Appendix 3 – *Text provided by the Australian Bureau of Statistics*

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 1 (SA1) starting with a base at 30 June 2013 annually through to 30 June 2017. To allow baseline comparison with latest electoral roll counts, interpolation was used to derive 1 December 2014 population. The 8 February 2017 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:

P_{2014} = ABS projection of residents aged 18+ at 1 December 2014

P_{2017} = ABS projection of residents aged 18+ at 8 February 2017

E_{2014} = Enrolled persons at 1 December 2014

E_{2017} = Projected enrolled persons at 8 February 2017

E_{2017} = $(E_{2014} / P_{2014}) * P_{2017}$

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

P_{2014} = 479

P_{2017} = 493

E_{2014} = 363

E_{2017} = (363 / 479) * 493

= 374

Some SA1s 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.

Where a SA1 crosses existing electoral 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+, ie:

E_{2017} = $E_{2014} + (P_{2017} - P_{2014})$

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

$$P_{2014} = 1,125$$
$$P_{2017} = 1,390$$
$$E_{2014} = 1,192$$

$$E_{2017} = 1,192 + (1,390-1,125)$$
$$= 1,457$$

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

The SA1 is a relatively new geographic unit and AEC have undertaken a conversion process to code the electoral roll to the SA1 as a replacement unit for the CCD.