



Demographic Report

Review of the impacts from
COVID-19 on voter forecasts

8 July 2021

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Executive Summary

- ▣ COVID-19 has had a profound impact on population trends in New South Wales, with the closure of the international borders in March 2020.
- ▣ A review of the current voter forecasts was requested by the NSWEC due to concern over the potential significance of the pandemic's effects on future voter growth in NSW.
- ▣ In 2021, population growth has slowed, while voter growth has continued.
- ▣ Current NSW voter forecasts are tracking well against electoral roll data. In April 2021, voter forecasts were 0.77% higher (+41,411) than enrolments in NSW.
- ▣ Analysis by age suggests that the current enrolment share of persons aged 18 and 19 is low (<50%). Assuming a typical pre-election share of 70%, an additional 39,000 persons in these age groups would be on the roll, cancelling out the bulk of the voter difference of 41,411.
- ▣ Most regions are tracking well, although the Richmond-Tweed SA4 has a significantly higher variance in April 2021. Murray SA4 has the opposite trend to most areas of NSW, suggesting growth in voters has been higher than expected.
- ▣ Recently revised COVID-adjusted SA4 forecasts indicate a significantly reduced growth in adult population across NSW to 2023. With overseas migration assumed to return to normal, the difference in adult population between forecasts is steady to 2027.
- ▣ A reduction in population growth is more likely in Sydney compared to regional NSW, although most areas are expected to experience a lower growth of adult population.
- ▣ Inner City areas are expected to experience a large decrease in growth due to COVID adjustments, while fringe suburban and regional greenfield areas are expected to maintain similar levels of growth to the current forecasts.
- ▣ A key benchmark of electoral districts is that they remain within a 5% margin of the NSW average (the quotient).
- ▣ Two of the current proposed electoral districts (Barwon and Cootamundra) were already expected to fall outside of the 5% margin in April 2023.
- ▣ Three additional electoral districts may also fall outside of the 5% quotient margin as of April 2023 due to the revised forecast outlook. These are Heffron (lower population likely), Upper Hunter and Camden (similar or higher population likely).
- ▣ These 5 electoral districts represent 5.38% of the 93 districts across NSW.

- This level of difference suggests the proposed districts are overall sufficiently robust to April 2023.

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List of abbreviations

ABS - Australian Bureau of Statistics

AEC – Australian Electoral Commission

ATO – Australian Taxation Office

.id - informed decisions Pty. Ltd.

NEVDIS – National Exchange of Vehicle and Driver Information System

NSWEC - New South Wales Electoral Commission

SA1 - Statistical Area 1 (An ABS local unit of geography of about 200 households)

SA2 - Statistical Area 2 (An ABS unit of geography that roughly equates to a 'suburb' or 'locality')

SA4 - The most aggregate level of the ABS standard geography within Greater Sydney and Regional NSW. They are the equivalent to a broad region.

SAFi - Small Area Forecast information

1. Introduction

In December 2019, the NSW Electoral Commission (NSWEC) undertook a procurement process and appointed informed decisions (.id) to provide detailed demographic and forecast services to create a projected enrolment dataset for the period April 2019 to April 2029 on a year-by-year basis at the 2016 SA1 based geographic level for the whole of New South Wales.

This project was carried out to assist the NSW Electoral Commission with the formal redistribution process for the state, which ensures the number of electors within each district remains approximately the same over time. The *Constitution Act 1902* requires that electoral district boundaries be adjusted (in a process known as a redistribution) and must take place at least after every second New South Wales State General Election.

The work to perform the analysis and produce this dataset was carried out over the period from February to April 2020. The deliverables included the dataset accompanied by a detailed Voter Methodology report and a Voter Trends report, as well as a presentation to relevant Electoral Commission stakeholders.

Since this project was completed, the NSWEC have been undertaking the required stages of the redistribution process, including public hearings, within the timetable allocated for the redistribution process. During this time, Australia closed its national borders in response to the Federal Government's approach to managing the impacts from COVID-19.

Before formally completing the redistribution process, a review of the current forecast performance was requested by the NSWEC due to concern over the significance of the pandemic on future voter patterns in NSW. This request forms the basis of the report. We have undertaken benchmarking for 2021, based on comparison with enrolments as of April. We have also assessed the differences in the current, pre-COVID-19 and COVID19-adjusted forecast results as of 2023 and 2027, with commentary as to the potential impacts on the proposed electoral boundaries.

The impact of the COVID-19 pandemic will almost certainly reduce population growth to 2023 and 2027. It will also likely impact on voter growth. The critical question relates to whether those impacts will be even across NSW. The key future indicator for Electoral Districts is the average number of voters (known as the quotient) and the degree to which Districts and the number of districts that fall outside the quotient by more than 5%.

2. Impact of COVID-19 on 2021 population

The impact of COVID-19 on all aspects of Australian society since early 2020 has been profound. The effects on demographic trends have been especially pronounced since March 2020, when external borders were 'closed'. Although there has been a trickle of Australian citizens returning home over the last 18 months, the border closure has greatly impacted overall population growth across New South Wales. With more people leaving Australia than arriving over the period from March 2020 to June 2021, net overseas migration has been negative for the first time since the Second World War.

The impact of the international border closure on New South Wales was quite significant on population growth, as the State typically receives about 30% to 40% of Australia's net overseas migration gain. As Figure 1 below indicates, the net gain to NSW by quarter fell from an average of just under 20,000 persons in the six quarters preceding the border closure in March 2020 to negative figures for June and September. While the December data indicates a return to positive numbers, the impact on overall population growth continues to be great.

Figure 1: Overseas migration flows by quarter, NSW, December 2018 - December 2020

	Dec-18	Mar-19	Jun-19	Sep-19	Dec-19	Mar-20	Jun-20	Sep-20	Dec-20
Arrivals	44,980	51,775	43,686	56,211	57,148	55,146	5,122	11,334	23,873
Departures	26,964	24,815	31,661	32,922	40,138	33,004	8,875	20,505	21,578
Net	18,016	26,960	12,025	23,289	17,010	22,142	-3,753	-9,171	2,295

Source: ABS, Components of population change - states and territories – Cat. No 3101.02

.id's existing population forecast for persons aged 18 and over in NSW as of April 2021 was 6,491,890. These are the population forecasts that currently underpin the proposed District boundaries for NSW. Based on the recently completed population forecasts, incorporating the impacts from COVID on population growth, the 2021 figure¹ has been reduced to 6,389,570, or approximately 102,000 less than the current estimate. This quantity of difference, predominantly driven by lower net overseas migration gain,

¹ Revised SAFi forecasts are published as of June 30.

indicates a strong case for an independent review about the potential impacts from COVID-19 on NSW voter forecasts to 2029.

The differences in population between pre and COVID-adjusted population forecasts in 2021 are most noticeable in Greater Sydney than Regional NSW. The difference of 68,430 in Sydney represents 66.87% of the difference in population. This is slightly higher than its population share. As the bulk of net overseas migration gain occurs in Sydney, this outcome is not surprising.

Almost all SA4s in Greater Sydney are expected to have lower adult populations in 2021 compared to the existing (pre-COVID-19) figures. However, an analysis in 2021 at the SA4 level shows that some variations across regions are expected. The greatest reductions in adult population to 2021 are in areas that are most affected by overseas migration gain, especially Inner Sydney, Parramatta and Ryde. By contrast, more established middle suburban areas are less likely to be affected, but the presence of a major university campus in the SA4 can have a bearing.

Greenfield growth areas have proven to be highly resilient during the time of COVID-19, with areas in both the North-West and South-West growth corridors continuing to grow at strong levels. This is a pattern that has been replicated in other outer metropolitan growth areas across Australia. There have been several programs, such as the *First Home Buyer Scheme* and *HomeBuilder program* that may have supported the continuation of construction in new development areas on Sydney's fringe over the last 18 months. See Figure 2 below.

Figure 2: Comparison of existing and revised COVID-adjusted 18+ population forecasts, Sydney SA4s, 2021

SA4 area	Revised Post COVID-19 forecasts	Existing forecasts ²	Net Diff.	% Diff.
Central Coast	270,007	274,966	-4,959	-1.80%
Baulkham Hills & Hawkesbury	195,743	196,439	-696	-0.35%
Blacktown	286,906	288,261	-1,354	-0.47%
City & Inner South	327,424	341,058	-13,634	-4.00%
Eastern Suburbs	240,658	241,902	-1,245	-0.51%
Inner South West	492,914	501,547	-8,633	-1.72%
Inner West	266,375	268,908	-2,533	-0.94%
North Sydney & Hornsby	343,861	351,607	-7,747	-2.20%
Northern Beaches	211,424	211,995	-571	-0.27%
Outer South West	220,600	218,686	1,913	0.87%

² These .id population forecasts are the basis for the current NSW voter forecasts.

Outer West & Blue Mountains	253,346	253,178	168	0.07%
Parramatta	390,026	402,303	-12,277	-3.05%
Ryde	166,292	173,717	-7,425	-4.27%
South West	349,396	356,705	-7,309	-2.05%
Sutherland	180,604	182,726	-2,122	-1.16%
Greater Sydney Total	4,195,574	4,263,999	-68,425	-1.60%

Source: id, NSW voter forecasts; .id SAFI NSW, Small Area Forecast Information (SA4 level only)

The level of difference in Regional SA4s is greatest in the inland and more remote parts of New South Wales and selected parts of the coast, where population forecast growth is now assumed to be lower in 2021. The greatest percentage differences are expected to be in the SA4s of Far West & Orana, New England & North West, Coffs Harbour – Grafton and the Riverina. Areas on the edge of Sydney are generally assumed to be less affected by the population impacts of COVID-19, with the Hunter Valley exc. Newcastle, Illawarra and Southern Highlands & Shoalhaven having similar results to the previous population forecasts. See Figure 3 below.

Figure 3: Comparison of existing and revised COVID-adjusted 18+ population forecasts, Regional NSW SA4s, 2021

SA4 area	Revised COVID19-adjusted forecasts	Existing forecasts ³	Net Diff.	% Diff.
Capital Region	184,385	187,146	-2,761	-1.48%
Central West	163,039	166,710	-3,670	-2.20%
Coffs Harbour - Grafton	112,357	115,204	-2,847	-2.47%
Far West & Orana	88,112	90,714	-2,602	-2.87%
Hunter Valley exc Newcastle	220,439	222,092	-1,653	-0.74%
Illawarra	250,335	251,287	-952	-0.38%
Mid North Coast	181,143	184,295	-3,152	-1.71%
Murray	95,381	96,479	-1,098	-1.14%
New England & North West	142,129	145,747	-3,618	-2.48%
Newcastle & Lake Macquarie	302,264	307,560	-5,296	-1.72%
Richmond - Tweed	203,575	206,336	-2,760	-1.34%
Riverina	123,074	125,926	-2,852	-2.26%
Southern Highlands & Shoalhaven	127,758	128,397	-639	-0.50%
Regional NSW Total	2,193,992	2,227,891	-33,899	-1.52%

Source: .id, NSW voter forecasts; .id SAFI NSW, Small Area Forecast Information (SA4 level only)

Regional areas that have lower growth prospects will likely see a direct correlation between falling adult population growth and voter growth. This is because the voter share in most parts of Regional NSW exceeds 85%.

³ These .id population forecasts are the basis for the current NSW voter forecasts.

3. Comparison of 2021 .id voter forecasts to NSW enrolment data

Before analysing the impact of changes to .id voter forecasts to 2029, it is useful to compare the performance of the existing .id voter forecasts with recent enrolment data from the NSWEC. We have benchmarked the voter forecasts' performance in April 2021 to measure the impacts of COVID-19. This assessment also gives insight into the potential for future divergence, based on the changes over the last 18 months.

Overall, the voter forecasts were tracking relatively well in April 2021 at 0.77% higher than the enrolment data for the same period; a difference of 41,411 voters. At the Metropolitan-Regional level, the percentage difference was similar, with the voter forecast for Greater Sydney 0.81% higher and Regional NSW 0.71% higher. There is some level of differentiation at the SA4 level in Greater Sydney, as indicated in Figure 4 below.

Figure 4: Difference in voter forecasts & NSW Electoral Roll, Sydney SA4, April 2021

SA4 area	Voter Forecasts	Electoral Roll	Net Diff.	% Diff.
Central Coast	256,039	255,340	699	0.27%
Baulkham Hills & Hawkesbury	173,345	171,549	1,796	1.05%
Blacktown	231,969	231,946	23	0.01%
City & Inner South	204,381	201,725	2,656	1.32%
Eastern Suburbs	179,053	176,963	2,090	1.18%
Inner South West	375,435	372,152	3,283	0.88%
Inner West	195,598	193,352	2,246	1.16%
North Syd. & Hornsby	280,402	278,761	1,641	0.59%
Northern Beaches	184,595	183,658	937	0.51%
Outer South West	194,292	192,682	1,610	0.84%
Outer West & Blue Mountains	227,931	226,684	1,247	0.55%
Parramatta	271,776	267,053	4,723	1.77%
Ryde	122,946	121,474	1,472	1.21%
South West	290,466	288,514	1,952	0.68%
Sutherland	166,618	166,018	600	0.36%
Greater Sydney Total	3,354,847	3,327,871	26,976	0.81%

Source: id, NSW voter forecasts, NSWEC, NSW Electoral Roll, April 1, 2021

The differences in voter population can be explained in part by the period in the electoral cycle. Prior to the voter forecast project commencing (end of 2019), there had been both a New South Wales and a Federal Election. Since that time, it is likely that the share of

enrolment numbers on the roll has fallen in line with a lower motivation to update enrolment details. This is particularly an issue for persons under 20 who have not yet voted. Younger people tend to be more transient and are less engaged with Government services, such as Medicare, the ATO etc. With more unstable housing and household arrangements, they are less likely to update their voting details, with many not on the electoral roll or still registered to vote at the family home.

All SA4s in Sydney had higher voter forecasts than the electoral roll, with the greatest differences in Parramatta, City and Inner South, Eastern Suburbs, Inner West and Ryde. These areas tend to attract many persons from overseas and, except for the Eastern Suburbs and the Inner West, are fast growing areas. In general, these variations are not especially high and do not provide great cause for concern with the voter forecasts in 2023 and 2027. Given the transient population in the Parramatta area, the level of voter undercount in this SA4 may be higher than the average.

Figure 5 below indicates the level of difference in Regional NSW by SA4. The greatest differences are in the SA4s of Richmond-Tweed, Coffs Harbour – Grafton and the Capital Region. By contrast, the Murray SA4 has experienced more enrolment growth than expected which is a considerably different trend to other SA4s in NSW.

Figure 5: Difference in voter forecasts & NSW Electoral Roll, Regional NSW SA4, April 2021

SA4 area	Voter Forecasts	Electoral Roll	Net Diff.	% Diff.
Capital Region	174,216	171,272	2,944	1.72%
Central West	153,165	152,336	829	0.54%
Coffs Harbour - Grafton	107,063	105,201	1,862	1.77%
Far West & Orana	81,823	81,292	531	0.65%
Hunter Valley exc Newcastle	208,291	208,591	-300	-0.14%
Illawarra	226,458	226,702	-244	-0.11%
Mid North Coast	174,799	174,296	503	0.29%
Murray	83,995	84,915	-920	-1.08%
New England & North West	131,379	129,588	1,791	1.38%
Newcastle & Lake Macquarie	286,825	287,408	-583	-0.20%
Richmond - Tweed	188,499	180,634	7,865	4.35%
Riverina	111,459	111,015	444	0.40%
Southern Highlands & Shoalhaven	120,603	120,872	-269	-0.22%
Regional NSW Total	2,048,573	2,034,122	14,451	0.71%

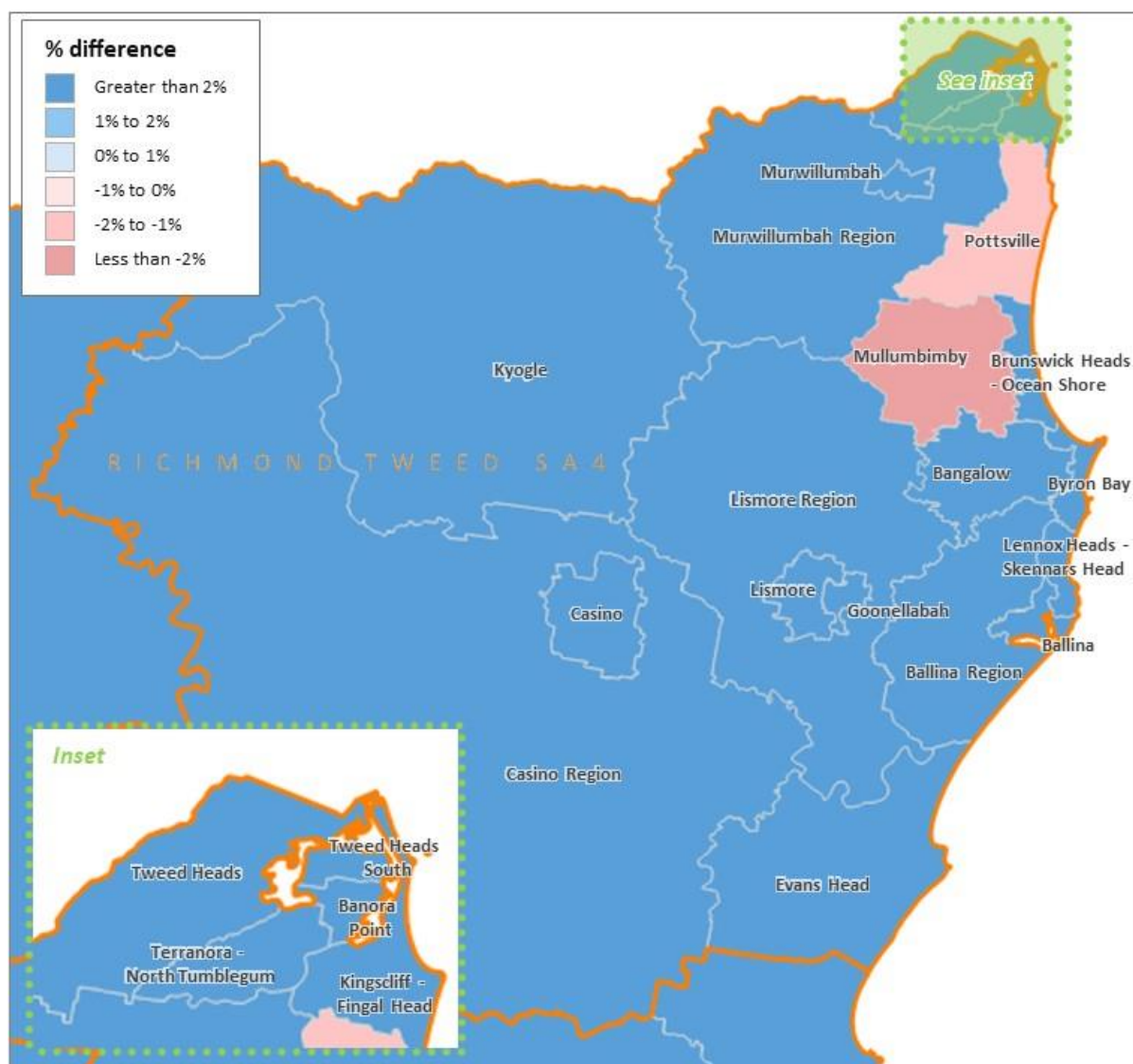
Source: *id*, NSW voter forecasts, NSWEC, NSW Electoral Roll, April 1, 2021

The regions that pose the greatest concern based on the April 2021 comparison are Richmond-Tweed and Murray. The former area shows the largest difference of 4.35%, while the latter area has a very different trend with a lower growth voter forecast than the enrolments in April 2021 (-1.08%). While some of the positive differences can be explained by enrolment factors, the negative figure in Murray probably suggests a simple underestimation of voter forecast growth in the region.

3.1 Richmond Tweed SA4

A closer analysis of the Richmond-Tweed area suggests that the difference between the voter forecasts and the electoral roll is relatively widespread. The percentage differences in population by SA2 are generally similar to the Richmond-Tweed SA4 level, although Pottsville and Mullumbimby have higher numbers on the electoral roll than the voter forecasts. This suggests that the difference in outcome may relate to a general factor across the region, rather than specific development or demographic assumptions and resulting forecasts in a particular area. However, the greater increases in voter population in the Mullumbimby and Pottsville SA2s suggest higher levels of residential development than expected. See Figure 6 below.

Figure 6: Comparison of voter forecasts to NSW Electoral Roll, Richmond-Tweed SA2s, April 2021



Source: id, NSW voter forecasts, NSWEC, NSW Electoral Roll, April 1, 2021

The changes in the electoral roll over the last 2-3 years in the Richmond – Tweed SA4 suggest some form of issue with the updating of voters on the electoral roll within the region. There have been steady historical increases in voter numbers on the roll over previous years until the end of 2019. Over the past 18 months, there has been a large and consistent fall by month in electors across the region.

The explanation for this trend is most likely related to the impact of a series of natural disasters in the region (including bushfires followed by floods) which has impacted on the usual process of enrolment by the AEC. Given that people may have been displaced and not yet residing at what they intend to be a permanent address, the AEC has held off on contacting residents in this region who may have moved to or within the area over the last 18 months.

There is little evidence from other data sources corroborating a decline in adult population in the region. Department of Social Services' payment recipient data, driver licence renewals' data from the NEVDIS database and more general indicators of population growth, such as the number of children from the School Census and building approvals, show no dramatic changes. This reiterates the likelihood that the elector data may be lacking persons who have moved into the region over the past 18 months.

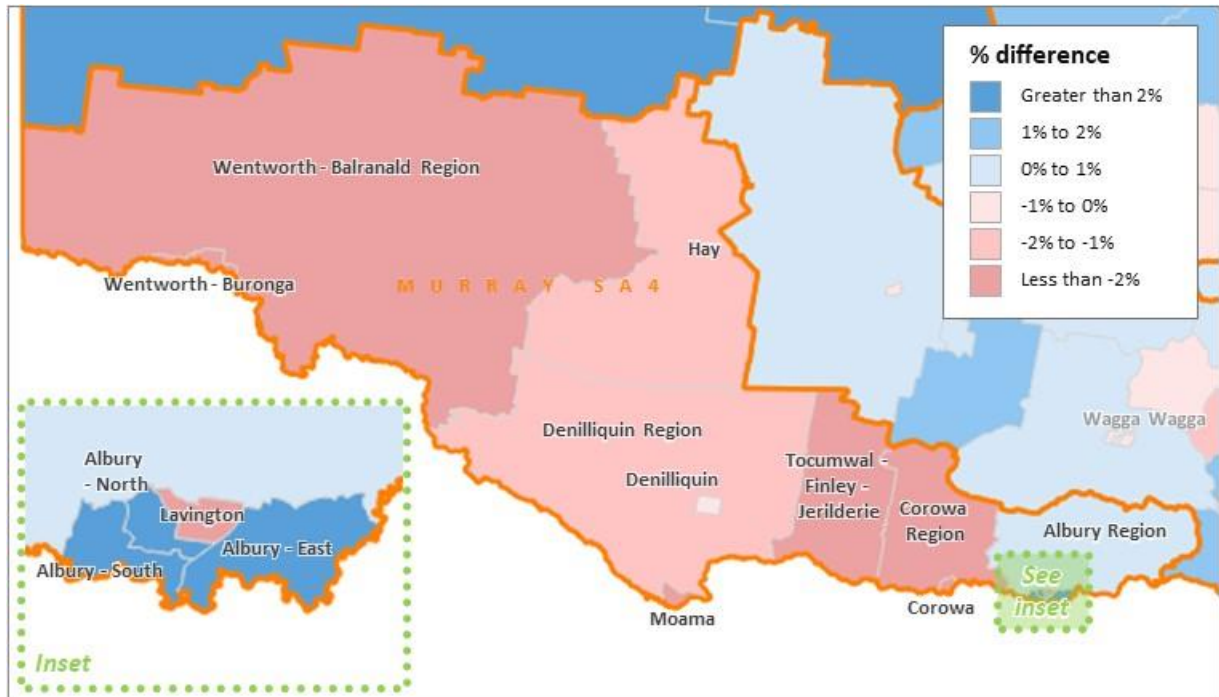
3.2 Murray SA4

There is quite a strong variation in the performance of the voter forecasts against the enrolment data by SA2 within the Murray SA4. The established parts of Albury generally follow the state-wide pattern of an apparent overestimation of voter growth to April 2021. However, the forecast voters for the Lavington SA2 appear to be too low, suggesting higher levels of residential growth than expected.

Similarly, the enrolment data is higher in many areas along the Murray River, most notably in Moama. It is possible that the population forecasts have simply underestimated the migration to these areas from all parts of Australia. However, elector numbers in these areas may have been affected more specifically by cross-border considerations. The impact of prolonged periods of lockdown in Victoria may have acted as a fillip for growth on the NSW side with renters and other transient people preferring the greater freedom on the northern side of the Murray.

The significance in understanding the source of this greater voter growth relates to whether this is a sustained trend into the future. This will be further examined in the subsequent chapters of this report. See Figure 7 below.

Figure 7: Comparison of voter forecasts to NSW Electoral Roll, Murray SA2s, April 2021



Source: *id, NSW voter forecasts, NSWEC, NSW Electoral Roll, April 1, 2021*

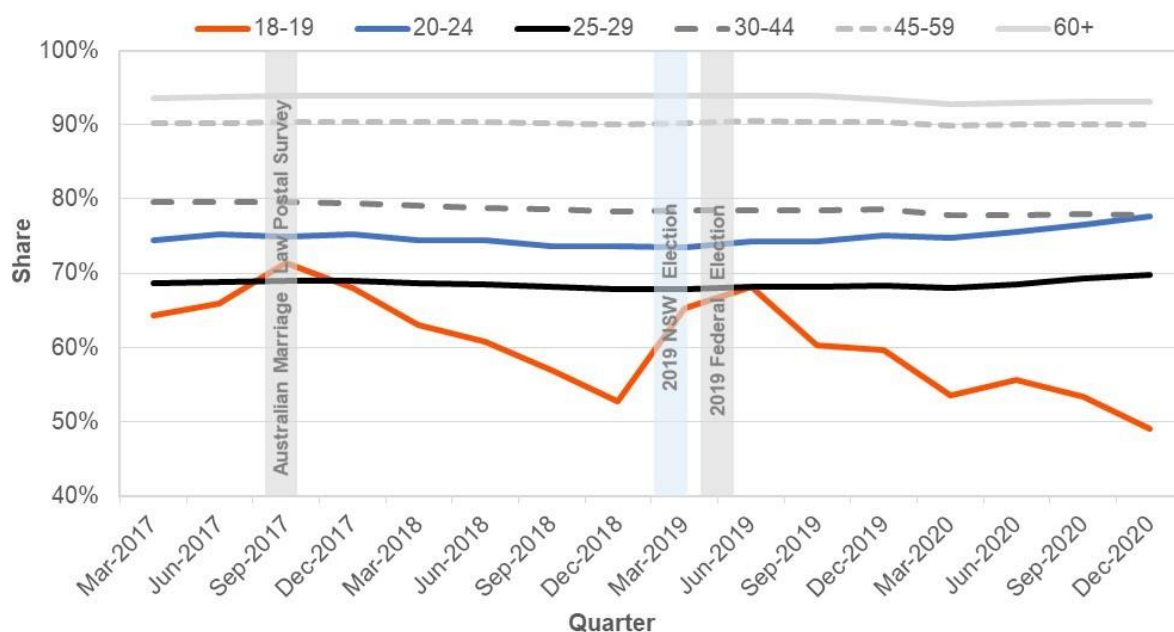
The following section of the report goes into greater detail to analyse some of these trends by age over time. This will help determine how high the level of undercount might be with the current electoral roll. In turn, it may be possible to validate the overall difference between current voter forecasts and enrolment numbers across NSW and anticipate areas where enrolments may increase in the lead up to the next Federal and State Elections.

4. 2021 enrolments with age-based adjustments

It is likely that in most electoral districts, the number of voters is underestimated between elections. The AEC and NSWEC actively attempt to enrol young people on the electoral roll prior to and as they turn 18 and ask people to update their enrolment details in cases of change of address. However, it is common for people to delay in reporting a new address or household arrangements. The extent of this trend can be demonstrated historically by age and does suggest that the overall voter forecasts are more accurate than the headline discrepancy of 0.77% in April 2021.

Figure 8 below suggests the population share of 18 and 19 year olds on the electoral roll is especially volatile. There are considerable peaks in the share of young adult enrolments associated with important electoral events over the past four years. The share of 18 and 19 year olds varies from more than 70% at the time of the Australian Marriage Postal Survey in September 2017 to less than 50% in December 2020. The confluence of both State and Federal Elections in 2019 led to very high elector share in the middle of that year. With the closure of international borders since March 2020, the share of the population aged 20-29 as voters has grown, with a lower than usual number of people of this age cohort in the NSW population.

Figure 8: Share of estimated population as voters, NSW, March 2017-December 2020



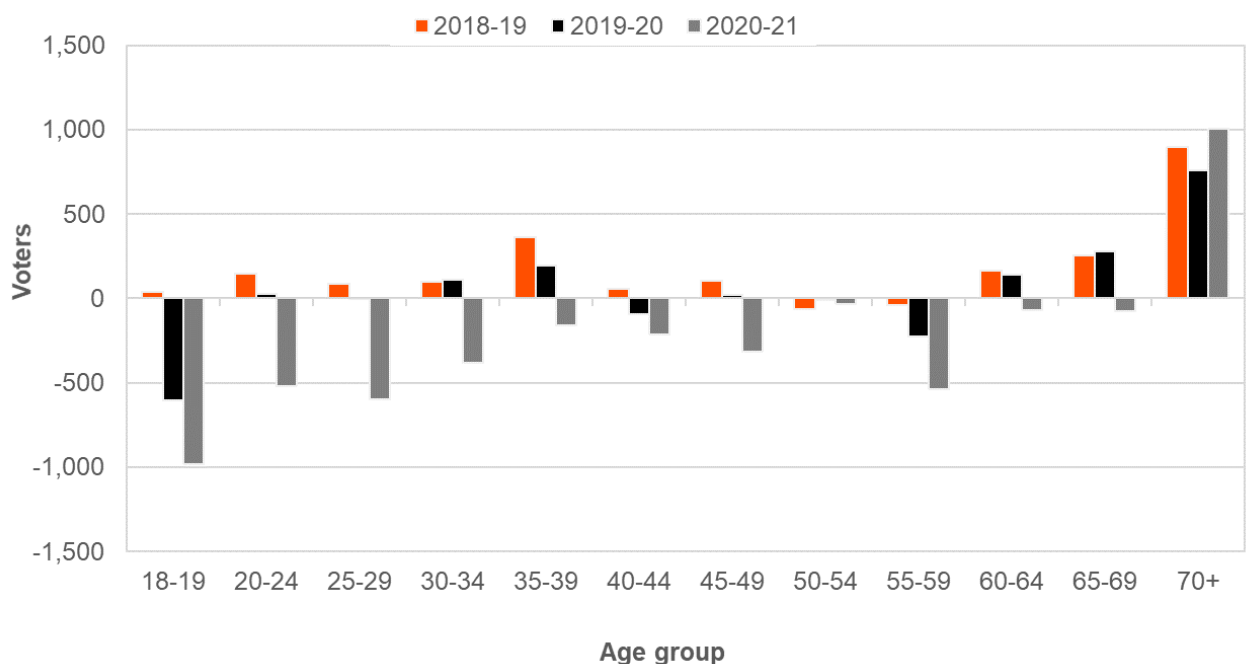
Source: ABS, Estimated Resident Population, Cat. No 3101.0; AEC, Electoral roll by age

If the share of 18 and 19 year olds stood at 70% in December 2020, this would represent an additional 39,000 enrolments on the electoral roll. The overall difference between the voter forecasts and the enrolment numbers was 41,411. This would suggest that at the NSW level, the voter forecasts are tracking very well as of April 2021.

In terms of the difference in the Richmond-Tweed SA4 area, it is possible to use the AEC age of enrolment data to indicate whether the variation is specific to any age group. The data was not available by SA1 or SA2 (granular and suburb level geography) but was analysed at the Federal Division level. The Division of Richmond covers much of the SA4 of Richmond – Tweed and encompasses the proposed electoral district of Tweed, as well as most of Ballina and parts of the Lismore District.

Figure 7 below indicates the annual changes by age to the enrolment numbers from March 2018 to March 2021. Total enrolments in the Division rose by 1,530 to March 2019, then fell by 180 to March 2020. In the year to March 2021, the number of enrolments fell by more than 3,100. Although there has been a significant drop in the number of those aged 18-19 (a loss of two-thirds in this age group since March 2019), there have been losses in almost all age groups in the 2020-21 year (70+ year olds being the main exception). This pattern of change is also seen in the neighbouring Division of Page.

Figure 9: Change in enrolments, Federal Division of Richmond, March 2018-March 2021



Source: AEC, Enrolment data by age

This analysis reiterates that the difference between the population forecasts against the enrolment numbers in this area in 2021 is more likely a product of the enrolment (or electoral roll) data, rather than the accuracy of the existing forecasts for the region.

5. COVID19-adjusted .id population forecasts

This section of the report looks at the differences between the existing .id population forecasts used to devise the electoral boundaries and the recently revised COVID19-adjusted population forecasts from .id. This section does not look at voter forecasts specifically. The analysis drills down to the SA4 level. Unfortunately, at the time of writing, revised population forecast figures to the SA1 level are not available. However, these revised data points provide an overview of the extent of population difference between the old and new forecasts and should highlight any areas of concern where population growth may be expected to be higher or lower to 2023 and 2027.

5.1 Voter share analysis

One of the key methodological tools for forecasting voter growth in the future is the voter share. This is a simple proportion of the population aged 18 and above who are on the electoral roll. The voter share is used in combination with the forecast of adult population to create voter forecasts. In general terms, the voter share is an important driver of future growth and signifies the role and function of an area in Sydney or Regional NSW. Some areas have a lower voter share because they have a high share of newly arrived overseas-born population (such as the inner city or around Macquarie University). Others have a high voter share due to the overwhelmingly Australian born population (such as rural areas in the west of the State).

With the closure of Australian borders, the impact on population trends in the state has been highly significant and uneven. Inner City areas and areas around universities have seen an increase in rental vacancies, with fewer people arriving to work and study from overseas.

This has led to a change in the relationship between population growth and voter growth. Children growing up in Australia continue to 'qualify' for voting rights when they turn 18. The citizenship program, although disrupted by COVID-19, has also continued. Meanwhile, many non-citizens have returned to their country of birth and far fewer non-citizens have arrived in Australia. In addition, many Australian-born residents living in other countries have returned home, sometimes 'prematurely', for a range of reasons, most notably the loss of jobs and lack of social welfare, as well as fears over outbreaks of COVID-19 in their adopted place of residence.

While it is likely that the relationship between adult population and voter growth has changed during this period, it is assumed that the underlying voter growth has continued, creating a good match to the existing population forecasts. The SA4 data suggests that the existing population forecasts are tracking relatively well, at least at the broad level in 2021.

At this stage, it is likely that the pandemic will have an impact on overall voter growth, but it is more likely to have an impact in the medium to longer term (2026+), rather than the short term. Australian born teenagers will continue to become eligible and skilled migrants will be able to apply for citizenship. However, with a break on overseas migration, likely to be close to or more than two years, there is the potential for a lower number of desirable, appropriately skilled candidates available for citizenship in the future.

5.2 Forecast comparison to 2023 and 2027

The population forecasts for 2023 indicate a general decrease in 18 and over population numbers. The overall reduction in adult population across NSW in 2023 is 227,500 persons or 3.42%. The number remains relatively stable to 2027 at a difference of 232,460 persons or 3.32%. This is because overseas migration is expected to return to 'normal' levels by 2023. The decrease is more marked in Sydney than Regional New South Wales, again reflecting the higher share of overseas migration to Sydney. As Figure 10 below shows, the amount of difference between the population forecasts in Greater Sydney as a whole in 2023 and 2027 is similar.

Figure 10: Difference between existing and revised COVID-adjusted 18+ population forecasts, Sydney SA4s, 2021

SA4 area	2023		2027	
	Net Diff.	% Diff.	Net Diff.	% Diff.
Central Coast	-9,077	-3.23%	-11,089	-3.79%
Baulkham Hills & Hawkesbury	-5,073	-2.47%	-7,070	-3.18%
Blacktown	-6,275	-2.09%	-5,722	-1.76%
City & Inner South	-30,775	-8.75%	-29,611	-7.87%
Eastern Suburbs	-10,466	-4.28%	-6,887	-2.76%
Inner South West	-22,954	-4.47%	-20,028	-3.75%
Inner West	-9,854	-3.60%	-6,086	-2.14%
North Sydney & Hornsby	-16,459	-4.60%	-18,119	-4.86%
Northern Beaches	-2,014	-0.94%	-1,131	-0.51%
Outer South West	1,247	0.55%	3,238	1.35%
Outer West & Blue Mountains	-1,134	-0.44%	-1,177	-0.44%

Parramatta	-30,914	-7.37%	-43,494	-9.51%
Ryde	-13,073	-7.20%	-17,753	-8.98%
South West	-17,407	-4.66%	-20,818	-5.11%
Sutherland	-3,363	-1.81%	-1,902	-1.00%
Greater Sydney Total	-177,592	-4.05%	-187,648	-4.05%

Source: *id*, NSW voter forecasts; *.id SAFI NSW*, Small Area Forecast Information (SA4 level only)

The greatest differences by SA4 are expected to be in the City & Inner South, Parramatta and Inner South West Regions. These are areas that typically attract many overseas migrants, with a high share of overseas students and temporary or transient overseas migrants. This type of migrant is less likely to impact on voter populations in the short term, although as previously stated, it may have an impact in the medium to longer term as many become Permanent Residents over time and eventually Australian Citizens.

The greenfield growth areas continue to show a lower rate of adjustment in 2023 and 2027, in line with a maintenance of higher short term residential building and population growth. The Outer West & Blue Mountains SA4 is expected to have more moderate adjustments, while the Outer South West SA4 is forecast to be higher than the existing forecast (the *.id* population forecasts that underpin the voter forecasts). For this reason, it is these areas that may be the most likely to shift beyond a 5% quotient. Other areas that are expected to have lower than average downward adjustments include the Sutherland and Northern Beaches SA4s.

Regional areas are expected to have an overall lower than average adjustment to their growth prospects. These areas have a strong correlation between adult population growth and voter growth, meaning that most population gains will be gains on the electoral roll. This suggests that some regional areas may have a more positive than previously expected voter quotient. See Figure 11 below.

Figure 11: Difference between existing and revised COVID-adjusted 18+ population forecasts, Regional NSW SA4s, 2021

SA4 area	2023		2027	
	Net Diff.	% Diff.	Net Diff.	% Diff.
Capital Region	-3,863	-2.02%	-3,407	-1.70%
Central West	-5,914	-3.49%	-7,787	-4.45%
Coffs Harbour - Grafton	-3,984	-3.39%	-4,591	-3.75%
Far West & Orana	-3,363	-3.69%	-3,757	-4.07%
Hunter Valley exc. Newcastle	-1,690	-0.74%	1,078	0.44%

Illawarra	-3,513	-1.37%	-1,993	-0.75%
Mid North Coast	-4,469	-2.37%	-6,900	-3.48%
Murray	-1,640	-1.67%	-830	-0.82%
New England & North West	-5,385	-3.64%	-6,142	-4.04%
Newcastle & Lake Macquarie	-8,414	-2.68%	-6,526	-2.01%
Richmond - Tweed	-2,319	-1.11%	-238	-0.11%
Riverina	-4,523	-3.54%	-4,642	-3.55%
Southern Highlands & Shoalhaven	-814	-0.62%	924	0.67%
Regional NSW Total	-49,890	-2.20%	-44,812	-1.90%

Source: id, NSW voter forecasts; .id SAFI NSW, Small Area Forecast Information (SA4 level only)

Many regions on the edge of Sydney, such as the Hunter Valley exc. Newcastle, the Illawarra and Southern Highlands & Shoalhaven SA4s are forecast to have similar growth prospects to existing forecasts. These areas have shown higher levels of residential development, which is assumed to have converted into population growth during the last few years, in the same way as the greenfield growth areas in Sydney. Significant new development areas have emerged around Maitland and in the West Dapto Release Area, south-west of Wollongong.

Other areas, such as Richmond-Tweed and Murray are also expected to have similar growth outcomes between forecast periods. The revised SA4 forecasts for Murray suggest that the existing forecast may have underestimated voter growth in the next 5 to 10 years. The maintenance of solid growth in the population forecasts for Richmond - Tweed suggests that the identified variation in enrolment numbers in 2021 is not indicative of future growth prospects. This region is expected to experience a large increase in enrolments on the electoral roll in the period leading up to the Council elections in September, if not the next Federal Election sometime in the 2022.

Other parts of regional New South Wales are expected to have considerably lower future population numbers in 2023 and 2027. Most of the inland SA4s areas, such as the Riverina, New England & North West, Far West & Orana and the Central West are expected to grow at rates notably lower than previously estimated. In addition, the Coffs Harbour – Grafton and Mid North Coast are also expected to have significantly lower adult population growth. However, in most of these regions, the percentage decrease is still like the adjustment assumed in Sydney as a whole by 2023 (approximately 4% less).

6. Potential impact of covid-adjusted forecasts on electoral boundaries

Given the potential for error with the population forecasts in some areas, it is useful to qualify the impact on the proposed electoral boundaries. Although this review does not seek to create revised voter forecasts, it attempts to qualify the differences between the existing .id population forecasts and the new outlook based on the COVID19-adjusted SA4 population forecasts. As Chapter 3 and 4 indicate, the existing population forecasts are tracking well in 2021, although at the region level, some are performing better than others.

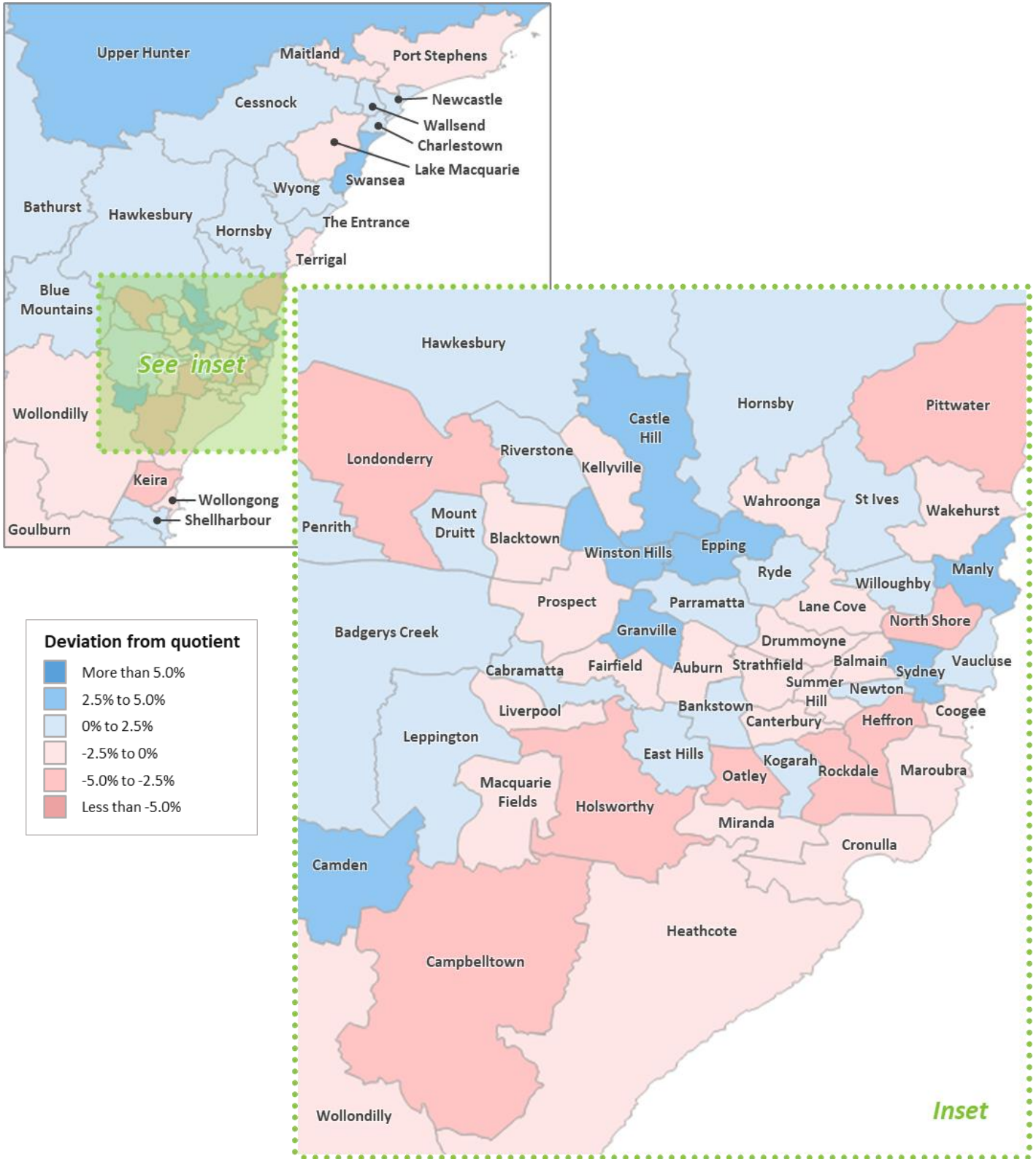
A key benchmark for the proposed electoral boundaries is that no more than a quarter of electoral districts exceed the average number of voters (the quotient) by a margin of 5% for a period of more than two months. Hence, the test for the durability of these proposed electoral boundaries, is that the bulk of electoral districts remain at or close enough to quotient over the next 4-6 years. When building electoral boundaries, the NSWEC must consider the potential for future voter growth and change. However, the NSWEC must also weigh up several other factors, such as the existing district boundaries. They consider communities of interest (places that relate to one another), natural geographical boundaries, such as rivers and mountain ranges and utilise other types of administrative geography, such as Local Government Areas or suburb boundaries.

As we examine the impact of a revised outlook on the current voter forecasts, it is important to state that .id was not involved in the drawing of the electoral boundaries, other than providing the granular voter forecasts to aid in creating those electoral districts. Figures 12 and 13 below show the difference in quotient based on the current voter forecasts in both Greater Sydney and Regional NSW as of April 2023.

The assessment focuses on the districts that are currently forecast to be at least 2.5% outside of quotient in April 2023, whether positive or negative. These areas have been selected as they are the most likely to be at risk of exceeding 5% or more from quotient by 2023. For these districts, we can assess the potential for greater variation from the quotient by noting the changes to .id's Covid19-adjusted forecasts at the SA4 level compared to the existing population forecast, as well as qualify the potential for differences within each SA4.

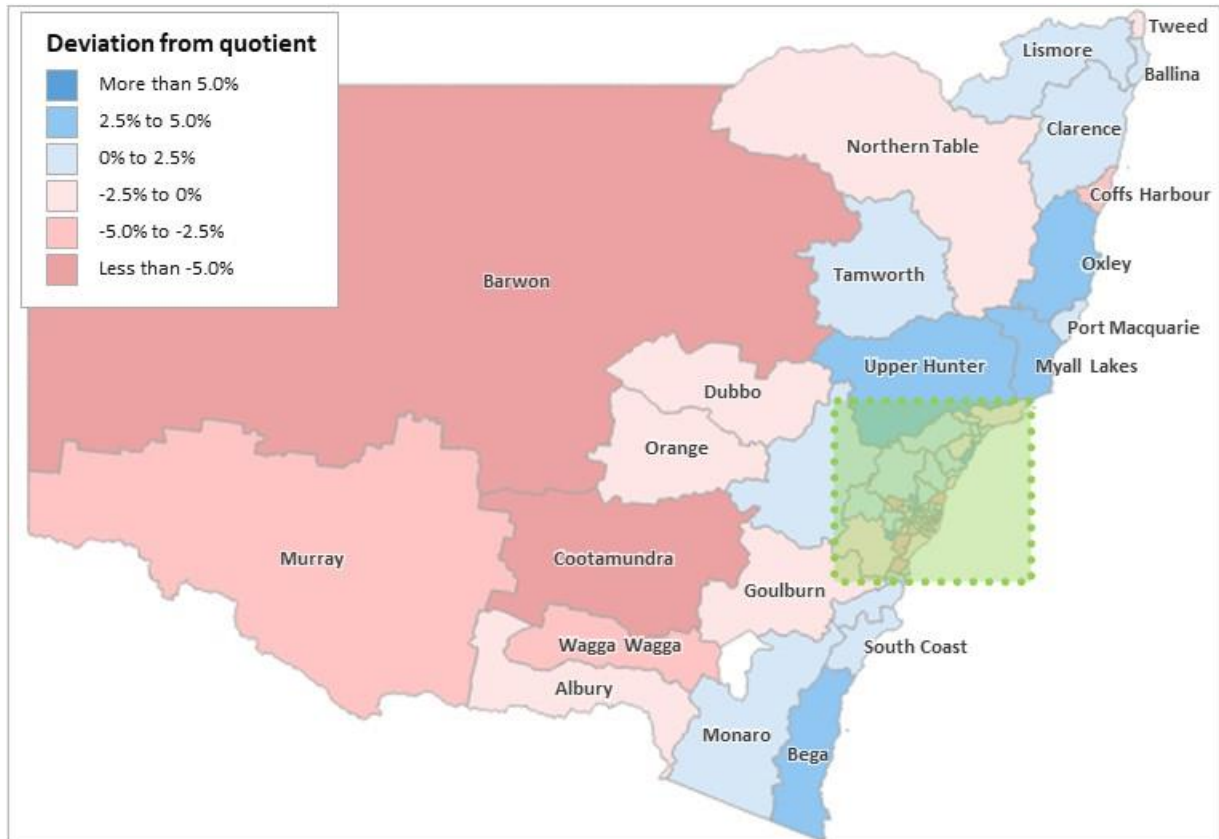
There are 14 Electoral Districts that are currently forecast to have a difference in quotient that exceeds -2.5% as of 2023. The table below indicates whether changes to forecasts will likely have a positive or negative impact on the outlook for these districts. See Figure 14 below.

Figure 12: Forecast difference in quotient, Greater Sydney and surrounding areas, April 2023



Source: NSWEC, Proposed Electoral Districts, 2021

Figure 13: Forecast difference in quotient, Regional NSW Electoral Districts, April 2023



Source: NSWEC, Proposed Electoral Districts, 2021

Figure 14: Largest negative differences in quotient, existing voter forecasts at April 2023 and Covid19-adjusted outlook by SA4 to 2023

Voter forecasts		.id Covid19-adjusted population forecasts	
Electoral District	% Above / Below Quotient 2023	Relevant SA4 (main)	Revised Covid-adjusted pop. forecast outlook by SA4*
Barwon	-7.45%	Far West & Orana	Similar
Cootamundra	-6.28%	Riverina	Similar
Pittwater	-3.93%	Northern Beaches	Higher growth
Murray	-3.74%	Murray	Higher growth
Keira	-3.69%	Illawarra	Higher growth
Holsworthy	-3.38%	Syd. - South West	Slightly lower growth
Wagga Wagga	-3.21%	Riverina	Similar
Heffron	-3.15%	Syd. - City & Inner South	Significantly lower growth
Campbelltown	-2.87%	Syd. - Outer South West	Significantly higher growth
Coffs Harbour	-2.87%	Coffs Harbour - Grafton	Similar
North Shore	-2.82%	Syd. - Nth Sydney & Hornsby	Slightly lower growth
Londonderry	-2.72%	Syd. - Blacktown	Slightly higher growth
Rockdale	-2.68%	Syd. - Inner South West	Slightly lower growth
Oatley	-2.56%	Syd. - Inner South West	Slightly lower growth

Source: NSWEC, Proposed Electoral Districts, 2021; .id, SAFI NSW, SA4 level only

* Based on relative growth – difference in NSW COVID19-adjusted forecasts in 2023 = -3.42%

Most of the districts that are already forecast to be moderately lower or lower than quotient in 2023 are expected to have a relatively similar (i.e., near the average) adjustment based on the revised outlook. This means that the bulk of these 14 areas are not likely to change substantially in relation to the quotient. The Districts of Barwon and Cootamundra are the only seats forecast to be lower than quotient by more than 5%. The outlook for these areas is similar to the changes expected to the forecasts for NSW as a whole.

The Electoral District with the greatest potential to have a lower outcome, relative to the existing population forecasts is Heffron, where the downward adjustment to growth is likely to be significant. The district is one of the fastest growing areas in the State, but the voter share is low, and it currently has a low number of voters, relative to quotient. This is the only District that stands out in the areas forecast to be lower than quotient.

There are 12 Electoral Districts that are currently forecast to have a difference in quotient that exceeds +2.5% as of 2023. The table below indicates whether changes to forecasts will likely have a positive or negative impact on the outlook for these districts. See Figure 15 below.

Figure 15: Largest positive differences in quotient, existing voter forecasts at April 2023 and Covid19-adjusted outlook by SA4 to 2023

Voter forecasts		.id Covid19-adjusted population forecasts	
Electoral District	% Above / Below Quotient 2023	Relevant SA4 (main)	Revised Covid-adjusted pop. forecast outlook by SA4*
Upper Hunter	4.19%	Hunter Valley Exc. Newcastle	Significantly higher growth
Winston Hills	3.79%	Syd. - Blacktown	Slightly higher growth
Sydney	3.72%	Syd. - City & Inner South	Significantly lower growth
Oxley	3.55%	Mid North Coast	Slightly higher growth
Bega	3.33%	Capital Region	Slightly higher growth
Myall Lakes	3.30%	Mid North Coast	Slightly higher growth
Castle Hill	3.23%	Syd. Baulkham Hills & Hawkesbury	Slightly higher growth
Epping	3.22%	Syd. - Parramatta	Significantly lower growth
Granville	3.21%	Syd. - Parramatta	Significantly lower growth
Camden	2.97%	Syd. - Outer South West	Significantly higher growth
Swansea	2.70%	Newcastle & Lake Macquarie	Slightly higher growth
Manly	2.56%	Northern Beaches	Higher growth

Source: NSWEC, Proposed Electoral Districts, 2021; .id, SAFI NSW (SA4 level only)

* Based on relative growth – difference in NSW COVID19-adjusted forecasts in 2023 = -3.42%

There are two districts that may increase to a more positive difference in quotient by April 2023 based on the revised SA4 outlook (greater than 5% above quotient). These are Upper Hunter and Camden, where greenfield growth rates are assumed to drive similar population outcomes to the existing population forecasts. This means the relative difference will be greater than the 4.19% and 2.97% differences currently assumed as of April 2023. The District of Manly is in the Northern Beaches SA4, but the difference in growth is more likely to be expressed in areas to the north of the Manly District (Wakehurst and Pittwater).

It is assumed that there will be considerably lower growth outcomes in the districts of Sydney, Epping and Granville than what is currently assumed. This variation, however, is likely to result in a lower level of difference from the quotient in 2023 than is currently assumed in the voter forecasts.

In general, this assessment affirms that the proposed electoral boundaries remain valid into the future, despite the impact of COVID-19. The revised forecasts, including the impact of COVID-19 on population, suggests that three districts (Heffron, Upper Hunter and Camden) may fall outside the 5% quotient. There are already two districts that are forecast to be outside of the quotient in 2023 (Barwon and Cootamundra). These five potential variations from the quotient in 2023 represent a small share (5.38%) of the total 93 proposed electoral districts.

Glossary

Greenfield development - land development characterised by conversion of predominantly rural land use to residential purposes. This type of development is characterised by lower densities, with a higher share of single-lot housing stock.

Quotient – the average number of voters across NSW Electoral Districts (Total Voters / Total Districts)

SAFi – Small Area Forecast Information: .id' s detailed local area population and household forecasts.

Voter share - the percentage of the adult population (18 and over) as voters.