

Implications of Population Change in Metropolitan Melbourne



Technical Report 6

PLANNING MELBOURNE FOR THE 21ST CENTURY



Message from the Ministers

By world standards Melbourne is a great city. The Bracks Government is committed to maintaining Melbourne's reputation as a highly liveable city and an attractive investment destination. The Government has embarked on the preparation of a Metropolitan Strategy to set a clear vision for Melbourne's future liveability, prosperity and, importantly, its long-term sustainability.

The preparation of the Metropolitan Strategy is drawing on inputs from a wide range of sources. It is vital that the strategy has a sound research and information basis. It is also especially vital that community aspirations for the city's future be well understood. The key inputs to the strategy therefore include both a wide ranging public consultation program as well as a series of research or technical papers on issues that may have an impact on Melbourne's future.

The Bracks Government has given an undertaking to make as much of this background information as possible widely available to stimulate discussion about the future of Melbourne.

This report is one of the technical reports commissioned by the Department of Infrastructure, which we hope will stimulate feedback. At this stage content and recommendations are only the views of its authors and not necessarily the views of the Government. The Strategy is still in its early stages of development and we remain open to hearing what the broader community would like it to encompass.

We encourage you to read this and other technical reports and, should you wish, to make your views known about the future of Melbourne by contacting us on:

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This report is structured around 10 headlines, each of which expresses a projected population change for Melbourne. Under each of these headlines a brief overview of the nature and causes of the population change is noted, implications are discussed and comments are provided on factors which remain uncertain or which may be altered by interaction with other factors in the future. The main headlines and the implications arising from population change are summarised below:

1. Population growth will continue

- A higher population is likely to mean a higher overall demand for services.
- More people can mean higher demand for housing, however, housing demand is also generated by household formation, and this will be higher than the rate of population growth.
- Likewise, if the per capita rates of resource usage and waste outputs were to rise (typical of affluent industrialised societies), then the rate of environmental impact might be higher than the rate of population growth.
- However, the relationship between population and environment is complex and non-linear.

2. The rate of population growth will fall over the coming decades

- Declining rates of population growth are likely to bring population issues more fully into the public focus and on to the agenda of public debate.
- Lower rates of population growth may be seen as leading to lower rates of economic growth. However, even though population growth rates are projected to slow, the rate of household growth will remain higher.
- For populations which have low levels of natural increase (low fertility and/or high mortality), the role of migration (from overseas, interstate and within-state) becomes a more important component of population growth than natural increase.
- Some may see a lower rate of population growth as having benefits for the environment - both in terms of resource use and waste outputs. However, a stable population still has the potential to place increasing demands upon the environment in situations of increasing per capita consumption.
- Population policies focused on the encouragement of higher birthrates have not been strongly pursued in Australia, nevertheless, there are related policies, such as family support which may enable child-rearing to be more economically attractive than at present.

3. Fertility rates will continue to fall

- As Victoria's population ages there will be fewer people of child-bearing age, and this will amplify the effect of lower fertility – not only will women be having fewer children, but there will be a smaller proportion of women of child-bearing age within the population.
- Over time, successively fewer people will be entering schools, universities and the workplace.
- With families having, on average, fewer children, future familial support networks may be smaller than in the past.
- At a spatial level, some areas of the city may become relatively 'childless' and possibly child-unfriendly. Some inner city areas display some of these characteristics, although this may be as much due to the lifecycle stage of the suburb in question rather than a long-term childlessness.
- Fewer people in younger age cohorts may reduce demand for child-related services such as infant care centres and schools.

4. The population will continue to age

- A significant demographic and social transition is beginning as the large group of people born in the post-Second World War period begin to reach retirement age. Today's 55 year olds represent the beginning of this 'baby-boomer' wave which will have significant impacts over the coming decades.
- As the population ages, there is likely to be a much greater demand for recreational and community services for young retirees (55 to 70 years of age) who are still active and mobile. Some will have superannuation incomes and housing assets which will provide them with consumer power. Others, however, will be restricted by pension incomes and, if they happen to own their own home, may be asset-rich but income-poor.
- Elderly populations (those over 70 years) are likely to be less mobile than active retirees and more likely to require health services and specialist accommodation.
- The cost of health services, particularly those intensive services required in the last years of life is likely to increase on a per capita basis (due to technological advances) as well as for the community as a whole (as the number of elderly people increases).
- Mobile services and the greater use of home-based technology (for example, the Internet) may extend the range of goods and services which can be accessed from the home.

- There will be a need for services for the elderly to respond to the diversity within Melbourne, as post-war immigrants age and require ethnically specific services and care.
- In cities such as Melbourne, transport and mobility issues may arise in relation to ageing populations that live in car-dependent suburbs.
- Regional Victoria will experience ageing to a greater degree than Melbourne. Whether working-age people will be attracted to these areas to service these populations is not yet clear.
- Many older people may fall into poorer income categories, especially if they are reliant upon public pensions or if much of their assets are non-liquid (that is, in their house). User pays systems for a range of elderly services may, therefore, have important impacts on the welfare of older people.
- On average, women outlive men and while women have traditionally provided informal spouse care the lone-female household is more likely to be reliant upon formal rather than informal care.
- Smaller family sizes and the mobility of more recent generations may contribute to the future social isolation of elderly people.

5. Households will contain fewer people than in the past

- As households become smaller, more housing and recurrent spending associated with housing is needed for the same population.
- If the housing stock of an area remains the same, then population levels of suburbs may decline, but if housing is redeveloped to accommodate smaller household units, then population levels may be retained or even increased.
- Medium-density housing, however, may not always result in large increases in population numbers or population capacity within a particular locality.
- Small household units can still consume as much space as many family households, particularly those who do not have the costs of child-rearing.
- While, on average, individuals now have smaller *family* networks for support, there may be increasing support found through non-family-based networks.
- The increasing numbers of sole-person households may have greater reliance on external services and recreational opportunities.
- The growth in one-person households may lead to greater incidence of isolation or poverty for some individuals.

6. Melbourne will receive the major share of Victoria's population growth

- A higher population in Melbourne can create new opportunities for higher order services.
- Such growth can also bring diseconomies, such as increasing congestion, pollution, and rising costs of living.
- The relative positions of Melbourne and regional Victoria may become polarised with population loss creating servicing difficulties for regional areas.
- The metropolitan primacy of Melbourne in the Victorian context may mean that regional opportunities are inherently more difficult to realise.
- This pattern need not be ongoing, because sometimes the diseconomies of urban growth stimulate out-migration to regional areas.

7. Melbourne's inner city will experience growth

- The revival of inner city areas has meant a revitalisation of the central area which has created a range of business and social opportunities and the reuse or redevelopment of urban building stock.
- Existing infrastructure in older inner areas, may need replacement or repair. Such redevelopment is often more expensive in inner areas than elsewhere.
- External costs such as increasing traffic congestion may compromise the livability of some inner areas.

8. Melbourne's suburbs will become more demographically diverse

- The diversification of suburban areas of Melbourne may enable a greater level of self-containment as suburban regions become able to supply workplace, residential space, recreation space, and shopping space to their local communities.
- There may be difficulty in managing and planning the change to suburbs with diverse people and housing.
- Past policies and approaches to suburban planning may fail to meet the changing needs of Melbourne. Providing intelligent guidance from the metropolitan perspective may, therefore, be an important role for the metropolitan strategy.
- Reliance on car transport will continue in most suburban areas of Melbourne into the foreseeable future.

9. The urban fringe will grow strongly, but at lower rates than in the past

- A decline in the rate of fringe growth may lessen the need for urban services to be extended further outwards at the same rate as in the past.
- There are locations where fringe growth is projected to concentrate, such as in the south-eastern corridor and north-western region.
- If 'upmarket' fringe development proves to be successful, there may be shifts in market focus by some developers to capture more lucrative markets and this may have implications for affordability in some fringe locations.

10. Exurban population growth will continue but at lower rates than in the past

- Demand for rural residential may decline in favour of exurban township living, or semi-suburban developments in exurban locations (such as Hidden Valley).
- Lower levels of resident population growth in exurban areas may not mean that peak population levels decline. Because of the recreational importance of many areas around Melbourne, the attraction for day trippers and tourists may increase in the future.
- A decline in the rate of exurban growth may be seen to ameliorate some problems such as land use conflict, ad hoc development and environmental degradation.
- However, the type of development as well as the population growth may be significant in determining social and environmental impact.

Introduction

This report forms part of the Victorian State Government population projections series – *Victoria in Future* - and is designed to facilitate discussion on population change – its characteristics and its implications. The report deals with the Melbourne metropolitan area and its immediate hinterland.

Projections data presented in this report are taken from the set of population projections produced by the Department of Infrastructure's Research Unit and released in February 2000. Further details regarding these projections and the methodology used are available (see inside back cover).

This report is structured around 10 headlines, each highlighting a projected population change for Melbourne. Under each of these headlines a brief overview of the nature and causes of the population change is noted, and implications discussed. Comments are also provided on 'alternative scenarios', that is, factors which remain uncertain or which may be altered by interaction with other factors in the future. These comments give some indication of the degree of uncertainty surrounding the population change in question and the implications arising from that change.



Implications of population change

Population growth will continue

Nature of change

Metropolitan Melbourne's population is projected to rise from 3,284,007 in 1996 to 3,934,878 in 2021. This represents an increase of 650,871 persons over the period at an average annual growth rate of 0.7 per cent. All but one of the local government areas within metropolitan Melbourne are projected to grow during this period (see Figure 1).

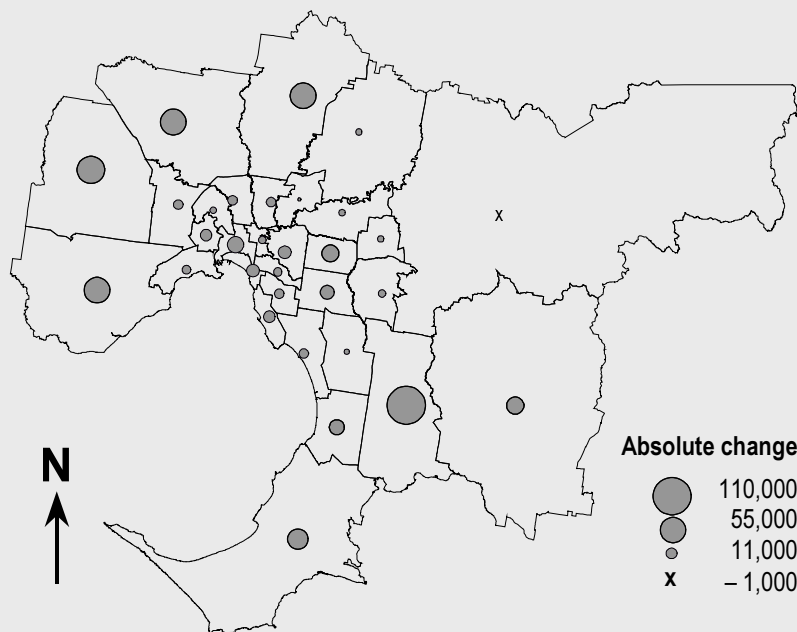


Figure 1. Projected population growth, Melbourne, 1996 to 2021

Source: Department of Infrastructure, 1999

Implications

Population growth will have effects on: infrastructure provision; service provision; housing consumption; transport demand, and environmental systems (inputs and outputs). Nevertheless, the relationship between population growth and these outcomes is not always linear, so the degree of impact may vary, as outlined below.



Dependent upon the locational choices and amount of housing space consumed, the nature of infrastructure demand will vary. Redevelopment in existing areas may have some infrastructure savings, although if there are capacity constraints or higher maintenance requirements because of older infrastructure, then infill and redevelopment in some existing urban areas can actually be more expensive. Infrastructure demand can increase even if population remains stable. Higher water and energy usage, for example, can place greater demand on services even without population growth.

The nature and scale of service demand can depend upon age cohorts within the population. Areas with higher numbers of children are likely to have higher demands for infant and child services and for schools. Areas with elderly populations will require different types of services. The income levels of individuals and households may also have an impact on the demand for certain services. While a higher population is likely to mean a greater overall demand for services, it is the structure and character of that population which is more likely to determine the actual service demand profile.

More people can mean higher demand for housing, however housing demand is also generated by household formation, and this can be higher than the rate of population growth. In Melbourne at present, the rate of household growth is higher than the rate of population growth and this trend is expected to continue into the immediate future.

As well as being affected by population growth, transport usage is also determined by factors such as the nature of employment and employment location, affluence, relative investment in public and private transport, and age structure. The modern service economy and the mobility requirements of individuals has made vehicle usage rise at a higher rate than population increase in the past few decades. This trend is likely to continue within the short to medium term at least.

Environmental systems are affected by urban population growth in terms of resource inputs to the city (water, energy, land) as well as outputs from the city (air emissions, hard waste, sewage). But again, the relationships between population growth and environmental impact are unlikely to be linear. If the per capita rate of resource usage and waste outputs are rising (typical of affluent industrialised societies), then the rate of environmental impact can be higher than the rate of population growth. This is usually the case with urban sprawl where larger land lots house fewer people than in the past. However, the relationship between population and environment is complicated by the ability of populations to undertake ameliorative environmental action (emission laws, water pricing, etc.). Such ameliorative actions have been shown to occur with concentrations of populations (Cardew & Fanning 1996), thus making the population-environment relationship much more complex.

Alternative scenarios

The comments above indicate that a number of scenarios may arise as a result of population growth. While the actual fact of population growth is a likely one over the coming decades, the impacts of that growth are much more difficult to predict accurately.

The rate of population growth will fall over the coming decades

Nature of change

While Melbourne’s population is expected to grow over the next two decades, the rate of growth is projected to decline. The projected average annual growth rate between 1996 and 2021 is 0.7 per cent, however, this will fall from an annual rate of 1 per cent for the years between 1996 and 2001 to an annual rate of 0.5 per cent for the years between 2011 and 2021, assuming constant flows of overseas, interstate and within-state migration.

Figure 2 shows the components of Victoria’s population growth with the declining rate of growth in evidence.

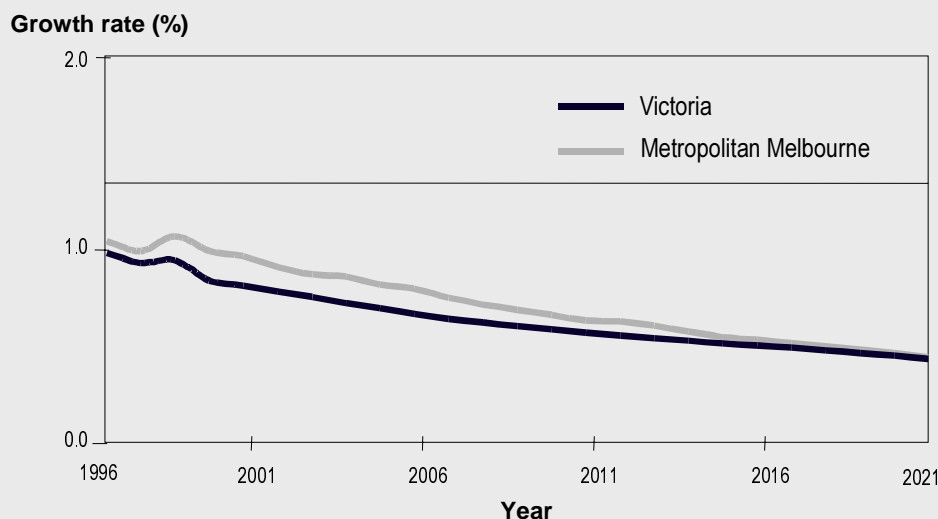


Figure 2. Population growth rates, Melbourne and Victoria, 1996 to 2021

Source: Department of Infrastructure, 1999

Implications

A falling rate of population growth may have implications for: economic growth; the significance of immigration; environmental systems, and the role of public policy. These implications are reviewed below.

Lower rates of population growth may be seen as leading to lower rates of economic growth. However the relationship is not necessarily so direct. For example, even though population growth rates are projected to slow, the rate of growth in household numbers is projected to remain higher. Therefore, fewer people will be creating a higher level of demand for housing than they would have in the past.

At a broader level, population growth rates may affect the position of Melbourne within its region and within the nation. Relative growth rates of the different States may strengthen the gap between States of higher population gain (Queensland, Western Australia) and those with lower rates of growth (Victoria, New South Wales). At the national level, Australia's pattern of settlement – a large country with concentrated settlement along the coast – may be further reinforced, along with capital city primacy and the difficulties of regional service provision and regional development which such a settlement pattern engenders.

For populations which have low levels of natural increase (low fertility and/or high mortality), the role of migration (from overseas, interstate and within-state) becomes a more important component of population growth than natural increase. Melbourne will continue to experience below-replacement fertility in the future and the impact on levels of natural increase will be strengthened by higher absolute mortality levels as the baby boomer cohort ages by mid-next century. Migration, rather than natural increase will, therefore, become more significant in Victoria's population increase. It is important to recognise, however, that immigration may not be able to be fully controlled, or predicted, especially if other States and other regions are trying to attract migrants themselves. In other words, migration and immigration are not an on/off tap, despite popular perception (for example, Australia does not always achieve its overseas immigration targets, especially during periods of economic downturn).

Some may see a lower rate of population growth as having benefits for the environment - both in terms of resource use and waste outputs. However, as explained earlier, the relationship between population numbers and environmental impact is not always linear. A stable population still has the potential to place increasing demands upon the environment in situations of increasing per capita consumption.

Declining rates of population growth are likely to bring population issues more fully into the public focus and onto the agenda of public debate. Three types of public policies may be regarded as having the potential to affect population levels. These are: immigration policies; fertility-related policies, and specific population policy(s).

The first of these, immigration policy, has a relatively long history within Australia, and has been adjusted over time in response to economic and social pressures. It is controlled at the federal level, although consultation with the States is part of the annual review of immigration targets. Because of its national scope and because of ongoing patterns of migrant settlement within Australia (Sydney and Melbourne being the main point of migrant settlement) there may be little ability for local or State governments to radically change overall numbers and settlement patterns of immigrants. These ‘constraints’ when dealing with immigration policy need to be recognised in considering population scenarios for Melbourne or Victoria.

The second type of policy is one directed at the number of births – generally these are referred to as population policies, but are more specifically focused on the encouragement of higher birthrates. Such policies have not been strongly pursued in Australia.

Nevertheless, there are related policies, such as family support which may enable child-rearing to be more economically attractive than at present. Given the many factors which are influencing lower birthrates in developed countries, it would seem unlikely that such policies could achieve major changes in birthrates in the foreseeable future.

A specific population policy would be likely to include the issues of immigration and birthrates outlined above. In the Australian context, a national population policy has also been advanced by environmental interests seeking to develop a policy for overall population levels within Australia. Because this lobby is interested in lower rates of population growth, there is likely to be conflict with those concerned about the ‘lack’ of population growth which low natural increase might entail. Others seeking lower rates of growth in the population debate focus more specifically on Australia’s immigration levels. Given the diverse aims among those seeking a population policy, developing one has proven to be practically and politically difficult. Population inquiries during the early 1990s (The National Population Council 1991; Australia Parliament 1994) explored the issues comprehensively, but did not result in a population policy for Australia.

Alternative scenarios

The rate of population growth can be affected by factors such as migration levels (both international and internal). Recent changes to Victoria’s net interstate migration levels, for example, have been somewhat unexpected, and the State has recorded its first net gain for several decades. Immigration from overseas can also vary over time depending upon federal government policies and economic conditions. Because these factors are difficult to predict, the level of accuracy of some population predictions should be taken into account.



Another factor to keep in mind when assessing implications of future population change is the time frame to be used. A short-term view may indicate little change in population growth rates and, therefore, economic impacts may be assumed to be minimal. A long-term view would consider the implications of the baby-boomer cohort reaching old age (around 2040 and beyond). Such a long-term view may bring into focus some critical implications such as the provision of acute health care services, which will be less important to a shorter term view.

Fertility rates will continue to fall

Nature of change

Changes have been occurring in the way we live, and the choices we make about having children. For example, women participate more fully in the labour force now than they did in the past. There is wide access to birth control and there is a greater social acceptance of diverse family and household arrangements. Many couples now delay child-bearing, have fewer children than in the past, and more are choosing not to have children at all.

The fertility rate (the number of children a woman would be expected to have on average during her lifetime on current birthrates) has declined in Victoria from 2.95 in 1971 to 1.94 in 1981 and 1.69 in 1997 (see Figure 3). The fertility rate in Victoria has been below replacement level since the mid 1970s. The projected decline in fertility rates will result in a significant drop in the numbers of children and adolescents. By 2021, the number of people aged less than 18 years in Victoria is projected to be 124,754 fewer than in 1996.

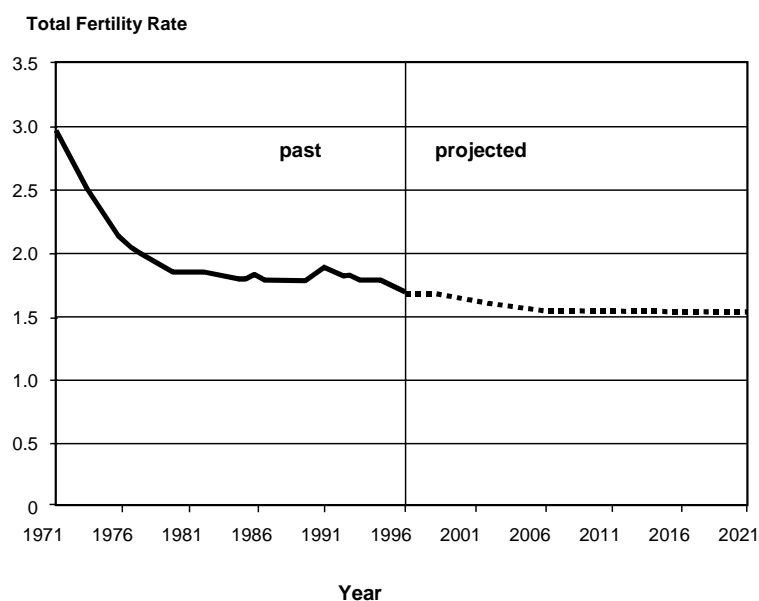


Figure 3. Fertility rate, Victoria, 1971 to 2021

Source: Department of Infrastructure, 1999

Implications

Fewer people in younger age cohorts may reduce demand for child-related services such as infant care centres and schools.

Perhaps harder to predict are the social and cultural impacts which may arise as children become a relatively small proportion of our population. If families have, on average, fewer children, future familial support networks may be smaller than in the past.

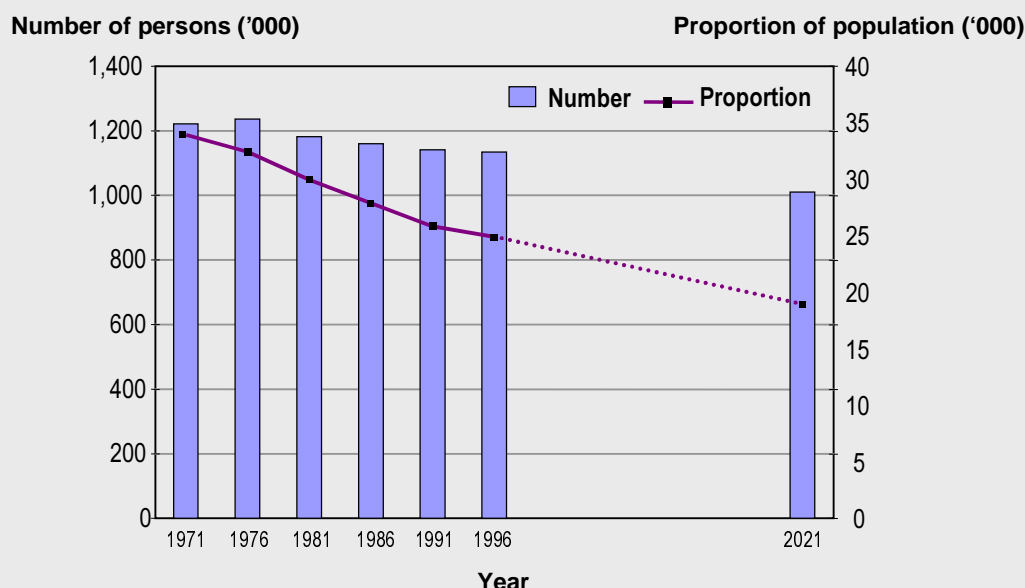


Figure 4. Number and proportion of 0-17 year olds, Victoria, 1971 to 2021

Sources: ABS Estimated Resident Population data
Department of Infrastructure, 1999

At a spatial level, changing demand for children’s services, along with social changes of a changing population, may lead to areas of the city which are relatively ‘childless’ and possibly child-unfriendly. Some inner city areas display some of these characteristics, although this may be as much due to the stage in the lifecycle of the suburb in question rather than a long term childlessness. Nevertheless, the societal impacts of having fewer children are yet to be fully understood.

As Victoria’s population ages (as discussed below), there will be fewer people of child bearing age, and this will amplify the effect of lower fertility – not only will women be having fewer children, but there will be a smaller proportion of women of child-bearing age within the population. This will lead to a decline in the number of babies born in Victoria. Over time, successively fewer people will be entering schools, universities and the workplace.



Alternative scenarios

Even if fertility rates stabilise rather than continue to fall, the issue of declining natural increase will still be significant in the future. This is because of the cumulative impact of below-replacement levels (apparent since the 1970s in Australia and partly obscured by the size of the baby boomer generation) as well as the increase in death rates which will become apparent in the middle of the next century. The implications outlined above are, therefore, significant, even if details of the projections prove to be inaccurate.

While it may be true that fertility rates will remain low, we have an imperfect understanding of the complex social interrelationships which underpin changes in the fertility rate. Further research into the relationships between marriage, women in the workforce, economic change and fertility rates is, therefore, warranted.

The population will continue to age

Nature of change

Victoria will continue to experience an increase in the average age of its population. In 1996, 16.5 per cent of Victoria's population was over the age of 60. By 2021, this figure is expected to rise to 25 per cent. This pattern of changing age structure is represented in Figure 5.

Older people will form a larger group within Victoria in **absolute** terms because of the large number of people born in the decades following the Second World War. These are the so called 'baby-boomers', born between 1945 and the late 1960s, reinforced by the immigration of young families to Melbourne in the 1950s and 1960s. They will be moving from middle age to older age groups during the period covered by these population projections. Furthermore, there will be fewer children born in Victoria in the future due to lower fertility rates (see previous section). Older age groups will therefore form a larger **proportion** of Victoria's population than in the past.

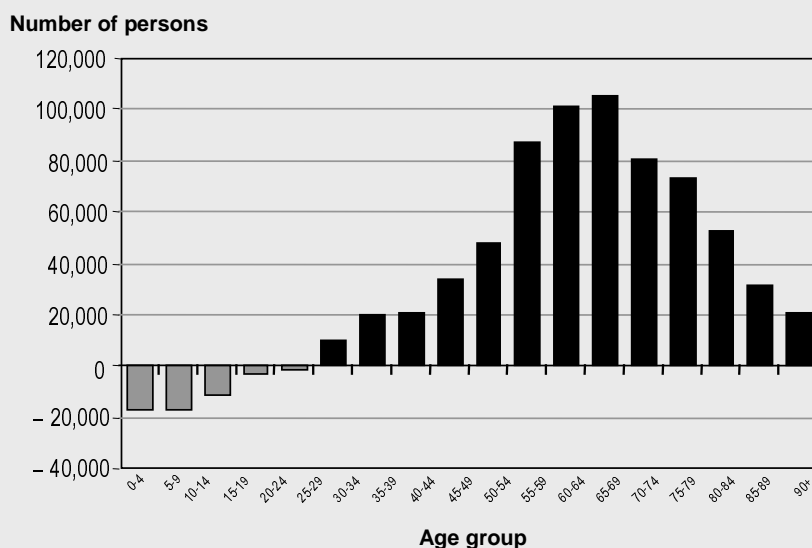


Figure 5. Change in age structure for Melbourne, 1996 to 2021

Source: Department of Infrastructure, 1999

In Victoria the life expectancy (that is, the number of years a person can expect to live at birth) has increased greatly and this, too, contributes to the older average age of the population. In 1971, the life expectancy for men was 69 years and, for females, 75 years. By 1997 these figures had risen to 76 years for males and 81 years for females. Much of this change was brought about by medical advances in the treatment of heart disease and cancer, thus extending life expectancy for those in middle age groups susceptible to these diseases.

The greatest change in Victoria's population over the next 20 years will be the number of people aged in their 50s and 60s. An extra 536,909 persons in these ages is projected by 2021. There will also be significant increases in the numbers of elderly, although the major impact of ageing will begin when the large numbers of people born in the 1950s and 1960s reach old age, that is, after 2030.

Some locations will be more affected by population ageing than others. Regional Victoria will follow statewide trends in terms of population ageing. However, its average population age is projected to increase more strongly than will the average age of Melbourne's population. In 1996, the proportion of people aged 60 years or more was 16 per cent in Melbourne and 18 per cent in regional Victoria. By 2021, these figures will be 23 per cent for Melbourne and 31 per cent for regional Victoria.

The different migration patterns for different age groups (that is, age-specific migration rates) account for the more rapid ageing of the population in regional Victoria compared to Melbourne. The out-migration of young adults from regional Victoria is one contributor to the more rapid ageing of regional populations compared to Melbourne.

Despite the loss of younger age groups, many parts of regional Victoria attract retirees. This is particularly the case for coastal areas, Melbourne's exurban area, along the Goulburn and Murray Rivers, and some alpine areas. The projected strong growth in retirement age groups over the next 25 years is likely to benefit regional Victoria, however, it will also contribute to an increase in the average age.

Implications

Age structure has a direct impact on the size of the population, since age is a significant indicator of whether people will move, give birth to children, or die. It can indicate the likely changes over time in people of workforce or retirement age and this can provide insights into the types of infrastructure, goods and services which might be needed by the population. The discussion below highlights some implications of ageing for services and infrastructure as well as for economic, social, political and spatial systems.

A significant demographic and social transition is beginning as the large group of people born in the post-Second World War period begin to reach retirement age. Today's 55 year olds represent the beginning of this 'baby-boomer' wave which will have a significant impact over the coming decades.

People's needs for different goods and services will change with age. As the population ages, there is likely to be a greater demand for recreational and community services for young retirees who are still active and mobile, especially in coastal parts of Victoria which are popular retirement destinations.

Some retirees will have superannuation incomes and housing assets which will provide them with consumer power. Others, however, will be restricted by pension incomes and, if they happen to own their own home, may be asset-rich but income-poor.

Elderly populations are likely to be less mobile than active retirees and more likely to require health services and specialist accommodation. The cost of health services, particularly those intensive services required in the last years of life will increase overall as the number of elderly people increases. There is also a trend for the per capita cost of health care to increase as technology advances, and this, combined with increasing numbers of aged people, is a likely cause of continuing concern over the coming decades.

In the future there is also likely to be greater diversity in the way that services are delivered. Mobile services which allow older people to remain in their own home are being developed, and the greater use of home-based technology (for example, the Internet) may extend the range of goods and services which can be accessed from the home.

For the first time we will have large groups of ethnic elderly, reflecting the large numbers who immigrated to Australia (and Victoria) after the Second World War. These groups are likely to have particular needs, particularly in relation to language and health care access in the future. There will be a need for services for the elderly to respond to diversity within Melbourne, as these immigrants age and require ethnically specific services and care.

In large cities such as Melbourne, issues may also arise in relation to the design of the city and its infrastructure and services. For example, what will happen to ageing populations who live in car-dependent suburbs? Will the redevelopment of suburbs to create greater housing diversity meet the needs of an ageing population or will there still be constraints in terms of transport and other urban systems (Troy, 1999)?

Ongoing debate on population ageing has highlighted issues surrounding the changing proportion of workers to non-workers within the community. One measure of this is the 'dependency ratio' which compares the ratio of workers to dependants (children and older age groups). Despite fears that the dependency ratio would change markedly with population ageing, there has also been work suggesting that the decline in numbers of children will have at least some balancing effect against the increasing numbers of aged. Because the dependency ratio includes both the young and the old as 'dependants' the overall change in the ratio may not be as great as thought earlier (Dowrick, 1999, p. 42).

Nevertheless, there are important implications to consider if we take the young age groups out of the picture and look simply at the changing ratio between workers and older age groups. What is significant here is the growth of service industries to cater for retirement and elderly age groups compared to the numbers of workers available to provide those (labour intensive) services. There is a spatial element to this issue as well, because of the fact that some areas (usually in regional Victoria) will experience ageing to a greater degree than metropolitan populations. Whether working-age people will be attracted to these areas to service these populations is not yet known – some coastal centres appear to be attracting working age people, but others such as in the western third of the State do not appear to be doing so.

As the population ages, there will be changes in consumption patterns within the community, both in terms of goods and services. Positive economic impacts are likely to arise as new industries develop and personal service industries find expanded opportunities. Recreation, tourism, and health care are examples of service industries which are likely to benefit from increasing numbers of people of retirement age.

While income levels for many independent retirees may be good, many older people may fall into poorer income categories, especially if they are reliant upon public pensions or if much of their asset-base is non-liquid (that is, their house). Again, the issue of methods of service provision may have impacts if such assets are expected to provide some of the cost of elderly care. User-pays systems for a range of services for the elderly may, therefore, have important impacts on the welfare of older people.

One outcome from population ageing may be changes in community attitudes to the role of older people. The role of 'grey power' in the community has already begun to be discussed and the skills and experience of older people are beginning to be appreciated. It was the Year of Older Persons in 1999, and such features of our community were further highlighted.

There are also gender elements to the ageing population. On average, women outlive men and while women have traditionally provided informal spouse care the lone-female household is more likely to be reliant upon formal rather than informal care. This issue may be further exacerbated by the changing role of women in the younger generation and are more likely to be in the workforce than at home providing family care. Smaller family sizes and the mobility of more recent generations might also contribute to the future social isolation of elderly people.

Alternative scenarios

A difficulty in discussing implications arising from an ageing population is the diversity which exists within the population over a particular age. The socio-economic differences within such populations can determine the issues surrounding health care and consumption patterns, as can the health of any given individual. In temporal terms, the process of ageing is not a predictable one for planners to deal with. Generalisations for a whole population may, therefore, hide more specific policy issues for particular people and particular locations.

As mentioned previously, the time frame chosen for the analysis of population change can have important effects on the types of implications which arise. The difference between assessing the impacts of ageing for 2010, 2030 or 2050 may be markedly different in terms of servicing and social implications.

Households will contain fewer people than in the past

Nature of change

The average size of households in Victoria will continue to decline in the future. In 1996 the average household size was 2.68. By 2021, the average household size is projected to be 2.34. The impact of this on Melbourne can be seen by comparing the projected population growth with the projected growth in household numbers. The average annual population growth rate between 1999 and 2021 is projected to be 0.7 per cent. By contrast the annual growth rate in household numbers is projected to be 1.1 per cent. In absolute terms, the projected increase of 547,484 persons between 1999 and 2021 is accompanied by a projected increase of 361,725 households for the Melbourne metropolitan area. The projected growth in household numbers and decline in household size is shown in Figure 6.

Young adults are often choosing to live in smaller households, alone or with a partner, for much longer. Fewer young people follow the traditional pattern of family formation and child rearing, or do so at a later stage in their lives. Furthermore, households are more likely to dissolve and reform than in the past (due, for example, to lower marriage rates and higher divorce rates) and this is likely to continue in the foreseeable future.

As the population of Victoria ages and lives longer, there is also likely to be an increase in older households with one or two people. These may be ‘empty-nester’ couples whose children have left home, or they may be widowed elderly people (mostly women) who form a single-person household until old age or ill-health causes them to move to a supported care environment.

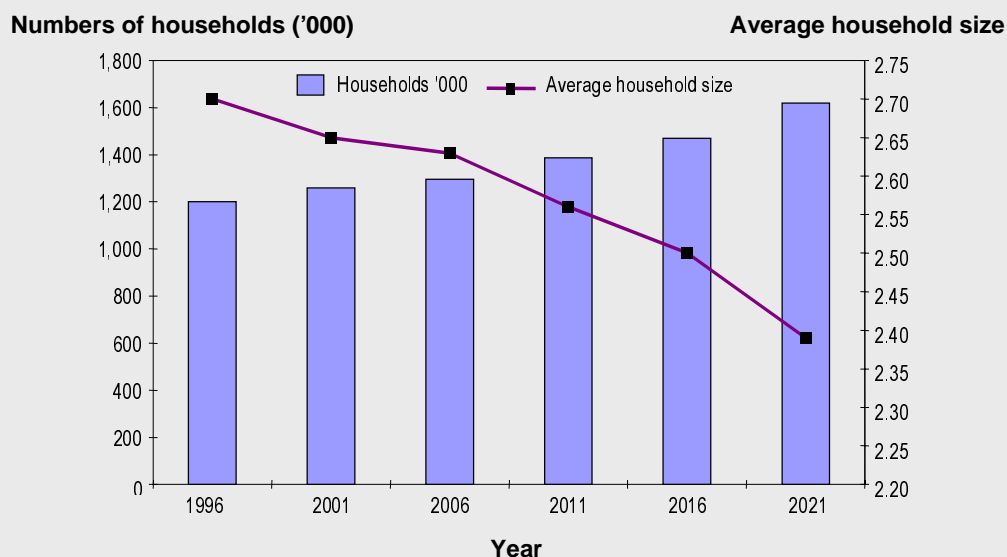


Figure 6. Household numbers and household size, Victoria, 1996 to 2021

Source: Department of Infrastructure, 1999

Implications

Household size is an indicator of the way we consume dwelling space. Declining household size will have an important impact on the demographic characteristics of Victoria in the coming decades. As households become smaller, more housing and recurrent spending associated with housing is needed for the same population. If the housing stock of an area remains the same, then population levels of suburbs may decline. But if housing is redeveloped to accommodate smaller household units, then population levels may be retained or even increased.



Medium-density housing, however, may not always result in large increases in population numbers or population capacity within a particular locality. In situations where a traditional family home (which may have housed 4-6 people) is redeveloped as four units occupied by 1-2 person households then population levels may simply be maintained. It is also often assumed that a smaller household, be that an empty-nester household, young couple or single occupant household, will consume a smaller amount of urban residential space. Yet this cannot be assumed when estimating future populations in an area, because small households may choose to purchase greater amounts of residential space, if they can afford to do so. A good example is the wealthy empty-nester couple or single person wishing to reduce the maintenance demands of a large house on a large block, by moving to a large house (3-4 bedrooms) on a small block – thus reducing the major maintenance item of a garden but retaining the equivalent of a larger family home for a small family unit.

The use of residential space for a range of ‘modern’ needs such as garages, home offices and recreational rooms also shows how a small household unit can still consume as much space as many family households, particularly for those who do not have the costs of child-rearing. Often a non-family household is in a position to purchase or rent more housing space than a family. Again, this can affect the level of projected population.

Smaller household sizes are likely to have a range of social impacts, some of which are already apparent. While, on average, individuals now have smaller family networks for support, there may be increasing support found through non-family based networks. The degree to which such networks are geographically based is not yet fully known although the higher rates of mobility and changing work structures would suggest growth in non-geographic networks.

The increasing numbers of sole person households may have a greater reliance on external services and recreational opportunities. This may include a range of urban services such as restaurants, entertainment, home maintenance services, personal services, and so forth. On a more negative note, the growth in one-person households may lead to greater incidence of isolation or poverty for some individuals.

Alternative scenarios

As indicated in the discussion on housing demand above, changes in housing densities may not be accompanied by an equivalent increase in population densities. This makes the accurate prediction of population levels, especially at the local level, more difficult. The impact of smaller household units may be either greater urban consolidation or greater consumption of space by individuals.

Melbourne will receive the major share of Victoria's population growth

Nature of change

Melbourne's population is projected to grow at a faster rate than regional Victoria over the next 20 years. The average annual growth rate over the period 1999 to 2021 is expected to be 0.7 per cent for Melbourne compared to 0.4 per cent for regional Victoria (see Figure 7).

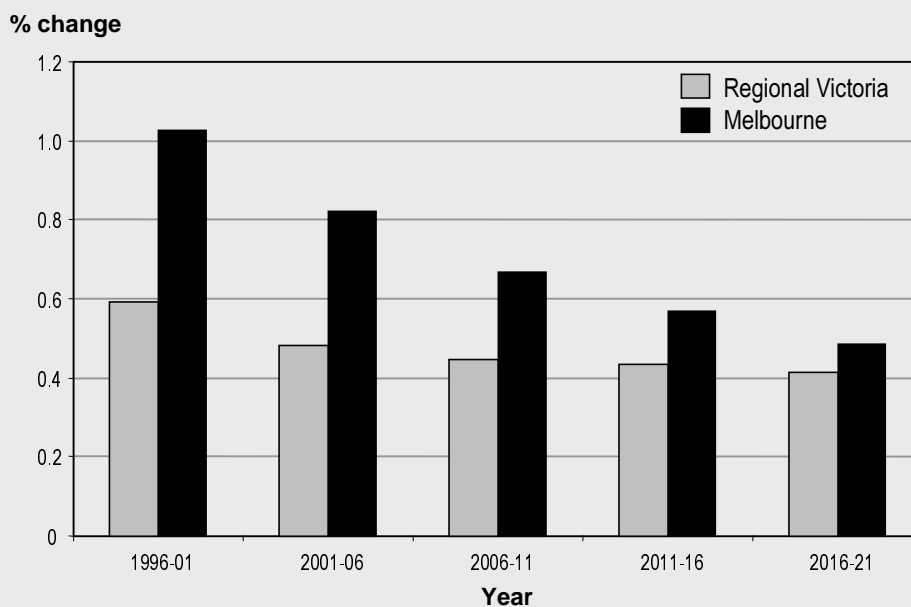


Figure 7. Population growth, Melbourne and regional Victoria, 1996 to 2021

Source: Department of Infrastructure, 1999

The metropolitan area provides the largest employment market of any centre in Victoria and this is clearly a major attractor, especially for young people. The range of job opportunities from unskilled to highly skilled, and across major growth sectors of the economy, make Melbourne more competitive in attracting population than other centres in the State.

Higher education institutions are also an important attractor of population. Melbourne contains the highest number of and the largest institutions of this type in Victoria and it will, therefore, continue to attract young adults from within Victoria and increasingly from overseas.



Parts of regional Victoria will continue to experience population loss, continuing trends which have been apparent over recent decades. The restructuring of many industries in regional Victoria during the 1980s and 1990s has made it difficult for many regional areas to retain population. In agriculture, there have been losses of employment for some time. The consolidation of farm properties, and continued decline in demand for farm labour, led to population loss in many rural areas of Victoria. Nevertheless, productivity levels have generally increased.

Implications

As Melbourne grows, there are likely to be increasing economies of scale as investment and infrastructure is concentrated. A higher population can create new opportunities for higher order services. Such growth can also bring diseconomies, such as increasing congestion, pollution and rising costs of living. If growth is rapid, pressure may be placed on services and the provision of housing (including rental properties).

In areas of population decline, such as in parts of western Victoria, per capita costs of infrastructure and services may rise with declining population levels and densities. Unfortunately, the polarisation of metropolitan and regional fortunes can sometimes become cumulative – the metropolitan area attracts investment, which enables growth, which enhances profile, which attracts more investment, while the regional area suffering population or economic loss may find itself in a cycle of disinvestment, population decline, and more disinvestment. This pattern need not be ongoing, because sometimes the diseconomies of urban growth stimulate out-migration to regional areas. Nevertheless, the metropolitan primacy of Melbourne in the Victorian context may mean that regional opportunities are more difficult to realise. A good example of this is the greater opportunities for professional career development in the capital cities of Australia compared to regional centres or rural areas.

Alternative scenarios

As mentioned above, the relative attraction of metropolitan and regional locations can change over time depending on the strength of push and pull factors. So the relative growth rates of Melbourne and regional Victoria may either converge or diverge over time.

It is also worth noting that economic prosperity and population growth are not always closely linked. Regional areas which rely on visitor populations (tourists or business travellers) for much of their economic activity do not necessarily depend on increasing resident population for generation of community wealth. A more mobile Victorian population, with greater numbers of retired people, may benefit regional Victoria in this respect.

Finally, one unknown factor in relation to the fortunes of regional Victoria is the community or government response to any imbalance in investment or economic welfare. It may be that regional Victoria responds in ways which militate against the more pessimistic outlook for its future. The recent development of community banks, for example, is one sign of an innovative response to demographic and economic change, as is the development of telemedicine and the Internet for regional servicing.

Melbourne's inner city will experience growth

Nature of change

Some of the most important spatial impacts of recent economic change have affected central city areas in developed nations. Instead of continuing the century-long trend of population loss, many city centres in the 1990s showed a turnaround in terms of both economic performance and population growth. Many of the new residents are young, affluent and heavy consumers of urban services. This has revitalised city centres like Melbourne's and enhanced their economic potential and their desirability as places to live.

The population of the City of Melbourne is projected to grow from 39,716 at the time of the 1996 census, to 63,447 in 2021, an absolute increase of 23,731 persons (see Figure 8). The average annual growth rate between 1999 and 2021 is projected to be 1.7 per cent. This compares to metropolitan Melbourne's overall growth rate during the same period of 0.7 per cent.

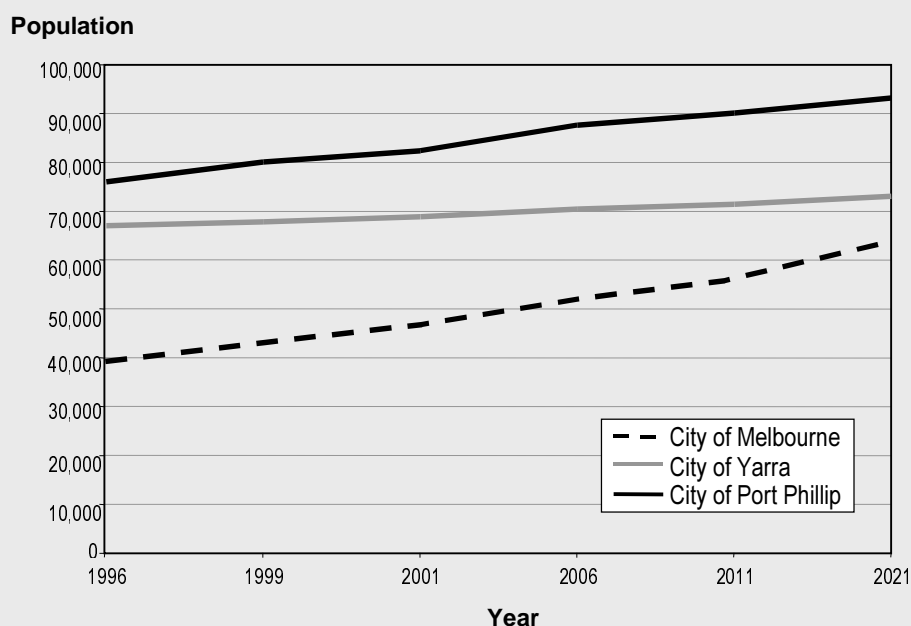


Figure 8. Projected population growth in inner Melbourne municipalities, 1996 to 2021

Source: Research Unit projections

The attraction of the city centre and inner suburbs as places to live will continue to increase as central city jobs demand a highly skilled and educated workforce. Many of these workers will have high incomes, but will be constrained by the demands of long working hours. Living in the inner city can be afforded by this group of well-paid people and provides advantages of living close to work and a range of entertainment and cultural facilities.

The redevelopment of sites in Melbourne's inner city region has been significant in the population growth of the inner city and this is likely to continue in the future. Existing areas of major inner redevelopment include: Southbank, Beacon Cove, St Kilda Road, and the Central Business District (CBD). Proposed development in the Docklands area is expected to yield more than 6,000 new dwellings over the next 15-20 years and there appears to be an ongoing demand for such inner city housing.

Implications

From a social and economic point of view, the revival of inner city areas has meant a revitalisation of the central area which has created a range of business and social opportunities. It has also meant the reuse or redevelopment of buildings and the revitalisation of larger regions such as Docklands and Southbank. These changes have created an attractive environment for residents, tourists and businesses.

Nevertheless, economic outcomes are not always positive, and the increasing cost of housing in inner areas is one example of an outcome which has negatively affected certain sectors of the community (for example, through the loss of affordable hostel and boarding house accommodation). An external cost, such as increasing traffic congestion, is, nevertheless, an outcome which is experienced by all and which may compromise the liveability of some inner areas. There may also be increasing demands on infrastructure and services with an increasing population. For older inner areas, existing infrastructure may be old and in need of replacement or repair. Such redevelopment is often more expensive in inner areas than elsewhere.

Alternative scenarios

The redevelopment of the inner region of Melbourne has created an environment of rapid urban change. The land use economics and investment patterns associated with this change may not be clear to the various interests involved, and this may raise issues of volatility and sustainability in some of the trends being observed (possibly increasing 'boom and bust' cycles in land markets). The increasing supply of residential and commercial buildings is driven by investment decisions as well as direct demand, so the future may involve variable growth at different stages.

While inner city development brings a range of positive benefits to residents, there may be associated decline in the livability of such areas if they become too popular and too overcrowded. Furthermore, the city centre services a range of functions apart from residential and the mix of these uses – commercial, tourist, entertainment – may bring conflicts as well as vibrancy. Whether such a complex mix of uses represents an ongoing attractor or a potential ‘push factor’ in the long term could be the subject of some speculation.

Melbourne’s suburbs will become more diverse

Nature of change

All but one of the local government areas in metropolitan Melbourne are expected to experience population growth between 1999 and 2021. This is in contrast to earlier periods when inner suburbs and suburbs with ageing populations tended to experience population decline.

The function of many suburban areas of Melbourne is diversifying. Suburbs built in the post-war period are no longer predominantly for traditional family groups and the population characteristics of many areas are, therefore, becoming more diverse. Suburban locations have also become important for emerging industry sectors such as research and development, high-tech manufacturing, computer software and biotechnology. Other economic functions such as offices, shopping centres and entertainment venues are also important sources of employment and activity for suburban areas.

The residential landscape is also changing. In suburbs such as Maribyrnong, former industry sites are being converted to residential use. As a result, rates of growth for the City of Maribyrnong are expected to be very high with a projected average annual growth rate between 1999 and 2021 of 0.8 per cent. In absolute terms, this represents an increase of 11,947 persons over the period.

In the eastern suburbs, residential development is in high demand, however, there is an absence of large redevelopment sites such as those found in Maribyrnong. With demand remaining high, and with constraints to outward eastward expansion created by the Dandenong Ranges, smaller scale redevelopment and increasing densities are foreseen for many eastern suburban areas. The City of Whitehorse, for example, is projected to grow from its 1996 population level of 143,013 to 169,350 in 2021 – an increase of 26,337 persons.



Implications

The diversification of suburban areas of Melbourne may enable revitalisation of commercial and residential fortunes (the revitalisation of some strip shopping centres in suburban areas might be an outcome, for example). These changes may also enable a greater level of self-containment as suburban regions become able to supply workplace, residential space, recreation space, and shopping space all within a reasonable radius. Home-based businesses are also likely to increase in such suburban locations.

From a political perspective, however, there may be difficulty in managing and planning such change. People's acceptance of change and development may be low, especially if residential areas are affected by housing redevelopment or the introduction of commercial enterprises. From the planning perspective there may be difficulty in knowing what mix of uses are workable, or what level of redevelopment is desirable. Planners are also likely to be faced with changing characteristics of the suburbs with which they work – for example, the likely increase in daytime populations and traffic levels, or increasing demand for infrastructure and services (roads, telecoms, water and waste disposal). Past policies and approaches to suburban planning may fail to meet the needs of the new suburban landscape. Providing guidance from the metropolitan perspective may become more important.

The social impact of changing suburban landscapes may create positive opportunities for cultural development and may extend the range of services currently available. However, one needs to be careful about predicting urban futures for suburbs which are physically different in design from inner urban areas. Reliance on car transport will continue into the foreseeable future.

Alternative scenarios

The discussion above has pointed to a number of factors that may alter trends of suburban diversity. These include:

- community responses to change and the actions which some may take to encourage or prevent such change;
- planning responses to suburban diversification – continuation of old approaches or re-evaluation of policies in response to change?
- the locational incidence of suburban diversification – will traditional industrial or blue collar areas be bypassed by diversification trends?

Such issues need to be kept in mind when assessing the likely impact of suburban trends in Melbourne.

The urban fringe will grow strongly, but at lower rates than in the past

Nature of change

The rate of population growth will be highest in the fringe suburbs of Melbourne. Major areas for development over the next 25 years are likely to be in the Local Government areas of Casey, Melton, Wyndham, Whittlesea and Hume. Over the period 1999 to 2021, the highest average annual growth rates are projected to occur in Melton (4.0 per cent). Areas to the east and north east of Melbourne are unlikely to experience rapid development due to planning restrictions and environmental constraints.

Despite population growth being strong in various fringe areas of Melbourne, the rates of growth are likely to be lower over the next 25 years than they have been over the past 25 years (see Figure 9). There are a number of factors which are influencing the falling demand for fringe housing.

Redevelopment opportunities which are emerging in existing suburbs and on former industrial sites have provided a source of residential development other than the outer fringe areas of Melbourne and this is likely to dampen demand for urban fringe living.

Share of new residential development (%)

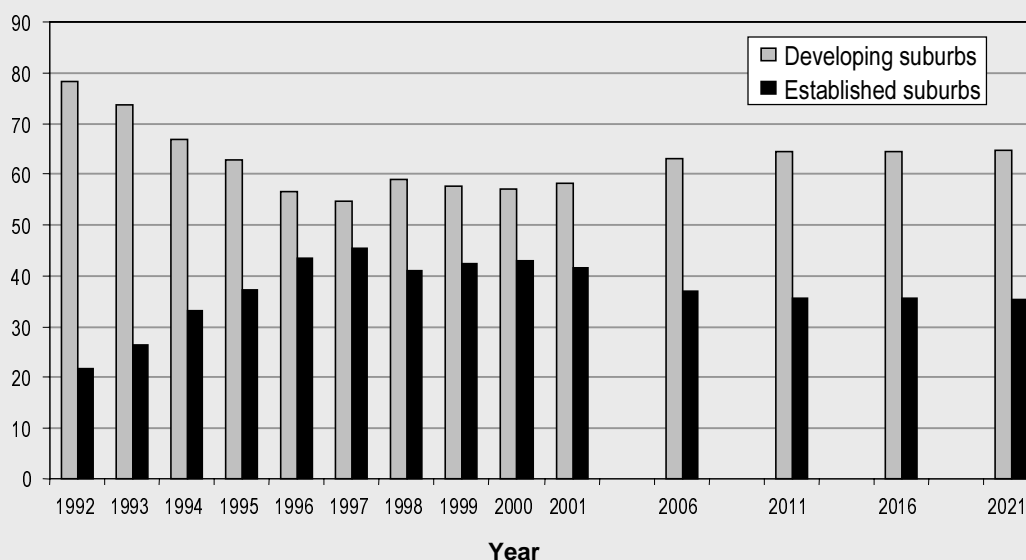


Figure 9. Residential building activity, Melbourne, 1992 to 2021

Developing suburbs = Wyndham, Brimbank, Melton, Hume, Nillumbik, Whittlesea, Knox, Manningham, Maroondah, Yarra Ranges, Cardinia, Casey, Greater Dandenong, Kingston, Frankston, Mornington Peninsula.

Established suburbs = Boroondara, Glen Eira, Stonnington, Monash, Whitehorse, Yarra, Maribyrnong, Moonee Valley, Banyule, Darebin, Moreland, Hobsons Bay, Port Phillip, Bayside, Melbourne

Source: Department of Infrastructure, 1999

There have also been changes in recent decades to the way in which infrastructure and services for new fringe development are delivered. Greater levels of private investment in infrastructure, and the more common use of user-pays systems through the 1990s, meant that residential development in fringe areas had to bear its full development cost.

Apart from these factors which affect the supply of housing, there are factors which affect the demand for housing. Most notably, lower fertility rates, the decline in household size and the ageing of the population mean that demand for traditional family houses on large blocks of land is likely to decrease in the future.

Implications

A decline in the rate of fringe growth may lessen the need for (costly) urban services to be extended further outwards at the same rate as in the past. Nevertheless, there may be locations where fringe growth will be concentrated, such as in the south eastern corridor and north western region. Development in these areas may place pressures on specific regions.

While most developers still provide for a variety of customers in these fringe estates, they are more likely to recoup increasing infrastructure costs by marketing and selling to second and third homebuyers. An extreme example of this kind of development is the luxury estate being built at Sanctuary Lakes to the south of Werribee. If such luxury fringe development proves to be successful, there may be further shifts in market focus by some developers to capture more lucrative markets and this may have implications for affordability in some locations. Nevertheless, the prospects for 'upmarket' fringe development are not yet clear.

Alternative scenarios

Traditionally, the urban fringes of Melbourne have provided opportunities for first homebuyers to enter the residential market. Changes in family structure and in the economics of fringe development seem to be affecting the traditional dynamics of fringe development, and the full outcomes of these changes are not yet fully understood. It is probable that fringe areas will remain important regions for new housing development, but the nature of those people occupying these areas may be different from in the past.

Exurban population growth will continue but at lower rates than in the past

Nature of change

The demand for exurban housing is likely to continue into the future, but at a lower rate (see Figure 10). The north-west of Melbourne is projected be the main location for Melbourne's exurban growth in the future, especially around Bacchus Marsh, Gisborne, Romsey and Wallan.

During the 1970s and 1980s, there was rapid population growth in coastal areas and areas on the fringe of Melbourne. Improved mobility and greater accessibility to employment in suburban locations helped to facilitate this growth. The reasons for a slowdown in exurban population growth in Victoria during the early 1990s related to the general slowdown of housing markets. This trend has changed in more recent years, yet there are other reasons which suggest that future exurban growth may not be as strong as in the 1970s and 1980s.

Increases in housing affordability due to lower interest rates in the late 1990s may allow more people to purchase housing within the urban area rather than beyond it. The reality of exurban living may also present difficulties for many households, particularly families, seeking access to employment, education and health services. It may also be that the market for residential developments in exurban areas has simply slowed after the boom of the late 1970s and 1980s, and will, therefore, continue at a steady but lower rate.

An important element of exurban development is visitor populations rather than resident populations, so the projected population growth for an area like Macedon Ranges may not necessarily reflect the scale or nature of economic growth. This is because exurban areas are important destinations for weekend visitors from Melbourne and those who may own a second home in the region.



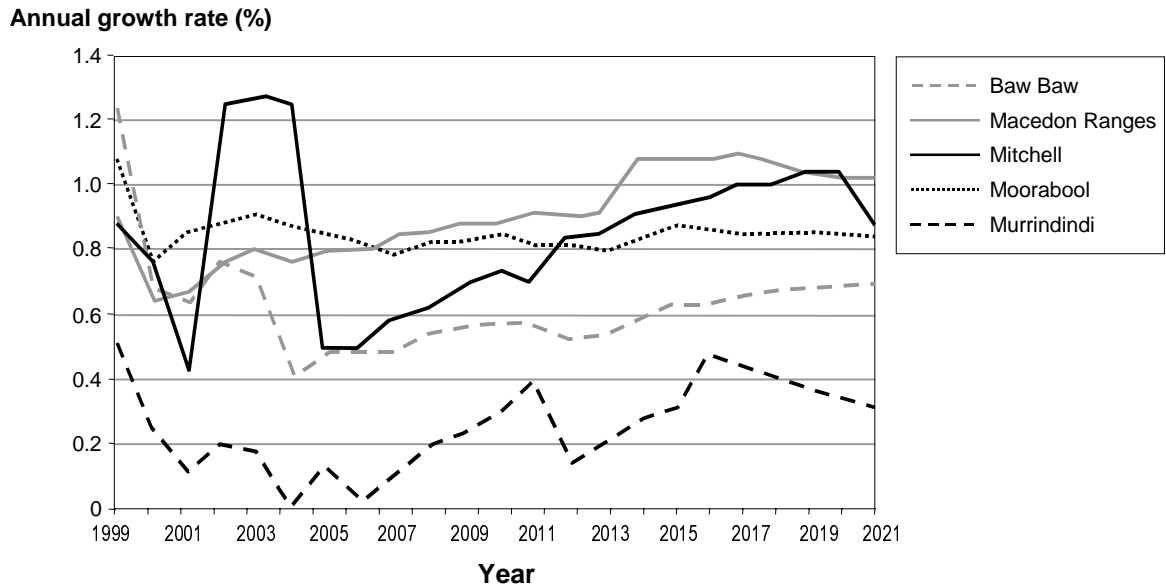


Figure 10. Projected population, selected exurban municipalities, 1999-2021

Source: Department of Infrastructure, 1999

Implications

Population growth in rural hinterlands of cities and towns can heighten problems between competing land uses – for example, commercial farmers as opposed to rural residents who commute to the city. There may also be problems in delivering services to a scattered population in such exurban areas, especially if growth happens in an unplanned way. Likewise, if exurban growth is not planned for appropriately there may be environmental consequences such as pollution, land degradation and increases in introduced species of animals and plants.

A decline in the rate of exurban growth may be seen to ameliorate some of these problems and conflicts. However, the type of development as well as the population growth may be significant in determining impact. For example, if servicing costs for developers rise due to the introduction of user-pays systems, there may be a preference for rural residential development on larger lots that do not require reticulated services. Such an outcome is a speculative one, but may be worth considering as a possible scenario for the future.

On the other hand, demand for rural residential may decline in favour of exurban township living, or semi-suburban developments in exurban locations (such as Hidden Valley). This pattern of exurban-suburban development is more common in the USA than in Australia, but it may increase in popularity in Australia in the future.

Lower levels of resident population growth in exurbia may not mean that peak population levels decline. Because of the recreational importance of many exurban areas around Melbourne, the attraction for day trippers and tourists may increase in the future. Hence some of the issues surrounding exurban development – environmental and economic – may continue to be important even if resident population growth rates fall.

Alternative scenarios

Because the slowing in exurban growth rates has only emerged in the 1990s, it is difficult to know whether the trend will continue or strengthen in the future. Exurban growth in the USA shows little sign of slowing, however Australia's settlement geography differs from that of the USA in regard to its level of metropolitan primacy. It might be assumed from this, for example, that exurban development may not become as widespread in the Australian context. Nevertheless, the relationship between a growing metropolis such as Melbourne or Sydney and its exurban hinterland is likely to continue in some form. It may even be the case that increased growth and/or increased density within the metropolitan area will have flow on effects to exurbia. The case of Sydney suggests such a pattern of movement with increasing congestion and increasing costs of living becoming a push factor for people moving to exurbia. A greater understanding of the urban-exurban relationship is needed before future scenarios can be fully formulated and understood.

Conclusion

This report has highlighted population change projected for Melbourne and has discussed some of the implications which may arise from such change. By considering alternatives, the report has also recognised the uncertainties which may surround both the projected change and the nature of implications arising. The degree of uncertainty may determine the nature of policy responses.

Any consideration of issues needs to recognise the dynamism that is affecting the metropolitan area. Beneath the demographic changes such as population ageing and fertility decline, there are many social and economic pressures and opportunities directing change. These are themselves dynamic and uncertain. Policy responses, therefore, need to be flexible enough to allow rapid response to emerging issues over time.



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