

Conversion of Australian Bureau of Statistics (ABS) Population Projections to Enrolment Projections

The Australian Bureau of Statistics (ABS) have calculated projections of the population of Australian residents aged 18 years and over for each Census Collection District (CD) starting with a base at 30 June 2004 annually through to 30 June 2010. To allow baseline comparison with latest electoral roll counts, interpolation was used to derive 15 November 2005 population. The 31 May 2010 population projections were also calculated by interpolating between 30 June figures.

For most CDs it was assumed that the proportional relationship between electoral enrolments and resident population aged 18+ will continue. Accordingly, the population projections were converted to enrolment projections as follows:

$$\begin{aligned} P_{2005} &= \text{ABS projection of residents aged 18+ at 15 November 2005} \\ P_{2010} &= \text{ABS projection of residents aged 18+ at 31 May 2010} \\ E_{2005} &= \text{Enrolled persons at 15 November 2005} \\ E_{2010} &= \text{Projected enrolled persons at 31 May 2010} \end{aligned}$$

$$E_{2010} = (E_{2005} / P_{2005}) * P_{2010}$$

For example, a Census Collection District's figures may be:

$$\begin{aligned} P_{2005} &= 471 \\ P_{2010} &= 498 \\ E_{2005} &= 411 \\ E_{2010} &= (411 / 471) * 498 \\ &= 435 \end{aligned}$$

Some CDs with very high growth have low enrolment population ratios due to lags in occupancy and/or change in enrolment address. These ratios were adjusted upwards as the lags work out over time, adjusting to the degree necessary to maintain the overall State enrolment ratio.

In a minority of CDs where enrolments were greater than the baseline population projection, it was assumed that electoral enrolments will grow by the same amount as the population of Australian residents aged 18+, ie:

$$E_{2010} = E_{2005} + (P_{2010} - P_{2005})$$

For example, a Census Collection District's figures may be:

$$\begin{aligned} P_{2005} &= 146 \\ P_{2010} &= 228 \\ E_{2005} &= 150 \\ E_{2010} &= 150 + (228 - 146) \\ &= 232 \end{aligned}$$

Thereafter the Australian Electoral Commission may amend the enrolment projections for certain CDs based on specific local knowledge of the area.