Population Growth Highlights and Trends, Queensland

February 2013
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Summary

Queensland’s population continued to grow
Queensland’s population was 4,560,060 at 30 June 2012 after growing by 85,960 or 1.9 per cent over the year.

Queensland’s population growth remains higher than the national average
Queensland’s annual population growth rate in the year to 30 June 2012 at 1.9 per cent was greater than that recorded at the national level (1.6 per cent). With respect to the level of change, Queensland recorded the second largest population increase (85,960) behind Victoria (88,970).

Queensland’s natural increase remained high
Natural increase in the year to 30 June 2012 was 33,690 as a result of 61,520 births and 27,830 deaths registered during the year. Natural increase was the second largest contributor to Queensland’s population growth, behind net overseas migration (40,470).

Queensland’s net overseas migration increased
Queensland’s net overseas migration was 40,470 in the year to 30 June 2012, substantially higher (29.4 per cent) than the level for the previous 12 months (31,270). Australia’s net overseas migration increased by 22.3 per cent over the same period, from 170,280 to 208,340.

Queensland’s net overseas migration continues to offset population ageing
Queensland’s net overseas migration gain was largest in age groups up to 45 years in 2011-12, with more than 65 per cent aged 0-29 years. The largest gain was in the 20-24 years age group. This had the effect of slowing the rate of population ageing in Queensland relative to that which would have occurred in the absence of the net migration gain.

Queensland’s net interstate migration remains low
The net gain from interstate migration in the year to 30 June 2012 was 11,800 people, down from a peak of 37,980 people in the year to 30 June 2003, although higher than the level for the previous 12 months (7,150). However, this was still the largest net interstate migration gain over the year among Australia’s states and territories.
1. Introduction

Population Growth Highlights and Trends, Queensland 2013 provides an overview of Queensland’s population growth at the state level. The report provides an overview of Queensland’s recent population growth and its changing age structure. Section 3 examines in detail the three components of population change in Queensland: natural increase, net overseas migration and net interstate migration. Section 4 concludes with information on the release schedule for the final rebased and revised population estimates from the 2011 Census by the Australian Bureau of Statistics (ABS) following the release of the 2011 Census of Population and Housing data.

Population data used in this publication were the most recent available at the time of preparation and have been sourced from the ABS publication Australian Demographic Statistics, June quarter 2012 (ABS 3101.0) with supporting data on migration sourced from Migration, Australia, 2010-11 (ABS 3412.0).

Historical analyses of trends in the size and rate of change in Queensland’s estimated resident population (ERP) have been excluded from this publication. This is due to a major change in the methodology used by the ABS to estimate the Census undercount (the people missing from the count of the population during the 2011 Census). This change resulted in the calculation of a lower estimate of the resident population for Queensland. The ABS also determined that the methodology used following previous Census counts overestimated the undercount, resulting in higher ERP figures for these years. As a result, the ABS will revise ERPs back to 1991 to reduce the impact of the relatively high intercensal error for the 2006-2011 period. For more information, see the June quarter 2012 edition of the ABS 3101.0 publication on the ABS website.

Complete accuracy of ERP figures is not claimed by the ABS and should not be assumed. Figures included in the text, tables and charts throughout this report are rounded to the nearest 10, although all calculations and percentages are based on unrounded data. A range of supporting data tables containing unrounded population estimates is available on the Government Statistician website.
2. Queensland’s changing population

2.1 Snapshot

At 30 June 2012, Queensland’s preliminary estimated resident population was 4,560,060 (Figure 2.1), representing 20.1 per cent of Australia’s total of 22,683,570 persons. Queensland is Australia’s third largest state by population behind New South Wales (7,290,350) and Victoria (5,623,490).

Figure 2.1 Estimated resident population, 30 June 2012, and growth, year to 30 June 2012

Note: Population figures are rounded to the nearest 10. Unrounded figures are available on the Government Statistician website.

Source: ABS 3101.0, Australian Demographic Statistics, June quarter 2012

2.2 Absolute population change

Queensland’s population increase in the year to 30 June 2012 of 85,960 people was the second largest increase of any state or territory after Victoria (88,970). New South Wales (78,880) had the third largest increase of any state or territory, followed by Western Australia (78,040).

Australia’s population grew by 359,640 people in the year to 30 June 2012. Queensland accounted for 23.9 per cent of that growth. The three largest states of New South Wales, Victoria and Queensland accounted for 70.6 per cent of the national population growth in the year to 30 June 2012.

2.3 Rate of population change

Queensland’s population growth rate was 1.9 per cent for the year to 30 June 2012. This growth rate was higher than the national average of 1.6 per cent and the second equal highest (with the Australian Capital Territory) of any Australian state or territory over this period, surpassed only by Western Australia (3.3 per cent).
2.4 Age structure of the Queensland population

Similar to the national trend, Queensland’s population is ageing as a result of sustained low fertility (despite an increase in births in recent years), increasing life expectancy and the movement of the large baby boomer cohort (born 1946-1965) into the older age groups. As a result, there are now proportionally fewer children under 15 years of age in the population (19.8 per cent at 30 June 2012) compared with 20 years ago (22.5 per cent at 30 June 1992).

The ageing of Queensland’s population, as shown by the change in distribution of the population by five-year age groups at 1992 and 2012, is illustrated at Figure 2.2. At 30 June 1992, the largest proportion was for the 20-24 year age group at 8.3 per cent. By 30 June 2012, the largest age group had shifted to persons aged 25-29 years (7.3 per cent).

In the 20 years from 30 June 1992 to 30 June 2012, the proportion of the population aged 15-64 years (the working age population) remained steady (66.6 per cent and 66.9 per cent respectively).

The increase in the older ages is also influenced by increasing length of life. Life expectancy at birth in Queensland reached 79.5 years for males and 84.1 years for females in 2011, up from 74.4 years and 80.2 years for males and females respectively in 1992. The proportion of the State’s population aged 85 years and over almost doubled from 0.9 per cent to 1.6 per cent between 1992 and 2012.

Another measure of Queensland’s changing population age structure is the increase in median age – the age at which half the population is younger and half is older. The median age of Queensland’s population was 31.9 years in 1992, increasing to 36.2 years in 2012. Queensland’s net migration gain in younger age categories (see Section 3) has assisted in slowing the ageing of the State’s population relative to the ageing that would otherwise occur without this net migration gain.

Note: Data for 30 June 2012 are preliminary. Revised figures for 1992 to be released in June 2013, as noted in Section 4 of this report.

Source: ABS 3101.0, Australian Demographic Statistics, June quarter 2012

ABS 3302.0, Deaths Australia, 2011; ABS 3105.0.65.001, Australian Historical Population Statistics, 2008

Government Statistician estimates.
3. Components of population change

3.1 Overview

Net population change at a state level is derived from three components: natural increase, net overseas migration and net interstate migration. Each of these components contributed to Queensland’s total population growth in the year to 30 June 2012 (Table 3.1).

Net overseas migration accounted for the largest proportion of growth over the year (40,470 people or 47.1 per cent of the State’s total). The contribution of natural increase was 33,690 people (39.2 per cent of the total). Net interstate migration made the smallest contribution to growth of 11,800 people, or 13.7 per cent of total growth.

Table 3.1 Components of population change, Queensland, year to 30 June 2012

<table>
<thead>
<tr>
<th></th>
<th>Queensland persons</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimated resident population at 30 June 2011</td>
<td>4,474,100</td>
<td></td>
</tr>
<tr>
<td>Births</td>
<td>61,520</td>
<td></td>
</tr>
<tr>
<td>less – Deaths</td>
<td>27,830</td>
<td></td>
</tr>
<tr>
<td>equals – Natural increase year to 30 June 2012</td>
<td>33,690</td>
<td></td>
</tr>
<tr>
<td>Overseas arrivals(^{(a)})</td>
<td>92,410</td>
<td></td>
</tr>
<tr>
<td>less – Overseas departures(^{(a)})</td>
<td>51,930</td>
<td></td>
</tr>
<tr>
<td>equals – Net overseas migration, year to 30 June 2012</td>
<td>40,470</td>
<td></td>
</tr>
<tr>
<td>Interstate arrivals</td>
<td>88,870</td>
<td></td>
</tr>
<tr>
<td>less – Interstate departures</td>
<td>77,070</td>
<td></td>
</tr>
<tr>
<td>equals – Net interstate migration, year to 30 June 2012</td>
<td>11,800</td>
<td></td>
</tr>
</tbody>
</table>

\(^{(a)}\) Only those arrivals and departures that contribute to net overseas migration based on a traveller’s actual duration of stay or absence using the ‘12/16 month rule’.

Note: Numbers are rounded to the nearest 10 and as a result may not add to totals shown.

Source: ABS 3101.0, Australian Demographic Statistics, June quarter 2012

The contribution to Queensland’s population growth by each component has changed notably in recent decades (Figure 3.1). Over this period, net migration from interstate and overseas has shown more volatility in numbers than natural increase. While net interstate migration increased from 7,150 in the year ending June 2011 to 11,800 in the year to June 2012, its contribution to Queensland’s growth remained small (13.7%), compared with the average contribution over the past 30 years (35.4 per cent).
3.2 Natural increase

Natural increase is calculated as registered births minus registered deaths for any given period. Natural increase contributed 33,690 people to Queensland’s population in the year to 30 June 2012, which accounted for 22.3 per cent of Australia’s total for the year. The increase over this period was the result of an estimated 61,520 births registered during the year and 27,830 deaths. This level of natural increase was 7.5 per cent lower than the previous year (36,430).

Natural increase figures are relatively stable in comparison with other components of population growth. The level of natural increase grew during the period 2003 to 2009, when it peaked at 38,440 for the year to 30 June 2009. Natural increase’s share of Queensland’s population growth increased from 27.2 per cent during the year to June 2003 to 48.7 per cent during the year to June 2011. This was mainly the result of an increase in the number of births.

Queensland recorded the third largest natural increase in the year to 30 June 2012 behind New South Wales (43,530), and Victoria (38,070).

3.3 Net overseas migration

Net overseas migration is the estimated difference between the number of people settling in Australia and the number of people departing Australia to live elsewhere. As measured by the ABS, it counts the net effect of the arrival or departure of any person who has resided in (or out of) Australia for 12 out of the 16 months prior to the reference period (the ‘12/16 month rule’).

Net overseas migration was estimated at 40,470 people in Queensland in the year to 30 June 2012, 29.4 per cent higher than the previous year’s figure of 31,270. The latest estimate is 18,900 (or 31.8 per cent) lower than the record peak of 59,370 in the year to 30 June 2009. Australia’s net overseas migration fell by 30.5 per cent over the same period, from 299,860 to 208,340. Queensland accounted for 19.4 per cent of Australia’s net overseas migration over the year to June 2012 (Figure 3.2). While this was similar to the previous year’s share of 18.4 per cent, it was considerably lower than the high of 25.4 per cent achieved in the year to 30 June 2004.
In the year to 30 June 2012, an estimated 92,410 people arrived from overseas to live in Queensland and 51,930 people departed Queensland to live overseas. The increase in the number of overseas arrivals from 2010-11 to 2011-12 was higher than the increase in the number of departures over the same period (12.1 per cent and 1.5 per cent respectively).

Net overseas migration made a relatively small contribution to the State’s total population growth during the 1990s. The growth in overseas migration evident since the mid-1990s reflects increasing arrivals of overseas students and New Zealand citizens, plus Australian Government immigration policy directed largely at skilled labour supply. Queensland’s net overseas migration has increased substantially and was the largest contributor to Queensland’s population growth in the year to 30 June between 2005 and 2010, and in the year to 30 June 2012.
3.3.1 Age of overseas migrants

Overseas migrants to and from Queensland tend to have a young age profile with the largest numbers of both arrivals from overseas and departures from Queensland aged 20-29 years (Figure 3.3). In 2011-12, net overseas migration to Queensland was largest in the age group 20-24 years, with a gain of 7,760 persons.

![Figure 3.3 Overseas migration by age group, Queensland, 2011-12](image)

(a) Only those arrivals and departures that contribute to net overseas migration based on a traveller’s actual duration of stay or absence using the ‘12/16 month rule’.

Source: ABS 3412.0, Migration, Australia, 2010-11 (Data cube: Net overseas migration, Arrivals and departures, State/territory, age and sex—Calendar and Financial years, 2004 to 2012, released 18/12/2012)

3.4 Net interstate migration

Net interstate migration reflects the estimated change to Queensland’s population as people move to and from other states and territories.

Comparing data over the past 30 years (1982-83 to 2011-12), net interstate migration was the largest contributor to Queensland’s annual population growth from 1988 to 1996, driving substantial overall population growth during this period. Net interstate migration was again the largest source of annual net gain in 2002 to 2005, peaking at 37,980 people in the year to 30 June 2003.

The net annual gain from net interstate migration has since declined to 11,800 in the year to 30 June 2012 (Figure 3.4). The percentage contribution of net interstate migration to Queensland’s annual population growth has declined from 42.5 per cent in 2003 to 13.7 per cent in 2012.

The net gain from interstate migration in the year to 30 June 2012 was higher than that recorded for the previous 12 months (7,150), with an increase in arrivals (3,350) and a decrease in departures (1,300). Interstate arrivals to Queensland declined by 25.7 per cent from the record level of 119,550 in the year to June 2003, to 88,870 in the year to June 2012. Interstate departures have remained relatively steady over the same period, declining from 81,570 in 2003 to 77,070 in 2012.
3.4.1 Compared with other states and territories

Queensland’s net interstate migration of 11,800 for the year to 30 June 2012 (around 230 people each week on average) was the largest of all Australian states and territories.

The other states and territories to record a net gain through interstate migration over this period were Western Australia (11,090), Victoria (1,200) and Australian Capital Territory (700). The remaining states and territories recorded net interstate migration losses, led by New South Wales (with a net loss of 18,380 people).

New South Wales and Victoria were the main sources and destinations of Queensland’s interstate arrivals and departures in the year to 30 June 2012. The largest net interstate migration gains were from New South Wales (9,750), followed by Victoria (1,670) and South Australia (1,120) (Figure 3.5). There was a net loss of people from Queensland to Western Australia (-2,510 people).

A larger number of Australians moved interstate in the year to 30 June 2012 (339,510) than in the year before (337,860).
3.4.2 Age of interstate migrants

The age profile of Queensland’s interstate migration in 2011-12 is shown in Figure 3.6. It highlights the large number of younger people moving to and from Queensland.

The age profile of those arriving in Queensland from interstate was very similar to those departing. Young adults in their twenties dominated both arrivals and departures. Together, people aged 20-24 years and 25-29 years accounted for 24.9 per cent of all arrivals to Queensland (22,160) and 27.1 per cent of all departures (20,870). In 2011-12 Queensland recorded a net gain of 150 persons aged 25-29 years, compared with net losses recorded for the previous two years (540 in 2010-11 and 150 persons in 2009-10). There were only six instances where any single age category recorded a net loss since 2000-01.

The numbers of both arrivals and departures tend to be lower in the older age groups, reflecting smaller cohort populations and lower propensities to move. A net gain of 620 persons aged 65 years and older accounted for just 5.3 per cent of Queensland’s total net migration gain in 2011-12.
Figure 3.6  Interstate migration by age group, Queensland, 2011-12

Source: ABS 3412.0, Migration, Australia, 2010-11 (Data cube: Net overseas migration, Arrivals and departures, State/territory, age and sex—Calendar and Financial years, 2004 to 2012, released 18/12/2012)
4. Technical notes

The status of estimated resident population (ERP) data changes over time from preliminary to revised to final as new component data become available. Users should exercise caution when analysing and interpreting the most recent annual and quarterly estimates for all components of ERP, particularly when making time series comparisons.

As mentioned in the introduction, historical analyses of trends in the size and rate of change in Queensland’s ERP have been excluded from this publication. At the time of publication of this report ERPs currently published by the ABS for periods prior to June quarter 2011 were not directly comparable to ERPs for the June quarter 2011 onwards due to a major change in the methodology used by the ABS to estimate Census undercount (the people missing from the count of the population during the 2011 Census).

The ABS will treat the 2006-2011 intercensal error in the final rebasing differently to the methodology used for preliminary rebasing, and historically for other rebasing periods, resulting in revisions to the ERPs during the most recent intercensal period (2006-2011), and all ERPs back to 1991.

Table 4.1 outlines the timing of ABS’ product releases for national, state and territory, and sub-state population estimates (totals and age/sex) that will have been rebased and revised using data from the 2011 Census.

<table>
<thead>
<tr>
<th>Release date</th>
<th>Reference year, version</th>
<th>Geography, estimate type</th>
<th>ABS product</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 June 2013</td>
<td>Final rebased ERP for 30 June 2011 and revised historical ERP series back to 1991</td>
<td>National, state and territory, totals and age/sex</td>
<td>Australian Demographic Statistics, December quarter 2012 (ABS 3101.0)</td>
</tr>
<tr>
<td>30 August 2013</td>
<td>Final rebased ERP for 30 June 2011 and revised historical ERP series back to 1991</td>
<td>Sub-state, totals</td>
<td>Regional Population Growth, Australia, 2011 (ABS 3218.0) (new data cubes added to the downloads section)</td>
</tr>
<tr>
<td>30 August 2013</td>
<td>Final rebased ERP for 30 June 2011 and revised historical ERP series back to 1991</td>
<td>Sub-state, age/sex</td>
<td>Population by Age and Sex, Regions of Australia, 2011 (ABS 3235.0) (new data cubes added to the downloads section)</td>
</tr>
</tbody>
</table>

Source: ABS 3101.0, Australian Demographic Statistics, June quarter 2012 and unpublished information.

Note that the population estimates within this report refer to ERP figures only. Full-time equivalent (FTE) population estimates, which take into account an area’s ERP together with a count of non-resident workers living in the area while rostered-on, are not discussed. Information on FTE population estimates can be found in the Queensland Treasury and Trade reports Bowen Basin Population Report, 2012 and Surat Basin Population Report, 2012 available on the Government Statistician website.
Glossary

This glossary provides a guide to terms used in this report. It is in alphabetical order. Further details about Census data definitions can be obtained from the Australian Bureau of Statistics (ABS) publication Census Dictionary, 2011 (ABS 2901.0).

**Australian resident**

For estimated resident population statistics, the Census year population estimates classify a person as an Australian resident if the person has (in the most recent Census) reported a usual address in Australia where the person has lived or intends to live for six months or more in the Census year. The post-censal estimates, while based on the Census data, are updated with international migration data that have a criterion of one year or more of intended stay in or absence from Australia.

For overseas arrivals and departures statistics, Australian residency is self-reported by travellers when completing an Incoming or Outgoing Passenger Card.

**Australian Statistical Geography Standard (ASGS)**

A geographical framework covering all spatial areas of Australia and the external territories. The ASGS was developed by the ABS to allow statistics from different collections to be spatially comparable. The ASGS came into effect in July 2011, replacing the Australian Standard Geographical Classification (ASGC). The 2012 edition of the ASGS has been used for the data in this report.

**Average annual rate of population change**

Also known as the average annual population growth rate. It is calculated as a percentage using the formula below, where \( P_0 \) is the population at the start of the period, \( P_n \) is the population at the end of the period and \( n \) is the length of the period between \( P_n \) and \( P_0 \) in years.

\[
\left( \frac{P_n}{P_0} \right)^{\frac{1}{n}} - 1 \times 100
\]

For example, to calculate the average annual rate of population change from 2011 to 2021, \( n \) is 10, \( P_0 \) is the population in 2011 and \( P_n \) is the population in 2021.

**Census count**

The Census of Population and Housing enumerates persons on the basis of where they were located on Census night. The Census also compiles information on people according to their place of usual residence. This means that Census counts of people can be produced according to their location on Census night as well as their place of usual residence.

**Estimated resident population (ERP)**

The official measure of the population of Australia is based on the concept of residence. It refers to all people, regardless of nationality or citizenship, who usually live in Australia, with the exception of foreign diplomatic personnel and their families. It includes usual residents who are overseas for less than 12 out of 16 months. It excludes overseas visitors who are in Australia for less than 12 out of 16 months.
**Intercensal error**

The difference between two estimates at 30 June of a Census year population, the first based on the latest Census and the second arrived at by updating the 30 June estimate of the previous Census year with intercensal components of population change which do not take account of information available from the latest Census.

**Natural increase**

The excess of births over deaths in a given area. Although usually positive, natural increase can be negative if the population has an older age structure such that more deaths than births are experienced over a period of time.

**Net interstate migration**

The net result of population movement into the region from interstate minus population movement out of the region to other states. During intercensal years, the ABS prepares state level quarterly estimates of net interstate migration using indicators of population change.

**Net migration**

Net migration refers to the net result of population movement into and out of a given area. It is the resulting change in population from the combination of overseas migration, interstate migration and internal (intrastate) migration.

**Net overseas migration**

The difference between the number of people settling in a given area from overseas and the number of people departing that area to live overseas. Estimates of overseas migration data are derived primarily from Department of Immigration and Citizenship international passenger and visa records, and revised for each period to include only those people who have been in (or out of) Australia for 12 of the previous 16 months. By this definition, some temporary residents in Australia are included in the net overseas migration figure.

**Net undercount**

The difference between the actual Census count (including imputations) and an estimate of the number of people who should have been counted in the Census. This estimate is based on the Post Enumeration Survey conducted after each Census. For a category of person (e.g. based on age, sex and state of usual residence), net undercount is the result of Census undercount, overcount, misclassification and imputation error.

**Temporary entrants**

People may enter Australia on a temporary basis under the Temporary Residence Program, whether as visitors, students or for a range of specialised purposes. Temporary entrants include tourists, students, business people on short stays, people with specialist skills, people who make a social or cultural contribution to the community, and people who contribute to the development of international relations.

The ABS counts temporary entrants towards net overseas migration and estimated resident population if they were in Australia for 12 out of the 16 months prior to the reference period.

**Usual residence**

Usual residence within Australia refers to that address at which the person has lived or intends to live for a total of six months or more in a given reference year.