

Victoria in Future – frequently asked questions

What is *Victoria in Future 2008*?

Victoria in Future 2008 (VIF 2008) is the Victorian State Government's official population and household projections for State, regional and metropolitan areas and Local Government Areas (LGAs).

Victoria in Future projections cover the period 2006 to 2036 for the higher level geographies and for 2006 to 2026 for LGAs. They are available in variety of easy-to-use formats, suitable for first time users to demographic experts.

The Department of Planning and Community Development will publish detailed age structure projections for LGAs over the coming months. The department will also produce further analysis of key trends shaping our society and the drivers and implications of population change.

How are the projections prepared?

The Department of Planning and Community Development has prepared population projections for Melbourne's local government areas for the period 2006 to 2026 and for statistical divisions for Regional Victoria for 2006 to 2036. The department bases projections on Australian Bureau of Statistics (ABS) population estimates derived from the 2006 census and other recent demographic trends.

Production of the projections involves analysis of demographic data and housing development information. Critical inputs into the development of the *Victoria in Future 2008* projections include analysis of Victoria's economic, social and demographic trends, and detailed local knowledge gained from consultation with local governments, regional service providers, peers and stakeholders.

Assumptions are critical to projections. In deriving assumptions the DPCD obtains advice from experts. Most important is the ABS, Australia's peak statistical agency. Projections for Victoria use very similar assumptions to the ABS's Series B projections published in September 2008.

VIF 2008 projections are an indication of possible future populations if current demographic, economic and social trends continue. They are not predictions of the future. Nor are they targets.

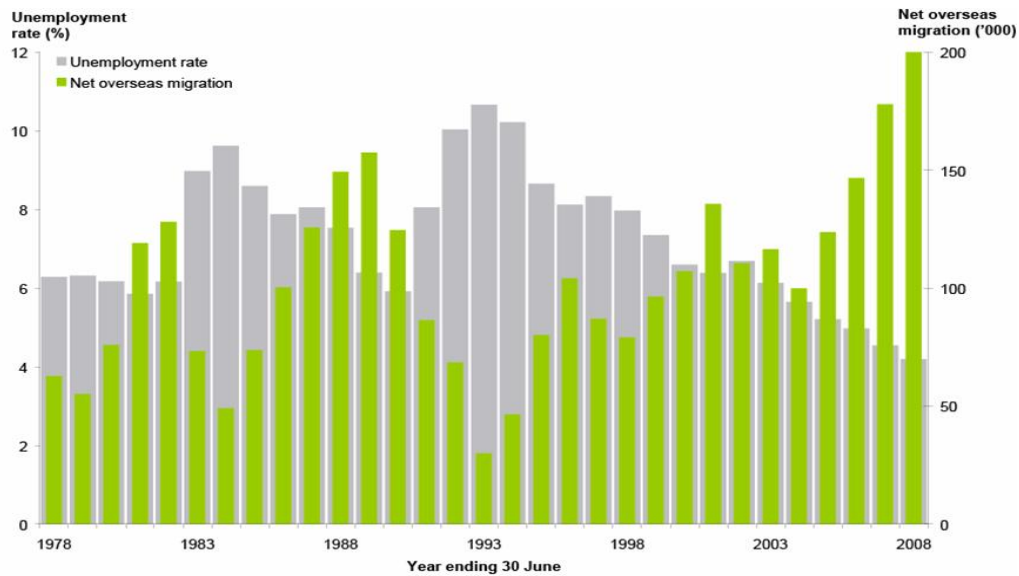
The projections also do not reflect the aspirations of present or future policies. Policies may independently aim to change the current trends of population growth and distribution in order to achieve better community outcomes. Therefore the size of the policy and implementation challenge is evident in the difference between policy aspirations and population projections.

Why does *VIF 2008* assume net overseas migration of 200,000 to Australia for the first three years, and then 180,000 to 2036?

In order to sustain growth in Australia's labour force, overseas migration will need to average 180,000 over the long term. A strong link exists between labour force conditions in Australia and overseas migration. When the labour force is tight, as in recent years, overseas migration supplements our labour and helps address skills

shortages. In a recession, like that experienced in the early 1990s, overseas migration slows.

Net overseas migration and unemployment in Australia, 1978-2007

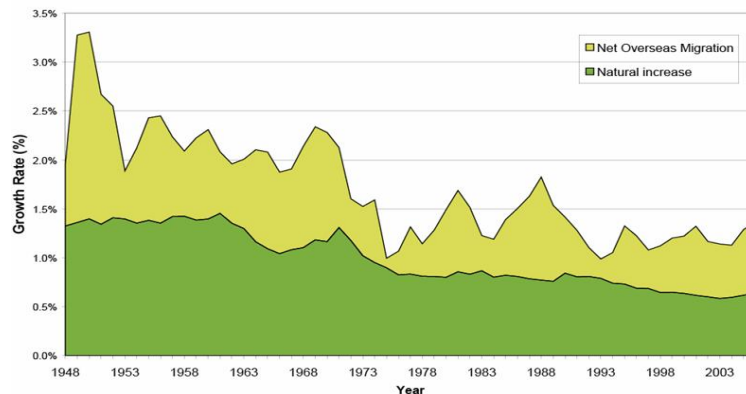


Is overseas migration of 180,000 too high given current economic prospects?

As we experience business cycles, future migrant numbers will vary from year to year as they have in the past. Taking a long term perspective three things stand out. First, as the economy grows and our population ages, we need the labour force to grow. In particular, the expanding consumer and business services sector demands highly skilled labour.. Secondly, we cannot rely on labour force growth within Australia. The baby boomer bulge of men and women entering the workforce between 1970 and 2000 sustained 2% annual labour force growth. That will not continue in the future. Thirdly, 180,000 net overseas migration is not high compared with that in the post-World War II period. Due to serious labour shortages, migration frequently exceeded 1% of the Australian population, equivalent to 220,000 in present day terms.

Population growth of Australia, through natural increase and overseas migration:

Growth rate, Australia, 1948 - 2006



While current economic conditions suggest a slowing of overseas migration in the near future, over the long term, the ABS assumption of net overseas migration of 180,000 provides the best basis for planning.

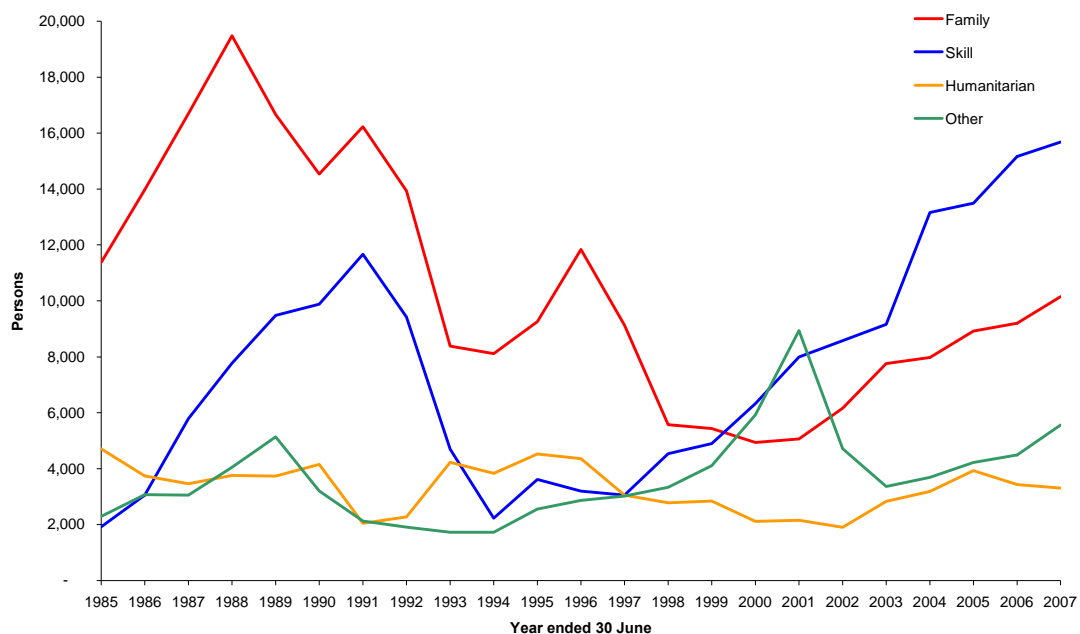
Are today's migrants different to the migrants of 30 years ago?

Migrants today differ from those of 30 or 50 years ago in three ways: where they are from, the type of visa with which they arrive, and whether they are a permanent or only a long term arrival. Migration 30 years ago consisted mainly of European economic migrants looking for a better life. This period also saw the beginning of major migration from Asia of humanitarian refugees and economic migrants. These migrants were often unskilled and found work in manufacturing and basic service industries. The family reunion program has played a major role in migration to Australia, however this has diminished in recent years.

The types of migrants coming to Australia are changing. Today, more skilled business migrants settle here permanently or stay for a couple of years of work. Many overseas students come to Australia for three to five years study at tertiary institutions. Many of these migrants return to their original (or a third) country when they obtain their qualifications but some also seek to remain in Australia and join the workforce.

Australia provides 15,000 visas each year for humanitarian refugees and the source countries for these refugees have also changed over time: from Europe (eg. Italy and Greece) to South east Asia (eg. Vietnam) to the Middle East (eg. Lebanon) and Asia (eg. China), and more recently Europe again (eg. Bosnia and Kosovo) and Africa (eg. Sudan and Ethiopia).

The trans-Tasman agreement allows an unlimited number of New Zealand citizens to settle in Australia (over 10% of the total migration intake to Australia in 2002-03). Australians are equally free to move to New Zealand.



Source: Department of Immigration & Citizenship.

The shift from permanent to long term arrivals is one of the key changes in migration in recent years. The ABS defines a long term arrival as an individual intending to stay in Australia for at least 12 months, but not longer than 3 years. The number of students, skilled business migrants and those indicating a long-term rather than permanent stay have risen in recent years. However many long-term arrivals successfully apply for permanent status during their initial stay. Many others renew their visas and stay many years in Australia, becoming a part of our resident population.

How is net overseas migration assumed to be distributed across Victoria?

The census provides the best source of information about where overseas migrants settle in Victoria. Other potential sources such as Medicare data or data collected from arrival cards filled in when entering Australia are of little help. Medicare data is incomplete as some new migrants are eligible to collect Medicare benefits and therefore do not register. Arrival cards only ask State of expected residence. Contact address data collected on these cards usually only indicates a temporary address on arrival in Australia and not the place of settlement.

The census asks questions about place of residence one year and five years previously. These data are used by the DPCD and the ABS to estimate shares of overseas migration going to Melbourne and regional Victoria.

The last four censuses show that between 90% and 95% of overseas migrants coming to Victoria settle in Melbourne.

Some inertia exists behind migration statistics. New migrants often prefer to settle close to people with similar cultures and language. For many years certain migrant groups concentrate in particular State capitals and in specific parts of those cities.

Can policy change where migrants settle in regional Victoria?

The Commonwealth Government provides incentives for migrants to settle outside the main capital cities in response to skills shortages in regions. However numbers remain small, reflecting the attractiveness of large cities to both migrants and non-migrants.

Why does VIF 2008 assume annual net interstate migration loss of 6,000?

The ABS first collected interstate migration data in 1971. Since then Victoria has generally experienced a net interstate migration loss. Victoria had its highest net loss of over 29,000 in 1994. Between 1999 and 2002 Victoria experienced its only net gains, peaking at 5,200 in 2000.

Average annual flows have been as follows:

- The last twenty years: -7,914
- The last ten years: +536
- The last five years: -2,178

The DPCD has assumed that net migration for Victoria will be -2,000 until 2009 and then -6,000 from 2011. These are the same as the ABS's long term assumption.

Importantly, net interstate migration is the result of strong flows of people in and out of Victoria. In 2006/07, the ABS estimates that 63,291 moved to Victoria while 65,485 Victorian moved interstate.

Why do *VIF 2008* projections assume that fertility will decline a little while in recent years it has been increasing?

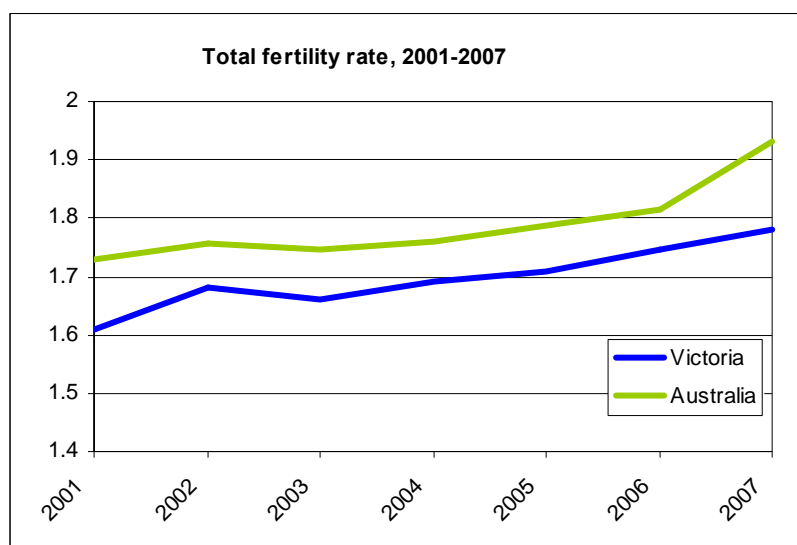
The fertility assumption adopted by *Victoria in Future 2008* is that the total fertility rate (TFR) will gradually decrease to 1.73 by 2021 and remain constant thereafter.

Unexpected increases in fertility

Births: 2007 marks the fourth year of consecutive rises in the number of births in Victoria. 70,313 births were registered, an increase of 7.8% from 2006 and the highest number since 1972, when 71,713 births were registered. In 2007, Australia recorded the highest number of births ever registered (285,200).

This rise of births has a profound impact on Victoria's population over the long term. Five years ago, projections indicated that Victoria would experience natural decrease, with deaths outnumbering births by the late 2030s. This is no longer projected to be the case either for Victoria or Australia.

Victoria's *total fertility rate (TFR)* in 2007 was 1.87, and Australia's 1.93. This is Victoria's highest rate since 1978 and a significant increase from the 1.61 TFR recorded for Victoria in 2001.



Possible influences on fertility increases over these years include government policy (baby bonus), economic prosperity, births to women in their late thirties who delayed child bearing (catch up births), and to the children of baby boomers who represent a slight bulge in population numbers (echo boomers).

Victoria in Future 2008 does incorporate these increases with births projected to rise to 80,785 in 2036. By 2018 projected births exceed the highest ever registered in Victoria (75,394 in 1971). This reflects, in part, overall population increases in Victoria. Melbourne currently accounts for 75% of births and the projections assume that this trend will continue.

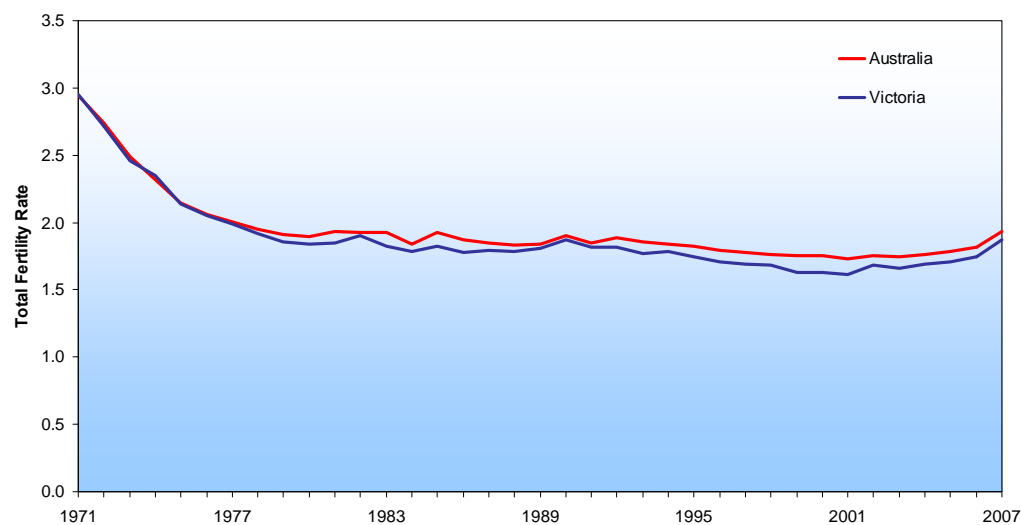
Decreases in fertility

Despite the projected increase in births and fertility rates observed over the last few years, the projections assume declining total fertility rates up to 2021 (and thereafter remain stable). Why is this?

The TFR is a different fertility measure to birth counts. It represents the number of children a woman would bear in her lifetime if she experienced current age-specific fertility rates at each age of her productive life. The ABS uses TFR and age-specific fertility rates when projecting populations..

The ABS's latest projections for States and Territories have taken into account recent rises in fertility. The *Victoria in Future 2008* population projections are based on very similar assumptions to the ABS's series B, which assumes a medium fertility assumption. The ABS's assumes that Victoria's TFR will gradually decrease to 1.73 by 2021 and remains constant thereafter. Influences on this choice for *VIF 2008* include recent increases in rates, the fluctuating nature of fertility rates (see graph below TFRs 1971-2007), the possibility that the catch up effect will diminish and the trend for women to have fewer children overall continuing.

While the fertility rate declines over the projection years to 2021, the influence of recent rises in fertility on the *Victoria in Future 2008* assumption is evident when compared to the *VIF 2004* fertility assumption. *VIF 2004*'s TFR declined to 1.6 by 2011, constant then to the end of the period well below *Victoria in Future 2008*'s stabilised TFR of 1.73 in 2021.



Does *VIF 2008* account for differences in fertility between Melbourne and regional Victoria?

Considerable regional variations exist in fertility rates, with higher fertility rates in more rural than urban areas. In Melbourne, inner city areas have lower fertility rates than outer suburbs.

VIF 2008 assumes that these spatial differences in age specific fertility rates continue into the future.

How do the *VIF 2008* projections account for the impact of changing household formation?

The *Victoria in Future 2008* population projections use a combination of three methods: the cohort component method, the housing unit method and the housing formation method. The household formation method aggregates the estimated resident population (living in private dwellings) produced by the cohort component method, into households for each year of the projections. An individual's age and sex indicates their likelihood to be living in a particular type of household. For example, a 30 year-old male could be living at home with his parents; he could also be living alone, in a shared (group) household, with a partner without children, as a father with a partner or alone. The projections model the likelihood of all of these different arrangements for different ages and sexes of the population. They also take into consideration changes in these household propensities over time.

Changing household formation reflects our (long term) greater propensity to have fewer children on average and for more lone person and couple only households, regardless of the effects of ageing.

Why is there only one projection?

DPCD's standard practice is to produce only one projection. This is due to the complexity of producing more than one projection at a lower level of geography than Melbourne – regional Victoria.

State level projections are relatively straightforward. The ABS makes alternative assumptions about the components of population change, which include overseas and interstate migration, fertility and mortality rates. The last set of ABS projections for States and Territories have three assumptions for overseas migration, three for interstate migration, three for fertility rates and two for mortality rates. The ABS produces 54 different projections of with three combinations, A, B' and C. Series B has the medium level assumption for all four components and are the ones most commonly used..

Below the state, capital city and balance of State levels of geography, projections must take into account within-state migration. This component mainly affects the balance of population between Melbourne and regional Victoria. The ABS has a constant assumption of 11,000 people moving from Melbourne to other parts of Australia, including regional Victoria. It also assumes that regional Victoria gains 5,000 new residents from other regions in Australia, including Melbourne.

At the lower geographical levels, the number of potential projections can become almost infinitesimal based on alternative assumptions about regional or local developments.

The DPCD also uses one projection to provide consistency. Extensive consultations occur to ensure good information supports the one projection. Short term business cycles can result in projections appearing out of date within two or three years. Therefore the department regularly reviews the projections, and the assumptions behind them and if warranted, produces new projections.

But in carrying out these reviews, the department considers longer term prospects and assumptions. In the future, population growth rates will vary considerably from year to year as they have in the past. No one can absolutely predict these changes.

The department therefore examines whether shifts are occurring in long term trends that may affect the planning and delivery of infrastructure, goods and services.

Given uncertainty over the economy and future overseas migration levels, how much would projected populations change if the ABS's 'low' or 'high' assumptions were used?

The ABS's high net overseas migration assumption of 220,000 per year projects 353,000 more Victorians by 2036 than *VIF 2008* (7.75m compared with 7.40m). Regional Victoria has an additional 55,000 residents (1.92m compared with 1.86m) and Melbourne has 298,000 (5.83m compared with 5.54m). This high assumption results in Melbourne achieving a population of 5 million by June 30th 2024 rather than 2026 under the medium assumption.

The low assumption – 140,000 per year – results in 330,000 fewer Victorians, 51,000 fewer regional Victorian residents and 279,000 fewer Melburnians and a capital city population of 5 million in 2030.

Why does Victoria's growth rate decline over time?

Assumptions about migration and natural increase drive Victoria's population projections. For example, the projections assume that migration will continue to contribute a steady number of people to the population over a 30-year period.

This period has a slowing population growth rate for Victoria because the number of deaths will increase by more than slight rises in natural increase slightly..Higher numbers of deaths do not relate to increased mortality or reduced life expectancy. Rather increasing numbers of older persons in the population reaching the end of their natural lives results in more total deaths.

Why does *VIF 2008* have slightly different assumptions to the ABS?

VIF 2008 uses a mix of short and long term assumptions. Short term assumptions are based on those informing the state government's four year budget cycle and reflect existing conditions in Victoria.

Long term assumptions - from 2011 onwards - for Victoria are identical to the ABS's series B projection. The Commonwealth Government uses this medium range projection, such as in the cooperative activities of the Council of Australian Governments (COAG).

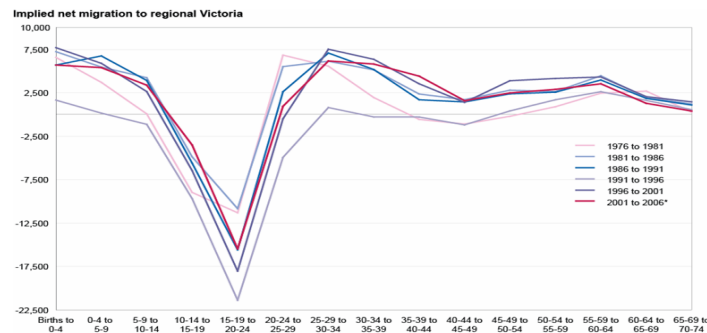
Why are *VIF* and ABS projections different for Melbourne and regional Victoria?

The DPCD uses a different method of modelling migration between Melbourne and regional Victoria. The ABS does not explicitly model migration between the two parts of Victoria: it assumes constant levels of migration to other parts of Australia over time.

The DPCD assumes that current age/sex specific propensities remain stable. For example, a 15-19 year old female in regional Victoria will have the same probability migrating to Melbourne. As the numbers in that age group change over time, so will the level of migration.

Migration between Melbourne and regional Victoria is fairly consistent, with young school leavers and adults moving to Melbourne and other age groups showing a net movement to regional Victoria.

Net movements of different age groups- regional Victoria, 1976 -2006



* Preliminary data

As the population of Victoria ages, regional Victoria has a lower proportion of older people in and Melbourne has higher proportions of people aged 35+. The net effect is that net migration from Melbourne to regional Victoria increases over time.

Why will VIF and the assumptions be revised?

Normally the DPCD revises population projections following each census. If, however, the department decides that assumptions are outdated, it will produce a new set of mid-census projections, probably in 2010.

Who uses these projections?

The state government, business and community sectors use the projections for a wide range of planning and service delivery purposes.

What assumptions does the DPCD make about mortality? If life expectancy changes how will it affect our population?

Life expectancy in Victoria has been steadily increasing over the past century and is projected to continue to do so. The mortality assumption used in *Victoria in Future 2008* matches the ABS medium (B) assumption, which projects a slowing rate of improvement in life expectancy. The medium assumption sees life expectancy increasing from 80 for Australian males and 84 for Australian females in 2005-06 to 85 for males and 88 for females in 2055/56.

In their 2008 population projections, the ABS included another mortality scenario which projects a constant improvement in life expectancy. This assumes further advances in medicine, reductions in premature life ending events (eg. infant mortality, road accidents, preventable diseases), and overall better health in the community. Life expectancy increases from 80 for Australian males and 84 for Australian females to 93.86 for males and 96.11 for females in 2050-51.

The ABS publication, *Population Projections Australia*, catalogue no. 3222.0 includes further detail on the high life expectancy assumption.

Why do so many people move these days to large cities like Melbourne?

One reason for population growth in one region rather than another may relate to changing relative economic opportunity. Victoria saw this in an extreme form in the Gold Rush of the nineteenth century. A new strike in one place suddenly led to hordes of people descending on it to take advantage of the new economic opportunity, often leaving other places deserted.

The modern economy also provides a landscape of shifting economic opportunity. People will move to places where they think they can better themselves. Aside from short-term fluctuations in market conditions, long-term structural economic changes have had lasting impacts on the distribution of economic activity, and particularly employment within Victoria. While the falls in manufacturing and agricultural employment may be nearing their end, the growth of employment in services continues apace. The increase in specialist and often highly paid employment in service industries is concentrated in large cities, particularly in the centre of those cities.

Economic globalisation generates increasingly volatile and unstable economic conditions and hence uncertainty. This uncertainty requires people and places to quickly adapt to new conditions – capital and labour are increasingly mobile. Cities are perhaps better equipped to deal with these uncertainties than smaller communities: land in Melbourne quickly turns over as one use declines in value and another new and better use emerges.

Pushers		Pullers
Poor employment prospects – high unemployment, low incomes, poor career opportunities	▶	Superior employment opportunities – low unemployment, high incomes, good career development prospects
High living costs relative to income	▶	Low living costs relative to income
Inappropriate local housing	▶	Suitable and affordable housing
Limited further education opportunities	▶	Wide range of further education opportunities
Feeling of cultural isolation – not many shared values	▶	Attractive social environment – other people with aspired values
Unattractive physical environment – congestion, poor climate	▶	Attractive physical environment – inner city dynamism, coasts, warmer places

Why can't growth just go to regional Victoria?

Governments engage in planning, policy development and service delivery in line with population growth in every region within Victoria. Many people, including those from other parts of Victoria, Australia or the rest of the world, choose to live in Melbourne for a range of reasons. These might include education and job opportunities, access to recreational, cultural and retail services, and familiarity and proximity to family and friends.

As the population grows most people want to live close to their family and friends and familiar surrounds or they choose to relocate for other reasons. Many people move from Melbourne into regional Victoria but Melbourne's population continues to gain many more households from within the existing population and from interstate or overseas migration.

Glossary of terms:

Age-specific migration:

The migration patterns for particular age groups.

Age specific fertility rates represent the number of births registered each year according to the age of the mother, per 1,000 of the female population of that age.

Australian Bureau of Statistics (ABS)

The Commonwealth body responsible for official national statistics and undertaking the Census of Population and Housing every five years.

Average household size

The average number of people per household in any given area.

Baby boomers

Those people born in Australia between the end of World War II (1945) and the late 1960s.

Completed fertility rate represents the average number of births an age group of women have had. It is calculated by summing the age-specific birth rates experienced by that age group of women over their reproductive life.

Department of Immigration and Citizenship (DIAC)

The Commonwealth Government agency that gathers immigration data

Dwelling

A building or structure in which people live. This may include a house, an apartment, or it may be a mobile dwelling such as a caravan. A private dwelling would exclude communal accommodation provided by institutions such as hospitals or prisons and transitory accommodation such as hotels and motels.

Empty nesters

Parents whose children have grown up and left home.

Generation X

Refers to people born from the late 1960s to the late 1970s. Until 2007, Australia recorded its highest number of births in 1971. .

Green Wedges

The Green Wedges are areas on Melbourne's fringe with environmental, social or economic significance. There are 12 green wedges, spanning 17 municipalities and land use in these areas is restricted to exclude major residential and industrial uses.

Household

(a) a group of two or more people who live in the same dwelling and who make common provision for food or other living essentials (this is a multi-person household); or
(b) a person who makes provision for their own food or other living essentials (this is a lone person household).

Local Government Area (LGA)

A geographical area which is administered by a local council. Victoria has 79 LGAs.

Melbourne metropolitan area

The geographical areas bounded by the municipalities of Wyndham, Melton, Hume, Whittlesea, Nillumbik, Yarra Ranges, Cardinia, Casey and the Mornington Peninsula.

Melbourne Statistical Division (MSD)

The Melbourne Statistical Division is defined by the Australian Bureau of Statistics as the Melbourne metropolitan area excluding the eastern parts of Yarra Ranges.

Migration

The movement of people from one area to another. This movement may take place within a city or region, between different states (interstate migration), or between different countries (overseas migration).

Mortality

The frequency of deaths occurring in a population.

Natural increase

The difference between the numbers of births and deaths.

Net Migration

The number of people moving into an area minus the number of people moving out of that area over a particular period of time. Net interstate migration for Victoria is the number of people arriving from other states of Australia minus the number of people leaving Victoria to move interstate. Net overseas migration is the number of immigrants arriving from overseas, minus the number of emigrants leaving to move overseas.

Peri-urban

Peri-urban development refers to development occurring around cities such as Melbourne as well as around larger regional centres in Victoria. Despite the rural appearance of much of the peri-urban region it can be closely connected with the urban area because many of its inhabitants use the city for employment, shopping and recreation.

Population projections

Estimates of the future size and characteristics of a population, based on the pattern of past trends and the predicted future pattern of births, deaths, migration and land availability.

Regional Victoria

Areas of Victoria which are outside the Melbourne Statistical Division. The ABS refers to regional Victoria as the 'balance of Victoria'.

Statistical Local Area (SLA)

A geographical area created by the ABS for statistical purposes. Victoria is divided into 200 SLAs. SLAs may be the same as an LGA or in most cases several SLAs aggregate to form LGAs. SLAs also aggregate to SDs and SSDs.

Statistical Division (SD)

A geographical area created by the ABS for statistical purposes. Victoria is divided into 11 SDs.

Statistical Sub Division (SSD)

A geographical area created by the ABS for statistical purposes Victoria is divided into 45 SSDs. SLAs aggregate to SSDs and SSDs aggregate to SDs.

Total fertility rate (TFR) is the sum of age specific fertility rates. It represents the number of children a woman would bear in her lifetime if she experienced current age-specific fertility rates at each age of her productive life. Five year age-cohorts used are between 15 and 49 years.

Urban Growth Boundary (UGB)

The boundary placed around Melbourne beyond which land may not be rezoned for residential or industrial use. The UGB has been implemented as part of the Melbourne 2030 planning strategy.