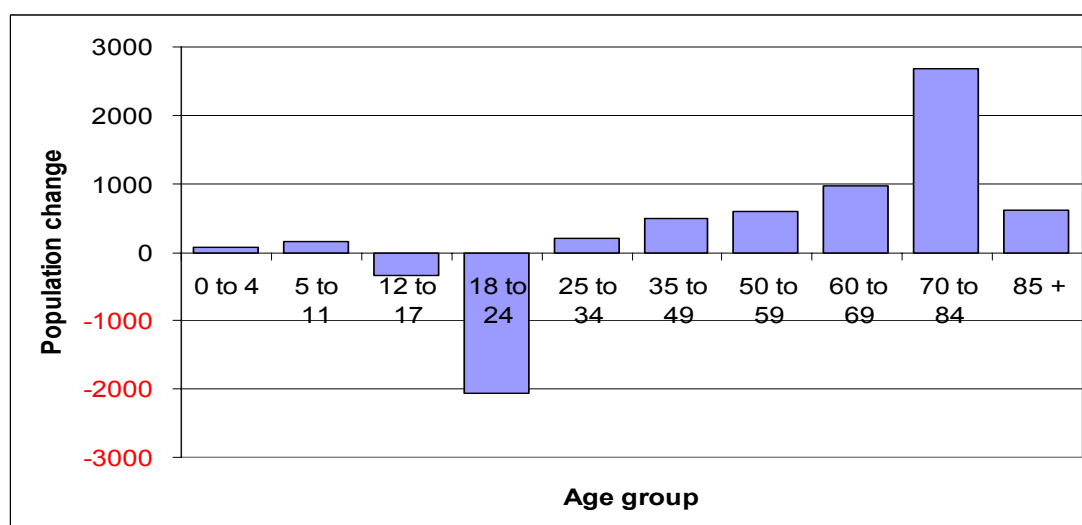


Figure A1: Changes in age structure of the Monash population from 1996 to 2001.

A decline in the number of persons aged 25 – 39 is observable in recent years. This change may be attributed to the rapidly increasing house prices over the past few years, which have possibly prevented this group (most often first home buyers) from purchasing in the City. As housing prices are expected to remain relatively stable, this trend is thought to continue within the municipality.

2 HOUSEHOLD AND FAMILY STRUCTURE

Changing lifestyle decisions of the population whereby more couples are having children much later in life or choosing not to have children at all are resulting in changing household and family structures.

With respect to household formation, the long-term trend is for a smaller number of occupants per household. This translates to an increase in the number of dwellings required to house any given population compared with the past (DSE, 2003).

Traditionally the “couple with children” household type has been dominant in Melbourne. However this dominance has been declining, from 42.9% in 1991 to 36.8% in 2001 (Figure A2). This decline has seen an increase in smaller household types such as couples without children (increase from 21.9% to 23.5%) and lone person households (increase from 19.4% to 23.2%).

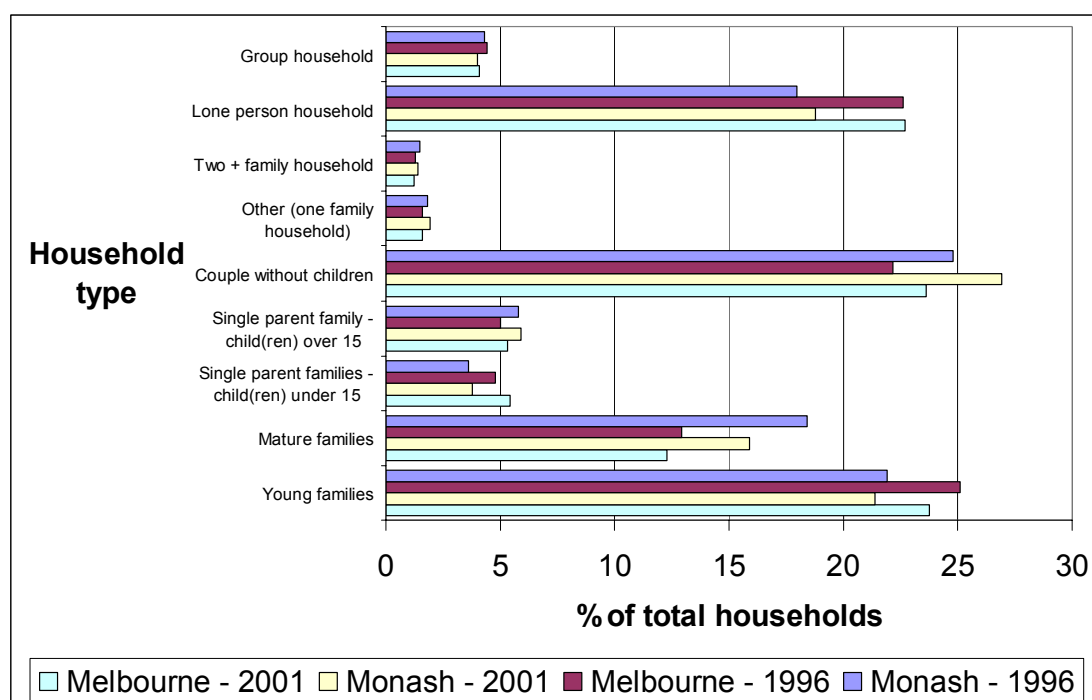


Figure A2: Household and family type 1996 – 2001.

The combination of family and non-family household types in Monash is indicative of the diverse household structure of the area in 2001. The basis for the mix of household types relates to the variety of dwellings and population in the area.

The most significant features of Monash as compared to broader Melbourne in 2001 were:

- a lesser share of lone person households;
- a greater proportion of couples without children; and
- a greater percentage of couples with child families.

Fig A3 shows that the mix of household types remained fairly stable between 1996 and 2001 with the most significant shift being in couples with children families ('mature families' and 'young families') whose relative proportion of the population decreased from 40.3% to 37.4% over this period, in part driven by an increase in the number of couple without children families (24.8% to 26.9%).

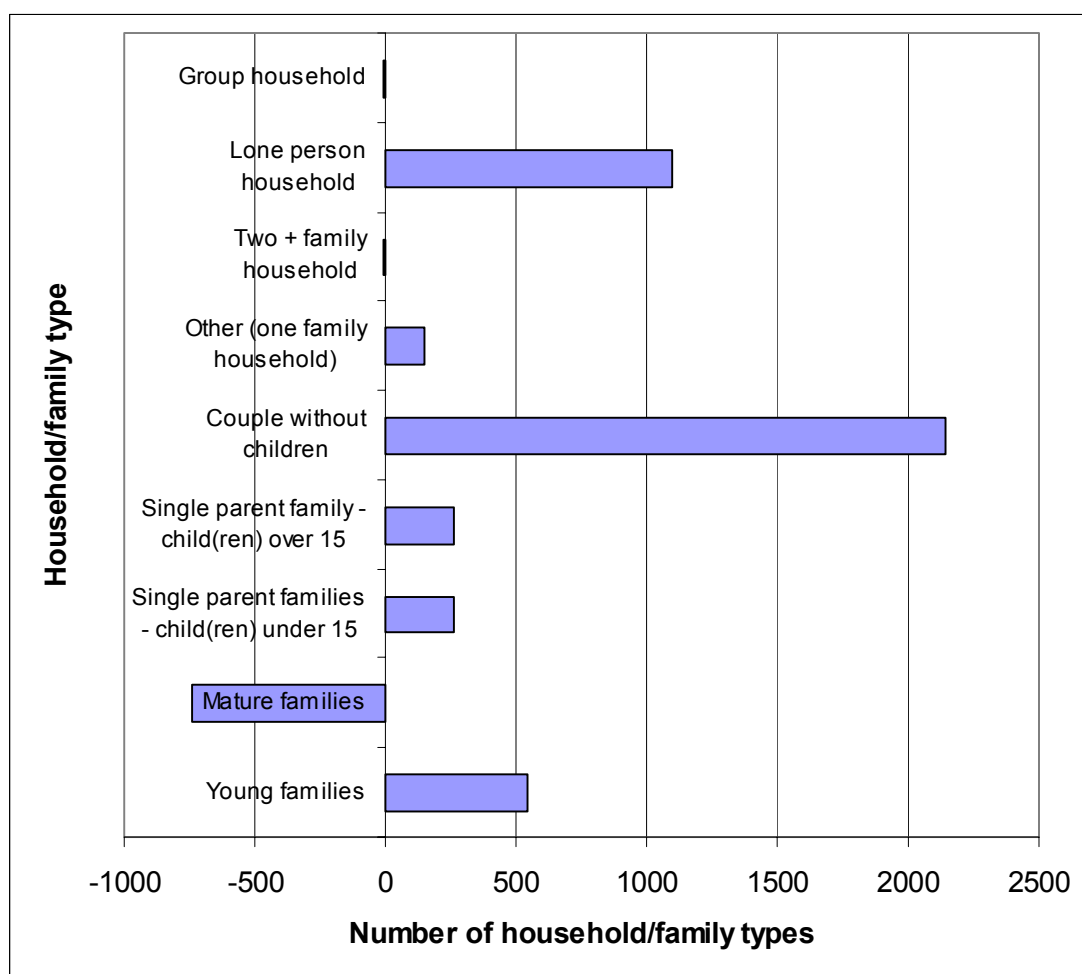


Figure A3: Changes in household and family types in Monash from 1996 to 2001

2.1 Household Size

The mean household size in Monash is 2.7.

Approximately 15,300 of the almost 18,700 two person households illustrated in Fig A4 below comprise couples without children, reflecting the significant proportion of 'empty nesters' present in the City during 2001.

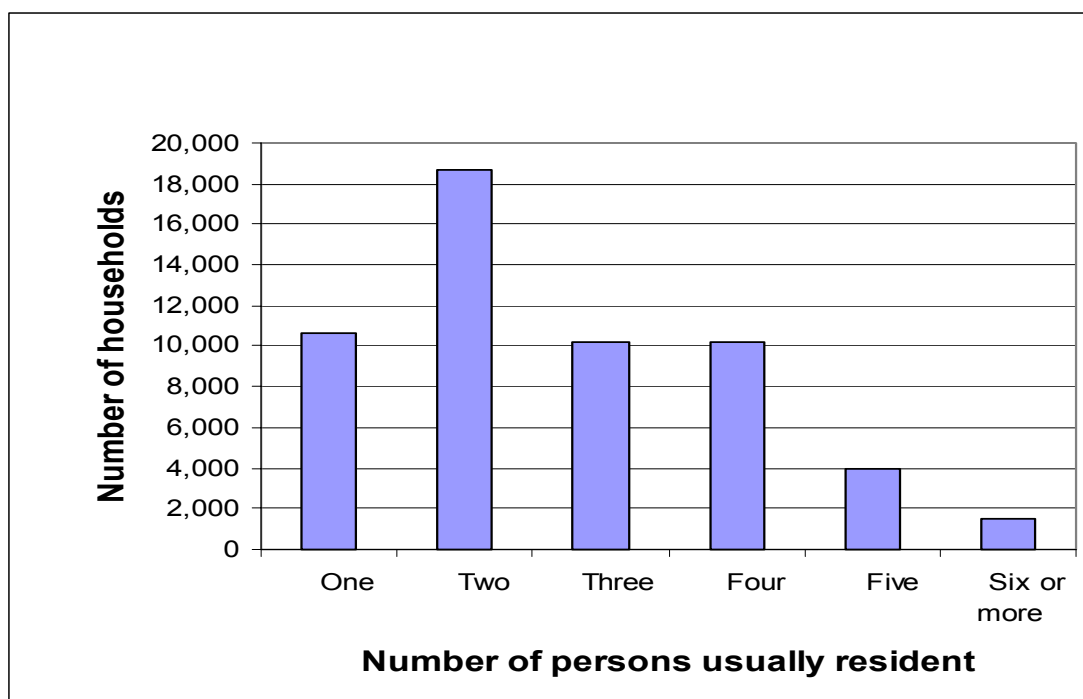


Figure A4: Household size in Monash in 2001.

Table A5 shows that household size is expected to decrease further, to approximately 2.5 by 2021. This impact is reflected in the predicted increased need for dwellings that would therefore be required if Monash’s population remained stable or increased slightly as predicted.

Table A5: Household Formation, 1996 - 2021

Households		Household Size	
Number of occupied private dwellings		Average Number of people per Private Dwelling	
1996 (actual)	53,127	1996 (actual)	2.85
2001 (actual)	56,827	2001 (actual)	2.73
2011	58,542	2011	2.68
2021	59,917	2021	2.55

Source: ABS; Department of Infrastructure, Victoria in Future, 1996.

3 HOUSING TYPE

There is a significant proportion of separate houses in Monash, consistent with a greater degree of uniformity in residential land uses. The proportion of separate houses was higher than that for Melbourne, with the proportion of attached dwellings or apartments lower (Figure A5).

The slight decrease in the proportion of separate houses in Monash between 1996 and 2001 was consistent with broader patterns of conversion to higher density dwellings and a reduced rate of construction of separate dwellings over this period.

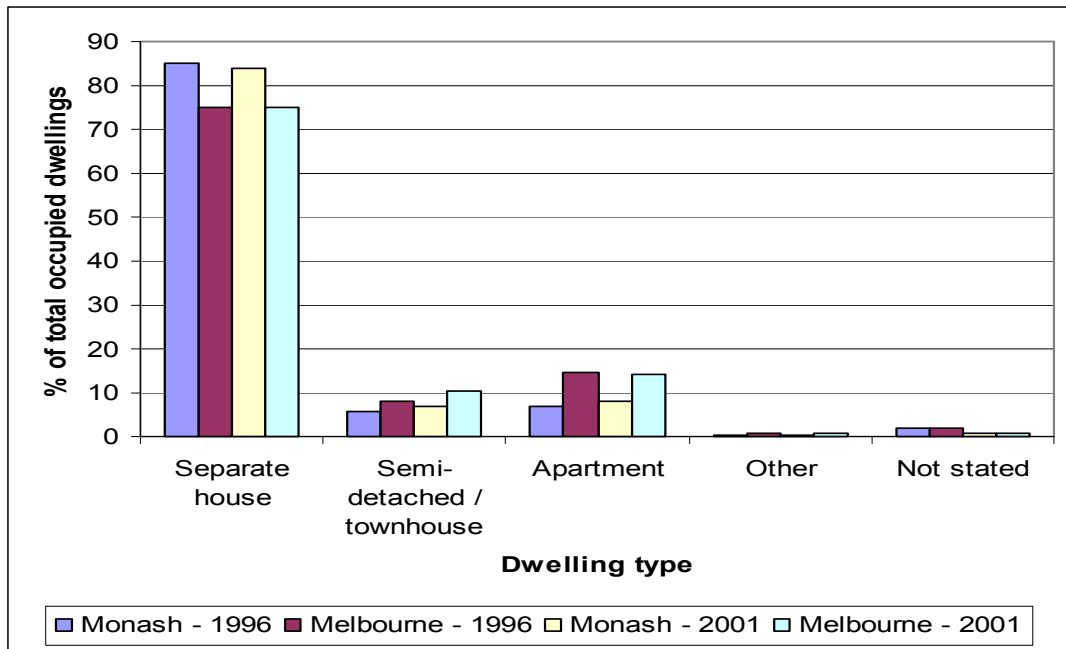


Figure A5: Dwelling structure 1996 – 2001

This high proportion of detached homes reflects the proportion of family household types that exists in Monash and the established nature of the area and is likely to continue to appeal more to families looking to move to the area.

3.1 Housing Tenure

There was a mix of housing markets in Monash during 2001, with a range of different tenure types. The greatest share of households were homeowners (52.5%), followed by home purchasers (22.3%) and private renters (17.2%). Monash had a significantly greater proportion of home owners as compared to the broader Melbourne area (Figure A6). This is supported by the greater proportion of separate houses within the municipality which tend to be associated with home owners.

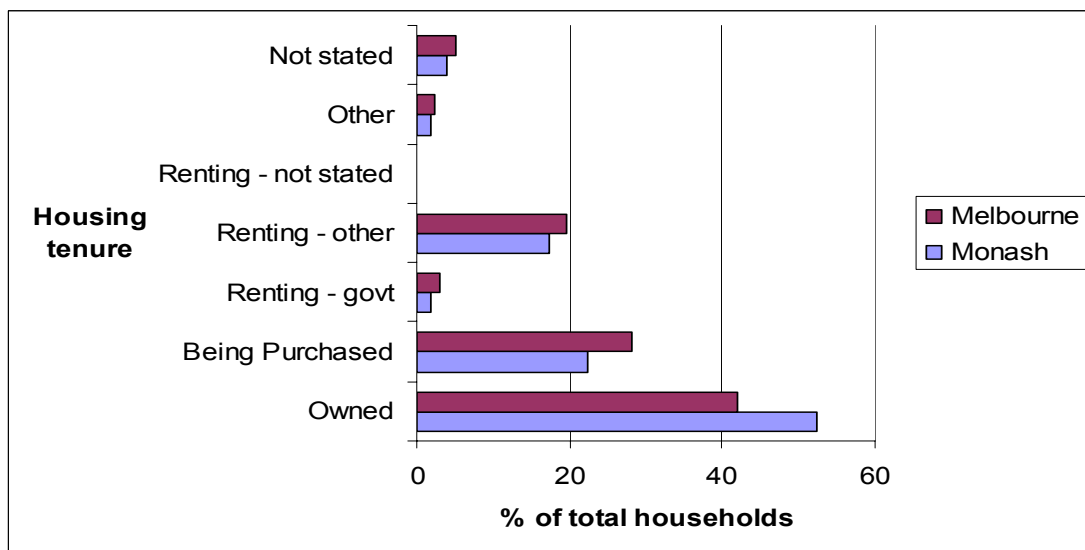


Figure A6: Housing tenure in Melbourne and Monash, 2001.

Almost three quarters of households in Monash own their home outright (52.5%) or are paying off a mortgage on their home (22.3%). There exists another 19.3% that rent. Despite the disproportionate increase in home ownership costs, absolute numbers of households are either completing or entering the home ownership process as numbers increased from 1996 to 2001.

There were also a greater proportion of private renters than public renters. There was little variation between 1996 and 2001 in the proportions between tenure types (Figure A7).

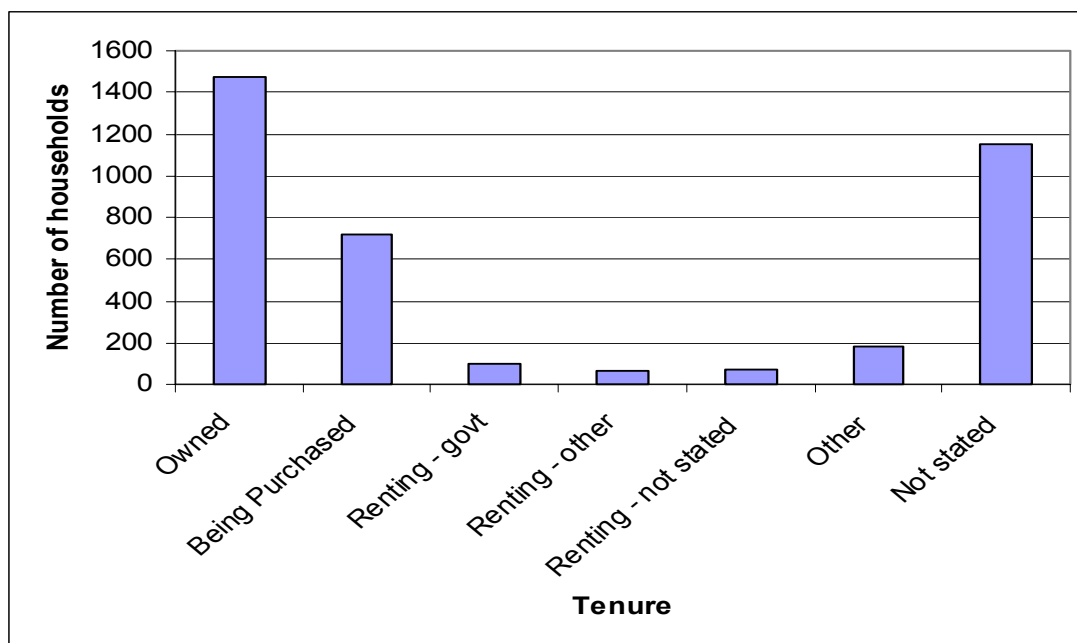


Figure A7: Change in housing tenure 1996 – 2001.

4 THE WORKFORCE

Monash’s population was heavily concentrated in services employment in 2001, with the largest industries including wholesale and retail trade (21.8%), finance, insurance and business services (19.5%) and education, health and community services (17.7%). This is typical of workforces in urban areas, with a comparatively small local manufacturing base.

4.1 Employment Status

Monash’s unemployment rate was 6.0% - similar to Melbourne’s rate of 6.6% for the same period – and had decreased since 1996, again in line with Melbourne’s rate decrease over the same period.

Monash’s labour force comprised 78,092 persons in 2001 (Figure A8) and showed relative stability between 1996 and 2001 though reflected a slight increase in the proportion of part-time workers (28.0% to 30.5%). This trend is in line with broader trends.

Proportions of the population across employment status groups for Monash were in line with Melbourne data during 2001.

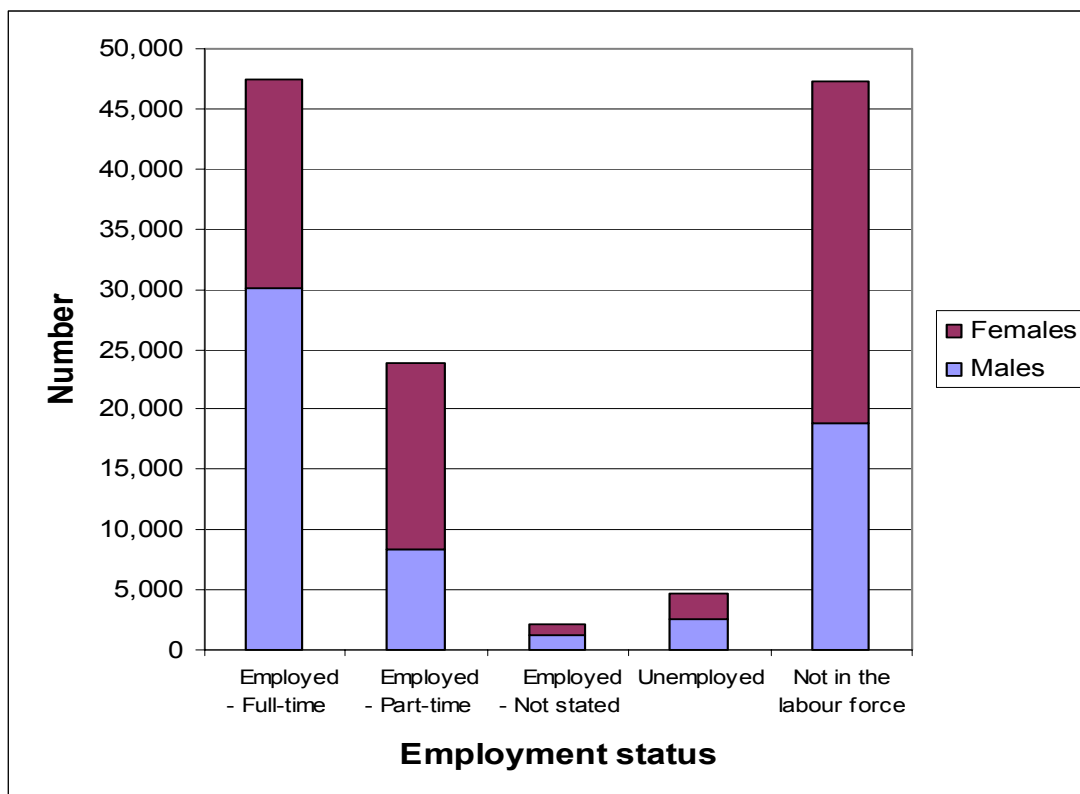


Figure A8: Employment status in Monash in 2001

4.2 Employment by Industry

Figure A9 highlights that workers living in Monash were heavily concentrated in services employment during 2001 with the most represented industries being wholesale and retail trade, finance, insurance and business services and education, health and community services. This is typical of workforces in urban areas, with a comparatively small local manufacturing base.

Monash follows broader Melbourne data closely with no significant differences in terms of employment by industry. An increase in the number of people employed (approximately 2,000 more) in the finance, insurance and business services sector occurred in the City between 1996 and 2001. This was the only notable shift during this period.

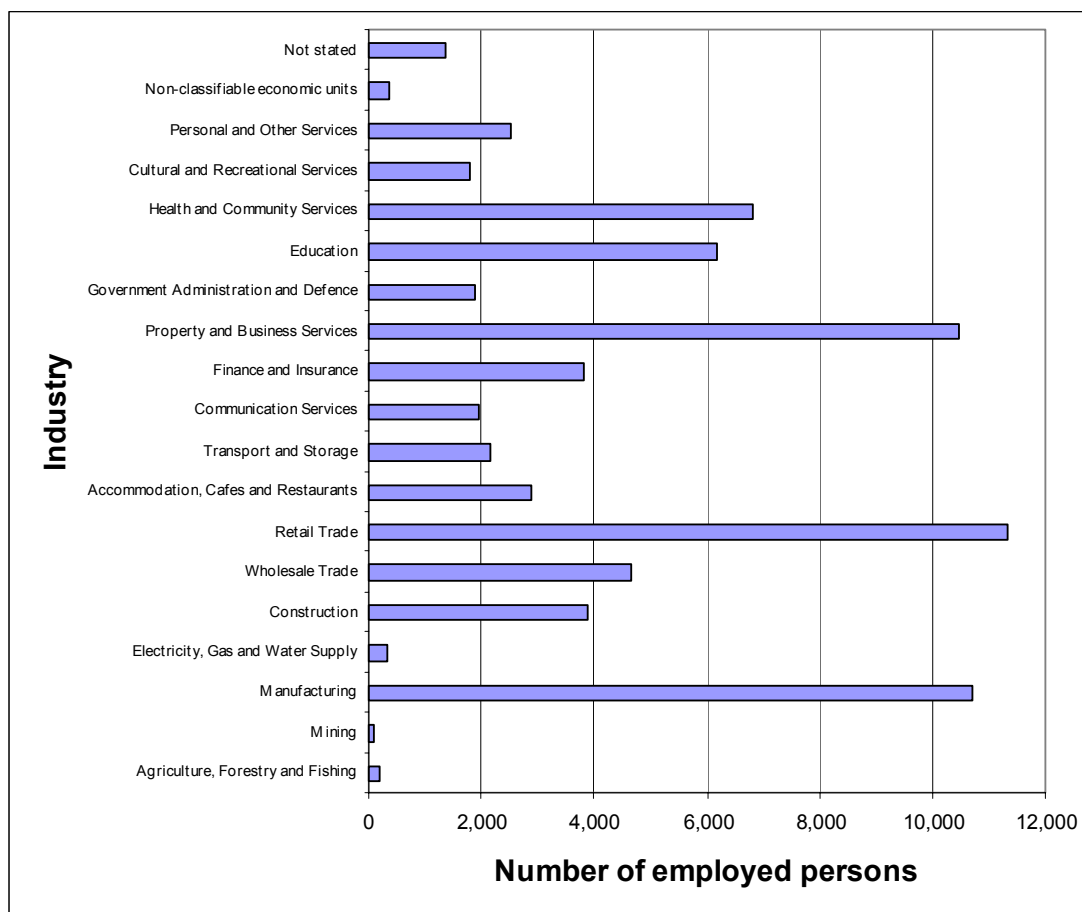


Figure A9: Employment within Monash by industry for 2001.

4.3 Occupation

The most prominent occupations in Monash during 2001 were mostly ‘white collar’ and included clerical, sales and service workers, professionals and associate professionals. This implies a relatively diverse employment base covering higher and lower skill occupations.

Monash exhibited a higher proportion of professionals (+3.5%) and a lower proportion of tradespersons (-1.9%) than Melbourne itself in 2001.

Significant changes occurred between 1996 and 2001 in the composition of occupations within the City. These changes included:

- An increase of 2,247 in the number of professionals.
- A increase of 905 in the number of clerical, sales and service workers.
- A fall of 784 in the number of tradespersons
- A fall of 733 in the number of production and transport workers.

4.4 Major Employers

Toyota Motor Company – Research and Development have declared an intention to locate in the City. Employment is expected to be approximately 100 initially with final figures yet to be made available.

The \$206 million Synchrotron Project is now under construction. This is expected to provide approximately 1,000 construction, scientific and related jobs over a period of two to three years as well as invite substantial investment. The potential level of this investment and its consequent benefits are not known and will be influenced by such factors as how many of the workers on these projects move into the City to live.

4.5 Qualifications

40.5% of Monash's population over 15 had a post-secondary qualification, which is slightly higher than the MSD average.

Overall the qualification profile of Monash is similar to the MSD in terms of the ratio of qualified to non-qualified people. The mix of qualifications within Monash shows a bias towards higher education as opposed to skilled vocational training (Table A6).

Table A6: Highest Qualification of Monash's population, 2001

Persons Aged 15 Years or Over	Persons	Monash	MSD
		%	%
Bachelor or higher degree	23,352	18.0	14.2
Advanced diploma or diploma	12,813	9.9	8.4
Vocational	16,313	12.6	13.8
Sub-total with qualifications	52,478	40.5	36.4
No qualifications	63,918	49.2	52.1
Not stated	13,585	10.5	11.5
Total	129,981	100.0	100.0

5 CAR OWNERSHIP LEVELS

Over two thirds of households own one or two vehicles. A comparison with MSD during 2001 highlights a slightly higher percentage of households in Monash owning two or more cars (Figure A10). This may suggest larger households with two or more adults eg, those with young adults (Table A7).

Table A7: Cars Per Household, 2001

	1996			2001		
	Number	%	MSD	Number	%	MSD
No vehicles	4,542	8.4	11.2	4,226	7.4	9.5
1 vehicle	18,616	34.5	36.6	19,010	33.4	34.7
2 vehicles	19,932	36.9	34.6	21,525	37.8	35.3
3 vehicles or more	8,607	16.0	12.1	9,142	16.1	13.7
Not stated	2,254	4.2	5.5	2,977	5.2	6.7
Total	53,951	100.0	100.0	56,880	100.0	100.0

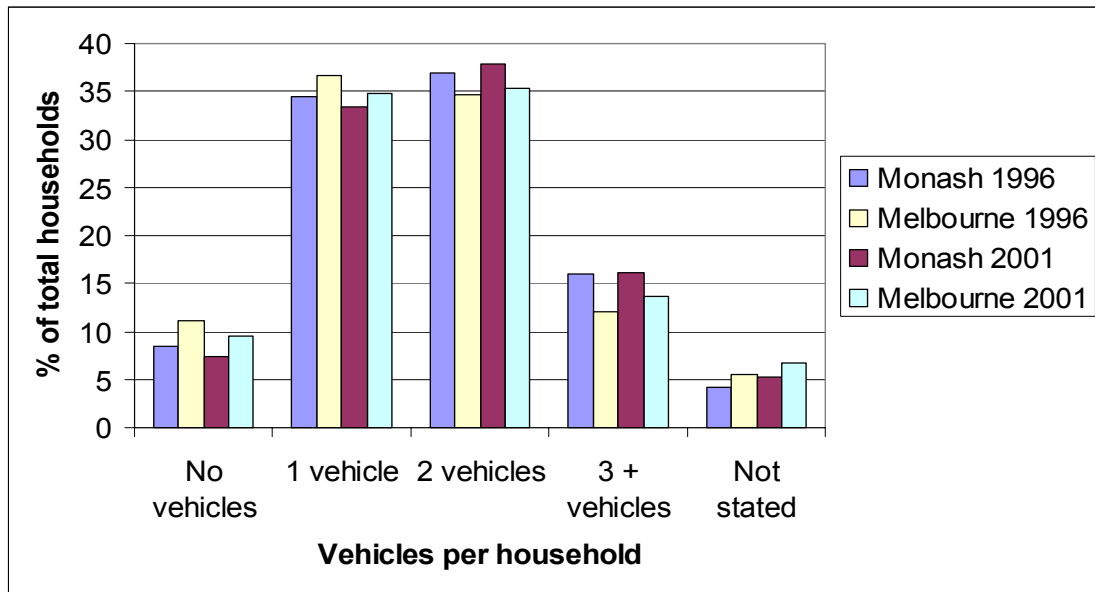


Figure A10: Car ownership in Melbourne and Monash 1996 – 2001

Fig A11 highlights a slight decline between 1996 and 2001 in the number of households without a vehicle – a trend experienced by most Melbourne areas over this period and coinciding with an increase in the number of households with a larger number of vehicles.

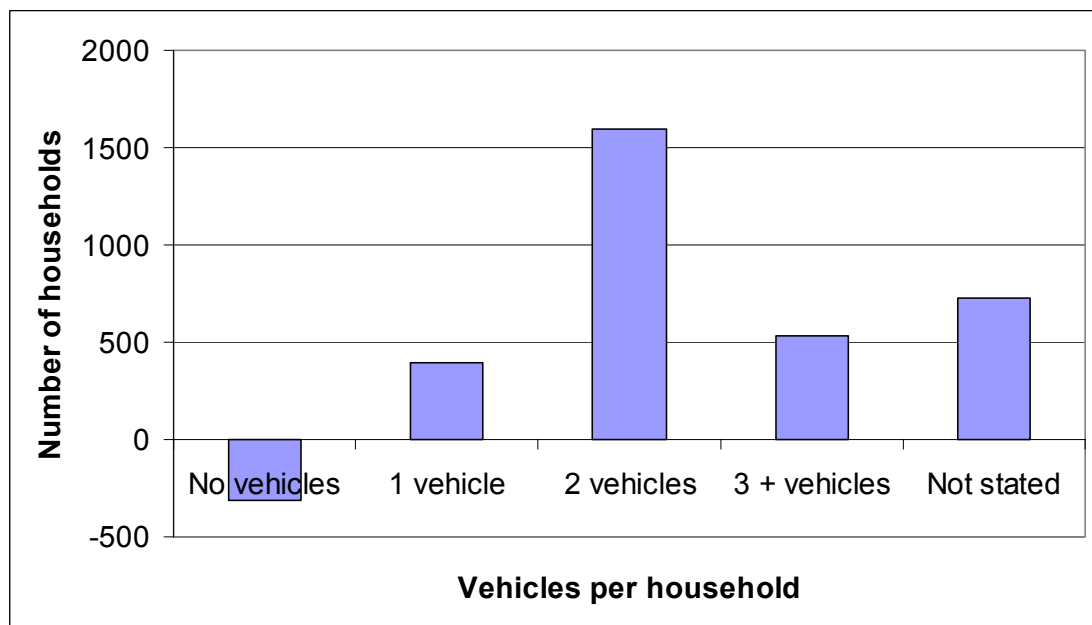


Figure A11: Change in car ownership 1996 – 2001.

For those who cannot, or are no longer able to drive ie, young, disabled, elderly etc, suitable alternate means of transport are critical with ‘suitability’ influenced by both frequency and accessibility of public transport. The increase in the aged proportion of the population within Monash may have implications for these people who have always used cars but can no longer drive.

5.1 Commuting Patterns

The dominant mode of transport in Monash for journeys to work is clearly vehicles as highlighted in Fig A12. Approximately 10% of the working population in Monash use public transport, primarily the train (8.9% in 2001). The journey to work data for Monash is consistent with patterns observed across Melbourne.

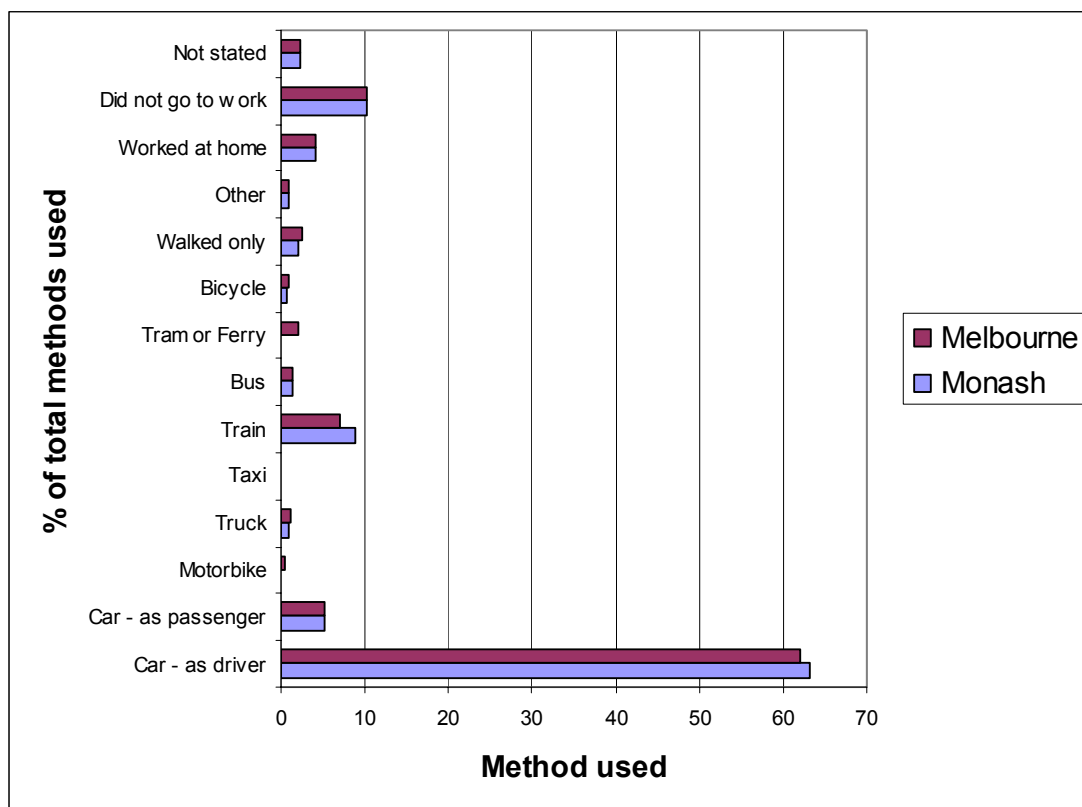


Figure A12: Mode of travel to work 2001.

Changes from 1996 to 2001 included a slight reduction in the share of vehicle passengers (-0.6%), and train (-0.4%) and bus (0.3%) users.

A number of factors have been identified as potentially influencing the type of mode of transport people may use to get to work including:

- The location of people’s homes
- Age and presence of disability
- Availability of effective public transport
- Access to a vehicle
- Distance to work / Place of employment

What is currently unknown is people’s preferences as to their mode of transport to work. It would be important to confirm that it is not the absence of suitable public transport alternatives (or awareness of them) that is influencing the rate of use of cars, or the absence of suitable housing nearer to work centres.

6 BIRTHPLACE AND LANGUAGE

The City of Monash is noted for its cultural diversity, clearly exhibited through information on birthplace and language.

6.1 Birthplaces

In 2001 36.2% of Monash’s population were born overseas, a proportion significantly higher than the MSD. Approximately 82% of these residents (46,012) were born in non-English speaking countries (Table A8 and Figure A13).

Table A8: Birthplace (Regions), 2001

	Total Persons	% of Total Population	MSD %
Non-English Speaking Backgrounds	46,012	29.7	21.3
Mainly English Speaking Backgrounds	10,110	6.5	7.2
Total Overseas Born	56,122	36.2	28.6
Australia	91,693	59.1	65.7
Not stated	7,246	4.7	5.7
Total	155,061	100.0	100.0

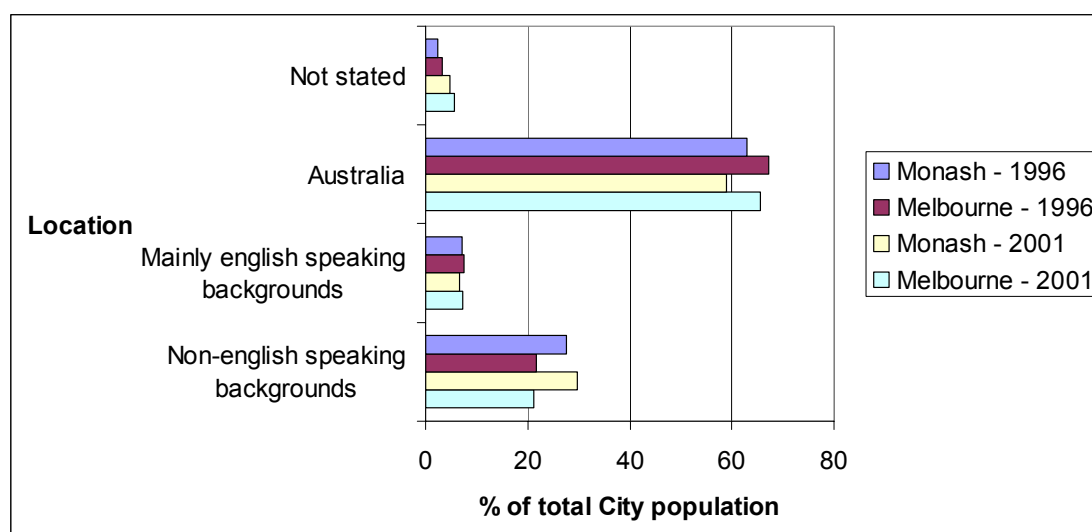


Figure A13: Origins of Monash’s population.

These residents primarily came from Southern Europe (5.7%), North East Asia (4.4%), Southern Central Asia (4.2%), United Kingdom (3.9%), and South East Asia (3.5%) (Table A9).

34% or 52,764 residents live in Non-English speaking homes representing a 3.5% increase from 1996. The main languages spoken are Chinese languages, Greek and Italian. Monash contains a significantly higher proportion of people from Greece, China, Malaysia, Sri Lanka, India, Hong Kong, and Vietnam than metropolitan Melbourne (Figure A14).

Table A9: Top 10 Overseas Birthplaces, 2001

	Total Persons	% of Total Population	MSD %
United Kingdom	6,114	3.9	4.7
Greece	5,298	3.4	1.7
China (exc. Taiwan)	4,628	3.0	1.1
Malaysia	3,737	2.4	0.7
Italy	3,530	2.3	2.4
Sri Lanka	3,383	2.2	0.8
India	3,042	2.0	0.9
Hong Kong	2,113	1.4	0.5
New Zealand	2,109	1.4	1.4
Vietnam	1,706	1.1	1.7
Total	35,660	23.0%	15.9%
Proportion of total Overseas Born (refer Table A8)	63.5%		

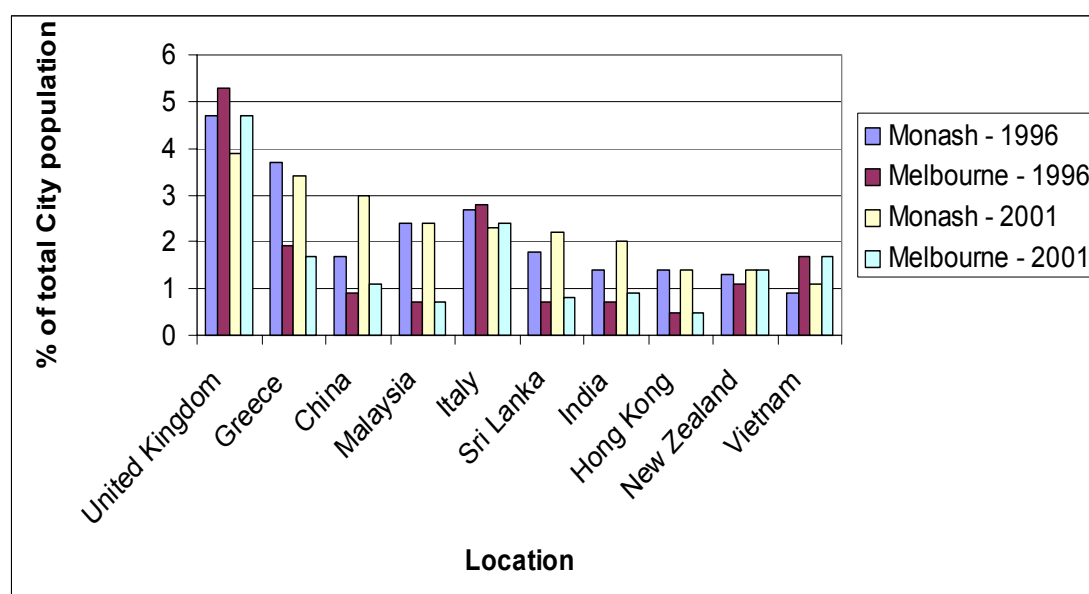


Figure A14: Monash's top 10 countries of birth.

6.2 Languages

Monash's cultural diversity is also reflected in the prominence of non-English languages spoken at home as illustrated in Fig A15 and tables A10 and A11.

The most prominent languages spoken other than English in 2001 were Chinese (13,006 or 8.4% as compared to a Melbourne proportion of 3.3%), Greek (11,771 or 7.6% as compared to a Melbourne proportion of 3.5%) and Italian (5,495 or 3.5% as compared to a Melbourne proportion of 4%).

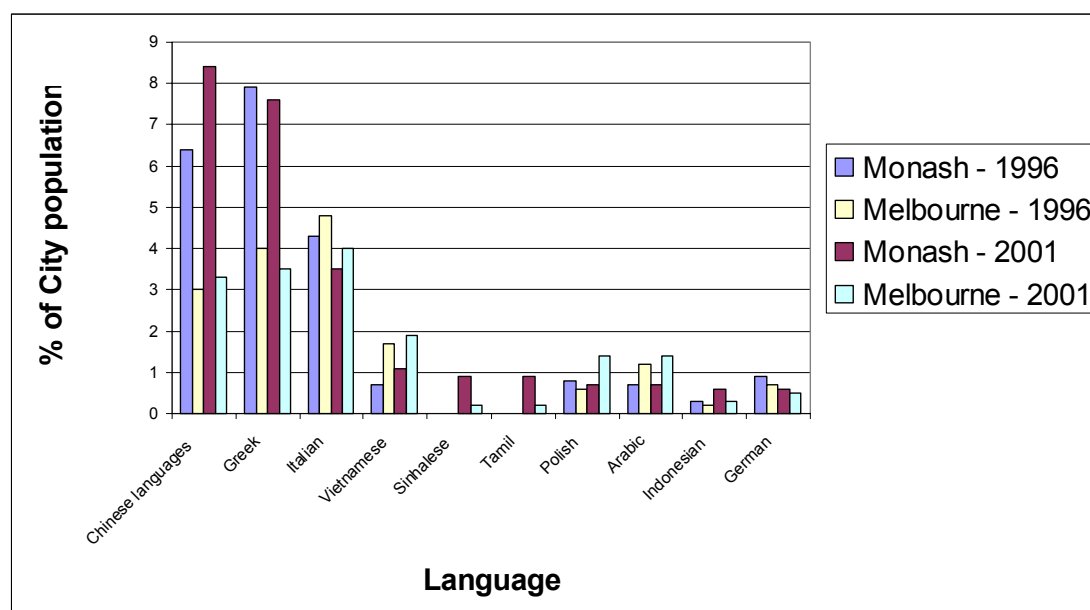


Figure A15: Top 10 languages spoken at home 1996 – 2001.

Table A10: Language Spoken At Home Summary (persons five years and over), 1996 – 2001

	1996			2001		
	Number	%	MSD %	Number	%	MSD %
Speaks English Only	95,792	66.5	100	96,467	62.2	100.0
Non-English Total	45,278	31.5	70.9	52,764	34.0	69.4
Not Stated	2,892	2.0	26.1	5,828	3.8	25.8
Total	143,962	100%	3.0%	155,059	100.0%	4.8%

Table A11: Language Spoken At Home Top Ten (persons five years and over), 1996 – 2001

	1996			2001		
	Number	%	MSD %	Number	%	MSD %
Chinese languages	9,236	6.4	3.0	13,006	8.4	3.3
Greek	11,412	7.9	4.0	11,771	7.6	3.5
Italian	6,158	4.3	4.8	5,495	3.5	4.0
Vietnamese	1,057	0.7	1.7	1,692	1.1	1.9
Sinhalese	n/a	n/a	n/a	1,465	0.9	0.2
Tamil	n/a	n/a	n/a	1,379	0.9	0.2
Polish	1,138	0.8	0.6	1,122	0.7	1.4
Arabic	1,022	0.7	1.2	1,018	0.7	1.4
Indonesian	427	0.3	0.2	987	0.6	0.3
German	1,280	0.9	0.7	966	0.6	0.5
Total	31,730	22%	16.2%	38,901	25%	16.7%