

The Distribution of New South Wales' Sign Language Users

Analysis from the 2001, 2006 And 2011 Census

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Prepared for the New South Wales Deaf Society by Dr Louisa Willoughby with the assistance of Ms Catherine Cook



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Introduction

This report outlines the age and geographic distribution of sign language users living in New South Wales at the time of the 2011 census, and compares this distribution to reports from previous census. The report explores the distribution of population both within Sydney and across regional New South Wales and identifies a number of key trends in settlement patterns which have important consequences for service delivery.

A note on data and terms

Data in this report comes from the 2001, 2006 and 2011 Australian Census of Population and Housing (hereafter "the census"). Specifically, it relates to the question *Does the person speak a language other than English at home?*, and counts the number of people who said that at home they speak "Auslan" (Australian Sign Language), "sign language," or any other terms (such as ASL) that allowed the language to be identified as a Deaf sign language.

A particular advantage of census data for profiling the Deaf population is that the census is distributed to every household so it may uncover a number of sign language users who are not part of the Deaf community in their state. Census data also gives a way to quickly and easily count the number of sign language users living in a particular area and to compare their numbers with the number of people living in the general population. Yet despite these advantages, the phrasing of census questions and mode of data collection means that we must approach data on the distribution of the New South Wales Deaf community with caution

As Ozolins and Bridge(1999, p. 8) note, underreporting of sign languages on Australian census forms is likely to be common because of the phrasing of the question respondents are asked – "does the person speak a language other than English at home?". Since sign languages are not spoken per se, it is reasonable to presume that many signers would not have listed their language in response to this question. Similar issues arise with the specification "at home", because many Deaf people who still live with their parents may use Auslan (or another sign language) as their preferred language but use English and lip reading to communicate with their hearing families. Kipp et al (1995, p. 26) have noted that the "at home" specification leads to speaker numbers being undercounted for most migrant languages, as large numbers of community members use English at home but their heritage language in a variety of other settings. This problem is more acute for Deaf individuals, however, because in over 90% of cases they are born into hearing families with no knowledge of Auslan.

While these factors may lead to the number of sign language users being undercounted, the absence of a question on hearing disabilities means there is no way of knowing how many sign language users are deaf themselves and how

many are hearing family members who use Auslan in the home environment. These figures are thus not synonymous with the total number of Deaf Australians, although analysis of 2006 census data (Access Economics, 2008; Willoughby, 2011a) suggests that census figures provide a reasonably accurate profile of the adult Deaf community. The issue of the extent to which the census provides a reliable age profile of the Queensland Deaf community will be explored in more detail in the following section.

The reader also needs to be aware that in municipalities with very small signing populations (generally less than 7 people), the ABS will randomize data to ensure that confidentiality is preserved, making these figures unreliable. The numbers of sign language users may also be updated over time as the ABS conducts new parses¹ of Census data. The results presented here should thus not be seen as a final definitive statement as to the number of sign language users in a particular area, but do provide a clear estimate of population size. As with all statistics, reliability is also partly a question of the population group one has in mind or the purpose for which the statistics will be used. Thus the number of people using Auslan at home may be more or less than the number of people requiring regular access to Auslan interpreters or assistance from deaf services. Home use of the language is, however, widely used as a measure of people's preferred language and gives the most accurate data currently available profiling the size of the Australian Deaf community.

¹The ABS continually updates census data with the aim of better coding ambiguous or hard to read answers.

Key trends in community size, New South Wales and Australia

The 2011 Australian census records 2,583 sign language users living in New South Wales, and 9,720 for Australia as a whole. Table 1 outlines changes in the size and composition of the New South Wales signing population from 2001 to 2011, compared to the total population:

	SIGNING POPULATION	TOTAL POPULATION	SIGNERS PER 10,000 RESIDENTS
2001	1,720	6,311,168	2.73
2006	1,923	6,528,692	2.95
2011	2,583	6,896,730	3.75

Table 1: New South Wales Auslan Users 2001-2011

Comparing the number of signers recorded in 2011 with those recorded in 2006 and 2001 uncovers several significant differences, which cannot be accounted for by natural growth alone. As Table 1 shows, the total number of signers nearly doubled between 2001 and 2011. These increases are well above what could be expected from natural growth (especially since Johnston 2004 has hypothesised that the signing population in Australia is declining) and is likely a reflection of growing community pride in Auslan as a language and strong public awareness campaigns by Australian Deaf Societies since 2001 reminding members to list Auslan on the census.

Strong gains in the proportion of sign language users were also seen at the national level, as shown in Table 2:

STATE	SIGNERS 2001	SIGNERS 2006	SIGNERS 2011	INCREASE 2001-11
New South Wales	1,720	1,923	2,583	863
Northern Territory	51	55	72	21
Queensland	1,071	1,412	2,221	1,144
South Australia	427	602	847	420
Tasmania	219	190	293	74
Victoria	1,254	2,107	2,783	1,529
Western Australia	460	560	808	348
TOTAL AUSTRALIA	5,306	6,944	9,723	4,417

Table 2: Australian sign language users 2001 to 2011

According to census data, the number of Australians signing at home increased by 124% between 2001 and 2011. All states and territories recorded growth in their signing population in this period, but the increase occurred at different rates across states: Tasmania's growth is relatively low, with a growth rate of only 33% (and a loss recorded between 2001 and 2006) compared to more than doubling in Victoria and Queensland. Since 2006, Victoria has recorded a higher signing population than NSW, despite lagging that state in general population by nearly 1.6 million. Queensland is also now home to a signing population

numbering several thousand, only slightly smaller than the signing community in NSW despite a general population of 2.5 million fewer people.

One possible explanation for the strong state-based differences seen above is that they are the result of different opportunities to learn sign languages in each state. For example, in Queensland the number of children reportedly using Auslan at home virtually doubled between 2006 and 2011, during the period in which the Queensland government implemented the Transition to Auslan in Deaf education (see <http://education.qld.gov.au/student-services/staff/workshops/auslan.html>). It seems highly likely that the Transition to Auslan program has thus had the effect of both motivating more families to use some Auslan at home and raising pride in the language, such that mothers, fathers and siblings of Deaf children are listing Auslan as a home language as well. The degree to which Auslan is used in education has varied quite markedly from state to state in Australia over the past 30 years (Komesaroff, 2008) and this may be influencing the degree to which young deaf children and their families are adopting Auslan from state to state and region to region. However, it should be noted that Johnston (2004) did not note widespread state differences in his comprehensive review of figures available on the number of Auslan users in Australia.

The rate of growth in the signing population between 2001-11 is too sharp to be accounted for solely by natural increase. When figures on Auslan use in the 2001 census were released, there was a strong feeling in the Deaf community that the census estimate was much too low, especially since previous estimates had often assumed a community size of between 9,000 and 15,000 (Flynn, 1987; Hyde & Power, 1992; Ozolins & Bridge, 1999). For the 2006 and 2011 censuses, the State Deaf Societies thus ran public awareness campaigns to get Deaf people to list Auslan on the census. In Victoria, this resulted in a particularly sharp increase in the number of sign language users between 2001-06, whereas in NSW and WA the greatest increase occurred between 2006-11. While these awareness campaigns were very much targeted at members of the Deaf community, they may have had a spillover effect of making hearing family members, Auslan interpreters and others with connections to the Deaf community more likely to list Auslan on the census as well. However, given that numbers are still quite similar to previous estimates of the size of community, it seems reasonable to assume that the majority of people listing Auslan on the census are in fact Deaf themselves.

In concluding this section, it is helpful to consider these numbers in the light of Johnston's (2004) claim that the Australian Deaf signing population is in decline. If we go on raw numbers alone, it appears that this claim is not supported by the current data. However, if we take the estimate as it was intended, as not just about Deaf people who can sign, but who are life-long users of Auslan as their preferred language and who acquire native or near-native proficiency in the language, then the claim may still be correct. In recent years, there has been a

developing trend of families and schools using some sign support with deaf children who are primarily being raised orally (Gregory, Bishop, & Sheldon, 1995; Meadow-Orlans, Mertens, & Sass-Lehrer, 2003). The idea that Auslan can be a useful resource for communication has also seen many schools with Deaf facilities offer Auslan as a LOTE for all students – whether Deaf or hearing – while at the same time often educating the deaf students primarily through oral English (see e.g. Department of Education and Early Childhood Development, 2012). In both cases, these trends give deaf children some access to a sign system, but do not lead to the development of full fluency in Auslan in childhood. Some of these children will doubtless encounter difficulties with oral language and will come to use Auslan as their preferred language in adulthood, however equally a number will likely continue to use oral communication as their primary communication method in adulthood. More research is thus clearly needed to understand the role that Auslan plays in the lives of those who report using it on the census.

What it is important for Deafness organisations to take away from these findings is that while the reported number of Auslan users in Australia is growing, this is happening at a time when the overall incidence of severe and profound deafness is falling and deaf children are increasingly attending mainstream schools, mostly without full-time Auslan interpreting support (Johnston, 2004; Komesaroff, 2008). This may well mean that the Deaf community of tomorrow is quite different in size, composition and support needs to today's community. Organisations would thus be well placed to monitor the demographic of the signing population in future censuses (and in other population surveys) in order to ensure that knowledge of this changing demography is fed back into the strategic planning and policy development level of the organisation.

Age distribution of sign language users

In 2011, New South Wales recorded 2,583 sign language users, out of a total state population of just under 7 million. This equates to an average of 3.75 sign language users per 10,000 New South Wales residents. However, as will become clear, the proportion of sign language users varied markedly across different age groups.

In order to explore the age profile of the New South Wales signing population, census data was first sub-divided into the following age groups:

- 0-14 (children)
- 15-24 (youth)
- 25-44 (younger working age)
- 45-64 (older working age)
- 65+ (seniors)

Both the general population and sign language users have a similar age profile: the largest age group is the 25-44 year olds, followed in both cases by 45-64 year old and 0-14 year olds in third place. The number of youths is larger than the number of seniors in the signing population, but lower in the general population. Table 3 gives the number of people in each classification, and Figure 1 gives a visual representation of this data.

AGE GROUPS	SIGN LANGUAGE USERS		GENERAL POPULATION	
	#	%	#	%
0-14	530	21%	1,331,921	19%
15-24	336	13%	892,671	13%
25-44	886	34%	1,908,871	28%
45-64	628	25%	1,751,372	25%
65+	203	7%	1,011,895	15%
TOTAL	2,583	100%	6,896,730	100%

Table 3: Age profile of signing and general population - New South Wales 2011

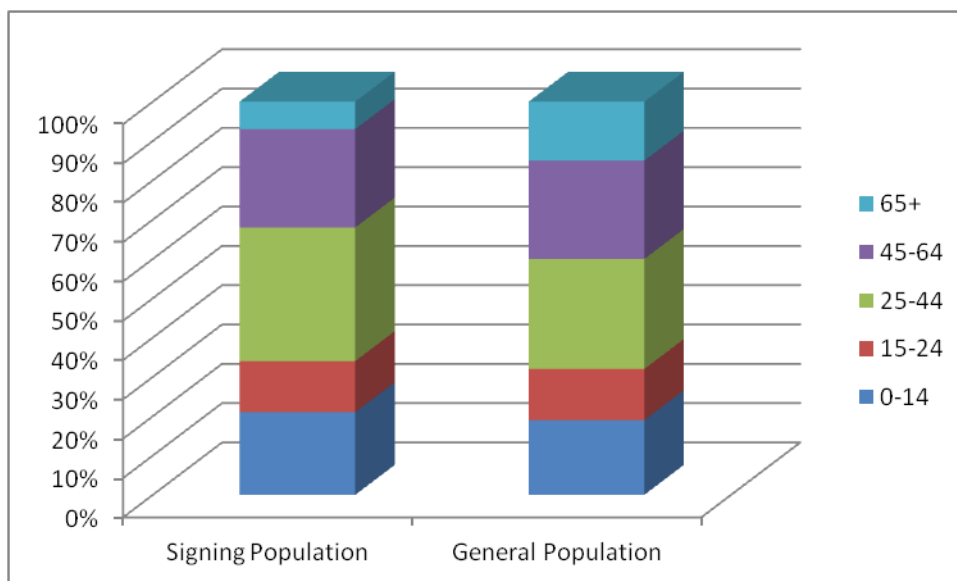


Figure 1: Age profile of signing and general population – New South Wales

Within Australia there is a commonly held view among researchers, professionals and members of the Deaf community that the number of Deaf people using Auslan as their sole or main form of communication is in decline. This is attributed to a number of related factors, including advances in hearing aid and cochlear implant technology that give users better access to speech, greater tendency towards mainstreaming Deaf and hard of hearing students, increasing use (and importance) of written English in electronic communication and a range of health measures (such as Rubella immunisation) that have seen fewer babies born with hearing impairments over the past 40 years (Johnston, 2004). As discussed in the previous section, this trend need not be seen to contradict data showing a growing number of sign language users and a relatively young community, as it may be the case that more people are now using Auslan alongside oral English, rather than making exclusive use of one or the other communication method.

The proportion of sign language users in each age bracket can look quite different to the spread of people across the general population and likely reflects both changing access to Auslan over time and idiosyncrasies of the data collection process. For the past three Australian censuses, the proportion of Auslan users aged 65+ in NSW has been markedly lower than the proportion of people aged 65+ in the general population. While the senior signing population has increased from 5% of Auslan users in 2001 to 7% in 2011, this is still well below the 15% of seniors in the general population. This trend occurs in all states and may in part reflect a preference among some older Deaf Australians to use finger-spelling rather than Auslan as their main communication method. However, it seems that a more wide-spread cause of the low numbers may be that low literacy skills may have impeded Deaf seniors' abilities to accurately complete their own census form. These seniors would have completed their schooling in or before the early 1960s, at a time when deaf education in

Australia was rudimentary. Recent studies of the needs of Australian Deaf seniors have noted the difficulty members of this age group can have filling out even basic, Deaf-friendly survey documents (Matairavula, 2009; Willoughby, 2011b) and it is thus hypothesized that a number of older Auslan users may have relied on a family member to fill out the census form, who did not list Auslan as the senior's home language.

In 2001, 39% of Auslan users in New South Wales were aged 25-44, whereas the corresponding proportion for the general population was 30%. This generation of speakers, born between 1957-76 in many ways represent a peak for Auslan in Australia: born at a time rubella epidemics had led to increased rates of congenital deafness they came of age at a time of growing Deaf pride and acceptance of the role sign languages might play in Deaf education (Ladd, 2003), and before technological changes such as cochlear implants or electronic communication began to lessen the involvement of some deaf people in the Deaf community. In 2011 the 24-45 generation is still slightly over-represented among Auslan users, however the difference is not so stark: 34% of Auslan users are in this bracket as opposed to 28% of the general population. One reason for this change of course is that in the intervening 10 years many from this generation have crossed over in to the next age bracket, and indeed the proportion of sign language users aged 45-64 has increased from 19% in 2001 to 25% in 2011.

While the proportion of children and youth using Auslan is broadly in line with proportions in the general population, it seems likely that for this age group, as well as for the 25-44 age group there is some inflation due to the presence of signing families with both Deaf and hearing members. We have already discussed the issue that parents and siblings of Deaf children may list Auslan on the census, but the converse is also true, i.e. that Deaf adults will report (quite rightly) that their hearing CODAs (children of Deaf adults) use Auslan as a home language. Thus figures on the signing population of children are best read alongside information about the number of students currently enrolled in Deaf facilities or receiving support from a teacher of the Deaf.

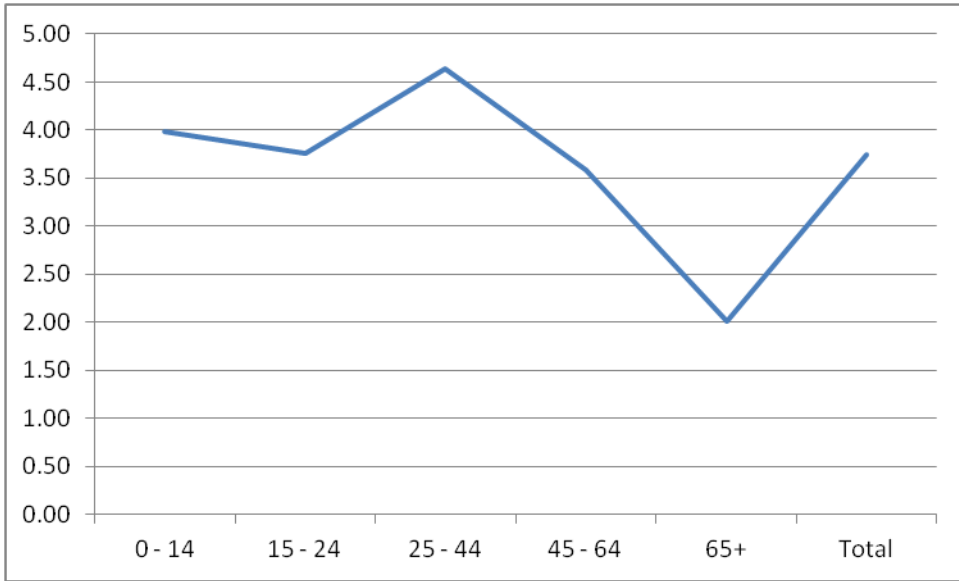


Figure 2: Signing population per 10,000 of general population - New South Wales

Geographic distribution of New South Wales's signing population

Of the 2,583 people who reported using a sign language at home in 2011, 1,401, or 54.2% live in the Sydney statistical area. It might be thought that the increasing ease with which interpreters and others services can be accessed in metro areas would make sign language users more likely to live in Sydney than members of the general population. Yet in fact the proportion of NSW sign language users who in Sydney is fractionally below figures for the general population (57.3%). A similar trend was noted for NSW in 2006 (Willoughby, 2009), where it was hypothesised that a combination of high house prices in Sydney and the availability of work in agriculture may be acting as pulls attracting sign language users to regional areas.

As we shall see, the signing population in regional areas is also relatively spread out. Lake Macquarie, Lismore and Newcastle are home to sizeable signing communities (80+ signers). The following section of the report elaborate on distribution trends within Sydney, before turning its focus to regional New South Wales².

The metropolitan population

In 2011 1,401 signers lived in Sydney. The signing population is concentrated in the outer Western suburbs. Sign language users are conspicuously absent from inner Northern suburbs – the municipalities of Hunter's Hill, Lane Cove, North Sydney, Mosman and Manly all have less than 10 signers, which equates to less than 4 people for every 10,000 residents. Figure 3 provides a visual representation of the distribution of Sydney's signing population, while the full figures for each municipality are given in Appendix 1:

² In this report the boundaries used for the metropolitan population are those that correspond to the ABS "Greater Capital City Statistical Area", while the regional population is based on the ABS classification "Balance of State".

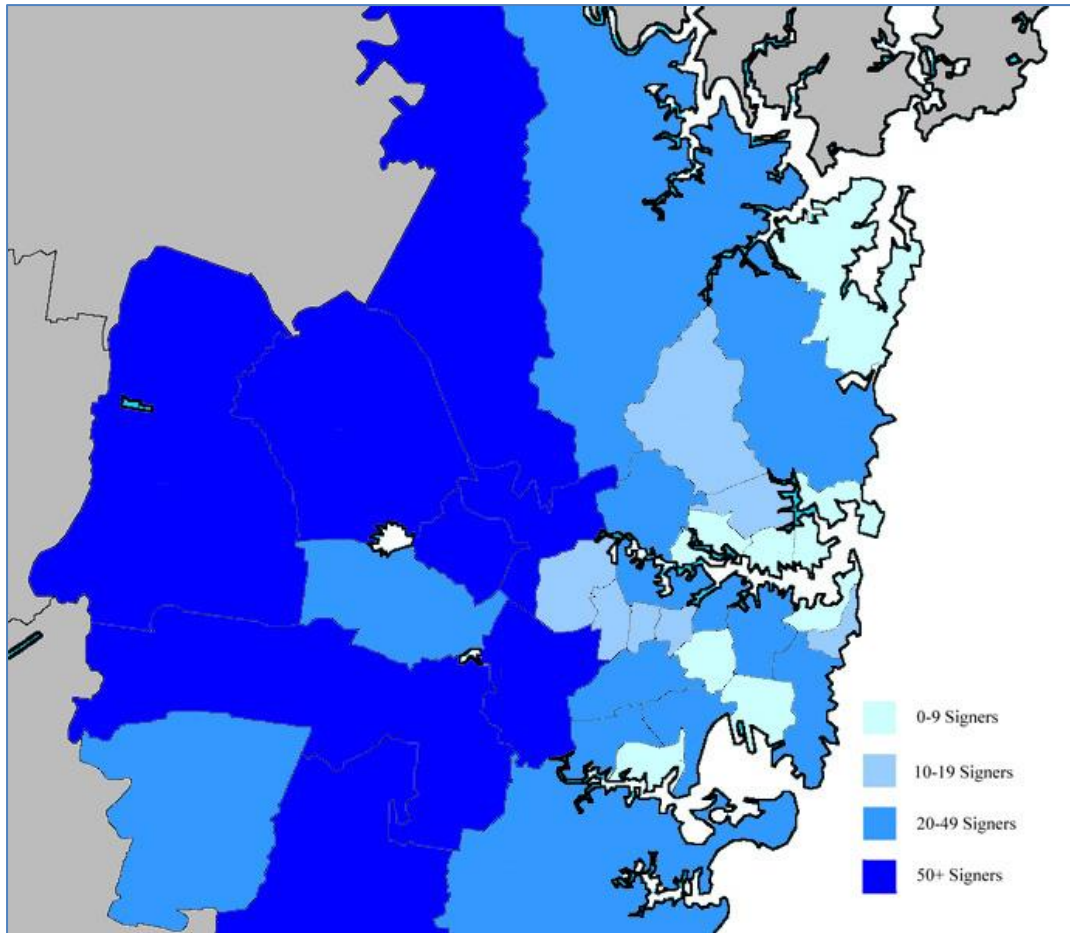


Figure 3: Signing Population Concentrations- Sydney

In terms of raw numbers, Blacktown (192 signers), Gosford (108) Penrith (107), the Hills (106), and Campbelltown (102) have largest signing populations of any Sydney Local Government areas (LGAs) , However these figures need to be taken in context of the total size of the municipality As table 5 shows the municipalities with the highest concentrations are Campbelltown (7 in 10,000), Gosford (6.75 in 10,000), Blacktown (6.4 in 10,000), The Hills (106 in 10,000) and Penrith (6 in 10,000).

LGA	SIGNING	TOTAL	SIGNERS PER
Campbelltown	102	145,701	7.00
Gosford	108	160,068	6.75
Blacktown	192	299,896	6.40
The Hills Shire	106	168,062	6.30
Penrith	107	177,983	6.01
Blue Mountains	45	74,967	6.00
Wyong	86	147,739	5.82
Parramatta	92	167,925	5.48
Holroyd	52	98,567	5.27
Burwood	15	32,417	4.63

Table 4: Top ten metropolitan signing populations by ratio in 2011

Several factors appear to be at work in shaping the distribution of Sydney's signing population. There is a clear trend that many of the metropolitan municipalities with the lowest percentages of sign language users are among Sydney's most expensive suburbs to rent or buy a home. Thus it seems reasonable to argue that Deaf people are in the main priced out of municipalities such as Mosman, where the median housing price is over \$2 million, preferring instead to settle in more affordable areas such as Gosford and Blacktown. Additionally, the concentration of deaf service providers – including the Deaf Society of New South Wales, The Royal Institute for Deaf and Blind Children and the Ephpheta Centre – in and around Parramatta may act as a drawcard for Deaf people to settle in surrounding areas in order to have easy access to these services. The number of sign language users in Blacktown receives a boost from the location of Mullauna Village Deaf aged care facility in the municipality, however Mullauna residents make up only a small fraction of the local Deaf community.

The growing signing communities living in fringe suburbs of Sydney poses a challenge for service delivery, since it is difficult for people living as far apart as Campbelltown, Gosford and Blacktown to access the same services. Schools with Deaf facilities are well dispersed throughout the outer suburbs of Sydney but other providers may look to increase their presence in these areas to meet a growing demand for deaf services on Sydney's fringe.

The regional population

In 2011 1,182 signers lived in regional New South Wales. The signing population is concentrated along the coast and around the outskirts of Sydney. Of 112 LGAs, 83 have low signing resident numbers, while 29 have 10 or more sign language users. Lake Macquarie and Lismore lead regional areas in the number of signers (90 and 84 respectively) while the number 3 and 4 spots for sign language users are taken by Newcastle (82 signers) and Wollongong (66

signers). Figure 4 outlines the distribution of New South Wales' regional signing population, while the full figures for each municipality are given in Appendix 2:

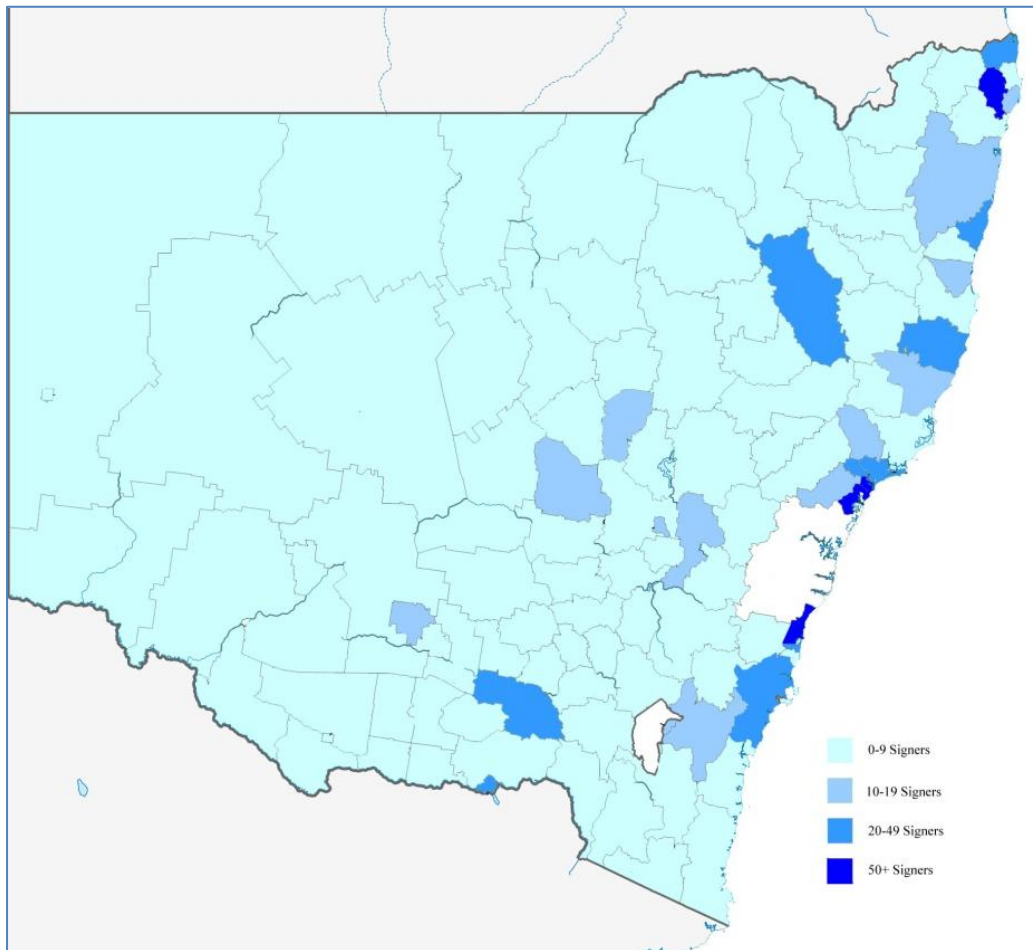


Figure 4: Signing Population Concentration- Regional NSW

Aside from the municipalities with a high number of signing residents, mention should be made of several regional municipalities where the proportion of signers in the total population is unexpectedly high. In Coolamon there are 22.26 sign language users for every 10,000 residents, while in Lismore the figure is 19.68 per 10,000. Lockhart (13.92 per 10,000), Dungog (13.42 per 10,000) and Gloucester (8.39 per 10,000) also report a high concentration of sign language users. Mitchell, in fact, has the highest Auslan to total population ratio in New South Wales, and is seventh in Australia. In fact, the top 12 population ratios in New South Wales come from outside the Sydney statistical area. No reason for these increased rates is readily apparent, although Coolamon's low overall population may account for the high ratio. Taking only signing populations over fifteen (see table 5), Lismore, Shellharbour and Newcastle have the highest ratios. Shellharbour's proximity to Sydney may account for their high ratios.

LGA	SIGNING POPULATION	TOTAL POPULATION	SIGNERS PER 10,000 RESIDENTS
Lismore	84	42,685	19.68
Shellharbour	46	62,697	7.34
Newcastle	82	148,154	5.53
Lake Macquarie	90	185,557	4.85
WaggaWagga	29	60,044	4.83
Tamworth Regional	27	55,968	4.82
Maitland	32	67,006	4.78
Albury	22	47,617	4.62
Dubbo	18	39,360	4.57
Ballina	18	39,429	4.56

Table 5: Top ten regional signing populations by ratio in 2011 (populations of 15 and over only)

Change from 2001 to 2011

In 2011, 2,583 New South Wales residents indicated that they used a sign language at home on the census form, up from 1,923 in 2006 and 1,720 in 2001. This growth rate (50% from 2001 to 2011) is taken to be the result of higher levels of reporting, rather than a natural increase in the population (which Johnston 2004 has in fact argued is in decline). The increasing number of sign language users living in regional areas poses a particular challenge for Auslan interpreting and equitable service delivery and strengthens the case for more sustained investment in service innovations in regional areas.

Number of signers in each LGA

Eight municipalities saw their number of signers increase by more than 40 people between 2001 and 2011. Of these, three are in regional New South Wales and five in the Sydney statistical area.

LGA	INCREASE IN SIGNERS 2001-2011
Blacktown	98
Gosford	67
Lake Macquarie	50
The Hills Shire	49
Penrith	46
Newcastle	40
Parramatta	40
Lismore	40

Table 6: Top ten regional signing populations by ratio in 2011 (populations of 15 and over only)

Of these areas, The Hills Shire, Blacktown and Parramatta all saw strong growth in their total population between 2001 and 2001 (between 21-17% increase).

Yet the pace at which the signing population grew in these areas far outweighs natural increase in the population, growing at a rate of between 77-104% between 2001-11. Gosford and Penrith also saw a sharp increase in their signing populations despite the total populations of these areas growing at below average rates. Growth in sign language users in Newcastle, Lismore and Lake Macquarie also happened in a context where there was limited growth in the total population. In general, NSW saw a pattern of the signing population growing fastest in areas that already had a strong signing presence in 2001. However, an exception to this trend was the area around Wollongong, where the 125 signers of 2001 increased to only 146 by 2011. While Camden and Campbelltown did see their signing populations increase during this period, it seems that the Central Coast and Western suburbs of Sydney are the preferred areas for sign language users to settle.

Outside the areas mentioned already Coff's Harbour was the only regional municipality to see its signing population increase by more than 20 people between 2001-11. While Warrumbungle, Walgett, Broken Hill and Moree Plains saw their total populations decline by more than 1,000 the number of sign language users in these areas remained stable. While the regional signing population of NSW is larger, it thus follows the same pattern of dispersal across a wide number of municipalities that was noted for 2006 (Willoughby, 2009).

Conclusion

This report has shown that the number of people in New South Wales indicating they used a sign language increased between the 2001 and 2011 surveys. In both years, the majority of sign language users lived in Greater Sydney, though this proportion is declining and stood at only 54.2% in 2011. Within Sydney, sign language users prefer to live in the outer Western suburbs and the Central Coast, with Blacktown and surrounds and Gosford proving particularly popular. This distribution sits well with the current location of many deaf services in Sydney (and may well be the reason these areas prove so popular), however providers are being challenged by strong growth in the regional signing population.

Outside of Sydney the signing population grew by 58% between 2001 and 2011. Lake Macquarie, Newcastle and Lismore saw their signing populations increase by 40-50 people in this period, but in most regional municipalities the signing population was relatively unchanged (+/-5 signers) during this period. The trend towards consolidation of the regional signing population in certain municipalities in some ways makes service provision easier, however it should not be forgotten that in addition to areas with large signing communities there are a number of municipalities, such as Albury, Tamworth and Wagga Wagga, that have at least 20 signers. Thus rural service provision in New South Wales needs to aspire

provide comprehensive coverage across the state, rather than focusing solely on areas with the numerically largest signing populations.

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Appendix 1: Sign Language Users and Total Population in the Sydney Statistical Area, 2011

	AUSLAN	TOTAL	SIGNERS PER 10,000
Ashfield	14	41,099	3.41
Auburn	11	74,102	1.48
Bankstown	67	182,068	3.68
Blacktown	192	299,896	6.40
Blue Mountains	45	74,967	6.00
Botany Bay	9	39,687	2.27
Burwood	15	32,417	4.63
Camden	37	56,185	6.59
Campbelltown	102	145,803	7.00
Canada Bay	21	75,443	2.78
Canterbury	38	137,023	2.77
Fairfield	29	187,272	1.55
Gosford	108	160,068	6.75
Hawkesbury	22	62,019	3.55
Holroyd	52	98,619	5.27
Hornsby	47	154,576	3.04
Hunters Hill	4	13,014	3.07
Hurstville	26	78,298	3.32
Kogarah	6	56,112	1.07
Ku-ring-gai	11	107,879	1.02
Lane Cove	6	31,578	1.90
Leichhardt	20	51,418	3.89
Liverpool	76	179,861	4.23
Manly	0	39,492	-
Marrickville	33	75,619	4.36
Mosman	0	26,983	-
North Sydney	7	62,289	1.12
Parramatta	92	167,925	5.48
Penrith	107	177,983	6.01
Randwick	20	128,931	1.55
Rockdale	21	97,106	2.16
Ryde	40	103,090	3.88
Strathfield	13	34,938	3.72
Sutherland Shire	39	208,193	1.87
Sydney	44	181,760	2.42
The Hills Shire	106	168,168	6.30
Warringah	30	138,779	2.16
Waverley	11	62,726	1.75
Willoughby	15	67,408	2.23
Wingecarribee	5	43,679	1.14
Wollondilly	19	42,553	4.47
Woollahra	0	51,668	-
Wyong	86	147,739	5.82

Appendix 2: Sign Language Users and Total Population outside the Sydney Statistical Area, 2011

	AUSLAN	TOTAL	SIGNERS PER 10,000
Albury	22	47,639	4.62
Armidale Dumaresq	9	24,481	3.68
Ballina	18	39,447	4.56
Balranald	0	2,396	-
Bathurst Regional	15	38,681	3.88
Bega Valley	7	32,024	2.19
Bellingen	5	12,425	4.02
Berrigan	0	7,811	-
Bland	0	5,891	-
Blayney	3	6,867	4.37
Bogan	0	3,004	-
Bombala	0	2,366	-
Boorowa	0	2,319	-
Bourke	0	3,152	-
Brewarrina	0	1,803	-
Broken Hill	4	18,755	2.13
Byron	7	29,991	2.33
Cabonne	0	12,522	-
Carrathool	0	2,567	-
Central Darling	0	2,346	-
Cessnock	16	50,696	3.16
Clarence Valley	14	50,135	2.79
Cobar	0	4,995	-
Coffs Harbour	31	69,514	4.46
Conargo	0	1,508	-
Coolamon	9	3,973	22.65
Cooma-Monaro	3	9,778	3.07
Coonamble	0	4,001	-
Cootamundra	0	7,171	-
Corowa Shire	0	10,967	-
Cowra	0	12,100	-
Deniliquin	5	7,082	7.06
Dubbo	18	39,378	4.57
Dungog	11	8,197	13.42
Eurobodalla	4	35,334	1.13
Forbes	0	9,063	-
Gilgandra	0	4,352	-
Glen Innes Severn	0	8,546	-
Gloucester	4	4,766	8.39
Goulburn Mulwaree	4	27,645	1.45
Great Lakes	3	34,457	0.87
Greater Hume Shire	8	9,673	8.27
Greater Taree	19	45,810	4.15
Griffith	10	24,337	4.11
Gundagai	3	3,680	8.15

Gunnedah	0	12,174	-
Guyra	0	4,276	-
Gwydir	0	4,870	-
Harden	0	3,480	-
Hay	0	3,035	-
Inverell	0	15,825	-
Jerilderie	0	1,413	-
Junee	0	5,747	-
Kempsey	4	28,473	1.40
Kiama	6	19,572	3.07
Kyogle	3	9,050	3.31
Lachlan	0	6,472	-
Lake Macquarie	90	185,557	4.85
Leeton	0	10,893	-
Lismore	84	42,685	19.68
Lithgow	3	19,818	1.51
Liverpool Plains	0	7,270	-
Lockhart	4	2,874	13.92
Maitland	32	67,006	4.78
Mid-Western Regional	7	22,139	3.16
Moree Plains	0	13,624	-
Murray	3	6,887	4.36
Murrumbidgee	0	2,192	-
Muswellbrook	3	16,063	1.87
Nambucca	10	18,547	5.39
Narrabri	3	13,161	2.28
Narrandera	0	5,864	-
Narromine	0	6,434	-
Newcastle	82	148,154	5.53
Oberon	0	5,120	-
Orange	17	38,463	4.42
Palerang	12	14,587	8.23
Parkes	10	14,538	6.88
Pittwater	3	55,660	0.54
Port Macquarie-	23	72,813	3.16
Port Stephens	20	64,062	3.12
Queanbeyan	17	38,042	4.47
Richmond Valley	3	22,246	1.35
Shellharbour	46	62,697	7.34
Shoalhaven	34	90,860	3.74
Singleton	0	22,950	-
Snowy River	0	18,549	-
Tamworth Regional	27	55,968	4.82
Temora	0	5,652	-
Tenterfield	0	6,713	-
Tumbarumba	0	3,296	-
Tumut Shire	0	10,869	-
Tweed	30	86,396	3.47
Upper Hunter Shire	0	13,744	-

Upper Lachlan Shire	0	6,985	-
Uralla	0	5,829	-
Urana	0	1,116	-
Wagga Wagga	29	60,044	4.83
Wakool	0	3,970	-
Walcha	0	2,995	-
Walgett	0	6,861	-
Warren	0	2,787	-
Warrumbungle Shire	3	9,417	3.19
Weddin	0	3,555	-
Wellington	4	8,353	4.79
Wentworth	0	7,070	-
Wollongong	66	190,695	3.46
Yass Valley	5	14,796	3.38
Young	0	11,996	-
Unincorporated NSW	4	3,389	11.80

Appendix 3: Change in the Sydney Statistical Area Populations, 2001-2011

	2001		2011		Increase	
	Signing Population	Total Population	Signing Population	Total Population	Signing Population	Total Population
Ashfield	13	38,981	14	41,099	8%	5%
Auburn	14	55,851	11	74,102	-21%	33%
Bankstown	64	164,841	67	182,068	5%	10%
Blacktown	94	255,195	192	299,896	104%	18%
Blue	24	73,675	45	74,967	88%	2%
Botany Bay	12	35,572	9	39,687	-25%	12%
Burwood	10	29,381	15	32,417	50%	10%
Camden	10	43,779	37	56,185	270%	28%
Campbelltown	83	145,294	102	145,803	23%	0%
Canada Bay	11	59,317	21	75,443	91%	27%
Canterbury	32	129,935	38	137,023	19%	5%
Fairfield	40	181,300	29	187,272	-28%	3%
Gosford	41	154,045	108	160,068	163%	4%
Hawkesbury	19	60,887	22	62,019	16%	2%
Holroyd	49	85,261	52	98,619	6%	16%
Hornsby	35	144,692	47	154,576	34%	7%
Hunters Hill	0	12,570	4	13,014	-	4%
Hurstville	11	70,009	26	78,298	136%	12%
Kogarah	6	49,885	6	56,112	0%	12%
Ku-ring-gai	12	100,152	11	107,879	-8%	8%
Lane Cove	13	30,340	6	31,578	-54%	4%
Leichhardt	5	47,972	20	51,418	300%	7%
Liverpool	38	153,633	76	179,861	100%	17%
Manly	3	36,544	0	39,492	-100%	8%
Marrickville	28	72,589	33	75,619	18%	4%
Mosman	3	25,477	0	26,983	-100%	6%
North Sydney	6	54,970	7	62,289	17%	13%
Parramatta	52	143,143	92	167,925	77%	17%
Penrith	61	171,870	107	177,983	75%	4%
Randwick	20	118,580	20	128,931		9%
Rockdale	7	87,657	21	97,106	200%	11%
Ryde	31	94,244	40	103,090	29%	9%
Strathfield	11	27,777	13	34,938	18%	26%
Sutherland Shire	30	202,158	39	208,193	30%	3%
Sydney	34	137,641	44	181,760	29%	32%
The Hills Shire	57	138,420	106	168,168	86%	21%
Warringah	47	127,613	30	138,779	-36%	9%
Waverley	5	59,404	11	62,726	120%	6%
Willoughby	10	58,319	15	67,408	50%	16%
Wingecarribee	6	40,636	5	43,679	-17%	7%
Wollondilly	13	36,953	19	42,553	46%	15%
Woollahra	4	49,179	0	51,668	-100%	5%
Wyong	47	130,536	86	147,739	83%	13%

Appendix 4: Change in the Non-Sydney Statistical Area Populations, 2001-2011

	2001		2011		Increase	
	Signing Population	Total Population	Signing Population	Total Population	Signing Population	Total Population
Albury	15	44,275	22	47,639	47%	8%
Armidale Dumaresq	7	23,920	9	24,481	29%	2%
Ballina	18	37,017	18	39,447	0%	7%
Balranald	0	2,763	0	2,396	-	-13%
Bathurst Regional	6	34,544	15	38,681	150%	12%
Bega Valley	9	30,447	7	32,024	-22%	5%
Bellingen	3	12,171	5	12,425	67%	2%
Berrigan	3	7,692	0	7,811	-100%	2%
Bland	0	6,430	0	5,891	-	-8%
Blayney	0	6,117	3	6,867	-	12%
Bogan	0	3,085	0	3,004	-	-3%
Bombala	0	2,462	0	2,366	-	-4%
Boorowa	0	2,324	0	2,319	-	-
Bourke	0	3,898	0	3,152	-	-19%
Brewarrina	0	2,058	0	1,803	-	-12%
Broken Hill	3	20,274	4	18,755	33%	-7%
Byron	19	28,916	7	29,991	-63%	4%
Cabonne	0	11,862	0	12,522	-	6%
Carrathool	0	3,302	0	2,567	-	-22%
Central Darling	0	2,678	0	2,346	-	-12%
Cessnock	13	45,071	16	50,696	23%	12%
Clarence Valley	3	47,018	14	50,135	367%	7%
Cobar	0	5,144	0	4,995	-	-3%
Coffs Harbour	10	62,756	31	69,514	210%	11%
Conargo	0	1,823	0	1,508	-	-17%
Coolamon	0	3,905	9	3,973	-	2%
Cooma-Monaro	5	9,741	3	9,778	-40%	-
Coonamble	0	4,575	0	4,001	-	-13%
Cootamundra	0	7,122	0	7,171	-	1%
Corowa Shire	4	10,644	0	10,967	-100%	3%
Cowra	3	12,425	0	12,100	-100%	-3%
Deniliquin	0	7,781	5	7,082	-	-9%
Dubbo	8	37,565	18	39,378	125%	5%
Dungog	0	7,874	11	8,197	-	4%
Eurobodalla	5	33,007	4	35,334	-20%	7%
Forbes	0	9,691	0	9,063	-	-6%
Gilgandra	0	4,708	0	4,352	-	-8%
Glen Innes Severn	3	8,488	0	8,546	-100%	1%
Gloucester	0	4,682	4	4,766	-	2%
Goulburn Mulwaree	5	26,683	4	27,645	-20%	4%
Great Lakes	10	31,266	3	34,457	-70%	10%
Greater Hume Shire	0	9,138	8	9,673	-	6%
Greater Taree	4	42,838	19	45,810	375%	7%

Griffith	9	23,717	10	24,337	11%	3%
Gundagai	0	3,714	3	3,680	-	-1%
Gunnedah	0	11,829	0	12,174	-	3%
Guyra	0	4,200	0	4,276	-	2%
Gwydir	0	5,521	0	4,870	-	-12%
Harden	0	3,732	0	3,480	-	-7%
Hay	0	3,562	0	3,035	-	-15%
Inverell	9	15,020	0	15,825	-100%	5%
Jerilderie	0	1,781	0	1,413	-	-21%
Junee	0	5,580	0	5,747	-	3%
Kempsey	6	26,887	4	28,473	-33%	6%
Kiama	0	18,773	6	19,572	-	4%
Kyogle	3	9,160	3	9,050	0%	-1%
Lachlan	0	7,180	0	6,472	-	-10%
Lake Macquarie	40	177,185	90	185,557	125%	5%
Leeton	0	11,424	0	10,893	-	-5%
Lismore	44	41,572	84	42,685	91%	3%
Lithgow	8	19,308	3	19,818	-63%	3%
Liverpool Plains	0	7,343	0	7,270	-	-1%
Lockhart	0	3,393	4	2,874	-	-15%
Maitland	16	53,718	32	67,006	100%	25%
Mid-Western Regional	3	21,313	7	22,139	133%	4%
Moree Plains	0	15,678	0	13,624	-	-13%
Murray	0	5,894	3	6,887	-	17%
Murrumbidgee	3	2,509	0	2,192	-100%	-13%
Muswellbrook	0	14,756	3	16,063	-	9%
Nambucca	7	17,660	10	18,547	43%	5%
Narrabri	9	13,800	3	13,161	-67%	-5%
Narrandera	0	6,478	0	5,864	-	-9%
Narromine	0	6,610	0	6,434	-	-3%
Newcastle	42	136,413	82	148,154	95%	9%
Oberon	0	5,102	0	5,120	-	-
Orange	10	35,446	17	38,463	70%	9%
Palerang	6	10,588	12	14,587	100%	38%
Parkes	0	14,433	10	14,538	-	1%
Pittwater	6	52,376	3	55,660	-50%	6%
Port Macquarie-Hastings	5	64,146	23	72,813	360%	14%
Port Stephens	14	56,474	20	64,062	43%	13%
Queanbeyan	8	32,272	17	38,042	113%	18%
Richmond Valley	8	20,511	3	22,246	-63%	8%
Shellharbour	42	56,964	46	62,697	10%	10%
Shoalhaven	37	83,305	34	90,860	-8%	9%
Singleton	0	20,290	0	22,950	-	13%
Snowy River	0	18,230	0	18,549	-	2%
Tamworth Regional	18	51,753	27	55,968	50%	8%
Temora	0	5,968	0	5,652	-	-5%
Tenterfield	0	6,363	0	6,713	-	6%

Tumbarumba	0	3,545	0	3,296	-	-7%
Tumut Shire	0	11,171	0	10,869	-	-3%
Tweed	17	73,821	30	86,396	76%	17%
Upper Hunter Shire	3	13,042	0	13,744	-100%	5%
Upper Lachlan	0	6,708	0	6,985	-	4%
Uralla	0	5,728	0	5,829	-	2%
Urana	0	1,332	0	1,116	-	-16%
Wagga Wagga	18	54,845	29	60,044	61%	9%
Wakool	0	4,793	0	3,970	-	-17%
Walcha	0	3,103	0	2,995	-	-3%
Walgett	3	8,280	0	6,861	-100%	-17%
Warren	0	3,151	0	2,787	-	-12%
Warrumbungle	0	10,528	3	9,417	-	-11%
Weddin	0	3,650	0	3,555	-	-3%
Wellington	0	8,228	4	8,353	-	2%
Wentworth	0	6,970	0	7,070	-	1%
Wollongong	46	180,358	66	190,695	43%	6%
Yass Valley	0	11,347	5	14,796	-	30%
Young	3	11,274	0	11,996	-100%	6%
Unincorporated	0	2,896	4	3,389	-	17%