2016 -17 LEGISLATIVE COUNCIL ELECTORAL BOUNDARIES

Redistribution

2016-17 Redistribution of Legislative Council Electoral Boundaries

Initial Redistribution Proposal – Reasons

Published by the Legislative Council Electoral Boundaries Redistribution Committee in accordance with the *Legislative Council Electoral Boundaries Act 1995*.

28 January 2017

2016 -17 LEGISLATIVE COUNCIL ELECTORAL BOUNDARIES

Redistribution COMMITTEE

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Mr Andrew Hawkey, Electoral Commissioner, Chairperson

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Note:

The Redistribution Committee and Tribunal are statutory bodies independent of the Tasmanian Electoral Commission (TEC). The TEC provides secretarial and administrative support to the Committee and Tribunal.

Contents

Public Offices for the Redistribution

The following locations have been designated as Public Offices for the purposes of the *Legislative Council Electoral Boundaries Act 1995*.

ServiceTas Offices		Hours of Operation
Beaconsfield	Council Chambers, West St	9:30 - 4:30, T/Th: Closed
Bridgewater	Bridgewater LINC, Green Point Rd	9:00 - 4:30
Burnie	Reece House, 48 Cattley St	8:45 - 4:45
Campbell Town	Council Chambers, High St	11:00 - 4:00
Currie	15 George St, Currie, King Island	11:00 - 4:00, Wed: Closed
Deloraine	8 Emu Bay Rd	9:30 - 1:00, 1:30 - 4:30
Devonport	21 Oldaker St	8:45 - 4:45
George Town	12 Elizabeth Street	10:00 - 4:30
Glenorchy	4 Terry St	9:00 - 5:00
Hobart	Ground Floor, 134 Macquarie St	9:00 - 5:00
Huonville	1 Skinner Drive	9:00 - 4:30
Kingston	87A Channel Court	9:00 - 4:30
Launceston	Henty House, 1 Civic Square	8:30 - 4:30
Longford	Shop 6, 9 Wellington St	9:00 - 4:30
New Norfolk	14 Bathurst St	9:00 - 4:30
Oatlands	71 High St	11:00 - 4:00
Queenstown	9 - 13 Driffield St	9:30 - 4:30
Rosny	46 Bligh St	9:00 - 5:00
Scottsdale	51 King St	10:00 - 4:30
Sheffield	64 High St	9:30 - 12:30, 1:00 - 4:00
Smithton	134 Nelson St	9:00 - 4:30
Sorell	Shop 3, 5 Fitzroy St	9:00 - 4:30
St Helens	65 Cecilia St	10:00 - 4:30
Triabunna	17 Vicary St	10:00 - 4:00
Ulverstone	54 - 56 King Edward St	9:00 - 4:30
Whitemark	2 Lagoon Rd	M/T/W: 11:00 - 3:00
Wynyard	72 Goldie St	9:30 - 4:00

Tasmanian Electoral Commission Office		Hours of Operation
Moonah	Level 3, 169 Main Rd	9:00 – 5:00

Comments, Suggestions or Objections

Within the period of 28 days after the publication of the Initial Redistribution Proposal on 28 January 2017, a person or organisation may lodge with the Redistribution Tribunal a written comment, suggestion or objection in relation to the Initial Redistribution Proposal. The deadline for lodgment of such comments, suggestions or objections is close of business, 25 February 2017.

Facilities for testing alternative scenarios on mapping software, with the assistance of a trained operator, will be made available at the Tasmanian Electoral Commission office to anyone wishing to make a comment, suggestion or objection during the 28-day period. Appointments may be made through the Executive Officer (info@redistribution.tas.gov.au).

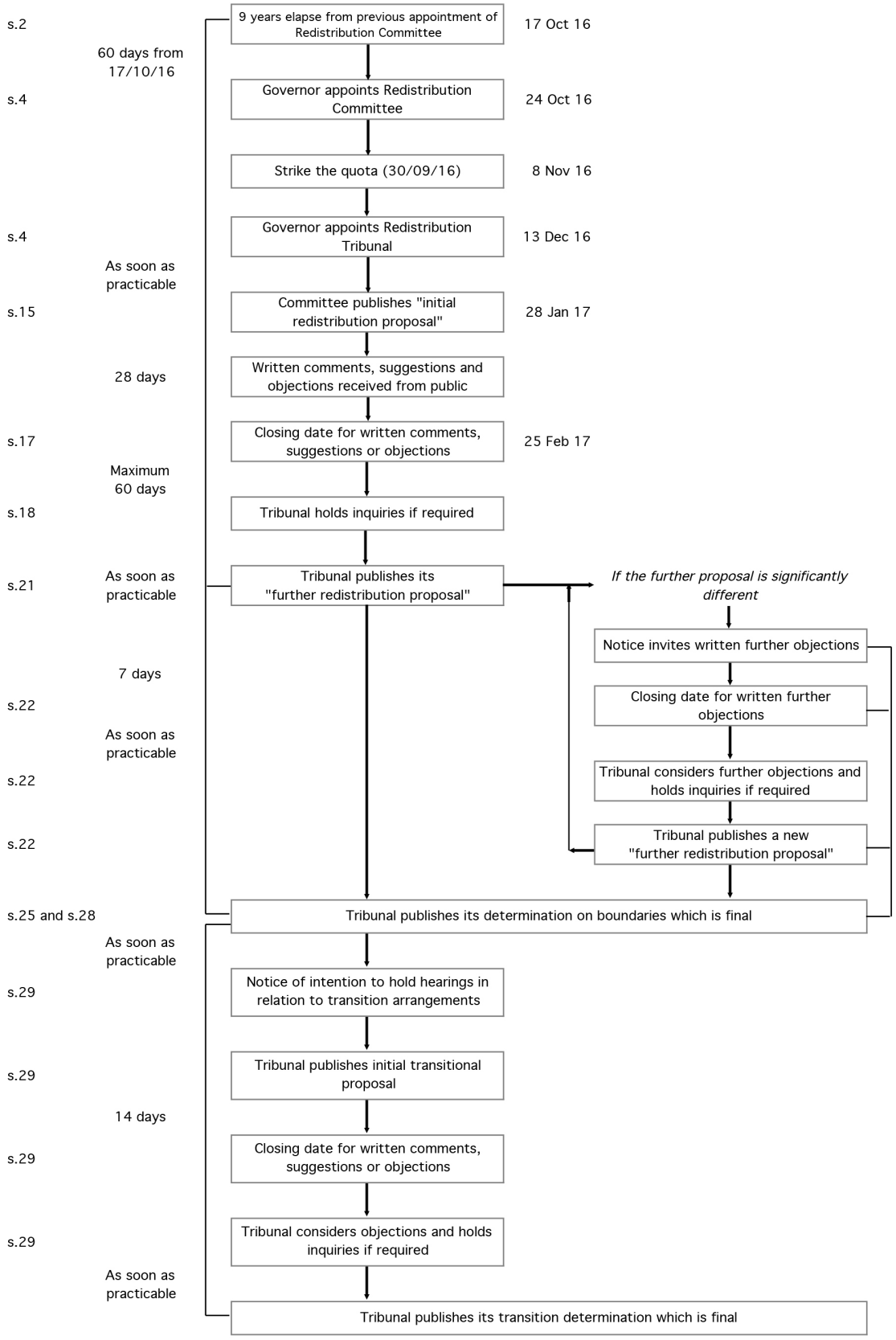
The Initial Redistribution Proposal, maps and reasons are available from public offices designated for this purpose or from our website. The proposed boundaries can be viewed as a layer on the Land Information System Tasmania (www.thelist.tas.gov.au) using the LISTmap website. The layer is called "Legislative Council – Initial Redistribution Proposal 2017". A link is available on the redistribution website.

If you prefer, the Executive Officer may be contacted on the Freecall (1 800 801 701). Where practicable, we will distribute material to you anywhere in Tasmania.

Written comments, suggestions or objections can be lodged with the Legislative Council Electoral Redistribution Tribunal:

- In person: with the Executive Officer, Michelle Davy, at Level 3 169 Main Rd, Moonah
- via our website www.lcredistribution.tas.gov.au
- by post, (PO Box 307 Moonah TAS 7009)
- by email (submissions@lcredistribution.tas.gov.au) or
- by facsimile: 03 6208 8791.

The Redistribution Timetable



Section 15 Notice

Initial Redistribution Proposal

Pursuant to Section 15 of the *Legislative Council Electoral Boundaries Act 1995* we, the Redistribution Committee, give notice of, and invite public attention to, our initial redistribution proposal for the redistribution of the State's 15 Legislative Council electoral divisions.

Maps showing names and boundaries of proposed divisions, together with copies of the reasons for the initial redistribution proposal and descriptions of proposed boundaries are exhibited at our public offices, where they are also available for perusal and supply. Information is also available on the website of the Legislative Council Electoral Boundary Redistribution: www.lcredistribution.tas.gov.au

For the purposes of this redistribution, the Tasmanian Electoral Commission and all Service Tasmania shops have been determined as public offices.

Comments, suggestions or objections

Within the period of 28 days after this publication, a person or organisation may lodge with the Redistribution Tribunal a written comment, suggestion or objection in relation to the Initial Redistribution Proposal.

Where practicable, facilities for testing alternative scenarios – consisting of computer software and a trained operator – will be made available in Hobart to persons wishing to make a comment, suggestion or objection during the 28-day period. Appointments may be made through the Executive Officer.

Andrew Hawkey — Chairperson of the Redistribution Committee

Saturday 28 January 2017

Table 1 - Summary of the Proposed Divisions

NAME	ELECTORS		QUOTA DEVIATION		AREA SQ KM
	CURRENT	PROJECTED	CURRENT	PROJECTED	
Derwent	24,824	25,208	-0.70%	-1.63%	12,157.860
Elwick	23,889	24,692	-4.44%	-3.65%	98.160
Hobart	24,455	25,222	-2.17%	-1.58%	62.340
Huon	24,199	25,134	-3.20%	-1.92%	6,157.980
Launceston	24,804	25,539	-0.78%	-0.34%	162.010
Mersey	26,809	27,241	+7.24%	+6.30%	710.160
McIntyre	26,631	26,914	+6.53%	+5.02%	15,208.500
Montgomery	27,360	27,619	+9.45%	+7.77%	2,447.020
Murchison	27,111	26,746	+8.45%	+4.37%	19,125.340
Nelson	24,123	24,791	-3.50%	-3.26%	73.990
Pembroke	22,771	24,016	-8.91%	-6.29%	31.280
Prosser	22,577	23,749	-9.68%	-7.33%	8,549.750
Rosevears	26,208	26,892	+4.84%	+4.94%	701.420
Rumney	23,343	24,719	-6.62%	-3.54%	399.800
Windermere	25,865	25,920	+3.47%	+1.14%	2,030.050
Total	374,969	384,402	-9.68% - +9.45	-7.33% - +7.77	67,915.660
Average	24,998	25,627			4,527.710

Background to this Redistribution

The Legislative Council comprises 15 members, elected from single member divisions by a preferential voting system. Each member of the Council holds office for a fixed term of six years, with periodic elections of three members held each odd-numbered year, and two each even-numbered year.

Legislative Council divisions contain approximately equal numbers of electors, and this parity is maintained by the periodic redistribution of divisional boundaries.

The *Legislative Council Electoral Boundaries Act 1995* requires the Electoral Commissioner to recommend to the Minister the reappointment of the Redistribution Committee and Tribunal whenever nine years has elapsed since the previous appointment. The Governor may appoint the Committee and Tribunal during the period of 60 days following the Commissioner's recommendation.

The Redistribution Process

The process of creating new electoral boundaries commences with an Initial Redistribution Proposal published by the Redistribution Committee.

The Redistribution Committee comprises: Mr Andrew Hawkey, the Electoral Commissioner, Mr Michael Giudici, the Surveyor-General, and Ms Lisa Wardlaw-Kelly, who has been nominated by the Australian Statistician.

After the publication of the Initial Redistribution Proposal, a 28-day consultation period commences and the Redistribution Committee is dissolved. The members of the former Committee become members of the Redistribution Tribunal and are joined on that Tribunal by the Chairperson of the Electoral Commission, Mr Mike Blake, who is to be the Chairperson of the Tribunal, and the other member of the Electoral Commission, Ms Karen Frost.

As soon as practicable after the Redistribution Tribunal has concluded its inquiries into any comments, suggestions and objections to the Initial Redistribution Proposal it must make a Further Redistribution Proposal for the State. The Redistribution Tribunal may have occasion to consider subsequent comments, suggestions and objections before making a final determination.

Once the final determination of the new electoral boundaries and the names of the new divisions is made, the Tribunal must then determine the transition arrangements in respect of the newly determined divisions.

Projected Enrolment Methodology

As at previous redistributions, the Redistribution Committee used the services of the Australian Bureau of Statistics (ABS) to provide projected enrolment statistics.

Text provided by the ABS giving comprehensive details of the projection methodology and necessary assumptions made is contained in Appendices III, IV, and V.

The Redistribution Criteria

In accordance with the *Legislative Council Electoral Boundaries Act 1995* the Redistribution Committee must take into account the following priorities–

- the first priority is to ensure, as far as practicable, that the number of electors in each Council division would not, (in four and a half years time) vary more than ±10% of the average Council division enrolment.
- the second priority is to take into account community of interest within each Council division.

After taking into account the priorities specified above, the Redistribution Committee must consider the following matters in the case of each electoral division–

- the means of communication and travel within the division; - the physical features and area of the division; - existing electoral boundaries; - distinct natural boundaries.

The Council division quota is to be the basis for the Initial Redistribution Proposal.

For this redistribution the average divisional enrolment, or quota, is 24 998 and was determined as at 30 September 2016.

In no case is any variation from the Council division quota to exceed 10 percent.

Previous redistributions

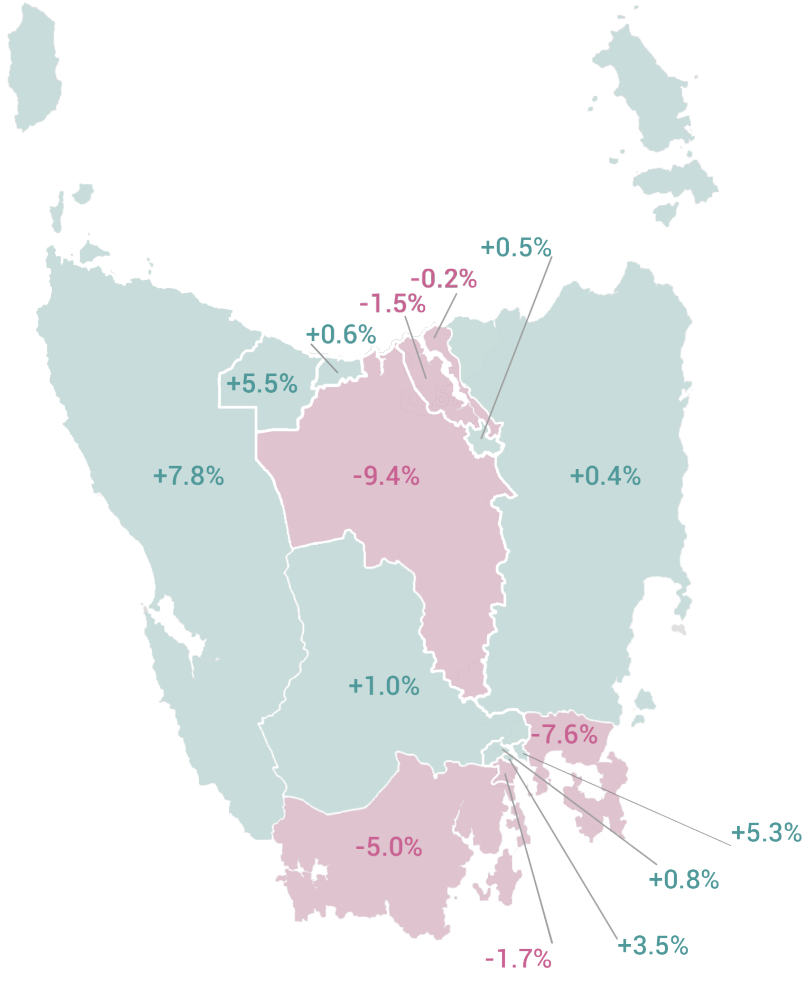
This will be the fourth redistribution carried out under the *Legislative Council Electoral Boundaries Act 1995*.

Prior to the 1995-96 redistribution, division enrolment totals varied significantly across the state. The 1995 Act enshrined the principle of "one vote, one value" and established an independent body to undertake the first redistribution process, originally for 19 divisions.

In July 1998 legislation was passed to reduce the size of both houses of the Tasmanian Parliament. The consequential 1998-99 redistribution was tasked with creating 15 new Legislative Council divisions and transitional arrangements. In the 1998 initial proposal, the boundaries for 14 of the 15 new divisions had enrolment projected figures that were closer to the quota than the actual enrolment figure. In other words, each of those divisions contained an enrolment buffer that would reduce the differences in enrolment across the divisions over time which would also reduce the likelihood of needing to make significant changes to the boundaries at the next redistribution.

Consistent with the 1998-99 redistribution electoral buffers, the 2007-08 redistribution only made minor alterations to the boundaries.

1998



Initial Redistribution Proposal — Reasons

Considerations for the current Committee

The general eastward and southward movement trend of elector numbers over the last 18 years continues across this redistribution's four-and-a-half-year enrolment projections.

If we look at the 30 September 2016 enrolment figures:

Of the eight Legislative Council divisions north and east of Campbell Town:

- only one division is above the average enrolment (Rosevears: +1.75%)
- the other seven have a combined divergence of -23.08% from the average

Of the seven Legislative Council divisions south of Campbell Town:

- only one division is below the average enrolment (Nelson: -6.05%)
- the other six have a combined divergence of +27.38% from the average.

The southern movement of electors is even further pronounced when comparing:

- Murchison, which has decreased from +7.8% (1998) to -3.08% (2016), with a forward projection of -6.56% and
- Rumney, which has increased from -7.6% (1998) to +10.15% (2016) with a forward projection of +13.54%

While ensuring adherence to the redistribution criteria, the Committee was mindful when producing an initial proposal that it cater for this general movement. In reviewing alternate boundary configurations, the Committee looked to provide additional buffers of enrolment numbers within divisions to reduce the likelihood of further boundary changes in the medium and longer term.

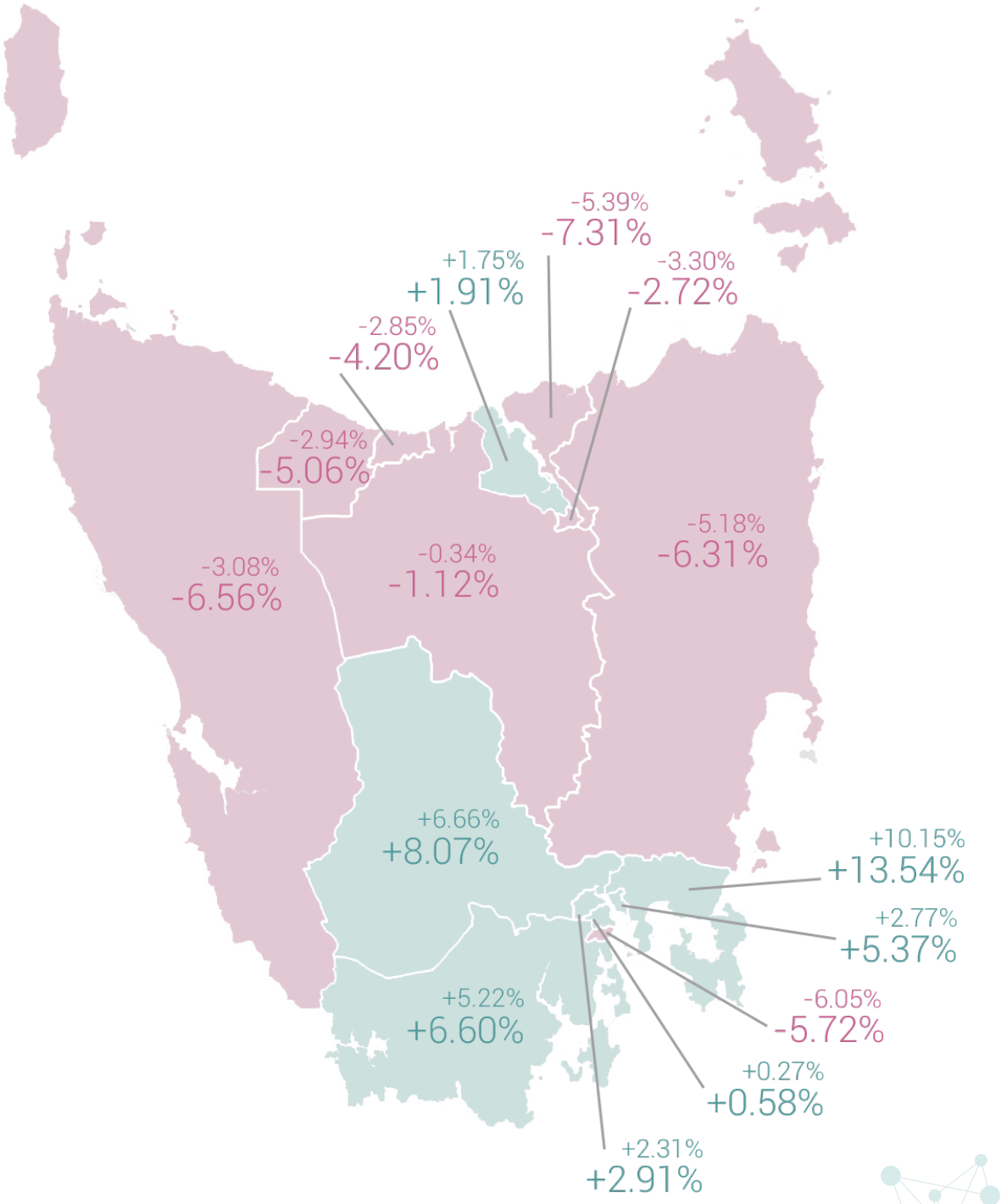
As Legislative Council elections are conducted on a six-year cycle, short term decisions could potentially result in three different boundaries for three consecutive elections for some divisions. Long term boundaries are more likely to provide better stability and consistency for electors and their representatives.

The Committee also noted that while the 1998 Redistribution was required to configure 15 new divisions, the current redistribution is making enrolment adjustments to an ongoing configuration of divisions, and therefore is mindful of maintaining consistency with the current arrangement as far as practicable.

Current division boundaries showing the differences from the quota:

The illustration below shows the differences from the quota for each division based on current (smaller number) and projected (larger number) enrolment.

30 September 2016



Local government and statutory locality boundaries

The 1998 Committee noted "when...new statutory locality boundaries are in place...they will provide a stable ongoing indicator of community of interest which will assist in determining better electoral boundaries."

Consistent with the view of the 2007-08 Committee, the current Committee has endeavoured, where possible, to utilise locality and local government area (LGA) boundaries when altering the boundaries of existing divisions.

A possible approach

The Committee considered various approaches before arriving at the proposed boundaries.

One option was to develop boundaries with the minimal adjustments required to comply with the legislated criteria. This model made minimal boundary movements in the northwest, which then required Western Tiers to take in new areas south of the current boundaries. While meeting the criteria, the Committee held concerns that these boundaries would only stay within the 10% tolerance levels in the short term. The Committee held the view that it was preferable to develop boundaries that enabled a long term consistent association between elector base and their representatives.

In examining current regional enrolment numbers and being mindful of the southward flow over the projected figures, the Committee considered an approach based on the following concepts:

- Consider adjusting boundaries to have three Legislative Council divisions across the municipal boundaries of the north-west councils, where each division has a positive deviation from the quota.
- Consider adjusting boundaries to have four Legislative Council divisions cover the rest of the north and north east areas of Tasmania, where most if not all divisions have a positive deviation from the quota.
- Consider the creation of a new central/southern Legislative Council division that has a recognisable community of interest link or regional identity.

In line with this approach the initial proposal contains:

- three north-west divisions:
    - Murchison includes: all of King Island, Circular Head, Waratah-Wynyard, West Coast municipal areas and part of Burnie City municipal area
    - Montgomery includes: the remainder of Burnie City, all Central Coast and part of Kentish municipal area
    - Mersey includes: all of Devonport City and Latrobe municipal areas
- four other northern divisions:
    - Rosevears includes: all of West Tamar municipal area and part of Launceston City municipal area
    - Windermere includes: all of George Town municipal area and part of Launceston City municipal area
    - Launceston includes: part of Launceston City and Meander Valley municipal areas
    - McIntyre includes: all of Flinders, Dorset, Break O'Day municipal areas and part of Kentish, Meander Valley and Northern Midlands municipal areas

McIntyre covers the rural areas that surround and generally have community of interest with the greater Launceston area.

The proposed configuration of seven north/north-west divisions makes a significant impact on the areas currently located within the divisions of Apsley and Western Tiers.

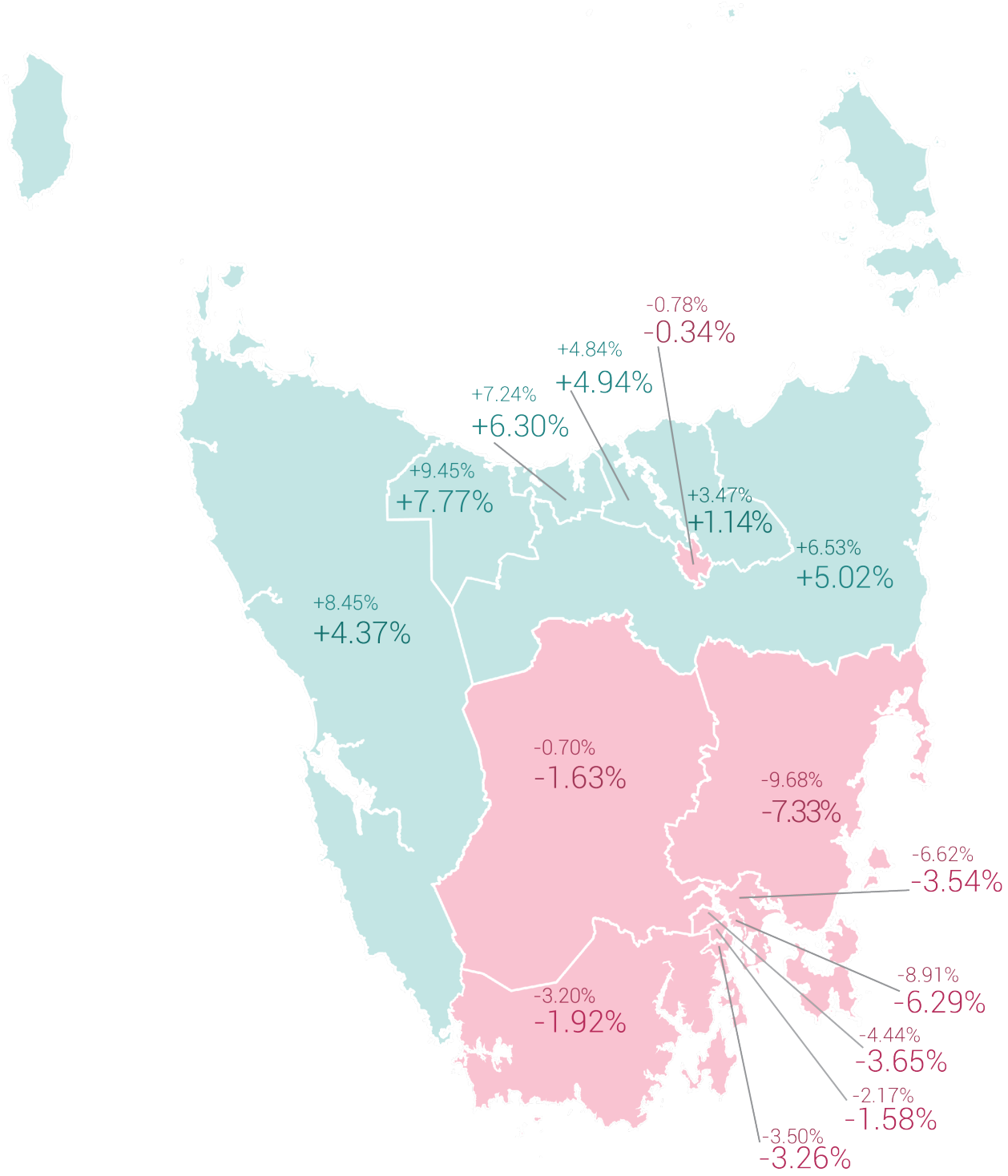
The proposed new central/southern division was a difficult fit to ensure a community of interest and geographical identity. A consequence of providing enrolment buffers to the northern divisions resulted in a need to move the Nelson, Hobart and Elwick boundaries, so a sufficient flow of electors was available to enable boundaries for the proposed south-east/east coast division.

The new division of Prosser includes: all Glamorgan-Spring Bay and Tasman municipal areas and part of Northern Midlands, Southern Midlands, Brighton and Sorell municipal areas. This area covers most of the rural south eastern corner of Tasmania.

As can be seen on the illustration over, the proposed boundaries enable the northern divisions to include an enrolment buffer for the future. The illustration also shows that the proposed boundaries produce projected enrolment figures that have the enrolment difference from the quota moving towards zero for all except two divisions (Derwent and Rosevears).

Illustration of the Initial Proposal showing the differences from the quota

Using data from Table 1, the illustration below shows the differences from the quota for each division based on current (smaller number) and projected (larger number) enrolment.



Names for proposed divisions

Once the proposed boundaries were agreed, the Committee examined a breakdown of the enrolment of the proposed division based on current electoral divisions (provided in Appendix 11). Thirteen of the fifteen divisions easily aligned to previous divisions. For the other two divisions, the Committee held the view that new names should be proposed.

The Committee proposes the northern division containing Flinders Island, the northern east coast and regional areas south and west of Launceston be named **McIntyre**.

In 1948, Margaret McIntyre was the first woman to be elected to the Parliament of Tasmania. She represented the Legislative Council seat of Cornwall, whose boundaries fell largely within this new proposed division.

The Committee propose the new central/southern division containing the south-east coast, the Sorell township and the Tasman Peninsula be named **Prosser**. Prosser is named after a topographical feature of the Prosser River, which flows through the centre of the proposed division and other geographical sites within the region: Prossers Plains, Prosser Bay and Prosser Ridge. The Prosser River was named after convict Thomas Prosser, which in turn has a connection with the extensive convict history of the area.

The proposed divisions

Individual descriptions of proposed divisions in terms of existing divisions and Local Government Areas are provided in Appendix II.

Murchison

Murchison gains from Montgomery the localities of Montello and Hillcrest, Burnie CBD, and South Burnie.

Montgomery

Montgomery loses the localities of Montello and Hillcrest, Burnie CBD, and South Burnie. Montgomery gains the remaining areas of Central Coast located in Mersey, and all area west of and including Sheffield within the Kentish municipal area.

Mersey

Mersey loses the areas of Central Coast previously included and gains the remaining areas of the Latrobe municipality. Mersey now solely consists of the municipal areas of Devonport City and Latrobe.

Rosevears

Rosevears' southern boundary moves to the Bass highway gaining the remaining parts of Prospect, on the northern side of the Bass Highway.

Windermere

Windermere gains the region of the Launceston City municipal area currently located in the division of Apsley.

Launceston

The new southern border of the division of Launceston is the South Esk river, including the townships of Perth and Western Junction. Launceston loses the parts of Prospect previously included to Rosevears and the township of Hadspen to McIntyre.

McIntyre

McIntyre includes:

- the municipal areas of Break O'Day, Dorest and Flinders
- the part of the Kentish municipal area not included in Montgomery
- the part of the Meander Valley municipal area not included in Launceston
- the part of the Northern Midlands not included in Launceston and the area surrounding and north of Conara Junction, and east to the Glamorgan-Spring Bay municipal boundary.

Derwent

Derwent gains from Western Tiers the remaining area of Central Highlands, and gains from Elwick the locality of Chigwell, and the rest of Claremont, Berriedale and north of Berriedale Road. Derwent loses the townships of Brighton, Pontville and Tea Tree to Prosser and Old Beach to Rumney.

Prosser

Prosser incorporates:

- the Northern Midlands municipal area located south of Conara Junction,
- the Glamorgan-Spring Bay municipal area
- the Sorell municipal area located east of Richmond, Penna and Midway Point
- the Tasman municipal area
- the townships of Brighton, Pontville and Tea Tree.

Rumney

Rumney gains:

- Old Beach from Derwent
- Otago, Risdon, Risdon Vale and a portion of Geilston Bay from Pembroke.

Rumney loses to Prosser the Tasman Peninsula, and the municipal area of Sorell located east of Penna (including the townships of Sorell and Orielton).

Pembroke

Pembroke loses to Rumney the following areas: Otago, Risdon, Risdon Vale and part of Geilston Bay north of Faggs Gully.

Elwick

Elwick loses to Derwent part of Claremont, Chigwell and part of Berriedale. Elwick gains from Hobart the Hobart City municipal area north of Risdon Road, Augusta Road and Lenah Valley Road.

Hobart

Hobart loses to Elwick the Hobart City municipal area north of Risdon Road, Augusta Road and Lenah Valley Road. Hobart gains Hobart City municipal areas west of the Southern Outlet, which includes part of Dynnyrne, Tolmans Hill, Ridgeway and Fern Tree.

Nelson

Nelson gains from Huon the area within Blackmans Bay north of Alonga Road and Pearsall Avenue. Nelson loses to Hobart the portion of the Hobart City municipal area located in the current boundaries west of the Southern Outlet (including Ridgeway and Fern Tree).

Huon

Huon loses to Nelson the area within Blackmans Bay north of Algona Road and Pearsall Avenue.

Current division of Apsley

Under the proposed boundaries, Apsley is redistributed as follows:

- the Flinders, Dorset and Break O'Day municipal areas are in McIntyre

- the Northern Midlands municipal area surrounding and north of Conara Junction is in McIntyre
- the Northern Midlands municipal area south of Conara Junction is in Prosser
- the Glamorgan-Spring Bay and Southern Midlands municipal areas are in Prosser.

Current division of Western Tiers

Under the proposed boundaries the Western Tiers is redistributed as follows:

- the Latrobe municipal area is in Mersey
- the Kentish municipal area is split between Montgomery and McIntyre
- the Central Highlands municipal area is in Derwent
- the Northern Midlands municipal area is split between McIntyre and Prosser.

Appendix I – Existing Divisions and Enrolment Trends

LEGISLATIVE COUNCIL ELECTORAL ENROLMENT, 2007-2016 (ACTUAL), AND 2016-2021 (PROJECTED BY ABS)

NAME	Enrolment 30/9/2007	Deviation from ADE* (%)	Enrolment 30/9/2016	Deviation from ADE* (%)	Annual Growth rate 2007-2016	Projected Enrolment 31/3/2021	Deviation from ADE* (%)	Annual Growth rate 2016-2021
Apsley	22,665	-2.2	23,702	-5.18	0.51%	24,010	-6.31	0.29%
Derwent	23,391	0.9	26,664	6.66	1.55%	27,696	8.07	0.86%
Elwick	25,010	7.9	25,576	2.31	0.25%	26,373	2.91	0.69%
Hobart	23,448	1.1	25,066	0.27	0.77%	25,776	0.58	0.63%
Huon	22,354	-3.6	26,302	5.22	1.96%	27,318	6.60	0.86%
Launceston	23,012	-0.7	24,174	-3.30	0.56%	24,931	-2.72	0.70%
Mersey	22,918	-1.1	24,285	-2.85	0.66%	24,551	-4.20	0.24%
Montgomery	23,581	1.7	24,262	-2.94	0.32%	24,329	-5.06	0.06%
Murchison	23,798	2.7	24,228	-3.08	0.20%	23,946	-6.56	-0.26%
Nelson	21,706	-6.4	23,485	-6.05	0.91%	24,161	-5.72	0.64%
Pembroke	24,321	4.9	25,690	2.77	0.63%	27,003	5.37	1.14%
Rosevears	23,183	0.0	25,435	1.75	1.08%	26,117	1.91	0.60%
Rumney	23,316	0.6	27,535	10.15	2.01%	29,097	13.54	1.26%
Western Tiers	22,147	-4.5	24,914	-0.34	1.39%	25,340	-1.12	0.38%
Windermere	22,892	-1.3	23,651	-5.39	0.37%	23,754	-7.31	0.10%
Total	347,742		374,969			384,402		
Average	23,183		24,998		0.87%	25,627		0.56%

*ADE = Average Divisional Enrolment

Appendix II – Composition of Proposed Divisions

Proposed Division of DERWENT

*How Constituted**		*Actual Enrolment 30 September 2016*	*Projected Enrolment 31 March 2021*
From existing Division of Derwent:			
	Part Brighton	5 019	5 123
	Part Central Highlands	1 007	994
	Part Derwent Valley	7 196	7 358
	Part Glenorchy City	7 184	7 285
From existing Division of Elwick:			
	Part Glenorchy City	3 763	3 789
From existing Division of Western Tiers:			
	Part Central Highlands	655	659
	Totals	**24 824**	**25 208**

Note – Parts of the existing Division of Derwent are transferred as follows:			
To the proposed Division of Rumney:			
	Part Brighton	2 725	3 089
To the proposed Division of Prosser:			
	Part Brighton	3 533	3 847

*How constituted in terms of Local Government Areas that may be contained, in whole or in part, within existing Divisions.

Proposed Division of ELWICK

*How Constituted**		*Actual Enrolment 30 September 2016*	*Projected Enrolment 31 March 2021*
From existing Division of Elwick:			
	Part Glenorchy City	21 811	22 582
	Part Hobart City	2	2
From existing Division of Hobart:			
	Part Glenorchy City	51	50
	Part Hobart City	2 025	2 058
	Totals	**23 889**	**24 692**

Note – Parts of the existing Division of Elwick are transferred as follows:			
To the proposed Division of Derwent:			
	Part Glenorchy City	3 763	3 789

*How constituted in terms of Local Government Areas that may be contained, in whole or in part, within existing Divisions.

Proposed Division of HOBART

*How Constituted**		*Actual Enrolment 30 September 2016*	*Projected Enrolment 31 March 2021*
From existing Division of Hobart:			
	Part Hobart City	22 990	23 668
From existing Division of Nelson:			
	Part Hobart City	1 465	1 554
	Totals	**24 455**	**25 222**

Note – Parts of the existing Division of Hobart are transferred as follows:

To the proposed Division of Elwick:			
	Part Glenorchy City	51	50
	Part Hobart City	2 025	2 058

*How constituted in terms of Local Government Areas that may be contained, in whole or in part, within existing Divisions.

Proposed Division of HUON

*How Constituted**		*Actual Enrolment 30 September 2016*	*Projected Enrolment 31 March 2021*
From existing Division of Huon:			
	Huon Valley	11 890	12 276
	Part Kingborough	12 309	12 858
	Totals	**24 199**	**25 134**
The following Local Government areas are wholly contained within the proposed Division of Huon:			
	Huon Valley	11 890	12 276
Note – Parts of the existing Division of Huon are transferred as follows:			
To the proposed Division of Nelson:			
	Part Kingborough	2 103	2 184

*How constituted in terms of Local Government Areas that may be contained, in whole or in part, within existing Divisions.

Proposed Division of LAUNCESTON

*How Constituted**		*Actual Enrolment 30 September 2016*	*Projected Enrolment 31 March 2021*
From existing Division of Launceston:			
	Part Launceston City	16 563	16 937
	Part Meander Valley	5 282	5 568
From existing Division of Western Tiers			
	Part Northern Midlands	2 959	3 034
	Totals	**24 804**	**25 539**

Note – Parts of the existing Division of Launceston are transferred as follows:

To the proposed Division of McIntyre:			
	Part Meander Valley	1 560	1 651
To the proposed Division of Rosevears:			
	Part Launceston City	773	775

*How constituted in terms of Local Government Areas that may be contained, in whole or in part, within existing Divisions.

Proposed Division of MERSEY

*How Constituted**		*Actual Enrolment 30 September 2016*	*Projected Enrolment 31 March 2021*
From existing Division of Mersey:			
	Devonport City	18 501	18 591
	Part Latrobe	3 385	3 540
From existing Division of Western Tiers			
	Part Latrobe	4 923	5 110
	Totals	**26 809**	**27 241**

The following Local Government areas are wholly contained within the proposed Division of Mersey:

Devonport City	18 501	18 591
Latrobe	8 308	8 650

Note – Parts of the existing Division of Mersey are transferred as follows:

To the proposed Division of Montgomery:

Part Central Coast	2 399	2 420

*How constituted in terms of Local Government Areas that may be contained, in whole or in part, within existing Divisions.

Proposed Division of McINTYRE

*How Constituted**		*Actual Enrolment 30 September 2016*	*Projected Enrolment 31 March 2021*
From existing Division of Apsley:			
	Break O'Day	4 900	4 980
	Dorset	5 168	5 188
	Flinders	679	677
	Part Northern Midlands	1 555	1 577
From existing Division of Launceston:			
	Part Meander Valley	1 560	1 651
From existing Division of Western Tiers:			
	Part Kentish	993	1002
	Part Meander Valley	7 795	7 800
	Part Northern Midlands	3 981	4 039
	Totals	**26 631**	**26 914**

The following Local Government Areas are wholly contained within the proposed Division of McIntyre:

Break O'Day	4 900	4 980
Dorset	5 168	5 188
Flinders	679	677

*How constituted in terms of Local Government Areas that may be contained, in whole or in part, within existing Divisions.

Proposed Division of MONTGOMERY

*How Constituted**		*Actual Enrolment 30 September 2016*	*Projected Enrolment 31 March 2021*
From existing Division of Montgomery:			
	Part Burnie City	7 074	7 157
	Part Central Coast	14 305	14 372
From existing Division of Mersey:			
	Part Central Coast	2 399	2 420
From existing Division of Western Tiers:			
	Part Kentish	3 582	3 670
	Totals	**27 360**	**27 619**
The following Local Government areas are wholly contained within the proposed Division of Montgomery:			
	Central Coast	16 704	16 792

Note – Parts of the existing Division of Montgomery are transferred as follows:

To the proposed Division of Murchison:			
	Part Burnie City	2 883	2 800

*How constituted in terms of Local Government Areas that may be contained, in whole or in part, within existing Divisions.

Proposed Division of MURCHISON

*How Constituted**		*Actual Enrolment 30 September 2016*	*Projected Enrolment 31 March 2021*
From existing Division of Murchison:			
	Part Burnie City	4 083	4 094
	Circular Head	5 484	5 406
	King Island	1 127	1 036
	Waratah-Wynyard	10 534	10 537
	West Coast	3 000	2 873
From existing Division of Montgomery			
	Part Burnie City	2 883	2 800
	Totals	**27 111**	**26 746**

The following Local Government areas are wholly contained within the proposed Division of Murchison:

Circular Head	5 484	5 406
King Island	1 127	1 036
Waratah-Wynyard	10 534	10 537
West Coast	3 000	2 873

*How constituted in terms of Local Government Areas that may be contained, in whole or in part, within existing Divisions.

Proposed Division of NELSON

*How Constituted**		*Actual Enrolment 30 September 2016*	*Projected Enrolment 31 March 2021*
From existing Division of Nelson:			
	Part Hobart City	10 056	10 257
	Part Kingborough	11 964	12 350
From existing Division of Huon			
	Part Kingborough	2 103	2 184
	Totals	**24 123**	**24 791**

Note – Parts of the existing Division of Nelson are transferred as follows:

To the proposed Division of Hobart:			
	Part Hobart City	1 465	1 554

*How constituted in terms of Local Government Areas that may be contained, in whole or in part, within existing Divisions.

Proposed Division of PEMBROKE

*How Constituted**		*Actual Enrolment 30 September 2016*	*Projected Enrolment 31 March 2021*
From existing Division of Pembroke:			
	Part Clarence City	22 757	23 959
From existing Division of Rumney			
	Part Clarence City	14	57
	Totals	**22 771**	**24 016**

Note – Parts of the existing Division of Pembroke are transferred as follows:

To the proposed Division of Rumney:			
	Part Clarence City	2 933	3 046

*How constituted in terms of Local Government Areas that may be contained, in whole or in part, within existing Divisions.

Proposed Division of PROSSER

*How Constituted**		*Actual Enrolment 30 September 2016*	*Projected Enrolment 31 March 2021*
From existing Division of Western Tiers:			
	Part Northern Midlands	26	26
From existing Division of Apsley:			
	Glamorgan-Spring Bay	3 582	3 668
	Part Northern Midlands	1 133	1 101
	Southern Midlands	4 467	4 653
From existing Division of Derwent:			
	Part Brighton	3 533	3 847
From existing Division of Rumney:			
	Part Clarence City	34	36
	Part Sorell	7 983	8 554
	Tasman	1 819	1 864
	Totals	**22 577**	**23 749**

The following Local Government areas are wholly contained within the proposed Division of Prosser:

Glamorgan-Spring Bay	3 582	3 668
Southern Midlands	4 467	4 653
Tasman	1 819	1 864

*How constituted in terms of Local Government Areas that may be contained, in whole or in part, within existing Divisions.

Proposed Division of ROSEVEARS

*How Constituted**	*Actual Enrolment 30 September 2016*	*Projected Enrolment 31 March 2021*
From existing Division of Rosevears:		
Part Launceston City	8 266	8 362
West Tamar	17 169	17 755
From existing Division of Launceston		
Part Launceston City	773	775
Totals	**26 208**	**26 892**

The following Local Government areas are wholly contained within the proposed Division of Rosevears:

West Tamar	17 169	17 755

*How constituted in terms of Local Government Areas that may be contained, in whole or in part, within existing Divisions.

Proposed Division of RUMNEY

*How Constituted**		*Actual Enrolment 30 September 2016*	*Projected Enrolment 31 March 2021*
From existing Division of Rumney:			
	Part Clarence City	15 192	15 955
	Part Sorell	2 493	2 629
From existing Division of Derwent:			
	Part Brighton	2 725	3 089
From existing Division of Pembroke:			
	Part Clarence City	2 933	3 046
	Totals	**23 343**	**24 719**

Note – Parts of the existing Division of Rumney are transferred as follows:

To the proposed Division of Pembroke:			
	Part Clarence City	14	57
To the proposed Division of Prosser:			
	Part Clarence City	34	36
	Part Sorell	7 983	8 554
	Tasman	1 819	1 864

*How constituted in terms of Local Government Areas that may be contained, in whole or in part, within existing Divisions.

Proposed Division of WINDERMERE

*How Constituted**		*Actual Enrolment 30 September 2016*	*Projected Enrolment 31 March 2021*
From existing Division of Windermere:			
	George Town	4 934	4 929
	Part Launceston City	18 713	18 825
From existing Division of Apsley:			
	Part Launceston City	2 218	2 166
	Totals	**25 865**	**25 920**

The following Local Government areas are wholly contained within the proposed Division of Windermere:			
	George Town	4 934	4 929

*How constituted in terms of Local Government Areas that may be contained, in whole or in part, within existing Divisions.

Existing Division of APSLEY

*How Constituted**		*Actual Enrolment 30 September 2016*	*Projected Enrolment 31 March 2021*
Note – Parts of the existing Division of Apsley are transferred as follows:			
To the proposed Division of McIntyre:			
	Break O'Day	4 900	4 980
	Dorset	5 168	5 188
	Flinders	679	677
	Part Northern Midlands	1 555	1 577
To the proposed Division of Prosser:			
	Glamorgan-Spring Bay	3 582	3 668
	Part Northern Midlands	1 133	1 101
	Southern Midlands	4 467	4 653
To the proposed Division of Windermere:			
	Part Launceston City	2 218	2 166

*How constituted in terms of Local Government Areas that may be contained, in whole or in part, within existing Divisions.

Existing Division of WESTERN TIERS

*How Constituted**		*Actual Enrolment 30 September 2016*	*Projected Enrolment 31 March 2021*
Note – Parts of the existing Division of Western Tiers are transferred as follows:			
To the proposed Division of Prosser			
	Part Northern Midlands	26	26
To the proposed Division of McIntyre:			
	Part Kentish	993	1002
	Part Meander Valley	7 795	7 800
	Part Northern Midlands	3 981	4 039
To the proposed Division of Derwent:			
	Part Central Highlands	655	659
To the proposed Division of Launceston:			
	Part Northern Midlands	2 959	3 034
To the proposed Division of Mersey			
	Part Latrobe	4 923	5 110
To the proposed Division of Montgomery			
	Part Kentish	3 582	3 670

*How constituted in terms of Local Government Areas that may be contained, in whole or in part, within existing Divisions.

Appendix III –The Tasmanian Small Area Population Projections (ABS)

Text provided by the Australian Bureau of Statistics

Tasmania Small Area Population Projections

This appendix outlines the process used for producing population and enrolment projections for all Statistical Area 1s (SA1s) in Tasmania, from June 2015 to June 2021.

Projection Method

The method employed for projecting the population down to Statistical Area 2 (SA2) level was the cohort-component method, widely accepted as the best way of producing age/sex population projections. It involved applying annual fertility and mortality rates and internal migration and overseas migration by age and sex to the base population to produce a projected population, which then became the base population for projecting the next year and so on. This cycle was repeated until the projection horizon was reached.

The following four-tiered process was taken in projecting the resident population aged 18 years and over for all SA1s in Tasmania:

1. State Projections. The Tasmania population was projected by age and sex.
2. Capital City / Rest of State Projections. The Hobart and the Rest of Tasmania populations were projected by age and sex (and constrained to 1).
3. Statistical Area 2 Projections. The population of all Tasmania's SA2s was projected by age and sex (and constrained to 2) and a subset of those over 18 was extracted.
4. Statistical Area 1 Projections. The SA2 projected population aged 18 and over (in 3) was split into SA1s.

Finally, the SA1 projected population aged 18 and over was combined with enrolment data to produce projected enrolments.

1. State Projections

The base population for the Tasmania cohort-component projections was preliminary age/sex Estimated Resident Population (ERP) as at 30 June 2015,. Assumptions for the projections were based on both short and long-term trends for each component of population change. These fertility, mortality, overseas migration and interstate migration assumptions were based on those used in the latest *Population Projections, Australia, 2012 (base) -2101* (ABS Cat. No. 3222.0), but adjusted to reflect more recently available data. All States and Territories were independently projected, then constrained to sum to the Australian-level projection.

2. Capital City/Rest of State Projections

As per the State/Territory level, the capital city and rest of state projections used assumptions updated from the *Population Projections* publication. 30 June 2015 ERP base population was used, with assumptions reflecting historically observed region-specific patterns of fertility, mortality, overseas migration and internal migration. The Tasmania projections acted as control totals.

3. Statistical Area 2 Projections

The base population for the SA2 cohort-component projections was also 30 June 2015 SA2 age/sex ERP. The fertility, mortality and migration assumptions were based on SA2-specific levels observed during the past five years, constrained to the assumed capital city/rest of state levels and trends. SA2 age/sex migration profiles were derived from 2011 Census data on place of usual residence one year ago, with migration levels based on recent growth rate and proportion of Capital City/Balance of State migration.

The ABS regularly collects demographic information down to the SA2 level, which means that SA2 projections (in contrast to smaller areas) are firmly based on a series of known data. At each yearly cycle in this process, the resulting SA2 projections were constrained to sum to the capital city/rest of state projections, helping to produce more reliable SA2 figures. SA2s with an ERP of less than 1,000 persons were generally held constant for the projection duration as assumptions for the accompanying tiny age/sex cells are too unreliable.

From the resultant 30 June SA2 projections, the projected population aged 18 and over was derived by sub setting the total population for each SA2.

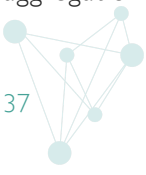
4. Statistical Area 1 Projections

SA1 projected population aged 18 and over were calculated by extrapolation using 2011-2015 SA1 ERP.

SA1 projections were formed using extrapolations from 2011-2015 SA1 ERP constrained to the SA2 projections. Projected population aged 18 at 31 March 2021 was derived by interpolation using the 30 June projections.

Following the above four-tiered process the projected enrolments (for SA1s) are calculated using the 30 September 2016 relationship between each SA1's enrolments and its ERP (see Appendix III).

The lack of demographic data collected regularly at SA1 level makes it necessary to use the conversion method as outlined above. While the process is quite complex, it should be reiterated that the basic concept of splitting SA2s to SA1 level cannot be expected to give projections as reliable as those for SA2s. However, as the goal is to support the redrawing of State Electoral Division boundaries which are aggregates of large numbers of SA1s there is a high likelihood that any random errors or inconsistencies will be statistically offset in the aggregation process.



Boundaries

Previous redistributions have used Census Collection Districts (CCDs) as the base unit, however in 2011 CCDs were superseded by the new SA1 unit.

SA1 and SA2 boundaries are from the *Australian Statistical Geography Standard (ASGS) Volume 1 – Main Structure and Greater Capital City Statistical Areas, July 2011* (ABS Cat. 1270.0.55.001) corresponding to those used for the 2011 Census.

Disclaimer

It is important to recognise that the projection results given in this report reflect the assumptions made about future fertility, mortality and migration trends. While these assumptions are formulated on the basis of an objective assessment of historical demographic trends and their likely future dynamics, there can be no certainty that they will be realised.

The ABS takes responsibility for the method employed, however in accordance with ABS policy regarding small area population projections, the assumptions used are the final responsibility of the client, and the projections are not official ABS population statistics.

The projections may be referred to as "...projections prepared by the ABS according to assumptions reflecting prevailing trends agreed to by the Tasmanian Electoral Commission...".

No liability will be accepted by the ABS for any damages arising from decisions or actions based upon this population projection consultancy service.

Appendix IV – Projection methods for the Tasmania, Capital City/Balance of State, Statistical

Text provided by the Australian Bureau of Statistics

This appendix gives a more detailed breakdown of the four-tiered process outlined in Appendix III. Apart from the births formulae all equations apply to both sexes, so sex has not been denoted. "State" and "state-level" may refer to either State or Territory.

Step 1 - State Projections

This involved projecting the Tasmania population by age and sex at 30 June 2015 out to 30 June 2021.

The cohort component method used can be summarised in the formulae below:

where:

x	->	age
max	->	highest age projected (100+ for state; 85+ for sub-state)
t	->	base year
P	->	population
F	->	fertility rate
f	->	females
B	->	births
Q	->	death probability
OM	->	net overseas migration
IM	->	net interstate (or internal) migration
NM	->	net migration (SA2 projections only)

In Step 1 the following refer to interstate migration; in step 2 they refer to internal migration; and in step 3 they refer to total (overseas + inter-SA2 migration).

DEP	->	departures
ARR	->	arrivals
DEPRATE	->	per capita departure rate (donor state *or* capital city-rest *or* SA2)
ARRRATE	->	per capita arrival rate (receiving states)

For ages 0 to maximum age - 1:

(i) $$P_{x+1}(t+1) = P_x(t) * [1-Q_x(t)] + (0.5 * OM_x(t)) * (1-(0.5 * Q_x(t))) + (0.5 * OM_{x+1}(t)) * (1-(0.5 * Q_{x+1}(t)))$$

(ii) $$P_{max}(t+1) = P_{max}(t) * [1-Q_{max}(t)] + P_{max-1}(t) * [1-Q_{max-1}(t)] + OM_{max}(t) * (1-(0.5 * Q_{max}(t))) + (0.5 * OM_{max-1}(t)) * (1-(0.5 * Q_{max-1}(t)))$$

Births were then calculated:

(iii) $$B(t) = 0.5*[\sum_{x=15}^{49} (F_x(t)*P_{f,x}(t)) + \sum_{x=15}^{49} (F_x(t+1)*P_{f,x}(t+1))]$$

After constraining to projected Australian-level births, these were then used to calculate age 0 in the projected year:

(iv) $$P_0(t+1) = B(t)*(1-Q_b(t)) + (0.5*OM_0(t)) * (1-(0.5*Q_0(t)))$$

Interstate migration was calculated by applying departure rates to the Tasmania population and arrival rates to the population of the remaining States and Territories (to obtain numbers departing other States to reside in Tasmania). These rates were based on the assumptions published in *Population Projections, Australia, 2012 (base) to 2101* (ABS Cat. No. 3222.0).

(v) $$DEP_x(t+1) = P_x(t+1) * DEPRATE_x$$

(vi) $$ARR_x(t+1) = P_x(t+1)^{\text{Non-Tas}} * ARRRATE_x$$

The resulting total arrivals and departures were then scaled to a predetermined total net interstate migration assumption. Finally, the arrivals and departures by age and sex were scaled to the new arrival and departure totals, and then combined to give net age/sex interstate migration.

(vii) $$IM_x(t+1) = ARR_x(t+1) - DEP_x(t+1)$$

Then add the interstate migration:

(viii) $$P_x(t+1) = P_x(t+1) + IM_x(t+1)$$

To achieve coherent interstate migration figures, projections are concurrently run for all States, Territories and Australia. After constraining the State age/sex population to the Australian-level (method described in Step 2), year t+1 then became the base for projecting the next year and the cycle was repeated until the final projection year was reached.

Step 2 - Hobart / Rest of Tasmania Projections

This employs the cohort component method to project the Hobart Greater Capital City Statistical Area and the Rest of Tasmania. The formulae in Step 1 generally apply to these projections, except that the upper age is 85+, fertility rates are by 5yr age of mother and migration arrival levels are used instead of rates.

For ages 0 to maximum age - 1:

(ix) $$P_{x+1}(t+1) = P_x(t) * [1-Q_x(t)] + (0.5 * OM_x(t)) * (1-(0.5 * Q_x(t))) + (0.5 * OM_{x+1}(t)) * (1-(0.5 * Q_{x+1}(t)))$$

(x) $$P_{max}(t+1) = P_{max}(t) * [1-Q_{max}(t)] + P_{max-1}(t) * [1-Q_{max-1}(t)] + OM_{max}(t) * (1-(0.5 * Q_{max}(t))) + (0.5 * OM_{max-1}(t)) * (1-(0.5 * Q_{max-1}(t)))$$

Births were then calculated:

(xi) $$B(t) = 0.5*[\sum_{x=15-19}^{45-49} (F_x(t)*P_{f,x}(t)) + \sum_{x=15-19}^{45-49} (F_x(t+1)*P_{f,x}(t+1))]$$

After constraining to projected State-level births, these were then used to calculate age 0 in the projected year:

(xii) $$P_0(t+1)= B(t)*(1-Q_b(t)) + (0.5*OM_0(t)) * (1-(0.5*Q_0(t)))$$

Capital city-Rest of state internal migration departures were calculated by applying 2011 Census-derived departure rates to the population:

(xiii) $$DEP_x(t+1) = P_x(t+1) * DEPRATE_x$$

Total capital city-Rest of state internal arrivals were then derived using the pre-set net migration assumptions:

(xiv) $$ARR(t+1) = NM(t+1) - \sum_{x=0}^{x=max} DEP_x(t+1)$$

(xv) The assumed age-specific arrival levels were derived from 2011 Census data. Together with departures from (xiii) these were simultaneously constrained (via IPF - see xvii - xix) to:

(a) Capital city-Rest of state arrival and departure totals

(b) State age-specific net migration

Then the arrivals and departures were applied to the population projected so far:

(xvi) $P_x(t+1) = P_x(t+1) + ARR_x(t+1) - DEP_x(t+1)$

Year t+1 then became the base for projecting the next year and the cycle was repeated until the final projection year was reached. However, before $P_x(t+1)$ became the new base, the projected capital city-rest of state were constrained to sum to the State projection. This involved a final 2-way iterative proportional fitting (IPF) process; the year is t+1:

where:

CC-Bal	->	Capital City or Rest of State *region*
S	->	Tasmania
a	->	first region
z	->	last region
r	->	region number

Scale the regional (capital city-rest of state) totals to the State total:

$$(xvii) \quad {}^{P}CC\text{-}Bal = {}^{P}CC\text{-}Bal * ({}^{P}S \Big/ \sum_{r=a}^{r=z} {}_{P_r}CC\text{-}Bal)$$

For each region scale ages to sum to the new region total:

$$(xviii) \quad {}_{P_x}CC\text{-}Bal = {}_{P_x}CC\text{-}Bal * ({}^{P}CC\text{-}Bal \Big/ \sum_{x=0}^{x=max} {}_{P_{xr}}CC\text{-}Bal)$$

For each age, scale both regions to sum to the State total:

$$(xix) \quad {}_{P_x}CC\text{-}Bal = {}_{P_x}CC\text{-}Bal * ({}_{P_x}S \Big/ \sum_{r=a}^{r=z} {}_{P_{xr}}CC\text{-}Bal)$$

Stages (xviii) and (xix) were then iterated several times before the resulting matrix was rounded while not changing the marginal constraints.

Step 3 – Statistical Area 2 Projections

This used the cohort component method to project all Tasmania SA2s. The formulae in Step 1 generally apply to the SA2 projections, except that the upper age is 85+, fertility rates are by 5yr age of mother, migration arrival rates were not used and Net Migration (overseas + inter-SA2) was used instead of overseas and inter-SA2 separately.

This slightly simpler approach to migration was warranted as the overseas component is negligible in most SA2s in comparison with inter-SA2 migration. Furthermore as an annual historical time-series only exists at the SA2 level for *net* migration, any overseas/inter-SA2 split can only be approximated using past Census data.

For ages 0 to maximum age - 1:

(xx) $P_{x+1}(t+1) = P_x(t) * [1-Q_x(t)]$

(xxi) $P_{max}(t+1) = P_{max}(t) * [1-Q_{max}(t)] + P_{max-1}(t) * [1-Q_{max-1}(t)]$

Births were then calculated:

(xxii) $$B(t) = 0.5*[\sum_{x=15-19}^{45-49}(F_x(t)*P_{f,x}(t)) + \sum_{x=15-19}^{45-49}(F_x(t+1) * P_{f,x}(t+1))]$$

After constraining to projected capital city/rest of state births, these were then used to calculate age 0 in the projected year:

(xxiii) $P_0(t+1) = B(t) * (1-Q_b(t))$

SA2 migration departures were calculated by applying 2011 Census-derived departure rates to the population:

(xxiv) $DEP_x(t+1) = P_x(t+1) * DEPRATE_x$

Total SA2 arrivals were then derived using the pre-set net migration assumptions:

(xxv) $$ARR(t+1) = NM(t+1) - \sum_{x=0}^{x=max} DEPx(t+1)$$

(xxvi) The assumed age-specific arrival levels were derived from 2011 Census data. Together with departures from (xxiv) these were simultaneously constrained (via IPF - see xvii - xix) to:

(a) SA2 arrival and departure totals (from the previous 2 steps)

(b) Capital city/rest of state age-specific net internal migration

Then the arrivals and departures were applied to the population projected so far:

(xxvii) $P_X(t+1) = P_X(t+1) + ARR_X(t+1) - DEP_X(t+1)$

After constraining the SA2 age/sex populations to sum to the capital city/rest of state projections using iterative proportional fitting (method described in Step 2), year t+1 then became the base for projecting the next year and the cycle was repeated until the projection horizon was reached.

Step 4 – Statistical Area 1 Projections

This involved splitting the completed SA2 population projections into SA1s.

(xxviii) Each SA1's ERP aged 18 and over was extrapolated linearly to 30 June 2021, based on 30 June 2011 – 30 June 2015 data.

(xxix) Results were then aligned so they summed to the SA2 projections. Two approaches were used for this:

(a) If extrapolated SA1s sum to less than projected SA2s (or both projection & extrapolation falling) then scale all SA1s in the SA2 pro rata.

(b) If the extrapolation was growing faster than the projection, scale down only the growth SA1s according to their share of the growing SA1s.

This dual approach improved the results for SA1s in SA2s where there was widely divergent SA1 growth.

Appendix V– Conversion of Australian Bureau of Statistics (ABS)

Text provided by the Australian Bureau of Statistics

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 2015 annually through to 30 June 2021. To allow baseline comparison with latest electoral roll counts, interpolation was used to derive 30 September 2016 population. The 31 March 2021 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_{2016} = ABS projection of residents aged 18 and over at 30 September 2016

P_{2021} = ABS projection of residents aged 18 and over at 31 March 2021

E_{2016} = Enrolled persons at 30 September 2016

E_{2021} = Projected enrolled persons at 31 March 2021

$E_{2021} = (E_{2016} / P_{2016}) * P_{2021}$

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

P_{2016} = 479

P_{2021} = 493

E_{2016} = 363

E_{2021} = (363 / 479) * 493

= 374

Some SA1s with very high growth have low enrolment to 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 and over, i.e.:

E2021 = E2016 + (P2021 - P2016)

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

P_{2016} = 1,125

P_{2021} = 1,390

E_{2016} = 1,192

E_{2021} = 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.