Analysis of Indigenous Enrolment

Population Estimates

The ABS data provided at table 1 represents the ABS estimated <u>resident</u> Indigenous population 1=8 years and over by state as at 2016 and projected to 30 June 2019.

This data has not been adjusted by the ABS to calculate estimated Indigenous enrolment eligible population, however, table 2 provides the AEC's estimated Indigenous voting age population as at 30 June 2018.

Table 1 - ABS estimated resident and projected population - Indigenous Australians - 18 years and over

Estimated resident ar	d resident and projected population, Aboriginal and Torres Strait Islander Australians, Series B, 18 years and over - 30 June 2016 to 2019 (see note a)			
State/territory	Estimated Resident Population	Š	Projected Population	
	2016 (see note b)	2017	2018	2019
ACT	4,670	4,886	5,089	5,273
NSW	156,172	160,403	164,510	168,896
NT(b)	48,180	49,282	50,464	51,674
QLD	127,492	131,166	135,141	139,306
SA	24,991	25,719	26,507	27,207
Tas	16,991	17,471	17,986	18,489
Vic	34,289	35,457	36,645	37,839
WA	60,733	62,544	64,451	66,335
Australia (see note c)	473,710	487,121	500,988	515,215

Source: Australian Bureau of Statistics, Estimates and Projections, Aboriginal and Torres Strait Islander Australians, 2006 to 2031 (cat. No. 3238.0)

- (a) Projection Series B has been used for the period 2017-2019.
- (b) An age heaping adjustment was applied to derive final 30 June 2016 Aboriginal and Torres Strait Islander population estimates for the Northern Territory. This information was published in Estimates of Aboriginal and Torres Strait Islander Australians, June 2016 (cat. no. 3238.0.55.001) and has been used as the base population for compiling estimates and projections for this release.
- (c) Includes Other Territories.

Estimated Indigenous Enrolment Rates

Table 2 - Estimated Indigenous Enrolment Rates

	Estimated Indigenous Enrolment Rates as at 30 June 2018			
State	Estimated Indigenous voting age population	Estimated enrolled	Estimated unenrolled	Estimated enrolment rate
NSW	164,845	143,891	20,954	87.3%
VIC	36,538	27,775	8,763	76.0%
QLD	135,642	98,357	37,285	72.5%
WA	64,545	41,182	23,363	63.8%
SA	26,522	18,622	7,900	70.2%
TAS	18,004	15,150	2,854	84.1%
ACT	5,000	3,971	1,029	79.4%
NT	50,563	34,130	16,433	67.5%
National	501,659	383,078	118,581	76.4%

As Australia's federal electoral roll does not have a personal Indigenous identifier, estimating the enrolment rates for Indigenous persons is problematic, however, having this key franchise KPI for the Indigenous population is important for Closing the Gap purposes and the AECs focus on how the franchise could be better delivered.

In 2014 the AEC's Research Section commenced indirect estimation of these figures, using a regression model of the relationship between the Indigenous population and each of the three franchise KPIs at a small area level, such as polling place catchment or the ABS' SA2 geography.

While the models did not fit the data particularly well, the resulting Indigenous enrolment rates were statistically based on real data, rather than anecdote. Yet the resulting enrolment and turnout rates in particular were alarmingly low, and hopefully represented a worst case picture.

As part of the Annual Roll Integrity Review (ARIR), the person-level matching between the Roll and Centrelink now includes Centrelink's Indigenous indicator. However, as Centrelink customers represent only around half of the Roll, the matching (even if perfect) would be far from assigning all enrolments an Indigenous flag. Nevertheless, for the first time the AEC has a very large number of enrolled persons, over 6 million, with an explicit Indigenous status.

The enrolment rate, even for all persons regardless of indigeneity, is difficult to calculate reliably due to conceptual, collection and methodological differences between the Roll (numerator) and the ABS-based enrolment-eligible population (denominator, "EEP"). In the case of the Indigenous population

these problems are magnified by having no Indigenous identifier on the Roll and less reliable estimates of Indigenous EEP.

However, matching the Roll to Centrelink data allows a more direct method of estimating the Indigenous enrolment rate.

It is still subject to quite courageous assumptions, but as fewer are required it likely represents an improved approach. In summary:

- For all Centrelink customers with an identified Indigenous or non-Indigenous status,
 calculate the proportion on the Roll. This is the raw enrolment rate of Centrelink clients.
- Calculate the ratio of the actual AEC enrolment rate versus the Centrelink-based rate, for the same point in time. This is the overall factor to adjust any Centrelink-based rates to align with AEC enrolment rates.
- Apply the adjustment factor to raw Centrelink-based enrolment rates by Indigenous status to give Indigenous and non-Indigenous enrolment rates.
- This process can be done at the State level, though results will have lower reliability.

It should be noted that while this method avoids indirectly modelling Indigenous enrolment rates via geographic association, it does assume that any bias in Centrelink clients being enrolled is equal for Indigenous and non-Indigenous, and that there are no substantive Indigenous-status biases inherent in the Roll-to-Centrelink person matching.

The Centrelink client file with Indigenous indicator newly available to the AEC has presented an excellent opportunity, via matching to the Roll and mark-off data, to improve estimation of Indigenous franchise KPIs.

While the results are subject to a number of non-trivial assumptions, the more direct estimation methods lead to a higher likelihood of robust results. The figures should nevertheless still be regarded as *indicative* only.

Centrelink Data

The number of Indigenous Australians that are identified both on the Centrelink file sent to the AEC in July 2018 and the electoral Roll does not represent all Indigenous enrolments. It is limited to those Indigenous Australians who both receive a Centrelink benefit and who have self-identified as Indigenous to Centrelink.

After considerable data cleansing and analysis the AEC identified 72,451 potentially unenrolled Indigenous Australians. This represents around 61 per cent of the 118,581 Indigenous Australians the AEC estimate were unenrolled as at 30 June 2018 (see table 2 above).

The enrolment stimulation event conducted in February/March 2019 resulted in the enrolment of 2,646 Indigenous Australians, reducing the estimated number of unenrolled Indigenous Australians identified in the Centrelink dataset to 69,143. Table 3 sets out the distribution of this cohort across electoral divisions.

It is important to note that the potential unenrolled under 65 Indigenous Australians as at the 2019 close of rolls represents those people that are on the Centrelink file sent to the AEC in July 2018 and who were included in the February 2019 enrolment stimulation event but had not enrolled as at the 2019 close of rolls (18 April 2019).

Analysis of the Centrelink potentially unenrolled Indigenous Australians 65 years and older identified significant matching error, due to the quality of data input and the nature of the residential status of this cohort. Work will be undertaken on the 2018-19 dataset to better understand this phenomenon to facilitate better targeting of potentially unenrolled indigenous Australians in the future.

Table 3 - Enrolled and potentially unenrolled Indigenous Australians identified on the 2017-18 Centrelink file by electoral division as at the 2019 close of rolls

Division	Potential Unenrolled under 65 Indigenous Australians as at the 2019 close of rolls	Number of Indigenous Australians in the Centrelink file and enrolled as at 30 June 2018
BEAN	168	702
CANBERRA	157	468
FENNER	145	631
BANKS	50	365
BARTON	63	415
BENNELONG	23	206
BEROWRA	14	133
BLAXLAND	52	364
BRADFIELD	4	74
CALARE	494	3,676
CHIFLEY	439	2,838
СООК	21	307
COWPER	743	4,382
CUNNINGHAM	164	1,229
DOBELL	210	2,386

Division	Potential Unenrolled under 65 Indigenous Australians as at the 2019 close of rolls	Number of Indigenous Australians in the Centrelink file and enrolled as at 30 June 2018
EDEN-MONARO	308	1,658
FARRER	733	2,641
FOWLER	87	532
GILMORE	439	2,839
GRAYNDLER	160	659
GREENWAY	102	710
HUGHES	19	370
HUME	91	1,133
HUNTER	253	3,017
KINGSFORD SMITH	153	1,010
LINDSAY	257	2,159
LYNE	387	3,088
MACARTHUR	218	1,911
MACKELLAR	14	160
MACQUARIE	100	1,182
MCMAHON	68	567
MITCHELL	11	155
NEW ENGLAND	805	5,527
NEWCASTLE	234	2,033
NORTHSYDNEY	13	101
PAGE	837	3,856
PARKES	2,162	10,143
PARRAMATTA	103	493
PATERSON	247	2,955
REID	27	208
RICHMOND	328	1,961
RIVERINA	451	3,337
ROBERTSON	123	1,308
SHORTLAND	159	1,831
SYDNEY	376	1,231
WARRINGAH	4	120
WATSON	41	307
WENTWORTH	11	124
WERRIWA	177	1,077
WHITLAM	197	1,832
LINGIARI	5,483	16,473
SOLOMON	1,395	3,659
BLAIR	898	
		2,331
BONNER	224	832

Division	Potential Unenrolled under 65 Indigenous Australians as at the 2019 close of rolls	Number of Indigenous Australians in the Centrelink file and enrolled as at 30 June 2018
BOWMAN	286	945
BRISBANE	234	636
CAPRICORNIA	991	2,537
DAWSON	971	2,687
DICKSON	217	818
FADDEN	195	978
FAIRFAX	216	866
FISHER	201	911
FLYNN	1,114	2,715
FORDE	484	1,464
GRIFFITH	247	691
GROOM	748	2,035
HERBERT	2,504	4,808
HINKLER	731	2,178
KENNEDY	4,221	7,587
LEICHHARDT	3,537	10,021
LILLEY	379	1,077
LONGMAN	551	1,888
MARANOA	1,131	3,025
MCPHERSON	123	751
MONCRIEFF	202	885
MORETON	258	704
OXLEY	640	1,499
PETRIE	467	1,536
RANKIN	749	1,653
RYAN	112	408
WIDE BAY	818	1,886
WRIGHT	343	1,155
ADELAIDE	459	1,038
BARKER	610	1,207
воотнву	221	620
GREY	1,931	3,938
HINDMARSH	412	1,141
KINGSTON	278	810
MAKIN	242	773
MAYO	131	443
SPENCE	705	1,936
STURT	154	416
BASS	326	1,199

Division	Potential Unenrolled under 65 Indigenous Australians as at the 2019 close of rolls	Number of Indigenous Australians in the Centrelink file and enrolled as at 30 June 2018
BRADDON	364	2,491
CLARK	279	964
FRANKLIN	255	1,231
LYONS	399	1,521
ASTON	29	172
BALLARAT	179	625
BENDIGO	176	761
BRUCE	104	303
CALWELL	116	361
CASEY	75	327
CHISHOLM	21	125
COOPER	225	571
CORANGAMITE	56	302
CORIO	186	576
DEAKIN	39	187
DUNKLEY	120	404
FLINDERS	62	393
FRASER	77	251
GELLIBRAND	74	295
GIPPSLAND	489	1,121
GOLDSTEIN	23	75
GORTON	103	393
HIGGINS	25	126
HOLT	61	301
НОТНАМ	20	118
INDI	184	717
ISAACS	26	141
JAGAJAGA	72	253
KOOYONG	9	69
LATROBE	25	256
LALOR	75	446
MACNAMARA	68	222
MALLEE	662	1,631
MARIBYRNONG	61	206
MCEWEN	66	391
MELBOURNE	115	264
MENZIES	10	73
MONASH	157	497
NICHOLLS	576	1,570

Division	Potential Unenrolled under 65 Indigenous Australians as at the 2019 close of rolls	Number of Indigenous Australians in the Centrelink file and enrolled as at 30 June 2018
SCULLIN	105	415
WANNON	251	764
WILLS	63	291
BRAND	430	1,371
BURT	675	1,718
CANNING	332	1,025
COWAN	347	953
CURTIN	131	339
DURACK	6,885	9,241
FORREST	424	1,274
FREMANTLE	444	1,012
HASLUCK	583	1,420
MOORE	72	303
O'CONNOR	1,684	3,260
PEARCE	505	1,437
PERTH	343	730
STIRLING	380	886
SWAN	602	1,484
TANGNEY	139	330
NO FIXED ADDRESS	1,166	
TOTAL	69,805	224,554

Table 4 - Enrolled and potentially unenrolled Indigenous Australians identified on the 2017-18 Centrelink file by electoral division

State	Potential Unenrolled under 65 Indigenous Australians as at the 2019 close of rolls	Number of Indigenous Australians in the Centrelink file and enrolled as at 30 June 2018
ACT	470	1,801
NSW	11,972	78,610
NT	6,878	20,132
Qld	23,792	61,507
SA	5,143	12,322
Tas	1,623	7,406
Vic	4,123	15,993
WA	13,976	26,783

No Fixed Address	1,166	-
Total	69,143	224,554