

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 Statistical Area Level 1 (SA1) starting with a base at 30 June 2016 annually through to 30 June 2020. To allow baseline comparison with latest electoral roll counts, linear interpolation was used to derive 4 September 2017 population. The 25 August 2019 population projections were also calculated by interpolating between 30 June figures.

For most SA1s 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:

$$\begin{aligned} P_{2017} &= \text{ABS projection of residents aged 18 and over at 4 September 2017} \\ P_{2019} &= \text{ABS projection of residents aged 18 and over at 25 August 2019} \\ E_{2017} &= \text{Enrolled persons at 4 September 2017} \\ E_{2019} &= \text{Projected enrolled persons at 25 August 2019} \\ E_{2019} &= (E_{2017} / P_{2017}) * P_{2019} \end{aligned}$$

For example, a Statistical Area 1's figures may be:

$$\begin{aligned} P_{2017} &= 479 \\ P_{2019} &= 493 \\ E_{2017} &= 363 \\ \\ E_{2019} &= (363 / 479) * 493 \\ &= 374 \end{aligned}$$

Where a SA1 crosses existing electoral division boundaries, the projected enrolment has been allocated to electoral divisions in the same proportion as current enrolments.

In a minority of SA1s 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 and over, i.e.:

$$E_{2019} = E_{2017} + (P_{2019} - P_{2017})$$

For example, a SA1's figures may be:

$$\begin{aligned} P_{2017} &= 1,125 \\ P_{2019} &= 1,390 \\ E_{2017} &= 1,192 \\ \\ E_{2019} &= 1,192 + (1,390 - 1,125) \\ &= 1,457 \end{aligned}$$

Thereafter the Redistribution Committee may amend the enrolment projections for certain SA1s based on specific local knowledge of the area.