Population growth highlights and trends, Queensland 2014
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Summary

Queensland's population continued to grow
Queensland’s population was 4,658,560 at 30 June 2013 after growing by 89,860 persons. This was the third largest population increase of any Australian state or territory behind Victoria (106,050) and New South Wales (102,150).

Queensland’s population growth remains higher than the national average
Queensland’s annual population growth rate in the year to 30 June 2013, at 2.0 per cent, was greater than that recorded at the national level (1.8 per cent). Queensland had the third highest growth rate of any Australian state or territory behind Western Australia (3.3 per cent) and the Australian Capital Territory (2.2 per cent).

Queensland's natural increase remained high
Natural increase in the year to 30 June 2013 was 35,300 persons as a result of 63,650 births and 28,350 deaths registered during the year. Natural increase was the second largest contributor to Queensland’s population growth (39.3 per cent), behind net overseas migration (50.2 per cent).

Queensland’s net overseas migration increased
Queensland’s net overseas migration was 45,100 persons in the year to 30 June 2013 as a result of 98,430 overseas arrivals and 53,320 overseas departures. This is the highest level of net overseas migration to Queensland since the record level of 59,320 persons in the year to 30 June 2009.

Queensland’s net overseas migration continues to offset population ageing
Queensland’s net overseas migration gain had a young age profile in 2012–13, with seven in ten aged 0–29 years (70.2 per cent). The largest gain was in the 20–24 years age group (9,880 persons or 21.9 per cent). 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 2013 was 9,460 persons as a result of 86,270 interstate arrivals and 76,810 interstate departures. Although this level of net interstate migration is notably lower than historical levels, it 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 2014* provides an overview of Queensland’s population growth at the state level for the 10 years to 2012–13.

Section 2 provides an overview of Queensland’s recent population growth and its changing age structure. Historical analyses of trends in the size and rate of change in Queensland’s Estimated Resident Population (ERP) are included here. 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 of final rebased and recast population estimates by the Australian Bureau of Statistics (ABS).

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 2013 (ABS 3101.0), with supporting data sourced from *Migration, Australia*, 2011–12 and 2012–13 (ABS 3412.0).

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 are available on the Queensland Government Statistician's Office website.
2. Queensland’s changing population

2.1 Snapshot

At 30 June 2013, Queensland’s preliminary ERP was 4,658,560 (Figure 2.1), representing 20.1 per cent of Australia’s total of 23,130,930 persons. Queensland is Australia’s third largest state by population behind New South Wales (7,407,680) and Victoria (5,737,620).

![Figure 2.1 Estimated resident population, 30 June 2013, and growth, year to 30 June 2013](image)

Note: Population figures are rounded to the nearest 10.
Source: ABS 3101.0, Australian demographic statistics, June 2013

2.2 Absolute population change

Queensland’s population increase in the year to 30 June 2013 of 89,860 persons was the third largest increase of any state or territory after Victoria (106,050) and New South Wales (102,150). Western Australia (80,990) had the fourth largest increase of any state or territory.
Figure 2.2 shows trends in annual population growth for the four largest states in Australia during the 10 years to 30 June 2013. During this period, the highest annual population increase for the three largest states occurred in 2008–09, while Western Australia recorded its highest annual population growth in 2011–12. Following a moderation in annual population growth for the three largest states in the years to 30 June 2010 and 2011, population growth for New South Wales and Victoria has trended upwards in the last two years while Queensland’s growth during this time has steadied at a level comparable to its 10-year average (91,540 persons).

Australia’s population grew by an average of 341,020 persons per year over the 10 years to 30 June 2013. Queensland accounted for 26.8 per cent of that growth, which was the largest contribution of any state or territory in the period. The three largest states of New South Wales, Victoria and Queensland accounted for 75.3 per cent of the national population growth over the 10 years to 30 June 2013.

2.3 Rate of population change

Queensland’s population growth rate was 2.0 per cent for the year to 30 June 2013. This growth rate was higher than the national average of 1.8 per cent and the third highest of any Australian state or territory over this period, surpassed by Western Australia (3.3 per cent) and the Australian Capital Territory (2.2 per cent) (Figure 2.3). Both Queensland and Western Australia recorded a moderation in growth rates in 2012–13.

During the 10 years to 30 June 2013, Queensland’s average annual growth rate was 2.2 per cent, well above the Australian average of 1.6 per cent and surpassed only by Western Australia (2.6 per cent). Peak annual growth in Queensland during this time occurred in the years to 30 June 2007, 2008 and 2009.
The relatively high rate of population growth in Queensland and Western Australia for the 10 years to 30 June 2013 was associated in part with demand for labour from resource extraction and human service industries\(^1\). Following a marked slowing in the annual population growth rates in these two states in 2009–10, Western Australia’s growth rate accelerated in 2010–11 and 2011–12 (when it peaked at 3.5 per cent), while Queensland’s growth rate remained at a level below its period of peak growth.

### 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 (those born 1946–1965) into the older age groups. The ageing of Queensland’s population is illustrated by the change in distribution of the population by five–year age groups over the 20 year period to 30 June 2013 in Figure 2.4.

Figure 2.4 shows that, at 30 June 2013, there were proportionally fewer persons within each five–year age group up to 45-49 years of age compared with 20 years ago. At 30 June 1993, the 20–24 year age group comprised the largest proportion of the population at 8.4 per cent. By 30 June 2013, persons aged 25–29 years and 40–44 years were the largest groups proportionally (both 7.3 per cent). While the overall proportion of the population aged 15–64 years (the working-age population) remained stable between 1993 and 2013 (66.6 per cent and 66.5 per cent respectively), the proportion of the population aged 65 years or older increased from 11.0 per cent to 13.6 per cent over this period.

\(^1\) [Article: ‘Employment and mining in Queensland, New South Wales and Western Australia’](http://www.abs.gov.au/abs@.nsf/Lookup/6202.0Main+Features09), ABS 6202.0, Labour force, Australia, May 2012
The increase in the older ages is also influenced by increasing length of life in the older age groups. For example, the expected remaining years of life for Queenslanders aged 65 years in 2012 was 18.9 years for males and 21.9 years for females, up from 17.4 years and 20.8 years for males and females respectively in 2002\(^2\).

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 32.4 years at 30 June 1993, increasing to 36.6 years at 30 June 2013\(^3\). 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.

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\(^2\) ABS 3302.0, Deaths Australia, 2012. Life expectancy has been calculated using data for the three years ending in the reference year.

\(^3\) ABS 3101.0, Australian demographic statistics, Dec 2012 and Jun 2013
3. Components of population change

3.1 Overview

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 2013 (Table 3.1).

Net overseas migration accounted for the largest proportion of growth over the year (45,100 persons or 50.2 per cent of the State’s total). The contribution of natural increase was 35,300 persons (39.3 per cent of the total). Net interstate migration made the smallest contribution to growth with 9,460 persons, or 10.5 per cent of total growth.

<table>
<thead>
<tr>
<th>Table 3.1</th>
<th>Components of population change, Queensland, year to 30 June 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Queensland</td>
<td>persons</td>
</tr>
<tr>
<td>Estimated resident population at 30 June 2012</td>
<td>4,568,700</td>
</tr>
<tr>
<td>Births(a)</td>
<td>63,650</td>
</tr>
<tr>
<td>less – Deaths(a)</td>
<td>28,350</td>
</tr>
<tr>
<td>equals – Natural increase year to 30 June 2013</td>
<td>35,300</td>
</tr>
<tr>
<td>Overseas arrivals(b)</td>
<td>98,430</td>
</tr>
<tr>
<td>less – Overseas departures(b)</td>
<td>53,320</td>
</tr>
<tr>
<td>equals – Net overseas migration, year to 30 June 2013</td>
<td>45,100</td>
</tr>
<tr>
<td>Interstate arrivals(c)</td>
<td>86,270</td>
</tr>
<tr>
<td>less – Interstate departures(c)</td>
<td>76,810</td>
</tr>
<tr>
<td>equals – Net interstate migration, year to 30 June 2013</td>
<td>9,460</td>
</tr>
<tr>
<td>Estimated resident population at 30 June 2013</td>
<td>4,658,560</td>
</tr>
</tbody>
</table>

(a) Estimates are preliminary based on year of registration basis.
(b) 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’. Estimates are preliminary.
(c) Estimates are preliminary based on 2006 Census expansion factors.

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 2013

The contribution to Queensland’s population growth by each component has changed notably during the 10 years to 30 June 2013 (Figure 3.1). Over this period, net migration from interstate and overseas has shown more volatility in numbers than natural increase. The level of net overseas migration in Queensland has been trending upwards in the last two years following a marked decline in levels after the peak of 59,320 in 2008–09. In contrast, the level of net interstate migration progressively declined over the period between 2003–04 and 2009–10 and has remained at markedly lower levels over the last three years compared with ten years ago.
Natural increase is calculated as births minus deaths for any given period, using year of registration for preliminary data and year of occurrence for both revised and final data. Natural increase contributed 35,300 persons to Queensland’s population in 2012–13, slightly lower than the previous year’s figure of 35,430. This was the third highest level of natural increase of any Australian state or territory in 2012–13 behind New South Wales (49,900), and Victoria (40,750), and accounted for 21.7 per cent of the national level of natural increase over the year. Queensland’s natural increase in 2012–13 was the result of an estimated 63,650 births and 28,350 deaths registered during the year.

Natural increase figures are relatively stable in comparison with other components of population growth. The level of annual natural increase trended upwards between 2003–04 to 2009–10, when it peaked at 36,600 for the year to 30 June 2010. Its share of Queensland’s population growth increased from 29.4 per cent to 46.6 per cent over this period. This was the result of both a larger overall increase in the number of births relative to deaths (an increase of 14,020 births compared with 2,720 deaths) and a large decrease in the level of net interstate migration in Queensland (by 29,330 persons) over the period.

Over the three years to 2012–13, the annual level of natural increase has steadied although its overall contribution to Queensland’s population growth has declined as a result of an increase in levels of net overseas migration during this time.
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, regardless of nationality, citizenship or legal status, 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 45,100 persons in Queensland in the year to 30 June 2013, slightly higher than the previous year’s figure of 44,690. Queensland recorded the fourth largest increase in net overseas migration in the year to 30 June 2013 behind New South Wales (67,780), Victoria (60,630) and Western Australia (51,810). Since 2010–11, Western Australia’s annual level of net overseas migration has been higher than that recorded for Queensland.

Queensland’s level of net overseas migration in 2012–13 was 14,220 persons (or 24.0 per cent) lower than the peak of 59,320 recorded in the year to 30 June 2009 (Figure 3.2). Australia’s net overseas migration fell by 18.5 per cent over the same period, from 299,870 to 244,370. Queensland accounted for 18.5 per cent of Australia’s net overseas migration in 2012–13.

In the year to 30 June 2013, an estimated 98,430 persons arrived from overseas to live in Queensland and 53,320 persons departed Queensland to live overseas. The increase in the number of overseas arrivals from 2011–12 to 2012–13 was higher than the increase in the number of departures over the same period (an increase of 2,830 and 2,410 respectively).
Queensland’s net overseas migration has increased substantially in recent years and has been the largest contributor to Queensland’s population growth since 2005–06, with the exception of 2009–10 and 2010–11 when net overseas migration was surpassed by the contribution from natural increase.

### 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 and departures aged 20–29 years (Figure 3.3). Preliminary estimates for the year to 30 June 2013 indicate that net overseas migration to Queensland was largest in the age group 20–24 years (9,880 persons).

#### Figure 3.3 Overseas migration by age group, Queensland, 2012–13

![Overseas migration by age group, Queensland, 2012–13](chart.png)

(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, 2011–12 and 2012–13

### 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.

During the 10 years to 30 June 2013, net interstate migration was the largest source of annual net population gain in 2003–04 and 2004–05, contributing 35,500 and 30,370 persons (or 41.2 per cent and 34.5 per cent) respectively to the State’s annual growth (Figure 3.4).

The net annual gain from net interstate migration has since declined to 9,460 in the year to 30 June 2013, accounting for 10.5 per cent of Queensland’s annual population growth. Although this net gain from interstate migration was lower than that recorded for 2011–12 (11,800), it is higher than the historic low levels of net interstate migration recorded in 2009–10 and 2011–11 (6,170 and 6,800 respectively).
In the year to 30 June 2013, an estimated 86,270 persons arrived from interstate to live in Queensland and 76,810 persons departed Queensland to live interstate. Interstate arrivals declined by 2,600 persons over the year to 30 June 2013, while the number of interstate departures declined by 270 persons.

**Figure 3.4 Interstate migration flows, Queensland, year to 30 June**

Note: Estimates up to and including the June quarter 2011 are final. Estimates for September quarter 2011 onwards are preliminary based on 2006 Census expansion factors.

Source: ABS 3101.0, *Australian demographic statistics*, June 2013

### 3.4.1 Compared with other states and territories

Queensland’s net interstate migration of 9,460 for the year to 30 June 2013 (around 180 persons per week on average) was the largest of all Australian states and territories. Queensland has historically had the highest net interstate migration levels of any Australian state or territory, with the exception of 2010–11 when its net interstate migration gain was surpassed by that of Western Australia (6,800 and 7,030 persons respectively).

The other states and territories to record a net gain through interstate migration over the year were Western Australia (7,990), Victoria (4,670) and Australian Capital Territory (1,580). The remaining states and territories recorded net interstate migration losses, led by New South Wales (with a net loss of 15,530 persons).

New South Wales and Victoria were the main sources and destinations of Queensland’s interstate arrivals and departures in the year to 30 June 2013.

The largest net interstate migration gains were from New South Wales (7,430) followed by South Australia (1,710) and Northern Territory (1,000) (Figure 3.5). There was a net loss of 1,610 persons from Queensland to Western Australia.

Overall a lower number of interstate moves occurred in the year to 30 June 2013 (333,350) than in the previous year (339,510).
3.4.2 Age of interstate migrants

The age profile of Queensland’s interstate migrants in 2012–13 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, persons aged 20–24 years and 25-29 years accounted for 23.8 per cent of all arrivals to Queensland (20,540) and 26.7 per cent of all departures (20,490). In 2012–13 Queensland recorded a net loss of 680 persons aged 25–29 years, the only age group to record a net loss over the year. This was only the sixth instance where any single age category in Queensland recorded a net loss from interstate migration in the 10 years to 30 June 2013.

The age groups with the highest net gains from interstate migration in Queensland in 2012–13 were children aged 5–9 years and persons aged 35–39 years (1,220 and 1,180 respectively).

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 550 persons aged 65+ years accounted for just 5.9 per cent of Queensland’s total net migration gain in 2012–13.
Figure 3.6 Interstate migration\(^{(a)}\) by age group, Queensland, 2012–13

(a) Estimates for 2012–13 are preliminary based on 2006 Census expansion factors.

Source: ABS 3412.0, Migration, Australia, 2011–12 and 2012–13
4. Technical notes

The status of 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.

The ABS has revised ERPs from September quarter 1991 to June quarter 2011 for Australia and all states and territories. These recast estimates reduce the impact of the relatively high intercensal error for 2006–2011 and adjust the undercount in previous years to more closely reflect the adjustments of the improved 2011 PES methodology. Further information on these revisions is available from these articles on the ABS website:

-'Feature article 1: Final rebasing of Australia’s population estimates, September quarter 2006 – June quarter 2011’, Australian demographic statistics, Dec 2012 (ABS 3101.0)

-'Feature article 2: Recasting 20 years of ERP’, Australian demographic statistics, Dec 2012 (ABS 3101.0)

The ABS released sub–state population estimates (totals and age/sex) rebased using data from the 2011 Census on 30 August 2013 in the ABS products Regional population growth, Australia 2012 (ABS 3218.0) and Population by age and sex, regions of Australia, 2012 (ABS 3235.0). Final Aboriginal and Torres Strait Islander ERP based on the 2011 Census will be available on 30 April 2014 in the ABS product Estimates of Aboriginal and Torres Strait Islander Australians, 2001 to 2016 (ABS 3238.0).

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 Government Statistician’s Office, Queensland Treasury and Trade reports Bowen Basin Population Report and Surat Basin Population Report and associated data tables.

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, citizenship or legal status, 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 discrepancy
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 take account of information available from the latest census. Intercensal discrepancy is determined once rebasing is complete, and is the difference between final ERP and the final updated components of ERP.

Intercensal error
The difference between two estimates at 30 June of a census year population, the first based on the latest census (the ‘rebased’ estimate) 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 (the ‘unrebased’ estimate).
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 (NIM)
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 Border Protection international passenger and visa records, and revised for each period to include only those people, regardless of nationality, citizenship or legal status, 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.

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.