Queensland Government Statistician's Office



# Population estimates by Indigenous status, Queensland, data quality statement, 2015 edition

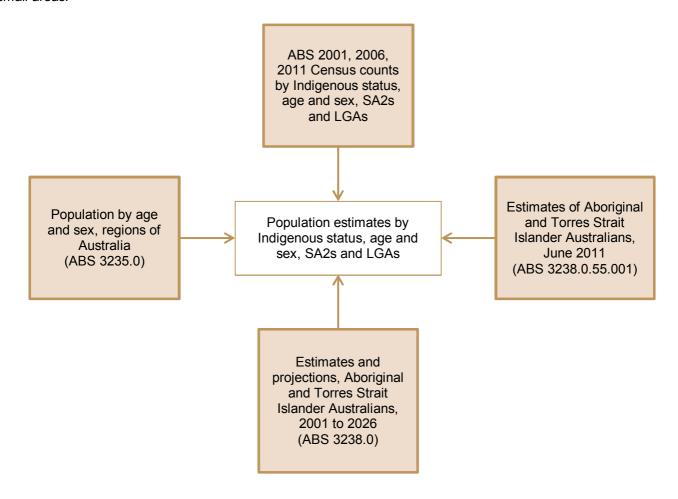
#### Introduction

Detailed population estimates by Indigenous status have been made available by:

- Indigenous status (Aboriginal and Torres Strait Islander, and non-Indigenous)
- Queensland statistical areas level 2 (SA2s) and local government areas (LGAs) based on the 2015 Australian Bureau of Statistics (ABS) Australian Statistical Geography Standard (ASGS)
- age (single year under 20 years, five-year age groups from 20 to 64 years, and 65 years and over) and sex
- years 2001 to 2015 (for LGAs) and 2006 to 2015 (for SA2s).

Estimates from 2001 to 2011 are final, and from 2012 to 2014 are revised. 2015 estimates are preliminary and are therefore subject to change. The final, revised or preliminary status of these estimates is consistent with the status of small area population estimates by age and sex published by the Australian Bureau of Statistics (ABS 3235.0).

These estimates have been modelled using four data sets, each of which contains inherent error affecting the data quality of the modelled estimates. The following figure shows these data sets used to compile the estimates for Queensland small areas:







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#### Sources of error

#### **Census of Population and Housing**

The principal sources of error in census data include:

- significant volatility in Aboriginal and Torres Strait Islander counts between censuses and within age—sex structures at the SA2 and LGA level
- undercount of the total population, and for persons identifying as being of Aboriginal and/or Torres Strait Islander origin
- partial response to the question on Aboriginal and Torres Strait Islander origin
- processing error related to the data capture of males and females in corrective institutions in Queensland at the time of the 2001 Census
- introduced random error in census output.

For example, census counts for Wujal Wujal LGA in 2011 indicate zero males and 15 females aged 0–4 years. This results in 2011 population estimates of zero males and 20 females in the 0–4 years age group in this LGA.

#### Small area population estimates by age and sex for the total population (ABS 3235.0)

Small area population estimates published by the ABS are based on census counts in census years, while a mathematical model is used to create estimates for intercensal years. The accuracy of these estimates is therefore directly related to the suitability of the mathematical model for non-census years. Small area population estimates for 2015 are preliminary; estimates for years 2012 to 2014 have been revised, and are final for 2001 to 2011.

# Aboriginal and Torres Strait Islander population estimates and projections at the Queensland level (ABS 3238.0)

Aboriginal and Torres Strait Islander population estimates and projections at the state level have been produced using the cohort-component method. A 2011 base population has been used, with projections for later years being generated by advancing year by year and applying assumptions regarding future fertility, mortality and migration. A similar technique was used to estimate populations prior to 2011, by 'reverse-surviving' the population using mortality rates derived from life tables.

Therefore while the 2011 figures are estimated resident population (ERP) numbers, the projections are based on assumptions, and are not predictions, forecasts or ERP numbers. Back-cast estimates are based on assumptions, and are also not ERP numbers.

#### Caveats

Due to sources of error in the data sets used to model these estimates, these numbers should be used with caution.

The SA2 and LGA estimates have been modelled independently. As such, it is recommended that SA2 estimates **not be aggregated** to LGA level or **compared directly** to LGA figures, as results may be inconsistent.

## Best practice use of the estimates

While the estimates are available for individual cross tabulations of age, sex, Indigenous status, LGA and SA2 categories, a high degree of accuracy at this level of disaggregation should not be assumed. The quality of the estimates increases at higher levels of aggregation (for example, larger geographical units, for persons only, or for larger groupings of age categories). The iterative proportional fitting technique used to create these estimates has ensured that the estimates are consistent with population estimates published by ABS. Therefore, it is strongly recommended that the estimates be aggregated before being used.

### Rounding

Data cells may not precisely sum to published totals due to rounding.