

3 April 2008

# Auslan interpreter services in Australia: supply and demand

Report by Access Economics Pty Limited for

Victorian Deaf Society

# CONTENTS

Glo	ssary of ac	cronyms	4
Ack	nowledge	ments	4
Exe	cutive sun	nmary	i
1.	Introduc	tion	1
	1.1 Bac	skground	1
	1.2 Stru	ucture of this report	2
2.	Demand	modeling	3
	2.1 Dat	a sources	3
	2.2 Pre	valence of Auslan users in Australia	3
	2.2.1	Previous estimates	4
	2.2.2	Estimates used in this analysis	4
	2.3 Use	e of Auslan interpreter services in Australia	7
	2.3.1	Utilisation rates	7
	2.3.2	Unmet demand	8
	2.3.3	Time parameters	9
	2.3.4	Total demand	10
	2.3.5	Other parameters (for projections)	10
	2.4 Der	mand projections	11
3.	Survey f	indings	
	3.1 Sur	vey background	
	3.2 Sur	vey data	
	3.2.1	Age and gender	13
	3.2.2	Location	14
	3.2.3	Employment type	15
	3.2.4	Hours supplied	16
	3.2.5	Income	
	3.2.6	Professionals and para-professionals	22
4.	Supply n	nodeling	23
	4.1 Cur	rent supply in Australia	23
	4.2 Sup	oply projections	24
	4.2.1	Entries	
	4.2.2	Exits	25
	4.2.3	Jurisdictional splits	25
Acknow Executi 1. In 1.1 2. De 2.1 2.1 2.1 3. St 3.1 3.1 3.1 4.1 4.1 4.1	4.2.4	Hours worked	25
	4.3 Bas	se case supply projection	26
2.	4.4 Sce	enarios	27

While every effort has been made to ensure the accuracy of this document, the uncertain nature of economic data, forecasting and analysis means that Access Economics Pty Limited is unable to make any warranties in relation to the information contained herein. Access Economics Pty Limited, its employees and agents disclaim liability for any loss or damage which may arise as a consequence of any person relying on the information contained in this document.



	4.4.1	High scenario: faster recruitment	27
	4.4.2	Low scenario: 10% fewer hours per interpreter	29
	4.4.3	Final supply scenario: change in jurisdictional distribution	
5.	Implication	ons of the projections	32
	5.1 Sum	nmary of demand and supply projections	32
	5.2 Mec	hanisms to bridge the gap	33
	5.2.1	Recruitment and retention initiatives	33
	5.2.2	Increasing remuneration to increase average hours worked	
	5.2.3	Maldistribution	
	5.2.4	A scenario to enable supply to meet demand	
	5.3 Surv	vey comments about workforce issues	38
Арр	endix – Ka	lleidoscope survey	45
Refe	erences		66

# **FIGURES**

Figure 2-1: State and territory distribution of Deaf Auslan user survey respondents compared to the ABS 2001 census signing Deaf population	5
Figure 2-2: Age profile of Deaf Auslan user survey respondents compared to the ABS 2001 census signing Deaf population	6
Figure 2-3: Projected demand for FTE Auslan interpreters in Australia, 2007-2030	12
Figure 3-1: Auslan interpreters, by age and gender, Australia, 2007	13
Figure 3-2: Auslan interpreters, by age started interpreting, Australia, 2007)	14
Figure 3-3: Estimated distribution of Auslan workforce, by jurisdiction & regionality	15
Figure 3-4: Division of workforce by employment type	16
Figure 3-5: Interpreting hours per year, Australia, 2007	17
Figure 3-6: Interpreters' hours per week, by weeks per year	17
Figure 3-7: Current workload satisfaction of interpreters (% total)	18
Figure 3-8: Interpreter income by employment type (\$ per annum)	19
Figure 3-9: Distribution of interpreter income (\$ per annum, % total)	20
Figure 3-10: Proportion of income derived from interpreting (%total)	20
Figure 3-11: Auslan interpreters, hours per annum & hourly rates, simple relationship	21
Figure 4-1: Age profile of Auslan interpreters, base case, 2007 and 2030	27
Figure 4-2: High scenario – recruitment of 5% per annum, 2007-2030	27
Figure 4-3: Growth in interpreting recruits, 1982-2007	28
Figure 4-4: Low scenario – 10% fewer hours per interpreter, 2007-2030	29
Figure 4-5: Jurisdictional change scenario, 2007-2030	31
Figure 5-1: Demand and supply scenario summary, showing shortfall, FTE, 2007-2030	33
Figure 5-2: Package of policies to address supply constraints, 2007-2030 (FTE)	38



# TABLES

Table 2-1: Estimates of the Auslan users* in Australia	4
Table 2-2: Estimated Auslan users by age, gender and jurisdiction, 2007	7
Table 2-3: Frequency of Auslan interpreter usage	8
Table 2-4: Average annual number of visits with an Auslan interpreter	8
Table 2-5: Frequency of Auslan interpreter provision when needed	9
Table 2-6: Unmet demand for Auslan interpreters by jurisdiction	9
Table 2-7: Demand for Auslan interpreters, by jurisdiction, 2007	10
Table 2-8: Projected demand for Auslan interpreting in Australia, 2007-2030	11
Table 3-1: Characteristics of employment types	16
Table 3-2: Possible response to increased remuneration	22
Table 3-3: Accreditation differences	22
Table 4-1: Auslan interpreters, by age and gender, 2007 (headcount & FTE)	23
Table 4-2: Auslan interpreters, by jurisdiction & regionality, 2007 (headcount & FTE)	24
Table 4-3: New Auslan interpreters, by age, 2007 (headcount)	24
Table 4-4: Auslan interpreter net exits, by age, 2007 (headcount)	25
Table 4-5: Hours worked per annum, by age, 2007-2030	26
Table 4-6: Auslan interpreter projections, base case, key outputs, 2007-2030	26
Table 4-7: Auslan interpreter projections, high scenario, key outputs, 2007-2030	28
Table 4-8: Auslan interpreter projections, low scenario, key outputs, 2007-2030	30
Table 4-9: Auslan interpreter projections, jurisdictional change scenario, 2007-2030	30
Table 5-1: Auslan interpreter projections, demand and supply, 2007-2030	32
Table 5-2: Auslan interpreters, base case FTE shortage relative to population share byjurisdiction, 2007 (FTE)	37
Table 5-3: Auslan interpreter projections, policy package scenario, key outputs, 2007-2030	38



# **GLOSSARY OF ACRONYMS**

ABS	Australian Bureau of Statistics
ACT	Australian Capital Territory
AFDS	Australian Federation of Deaf Societies
ASLIA	Australian Sign Language Interpreters' Association
AUSIT	Australian Institute of Interpreters and Translators
Auslan	Australian sign language
FaCS(IA)	(Department of) Family and Community Services (and Indigenous Affairs) (Australian Government)
FTE	Full Time Equivalent
NAATI	National Accreditation Authority for Translators and Interpreters
NABS	National Auslan Booking Services
NT	Northern Territory
NSW	New South Wales
QLD	Queensland
SA	South Australia
TAS	Tasmania
VIC	Victoria
VicDeaf	Victorian Deaf Society
WA	Western Australia

# ACKNOWLEDGEMENTS

Access Economics acknowledges with appreciation the supply of raw data for this analysis from a previous survey conducted by Macquarie University entitled '*The kaleidoscope of practice: A national survey of translators and interpreters*', jointly funded by the Australian Institute of Translators and Interpreters, the Australian Sign Language Interpreters' Association, the Australian Federation of Deaf Societies, and a Macquarie University External Collaborative Research Grant.



# EXECUTIVE SUMMARY

This study was commissioned by the Victorian Deaf Society (VicDeaf) and funded by the Australian Government Department of Families, Community Services and Indigenous Affairs, to analyse the apparent supply shortage of Australian sign language (Auslan) interpreting services in Australia. The aim of the study was to review the current workforce and working conditions of Auslan interpreters to better understand the key underlying issues of demand and supply for interpreters overall and in certain areas (ie, maldistribution), currently and in the future, and to conclude with policies and recommendations to address areas of concern.

Auslan is the sign language of the Australian Deaf community, which refers to people who are either born (severely or profoundly) deaf to deaf families who use Auslan or people born with hearing loss into families where the parents hear, but who learn sign language.

#### Methods

A fundamental data source used as an input into this modeling and analysis was data supplied to Access Economics from a survey fielded in 2007 by Macquarie University in conjunction with the Australian Sign Language Interpreters' Association (ASLIA), the Australian Federation of Deaf Societies (AFDS) and the Australian Institute of Interpreters and Translators (AUSIT).

Other primary data sources included a report on the *Supply and Demand for Auslan interpreting across Australia*, (FaCS, 2004), as well as 2001 and 2006 Census and other data from the Australian Bureau of Statistics (ABS) – eg, for demographic projections and average earnings. Interpreter usage rates were from a 2007 questionnaire (AAD, 2007) and severe hearing loss in children was sourced from estimates in *Listen Hear: the economic impact and cost of hearing loss in Australia* (Access Economics, 2006), based on South Australian epidemiological data.

Demand and supply were modeled in Excel using microsimulation techniques.

- Demand was estimated based on the number of Auslan users by age, gender and jurisdiction, multiplied by average service utilisation rates. Unmet demand was estimated from survey data. Total services demanded for each cohort were then multiplied by the average time of an episode of service, to estimate total hours demanded per annum. These were converted to a full time equivalent (FTE) based on 1,374 interpreting hours per year, noting that survey data suggest total hours worked including travel time is some 25% more ie, 1,718 hours per annum. For base case demand projections, real income growth was modelled as 1.0% per annum with income elasticity of demand of 1.2 and technological change impacts of zero per annum.
- Supply (headcount) was estimated by age, gender and jurisdiction for 2007 and projected to 2030 based on projected entries and exits. Headcount was multiplied by average hours worked in each cohort to estimate total hours, which was converted to FTE interpreters on the same basis as demand estimates. For base case supply projections, growth in entries was modelled as 1.0% per annum (population growth) with a continuation of the current exit rates, hours worked per cohort, and jurisdictional distribution.

#### Findings – demand and supply

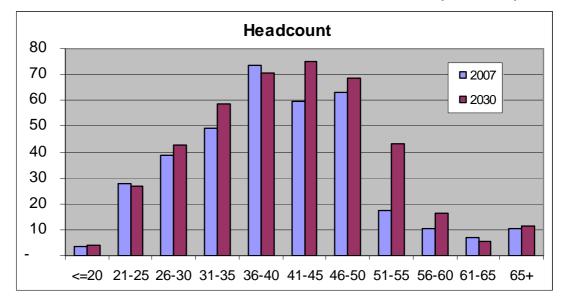
In 2007 there were an estimated 5,612 Auslan users in Australia – 2,464 females and 3149 males. The average number of Auslan interpreter services utilised was around 30 per annum per user and the average service time was estimated as 59.3 minutes. Including unmet



i

demand, total demand for Auslan interpreting services was 56.2 services (55.4 hours) per person per year. Unmet demand was greatest in Victoria and least in Tasmania. The FTE demanded in 2007 was 206 across Australia, projected in the base case to increase to 427 FTE by 2030.

On the supply side, in 2007 there were an estimated 361 interpreters (headcount including freelancers and 15 new entrants), of whom 80% were women. Entries strongly favoured younger cohorts and exits were relatively high from age 40 onwards. The data on average hours worked revealed two workforce segments – in-house part-time or casual workers (43% and 33% of the workforce respectively) and in-house full-time or freelance workers (13% and 11% respectively). Altogether they supplied 269,506 hours of services in 2007 ie, an FTE supply of 196 projected in the base case to increase to 230 FTE by 2030. 80% of interpreters are not looking for extra work and about half (49%) have too much work.



AUSLAN INTERPRETERS, BY AGE, AUSTRALIA, 2007 AND 2030 (BASE CASE)

Hourly remuneration was \$27.12 on average, so an average full time in-house interpreter earns around \$37,500 per year, about 65% of average Australian ordinary full time earnings of \$57,387 per year in 2007. Since not all Auslan interpreters work full time, the average Auslan interpreter only earns \$23,416 per year, less than half the average for Australia of \$45,505 (full and part time). Moreover, this distribution is quite skewed towards the lowest pay rates, with over a third (38%) of interpreters earning less than \$15,000 per annum.

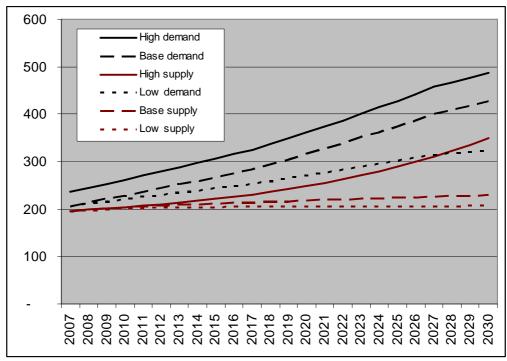
#### Workforce shortages and maldistribution

Overall the workforce shortage was estimated as 10.4 FTE in 2007, growing to 196.5 FTE by 2030 in the base case.

- A low demand projection scenario was based on no real income effects and a high scenario based on fewer hours (1,203) per FTE interpreter (a 70% compared to 80% proportion of travel time).
- A low supply projection scenario was based on average hours declining to 10% fewer hours per interpreter by 2030 (further feminisation or disenfranchisement), and a high scenario based on greater recruitment (5% per annum growth).
- In the worst case (high demand and low supply), demand would exceed supply by 39.8 FTE in 2007, with the shortage increasing to 280.5 FTE by 2030.



- Less than half the workforce would be available relative to that demanded.
- In the best case (low demand and high supply), demand would exceed supply by 10.4 FTE in 2007, but by 2030 there would be a surplus of 25.6 FTE.
  - Queensland, however, may have a shortage of 22 FTE, with shortages also in WA and SA, unless measures are taken to correct the current maldistribution situation in supply.



#### AUSLAN INTERPRETER DEMAND AND SUPPLY SCENARIOS, SHOWING SHORTFALL, FTE, 2007-2030

Source: Access Economics estimates.

#### **Potential policy responses**

Although entries increased historically at 4.7% on average, this may be difficult to achieve in future, and retention may also increasingly become a problem, if particular workforce issues are not addressed. The survey indicated a high proportion of interpreters currently considering leaving the workforce (13%) in addition to those who responded they had just left (7.5% of respondents). Workforce dissatisfaction issues raised in the survey, that threaten retention and recruitment were:

- 1 **Inadequate remuneration.** Pay scales do not take into account relevant academic qualifications, skill level, years of service and the nature of assignments.
- 2 **Variability of remuneration rates, titles and recognition.** What interpreters are called and pay scales nationwide vary depending on the employer, awards and other factors.
- 3 **Income uncertainty, job insecurity and poor conditions of service.** Many employers favour casual arrangements rather than permanent contracts. There is little security for interpreters and generally no income over holiday periods.
- 4 Lack of a career path. This is partly due to lack of consistent structures so the tasks of one role are not directly comparable with the duties somewhere else.
- 5 **Occupational overuse syndrome (OOS).** There can be lack of awareness or provisioning for appropriate OHS conditions, so burnout and injury are common and/or interpreters cannot effectively work. Solutions such as tandem interpreting may be



specified but not observed. Interpreters who may sustain a workplace injury are likely to have a difficult time making claims eg, for an interpreter working across agencies, insurance companies can demand the (near impossible) proof that the injury occurred due to working for a specific client and thus can avoid liability.

- 6 **Quality can be variable.** Lack of formal qualifications can be a problem in some areas and adherence to a code of ethics is not monitored. Professional development is not a compulsory part of being an interpreter.
- 7 Lack of workplace support. Because the interpreter is the point of communication for clients, the interpreter may become an emotional support, educator, sharer of health and personal confidences and so the role may be psychologically and personally demanding. There can be lack of awareness and provision for debriefing or mentoring so vicarious trauma, isolation from peers, deterioration of confidence and skills may occur, particularly in regional areas.
- 8 **Other problems in regional areas** are minimal networking opportunities, lack of job variety, lack of a Deaf community, no opportunities for tandem work (with consequent higher OHS risk), little or no PD and attending PD is much more expensive and harder to get to.
- 9 Lack of information about workforce opportunities. Interpreters do not have clear information and access to what vacant jobs and positions are available as interpreting jobs are not advertised at one centralised website.
- 10 Lack of community awareness and the 'welfare sandwich'. Interpreters are working for a traditionally oppressed minority group who may not know about the issues that effect interpreters, so interpreters have to sensitively educate about appropriate pay and adequate conditions. Interpreters may feel torn between providing a needed service for a disadvantaged group and meeting their own (family) needs.

#### **Recommendations (for FaCSIA implementation)**

- 1 Remuneration and defined career paths. Develop nationally uniform pay scales for Auslan interpreters that reflect educational qualifications, experience (skills and years of service) and the nature of assignments. Pay scales should be benchmarked to comparable professional remuneration levels and should adequately reimburse travel time and costs. In general, scales should reflect permanent contract arrangements and thus address leave entitlements, superannuation and other standard professional provisions. (Leave entitlements could be structured to coincide with educational sector holidays when this sector is the employer, as with teachers.)
- 2 Occupational protections: Provide and monitor mentoring and debriefing opportunities for workers. Develop and enforce consistent nationwide OHS guidelines for Auslan interpreters that protect against OOS, burnout and other workplace hazards, including by allocating multiple interpreters for longer jobs and through periodic breaks. Provide employer assistance with claims processing if injuries occur.
- 3 Service quality: Support and encourage minimum levels of training and adequate levels of ongoing PD for Auslan interpreters. Greater opportunities should be afforded for professional-level training possibly including provider training programs and a national curriculum (which may work well if linked to a national award or enterprise bargaining agreement). Training needs to be far more flexible in delivery and move away from only being offered face-to-face in cities. Initiatives already undertaken by some Deaf Societies, such as internship and graduate programs, could be extended. Monitor adherence to nationally consistent ethical codes. Provide information and opportunities for professional solidarity and networking.



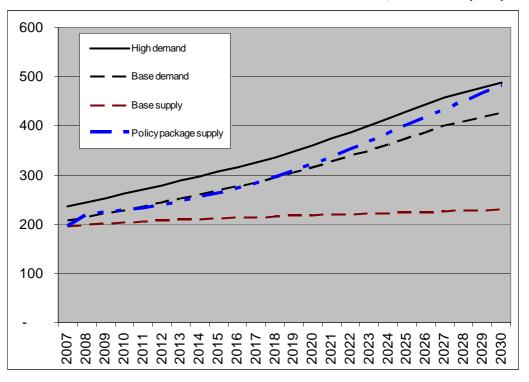
- 4 In **recruitment initiatives**, emphasise passion for the language; love of cultural diversity; flexibility of work; influence/encouragement of others; and desire to make a difference.
- 5 **Equal access**: Monitor conditions in regional areas to bring them more into line with those in metropolitan areas, especially in relation to access to mentoring and training *in* country areas (reducing travel burden). Access could also be increased through Video Relay Interpreting.

#### **Recommended policy package**

A final scenario was devised to enable supply to meet base case demand through a policy package of four key strands:

- measures to increase recruitment strongly in early years (targets of 10% per annum 2008-2012, 7.5% per annum 2013-2017, 5% per annum 2018-2022 and 1% per annum thereafter)
- measures to enhance retention in later years (reducing current exit rates by 10% in each age group between the ages of 40 and 60 years);
- increase in average real remuneration of 7.7% to increase average hours worked by 10% over the period to 2030; and
- recruitment and retention measures focused on Queensland, WA and SA to correct the maldistribution across jurisdictions so as to align with population shares by 2030.

The policy package would result in supply increasing beyond base case demand in 2015 and potentially beyond the high demand scenario in 2027. However, it is recommended that the Auslan interpreter workforce is re-evaluated in 2013 to assess the effectiveness of policies and realised demand changes.



#### PACKAGE OF POLICIES TO ADDRESS SUPPLY CONSTRAINTS, 2007-2030 (FTE)



# Auslan interpreter services in Australia

Key outputs	2007	2030	% change	absolute change
Headcount	361	802	122.3%	441
per 100,000 people	1.7	2.9	67.2%	1.15
Hours	269,506	661,631	145.5%	392,126
FTE	196.1	481.4	145.5%	285.3
per 100,000 people	0.93	1.72	84.6%	0.79
Entries	14.8	47.2	219.5%	32.5
Exits	8.7	20.3	132.4%	11.6
Mean age	40.1	38.6	-3.5%	-1.4
FTE				
NSW	63.6	146.9	130.8%	83.2
VIC	53.2	116.1	118.0%	62.8
QLD	30.5	110.0	260.4%	79.5
WA	12.3	54.1	338.6%	41.8
SA	9.7	32.4	232.3%	22.6
TAS	19.5	9.5	-51.4%	-10.0
ACT	4.5	7.5	65.6%	3.0
NT/Other	2.6	5.0	94.0%	2.4

#### AUSLAN INTERPRETER PROJECTIONS, POLICY PACKAGE SCENARIO, KEY OUTPUTS, 2007-2030

Source: Access Economics estimates.

Access Economics 3 April 2008



# 1. INTRODUCTION

# 1.1 BACKGROUND

Auslan (short for Australian sign language) is the sign language of the Australian Deaf community. The concept of the Australian Deaf community refers to people who are either born (severely or profoundly) deaf to deaf families who use Auslan or people born with hearing loss into families where the parents hear, but who learn sign language

Auslan is a registered language, recognised by the Australian Government as a 'community language other than English' and, like any other community language, able to be studied. In 1982, the first sign language interpreters were registered with the National Accreditation Authority for Translators and Interpreters (NAATI), the regulatory body for interpreting and translating. The first dictionary of Auslan was published in 1989. In the 1990s, Auslan began to emerge as a language for Deaf students in secondary schools, but sign language interpreters were also increasingly provided in tertiary education.

Today, there are a growing number of courses teaching Auslan as a second language, from an elective language subject offered by some secondary schools to a two-year full-time diploma at Technical and Further Education institutions. FaCS (2004) estimated there were 302 (professional and paraprofessional) Auslan interpreters working in Australia, 257 of whom were accredited. Most interpreters are registered with a State Deaf Society or Territory Auslan interpreting service (FaCS, 2004:6). However, footnote 31 of the report notes that the estimate of 302 interpreters nationwide does not include those who are:

- □ freelancers, or who work with providers other than the Deaf Societies and territory interpreting agencies; or
- are not registered with a Deaf Society or Territory interpreting agency.

The authors conclude that their figure may underestimate the true supply by 10% to 20%.

The provision of Auslan interpreting services is very important to enabling participation by the Deaf community in the Australian community. However, evidence of emerging supply shortages has been noted by Deaf Societies eg, difficulty finding an interpreter when needed, attrition from the profession. In addition, the establishment of services such as NABS (National Auslan Booking Services), which books Auslan interpreters for private medical appointments, and the decision by the Department of Employment and Workplace Relations to make interpreting provisions for Deaf job seekers, together increase demand and, without effective price signals or simultaneously introducing supply side measures, the shortage is potentially exacerbated.

This study was thus commissioned by the Victorian Deaf Society (VicDeaf) to analyse the apparent supply shortage of Auslan interpreting services in Australia. The study was funded by the Australian Government Department of Families, Community Services and Indigenous Affairs. The aim of the study was to review the current workforce and working conditions of Auslan interpreters to better understand the key underlying issues of demand and supply for interpreters overall and in certain areas (ie, maldistribution). Methods involved modeling of current demand and supply of Auslan interpreting services and projections of likely future demand and supply. A fundamental data source used as an input into this modeling and analysis was data supplied to Access Economics from a survey fielded by Macquarie University in conjunction with the Australian Sign Language Interpreters' Association (ASLIA), the Australian Federation of Deaf Societies (AFDS) and the Australian Institute of Interpreters and Translators (AUSIT).



# 1.2 STRUCTURE OF THIS REPORT

The remainder of the report is structured as follows.

- Chapter 2 presents information from desktop research on the number of Australians with severe hearing loss and a model of the demand for Auslan interpreting services in Australia, broken down by jurisdiction, with a discussion of factors that drive demand and future demand projections.
- Chapter 3 presents the survey methods and findings in relation to key supply side drivers, such as the age, gender, location, average hours worked and income of Auslan interpreters responding to the survey.
- Chapter 4 presents a model of the supply of Auslan interpreters in Australia, broken down by jurisdiction, including training pathways, barriers to supply (current shortfalls) and scenarios of future supply projections.
- Chapter 5 summarises supply shortfalls relative to demand, discusses distribution issues and interpreter workforce issues and needs, and concludes with policies and recommendations to address long term demand and supply concerns and to create consistency of conditions across Australia.



# 2. DEMAND MODELING

# 2.1 DATA SOURCES

Data for the demand-side of the Auslan interpreter workforce model were drawn from four main sources:

- Listen Hear: the economic impact and cost of hearing loss in Australia, a report by Access Economics for Hear CRC & Vic Deaf (Access Economics, 2006);
- the 2001 and 2006 Australian Census data, published by the Australian Bureau of Statistics (ABS);
- The supply and demand for Auslan interpreting: the Deaf perspective, an Australian Association of the Deaf Inc (AAD) position paper; and
- Supply and Demand for Auslan interpreting across Australia, report prepared by Orima Research for the (then) Department of Family and Community Services (FaCS, 2004).

In order to validate findings from the data and ensure consistency across data sources, various cross-tabulations and triangulations were undertaken. In some instances, the relatively small number of Auslan users in certain jurisdictions meant that the quality of the data was limited. However, in general, sufficiently robust results were able to be generated. Detailed use of these data can be found in the following sections.

# 2.2 PREVALENCE OF AUSLAN USERS IN AUSTRALIA

Establishing likely future demand for Auslan interpreting services in Australia requires first estimating the prevalence of Auslan usage among people with hearing loss, which in turn requires defining the population of such users. However, such determination is not straightforward as no central registry of hearing impaired users is maintained and in some instances, Auslan is not distinguishable among broader classifications such as 'sign language usage'. Various methods have been adopted to quantify the level of Auslan usage in Australia including enrolments in schools for the deaf, registered Centrelink sign language users, AAD membership and population Censuses.

Use of different methods leads to different results – for example, in the 2006 Census the number of 'all sign language users'<sup>1</sup> increases by about 2,000 from the 2001 Census. However, it is a smaller increase for Auslan use, where the 2006 Australian Census reveals that 5,539 Australians use Deaf Auslan to communicate at home, 236 more than the 5,303 sign language users identified in the 2001 Census. Differences in the recording and the reporting of sign language usage between Censuses suggest these trends are more 'indicative' than 'precise' estimates of Auslan usage.

<sup>&</sup>lt;sup>1</sup> The other signers in the 2006 Census may not be using Auslan but, perhaps, some American sign language, or various British, Greek, German, Norwegian, Russian, Spanish, Swedish and other signed languages. (The discrepancy between Auslan and total signers is, perhaps coincidentally, of similar magnitude to the number of people who cite that they speak a LOTE at home, were born outside of Australia or have non-Australian 'heritage'.) Given Australia's multiculturalism and other factors, we have adopted the conservative position appropriate in modelling, that the composition of the Sign Languages nec and nfd is in fact not known and should not be assumed to be all Auslan.



## 2.2.1 **P**REVIOUS ESTIMATES

Estimates of Australia's signing Deaf community vary widely, with the Census findings at the lower end of those in the published literature (Table 2-1). The disparity between estimates reflects a range of factors, including both definitional and methodological differences. For example, the Deaf Society estimate is based on the proportion of severely to profoundly deaf who would be considered 'likely' clients of the Society, while Hyde and Power (1991) relied on users identifying other users to form their estimate.

Source	Year	Estimated number of people	Implied prevalence (per 1,000 population		
Hyde & Power	1991	>15,400	>0.891		
Deaf Soc. of NSW	1997	3,700-7,400^	0.199 to 0.399		
Ozolins & Bridge	1999	>15,000	>0.792		
Australian Census	2001	5,303	0.027		
Johnston	2004	6,500	0.032		
Australian Census	2006	5,539	0.027		

#### TABLE 2-1: ESTIMATES OF THE AUSLAN USERS\* IN AUSTRALIA

^NSW results extrapolated to Australia. \* As per the discussion, some estimates are based on Auslan use and some on the Deaf signing community.

As Table 2-1 shows, previous estimates of the size of the Deaf community, derived from enrolments in Deaf schools and community data collection methods, vary between 6,500 and 15,400 individuals (Access Economics, 2006:38). The higher, earlier estimates may reflect a real decline in the number of Auslan users due to the factors mentioned by Johnston (2004). For example, there may be fewer deaf people using Auslan in the future due to fewer deaf children being born and advances in technology eg, cochlear implants (Johnston, 2004). However, the 1996 Census only identified 4,425 Australians who use sign language at home.

The 'conservative' nature of the Census estimate may reflect a number of factors associated with the collection and reporting of Census data. For example, weakness in the wording of the Census question, which asks what 'language the respondent speaks at home'. As other researchers, including Ozolins and Bridge (1999), have noted, there are several shortcomings with this:

- Auslan is of course not 'spoken' at all;
- some users do not recognise it as a 'language'; and
- not all use it in their home (eg, they may have parents who do not use Auslan with whom they use other means to communicate).

#### 2.2.2 ESTIMATES USED IN THIS ANALYSIS

As the most comprehensive source of population data in Australia, the 2006 Census estimate was adopted in the modeling as the basis for the overall estimate of the number of Australians using Deaf Auslan. Given the range of estimates in the literature, this approach



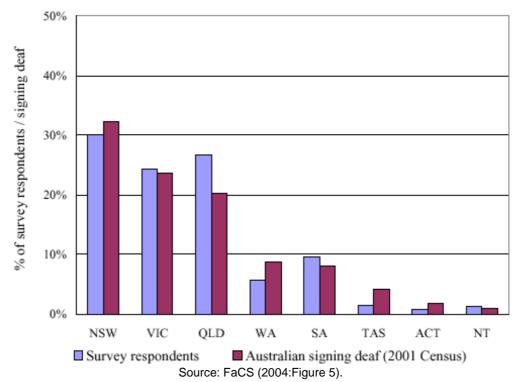
might be considered conservative. The composition of this total was based largely on data from FaCS (2004), given the compositional problems with Census data outlined below.

One weakness of the 2006 Census data was the anomalous finding in the Census that there are a greater number of Auslan users in Victoria in 2006 than in NSW. Given the previous Census (which showed usage more in line with population shares) and other information available, this finding is odd. One possible explanation is that Victorian Deafness organisations have had much more success promoting their message than those in other states, although we would be reluctant to draw this conclusion since the anomaly may also reflect:

- schools with a majority of hearing children all of whom are taught Auslan and might be self-reporting in the Census, but don't need interpreters (eg, http://www.klemzigps.sa.edu.au/auslan\_bilingual.htm);
- teaching hearing babies to use sign language to enhance the development of their language skills (eg, http://www.aad.org.au/info/policy\_babysigns.php); and/or
- other examples of hearing people learning Auslan (though they would not require interpreter services).

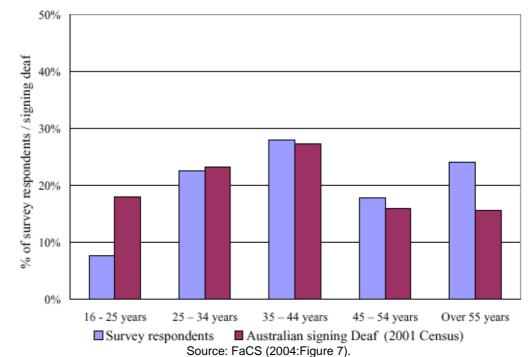
As noted earlier, this study estimates the future demand for interpreting services, which should not reflect Auslan users *per se* (ie, including those who have no hearing loss) nor indeed any particular state being 'ahead of the game' if indeed that were the case. Rather, demand modeling should reflect the number of people who are deaf from an early age and/or are part of the Deaf Community and need an interpreter. It would be important not to embed any current jurisdictional bias in future estimates of need, and to start with the skewed base from the 2006 Census data would result in irrational and inequitable policy implications. Hence, to avoid problems created by this outlier result, the geographical distribution of Deaf Auslan users across Australia's states and territories in the modeling was based on findings from the 2004 Auslan survey (FaCS, 2004) which align with the 2001 Census (Figure 2-1).

FIGURE 2-1: STATE AND TERRITORY DISTRIBUTION OF DEAF AUSLAN USER SURVEY RESPONDENTS COMPARED TO THE ABS 2001 CENSUS SIGNING DEAF POPULATION





Another weakness of the 2006 Census data is that a reliable age-gender breakdown of Auslan users was not available either. The age-gender profile of Auslan users was thus modelled on the 2001 Census age breakdown reported in FaCS (2004) with severe hearing loss in the youngest age groups estimated from Access Economics (2006).





The Census data in Figure 2-2 show highest prevalence of Auslan usage in the middle-aged population (35-44 years). This is true in terms of share of total users and also in per capita terms. This finding is likely to reflect the introduction of funded support of training programs for Auslan and awareness, on the one hand, which increase usage relative to previous generations, and the technological advances and preventive factors, on the other hand, that are likely to reduce usage of Auslan in later (younger) cohorts. For the purposes of projections, it is assumed that the fall-off in prevalence in the older cohorts is not due to people forgetting Auslan or stopping use of it as they get older (or there might potentially be an element of this) but, rather, the projections gradually move the people who use Auslan currently into the next age groups, while retaining the lower incidence in the younger cohorts.

The age-gender use of Auslan reported in the Census is quite different from the distribution of Australians with severe hearing loss as estimated in Access Economics (2006). There are many older deaf people who do not use Auslan. This is likely to be due to factors such as:

- reluctance or inability for those who develop severe hearing loss late in life to learn and use Auslan, particularly if they have multiple comorbidities (eg, dementia); and
- less availability and promotion of Auslan many decades ago when those older people who were deaf when they were young could have learned it.

A final adjustment is made to fit the gender distribution to that from the 2001 Census also – 55% female and 45% male and to fit the age-gender prevalence rates to the jurisdictional distribution of users. The resulting national profile of Auslan users is presented in Table 2-2, with 5,612 Australians estimated to use Auslan in 2007.



## Auslan interpreter services in Australia

	I ABLE 2-2: ESTIMATED AUSLAN USERS BY AGE, GENDER AND JURISDICTION, 2007									
	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	Australia	
MALES										
0-9	17.9	12.2	10.8	4.2	4.6	1.7	0.5	0.9	52.8	
10-19	103.1	69.3	62.7	24.4	26.8	10.4	2.7	4.4	303.8	
20-29	213.0	148.5	130.2	51.1	56.4	19.6	6.0	10.9	635.5	
30-39	261.6	181.2	160.0	61.3	68.8	24.2	7.2	12.6	776.9	
40-49	226.9	154.7	137.2	53.9	59.2	21.2	6.1	10.7	669.8	
50-59	121.2	83.0	74.6	28.6	32.7	11.5	3.8	6.2	361.7	
60-69	61.0	41.7	38.4	14.1	16.3	5.9	1.9	3.0	182.4	
70-79	38.1	26.2	21.5	9.2	9.2	3.5	0.6	1.5	109.9	
80-89	17.5	12.0	9.4	4.5	3.9	1.5	0.2	0.7	49.7	
90+	2.1	1.5	1.2	0.5	0.5	0.2	0.0	0.1	6.1	
Total										
males	1062.3	730.4	645.9	251.7	278.5	99.7	29.1	51.0	3148.7	
FEMALES										
0-9	14.9	10.2	9.0	3.5	3.9	1.4	0.4	0.7	44.0	
10-19	79.8	53.9	48.9	19.0	21.2	8.0	2.1	3.4	236.4	
20-29	166.0	115.1	101.4	39.8	43.5	15.3	4.6	8.4	494.2	
30-39	205.9	142.5	125.4	48.2	53.5	19.1	5.7	9.8	610.0	
40-49	177.4	121.1	108.0	42.2	46.3	16.7	4.7	8.4	524.9	
50-59	91.1	62.9	56.8	21.6	24.6	8.7	3.0	4.7	273.4	
60-69	43.1	29.4	27.4	10.0	11.6	4.2	1.4	2.2	129.2	
70-79	30.1	20.6	16.9	7.1	7.4	2.8	0.5	1.2	86.7	
80-89	18.8	12.8	10.1	4.8	4.3	1.7	0.2	0.7	53.4	
90+	4.0	2.7	2.1	1.0	1.0	0.4	0.0	0.1	11.4	
Total					<i>i</i>	/				
females	831.2	571.4	506.1	197.2	217.1	78.1	22.7	39.7	2463.6	
TOTAL	1893.5	1301.8	1152.0	448.9	495.7	177.8	51.8	90.7	5612.3	

Source: Access Economics based on the 2006 Census, FaCS (2004) and Access Economics (2004). Note: Totals may not sum exactly due to rounding.

## 2.3 USE OF AUSLAN INTERPRETER SERVICES IN AUSTRALIA

#### 2.3.1 UTILISATION RATES

The Deaf community rely on Auslan interpreters in a variety of circumstances. In many instances, the interpreter is provided free to the user, paid for by government or by the organisation providing the services. Situations where an interpreter is provided free to the user include medical appointments, workplace meetings, court appearances, and meetings with government departments and agencies (AAD, 2007). Auslan services may also be purchased by the individual directly for other circumstances such as family events, sporting activities or religious activities.

The 2007 AAD Auslan questionnaire (AAD, 2007), which was completed by 367 Auslan users, surveyed respondents regarding their annual use of Auslan interpreting services, with results presented below in Table 2-3. If 'more than once a week' is interpreted to mean about 72 times per annum, and 'other interval' as three times per annum, these data suggest that the **average number of Auslan interpreter services utilised is around 30 per annum**.



Frequency	% respondents^	Visits pa	Weighted average
Once a week	9	52	4.9
More than once a week	23	72	17.3
Once a fortnight	16	26	4.3
Once a month	17	12	2.1
Once every 2-3 months	20	5	1.0
Other interval	11	3	0.3
Total			30.0

#### TABLE 2-3: FREQUENCY OF AUSLAN INTERPRETER USAGE

Source: AAD (2007).

^ Note that 7% of respondents did not answer this question and a small number provided multiple answers, so the column does not sum to 100%.

Data from the Auslan User Survey (FaCS, 2004), reveal that the most common situations where an Auslan interpreter is utilised are GP visits, education and employment and visits to other health professionals (Table 2-4). 'Other' occasions capture other personal, family and social activities where an interpreter is used and are calculated as a residual from Table 2-3.

#### TABLE 2-4: AVERAGE ANNUAL NUMBER OF VISITS WITH AN AUSLAN INTERPRETER

Occasion	Average annual number of visits
GP visit	7.4
Public hospital	2.2
Private hospital	0.4
Other health professional	2.6
Legal/financial	1.8
Education/employment	4.3
Other	11.2*
Total	30.0**

Access Economics based on FaCS (2004). \* Calculated as a residual. \*\* From Table 2-3 above.

#### 2.3.2 UNMET DEMAND

In addition to calculating the current usage of Auslan interpreter services, estimating total demand for Auslan interpreter services also requires quantifying the level of any excess or unmet demand ie, those occasions where an Auslan interpreter is required, but not available.

To estimate excess demand, survey data from the Auslan user survey (FaCS, 2004) were used. The survey asked respondents to identify the proportion of occasions where an interpreter was provided when needed with four response options - never, always, 0-50%, 50-100%. Areas where unmet demand were greatest were GP visits and visits to other health professionals. By using a weighted average based on frequency it is estimated that, on average, an interpreter is provided 59.3% of those times when needed (Table 2-6).



Frequency	GP	Public hosp	Priv hosp	Other health	Legal Finance	Education	Total	Weight
Never	1675	461	197	1041	835	315	4524	37.4%
0-50%	459	96	26	117	155	132	985	8.2%
50-100%	187	61	6	21	31	108	414	3.4%
Always	1120	1125	333	700	865	2016	6159	51.0%
Average								59.3%

TABLE 2-5: FREQUENCY OF AUSLAN INTERPRETER PROVISION WHEN NEEDED
--

Source: FaCS (2004). Frequency is interpreted as follows: 'Never' interpreted to include 'almost never' to take account of disenchantment effects and proxied as 10% of the time; 'Sometimes' proxied as 25%; 'Mostly' proxied as 75%; and 'Always' proxied as 100%.

*Relative* shortages across the individual states and territories were based on other data from FaCS (2004), identifying the ability of Auslan users in different jurisdictions to obtain Auslan interpreting services when they need them. Findings for the ACT and NT were statistically insignificant and thus, for the territories, the national average was modelled. The greatest shortage was identified in Victoria (28.1% could not get an interpreter when needed) followed by Western Australia (18.6%), with Tasmania reporting the least shortage of interpreters (nil in the sample) (Table 2-6). While standard error was a problem with Tasmania too, this result was accepted triangulating against supply data that suggest a much better relative supply (and hence less unmet demand) in Tasmania. The 'multiplier' (based on standard deviation from the mean of 59.3%) in Table 2-6 was used to calculate services demanded.

Jurisdiction	Can't get an interpreter when needed (%)	Difference from mean (14.3%) (%)	Standard deviations* from mean (n)	Multiplier**
NSW	13.3	-1.0	-0.11	1.68
VIC	28.1	13.8	1.48	1.82
QLD	15.8	1.5	0.16	1.70
WA	18.6	4.3	0.46	1.73
SA	9.9	-4.4	-0.47	1.64
TAS	0.0	-14.3	-1.53	1.54
ACT	Na	Na	Na	1.69
NT	Na	Na	Na	1.69
Average <sup>#</sup>	14.3			

TABLE 2-6: UNMET DEMAND FOR AUSLAN INTERPRETERS BY JURISDICTION

Source: FaCS (2004). Na = not available due to very high standard error.# Average excludes ACT and NT. \* Standard deviation =9.3%. \*\* M=1/0.593+n\*.093 eg, for VIC, 1/(1-0.593)+1.48\*.093=1.69+0.14=1.82 (rounded).

#### 2.3.3 TIME PARAMETERS

Since the demand and supply modules are solved in terms of hours demanded and supplied, the time required per service and the hours per full time equivalent (FTE) interpreter are critical parameters.

The average duration of an Auslan interpreting service is derived from Auslan user survey data (FaCS, 2004). Survey respondents recorded the required service times in a number of different circumstances where an interpreter is required. For the purposes of modeling, the three options available in the survey - less than one hour, between one and two hours, and more than two hours - were assumed as 30 minutes, 90 minutes and 150 minutes, respectively. For services where the duration was unknown (not collected in the survey, eg, 'other' in Table 2-4), the duration of a service was assumed to be the average of those



where the duration was known.<sup>2</sup> From these responses, based on frequency of use the **weighted average service time was estimated to be 59.3 minutes**.

A FTE interpreter is estimated to spend, on average, **1,374 interpreting hours per year**, although total hours worked including travel time are 25% more ie, 1,718 hours per annum (see Section 3.2.4).

## 2.3.4 TOTAL DEMAND

Total demand for Auslan interpreting services in Australia is modelled in terms of hours of service and FTE required, and is calculated by taking the actual utilisation level and scaling this up to account for relative unmet demand in each jurisdiction, with scaling varying from a multiplier of 1.61 (South Australia) to 1.80 (Victoria), as discussed above (Table 2-6).

Adding this to current utilisation levels in each state and territory gives an **estimated total demand for Auslan interpreting services of 56.2 services (55.4 hours) per person per year**. Given the FTE conversion parameters outlined above, this implies that the number of **FTE required to satisfy demand in 2007 is 226, which is around 1.1 Auslan interpreter for every 100,000 Australians in the population.** The distribution of FTE required by jurisdiction in 2007 is shown in Table 2-7 below. Note that while the adjustment for excess demand brings the distribution closer to the population share, there are still some differences in demand that are likely due to relative age structures, urbanisation and expectations.

				-
Jurisdiction	% population	% Auslan users	% FTE demand	No. of FTE
NSW	32.8%	33.7%	33.0%	68
VIC	24.8%	23.2%	24.7%	51
QLD	19.9%	20.5%	20.4%	42
WA	10.0%	8.8%	8.9%	18
SA	7.5%	8.0%	7.7%	16
TAS	2.3%	3.2%	2.9%	6
ACT	1.6%	1.6%	1.6%	3
NT	1.0%	0.9%	0.9%	2
Australia	100%	100%	100%	206

TABLE 2-7: DEMAND FOR AUSLAN INTERPRETERS, BY JURISDICTION, 2007

Source: Access Economics modeling.

## 2.3.5 OTHER PARAMETERS (FOR PROJECTIONS)

The model incorporates a real income growth parameter and income elasticity of demand parameter which can be adjusted to reflect the impact of increasing real income per capita on the demand for interpreting services. In the demand projections presented here, real income growth is modelled as 1.0% per annum and income elasticity of demand is 1.2. That is, real income per capita is assumed to grow by 1% a year, and a 1% change in income is assumed to induce a 1.2% change in demand, since health services are generally income-elastic.

<sup>&</sup>lt;sup>2</sup> This is an interesting finding since the interpreting 'industry' (ie, across all languages not just Auslan) tend to employ interpreters on a sessional or sub-contract basis.



In addition, the model is equipped to capture the impact of substitution of technologies, such as cochlear implants, reducing the demand for Auslan interpreters in the future. The technological substitution parameter is expressed as a percentage annual reduction (if positive, increase if negative) in demand for services of Auslan interpreters in the future. It is set at zero in the base case.

# 2.4 DEMAND PROJECTIONS

Based on the parameters outlined above, the demand for Auslan interpreting services in Australia has been modelled from 2007 to 2030. The model is underpinned by demographic projections for the Australian population over that time, derived from Access Economics' inhouse demographic model, AE-DEM.

The projected demand for Auslan interpreters in the base case is based on the forecast demographic trends for the Australian population (such as increasing average age). The time parameters and demand per person are fixed. As such, the base case modeling does not capture any potential future changes in prevention, detection or treatment of hearing loss that may alter the demand for Auslan interpreting services in the future, or any changes in service duration or hours worked by interpreters (which is modelled on the supply side).

Table 2-8 shows the projected demand for Auslan interpreting services in Australia to the year 2030, assuming, as noted above, real per capita income growth of 1% per annum and income elasticity of demand of 1.2. Overall, **demand is forecast to increase by 107% over 2007-30**, with the annual hours of service demanded increasing from 284,000 to 586,000 and the **number of FTE interpreters required increasing from 206 in 2007 to 427 in 2030**.

		slan ers	Annual s demar		Annual demai			ΓE lired	%
	2007	2030	2007	2030	2007	2030	2007	2030	change
NSW	1,894	2,788	95,114	184,231	93,638	181,372	68	132	94%
VIC	1,302	1,984	71,165	142,704	70,061	140,490	51	102	101%
QLD	1,152	2,093	58,731	140,382	57,820	138,204	42	101	139%
WA	496	862	25,685	58,757	25,286	57,845	18	42	129%
SA	449	635	22,091	41,088	21,749	40,450	16	29	86%
TAS	178	236	8,224	14,345	8,097	14,122	6	10	74%
ACT	91	135	4,585	8,967	4,513	8,828	3	6	96%
NT	52	78	2,616	5,177	2,575	5,096	2	4	98%
Australia	5,612	8,810	288,211	595,651	283,739	586,408	206	427	107%

#### TABLE 2-8: PROJECTED DEMAND FOR AUSLAN INTERPRETING IN AUSTRALIA, 2007-2030

Source: Access Economics modeling.

Differences in projected demand across the various states and territories principally reflect differences in the growth in total population and differences in the age profile of the population between states. Accordingly, the growth in demand for Auslan interpreting services is greatest in Queensland (139%) and Western Australia (129%), where the highest rates of population growth are forecast and lowest in Tasmania (74%) where the population in 2030 is forecast to be just 12% greater than today.



Figure 2-3, below, depicts the forecast number of FTE interpreters required in Australia to 2030. It shows the base case, the scenario reflecting the parameters outlined above and captured in Table 2-5 as well as two sensitivities around this.

- The 'low scenario' shows the projected demand for Auslan interpreters in Australia given real per capita income growth of 0%, rather than 1.0% as in the base case. In this instance, the number of FTE interpreters required in 2030 is estimated to be 324 24% less than under the base case.
  - This is a little lower than technological change causing 1% less demand each year (also depicted in Figure 2-3), as there is no elasticity involved in the technological change situation, as there is with real income change. Technological change might reflect initiatives such as roll out of a newborn screening program with increased application of cochlear implants leading to declining Auslan use and hence less future need for interpreters.<sup>3</sup>
- The 'high scenario' depicts FTE equivalence of 1,203 hours rather than 1,374. In contrast to the low scenario, this affects the required number of interpreters in 2007 as well as into the future. Accordingly, it is estimated that, under this scenario, the number of FTE interpreters required would increase to 236 in 2007 and 488 in 2030 an increase of 14% on the base case.

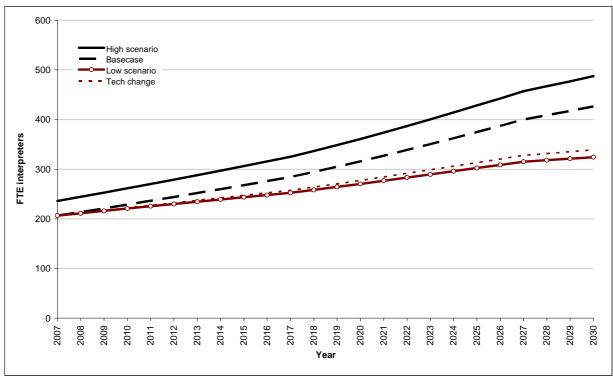


FIGURE 2-3: PROJECTED DEMAND FOR FTE AUSLAN INTERPRETERS IN AUSTRALIA, 2007-2030

#### Source: Access Economics modeling

These demand scenarios are considered in comparison to projected supply of Auslan interpreters, which is estimated in the next chapters.

<sup>&</sup>lt;sup>3</sup> There are plans to increase access to interpreters through Video Remote Interpreting (which is currently being applied on a very limited basis in Australia), particularly to regional and rural areas of Victoria. This would affect the location of interpreters but not the overall demand.



# 3. SURVEY FINDINGS

# 3.1 SURVEY BACKGROUND

Raw data for the supply side of the model were gleaned from a 2007 survey conducted by Macquarie University entitled '*The kaleidoscope of practice: A national survey of translators and interpreters*', jointly funded by AUSIT, ASLIA, AFDS and a Macquarie University External Collaborative Research Grant.

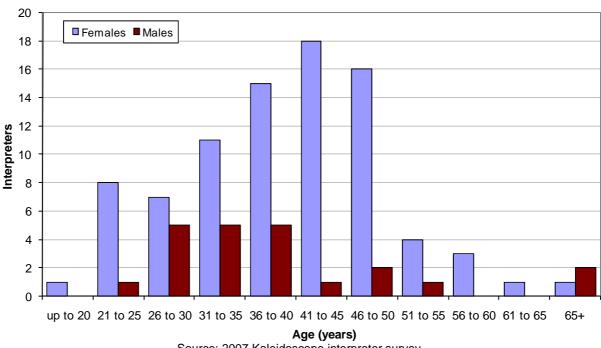
The survey questions are provided in Appendix A. Access Economics was provided with data for answers to select questions from 122 survey participants (of 734 in total) who answered in question 31 (working language) that they had Auslan as at least one working language. The sample size represents around one third of the workforce of '302 plus 10-20%' estimated by FaCS (2004) in 2004.

## 3.2 SURVEY DATA

#### 3.2.1 **AGE AND GENDER**

The great majority – 80% - of respondents to the survey were women. Of the 108 respondents who indicated their gender, 86 were female and 22 were male.

The average age of respondents was 40 years, with little difference between the genders – 39 years for men and 40 years for women. Figure 3-1 shows a slight decline in the number of female interpreters in their late twenties, possibly due to taking time off work to start families. A few participants specifically indicated that they were currently not working for this reason and/or that they there considering leaving to start a family within the next 12 months.



#### FIGURE 3-1: AUSLAN INTERPRETERS, BY AGE AND GENDER, AUSTRALIA, 2007

Source: 2007 Kaleidoscope interpreter survey.



There was a large decline in interpreter numbers from the 51-55 year age group and onwards. This may reflect, in part, that historically interpreting was possibly not as common a career path for a young person as it has been in the past few decades, to some extent due to policy changes. However, retirements also drive exits, with reasons for considering exit cited in the survey as repetitive strain injury (RSI), lack of a career path and low remuneration. While there is a noticeable drop in men over the age of 40 years, the sample size for men (22) is too small to draw meaningful inferences.

The average interpreter has around 11.5 years of experience. An interesting feature of the profession is that it is not one that most people tend to enter in the early years of their working life (Figure 3-2). While the largest cohort enters the field in their early twenties (28%), the second largest entry group are those in their early thirties (21%), and another 18% commence between ages 36 and 45 years. On the positive side, this means the scope for increased supply is greater than just young graduates. On the other hand, if people start interpreting later in life, they may have fewer years to spend before they retire.

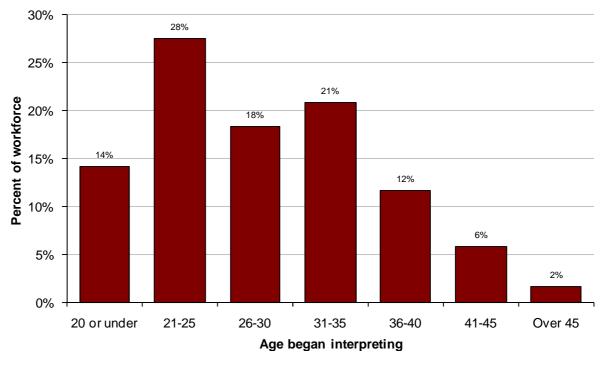


FIGURE 3-2: AUSLAN INTERPRETERS, BY AGE STARTED INTERPRETING, AUSTRALIA, 2007)

Source: 2007 Kaleidoscope interpreter survey.

## 3.2.2 LOCATION

Unfortunately, only postcodes for NSW (38 respondents) and the ACT (2 respondents) were included in the data supplied to Access Economics. Consequently, the State and regionality breakdowns adopted are from FaCS (2004) (Figure 3-3)<sup>4</sup>.

<sup>&</sup>lt;sup>4</sup> Unfortunately, the lack of postcode data also precluded any analysis of differences in interpreter pay rates across regions.



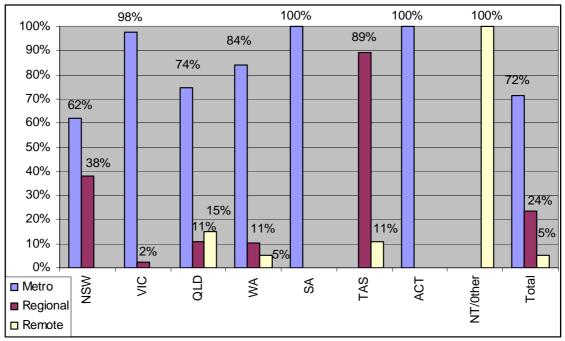


FIGURE 3-3: ESTIMATED DISTRIBUTION OF AUSLAN WORKFORCE, BY JURISDICTION & REGIONALITY

Source: FaCS (2004).

## 3.2.3 **EMPLOYMENT TYPE**

The survey data showed two types of interpreters, those who seek to make a living from it freelancers and in-house<sup>5</sup> full-timers (Figure 3-4) – and those who, by need or choice, have limited hours - casuals and in-house part-timers. The difference between freelancers and casuals is that the latter obtain work through a third party such as a service provider, agency or labour-hire firm. In-house part-timers comprise 43% of the workforce, and casuals a further 33%.

As Table 3-1 shows, how interpreters are employed affects how long they work, and to some extent how well they are paid. Not surprisingly, full time in-house interpreters have the longest hours. On hourly rates, in-house workers (full-timers 21.83/hr, part-timers 23.42/hr) are paid considerably less than those not on employment contracts (casuals = 29.71/hr, freelancers = 32.71/hr). Freelancers tend to work much longer hours than casuals, and their higher hourly rates<sup>6</sup> enable them to earn more than the longer-working full time in-housers.

Apart from those working full time in-house, many interpreters obtain work from a number of sources – eg, in-house part-time as well as casual. Multiple respondents were classified as in-house if they had any such work, freelance if they had over 100 hours per year freelance, and casual otherwise. (Hours by type of work was only available for the freelance category.)

<sup>&</sup>lt;sup>6</sup> Possibly, freelancers achieve slightly higher rates than casuals through not having to give a cut to intermediaries.



<sup>&</sup>lt;sup>5</sup> The Australian Government funds the education sector to either set up in-house Auslan interpreting units, or to purchase interpreting services from Auslan interpreting service providers (FACS, 2004). 'In-house' means registered with a Deaf Society or Territory interpreting agency.

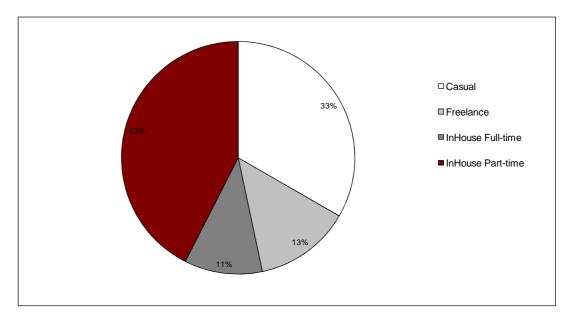


FIGURE 3-4: DIVISION OF WORKFORCE BY EMPLOYMENT TYPE

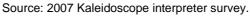


TABLE 3-1: CHARACTERISTICS OF EMPLO	YMENT TYPES
-------------------------------------	-------------

Employment type	Hours worked per year	Average income	Average hourly rate
Casual	642	\$19,074	\$29.71
In-house part-time	892	\$20,900	\$23.42
Freelance	1,217	\$39,821	\$32.71
In-house full-time	1,718	\$37,500	\$21.83

Source: 2007 Kaleidoscope interpreter survey.

## 3.2.4 HOURS SUPPLIED

The survey data suggest that the average hours worked per interpreter in 2007 was **948**, although very few interpreters work 'average' hours. Males worked 24% longer hours (1,131 per annum) on average than females (914 per annum). Figure 3-5 shows the two distinct, but roughly equally-sized, groups of interpreters:

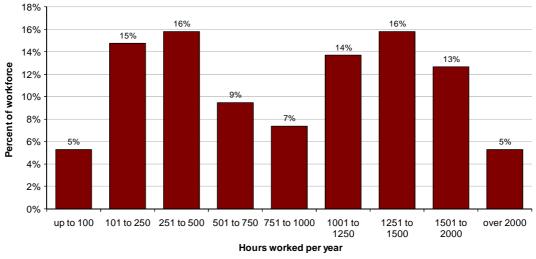
- those that work around 500 hours a year (casual/part-timers); and
- those that work around 1,500 hours a year (full-timers/freelancers).

Moreover, as can be seen in Figure 3-6, the casual/part-time group not only work for fewer weeks of the year (an average of 35 weeks) than the full-timers/freelancers (48 weeks), they also work for fewer hours in those weeks.

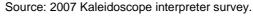
For those working full-time or freelancing, the average hours worked was 1,718<sup>7</sup>. However, not all of this was time spent directly interpreting. For every 2 hours interpreting, about half an hour is assumed to be spent travelling to provide interpreting services. Thus, 20% of 1,718 hours per annum is modelled as travelling. Hence **a FTE interpreter is estimated to spend**, **on average**, 1,374 interpreting hours per year.

<sup>&</sup>lt;sup>7</sup> Assuming a 48 week year, this translates to 36.8 hours a week – very close to the Australian Public Service standard of 7 hours and 21 minutes a day.

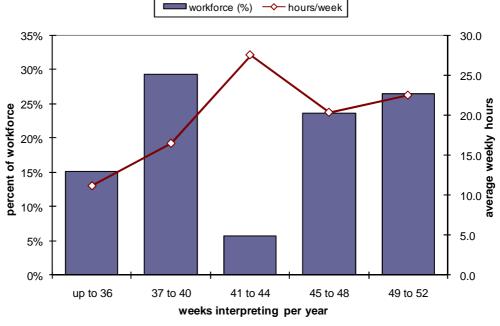




#### FIGURE 3-5: INTERPRETING HOURS PER YEAR, AUSTRALIA, 2007



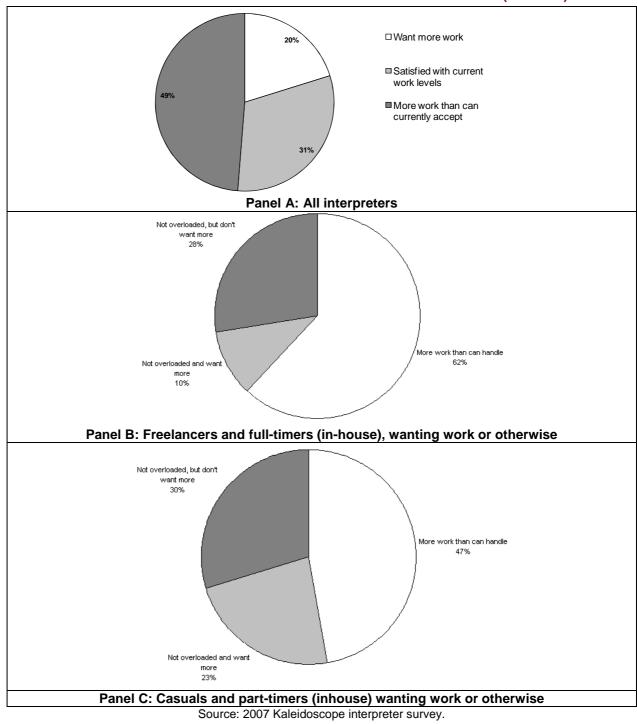




Source: 2007 Kaleidoscope interpreter survey.

The fact that a large number of interpreters only work part time does not seem to be due to lack of demand for their services. As Figure 3-7 shows, 80% of interpreters are not looking for extra work and about half (49%) have too much work. A majority of full-timers (62%) already have more work than they can handle. In contrast, most part-timers and casuals are not as overloaded (47% have too much work).





#### FIGURE 3-7: CURRENT WORKLOAD SATISFACTION OF INTERPRETERS (% TOTAL)

#### 3.2.5 **INCOME**

Auslan interpreting is not well remunerated. The average full time in-house interpreter earns around \$37,500 per year (Figure 3-8), about 65% of the average Australian ordinary full time earnings of \$57,387 per year in 2007.<sup>8</sup> Moreover, since not all Auslan interpreters work full

<sup>&</sup>lt;sup>8</sup> Based on full time adult ordinary time earnings of \$1103.60 per week (August 2007) multiplied by 52. Source *Average Weekly Earnings Australia*, ABS Cat No 6302.0 http://www.abs.gov.au/ausstats/abs@.nsf/mf/6302.0/



time, the average Auslan interpreter only earns \$23,416 per year<sup>9</sup>, less than half the average for Australia of \$45,505 (full and part time)<sup>10</sup>. Moreover, as Figure 3-9 shows, this distribution is quite skewed towards the lowest pay rates, with over a third (38%) of interpreters earning less than \$15,000 per annum.

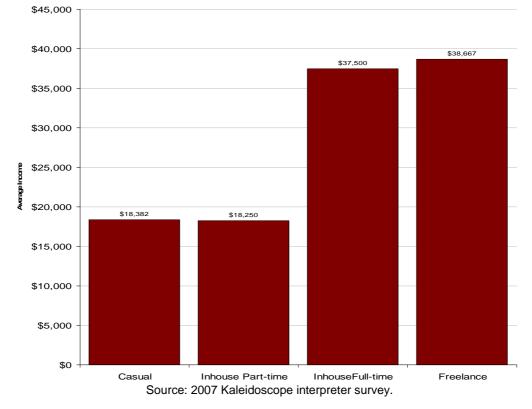


FIGURE 3-8: INTERPRETER INCOME BY EMPLOYMENT TYPE (\$ PER ANNUM)

<sup>&</sup>lt;sup>10</sup> Based on all employees total earnings of 875.10 per week (August 2007) multiplied by 52. Source Average Weekly Earnings Australia, ABS Cat No 6302.0 http://www.abs.gov.au/ausstats/abs@.nsf/mf/6302.0/



<sup>&</sup>lt;sup>9</sup> The lowest income category in the survey was '\$0 to \$14,999'. Respondents in this group were assumed to have an average income of \$7,500. Similarly, the highest category was '\$50,000 +'. Respondents in this group were assumed to have an average income of \$55,000.

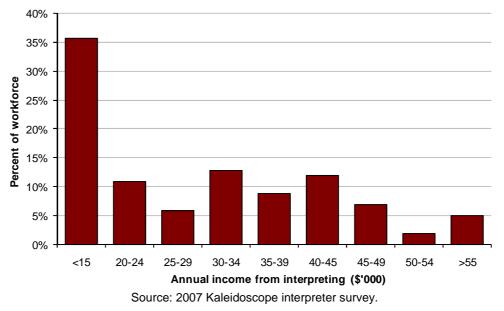


FIGURE 3-9: DISTRIBUTION OF INTERPRETER INCOME (\$ PER ANNUM, % TOTAL)

Thus, for many in the workforce, Auslan interpreting might be considered a secondary earning activity. Only 43% have interpreting as their only job. For the majority (57%), interpreting is not their primary source of income - averaging 42% of total income (Figure 3-10).

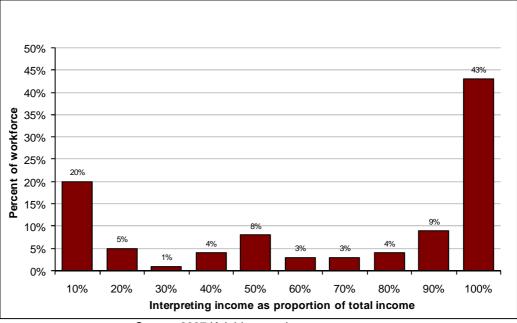


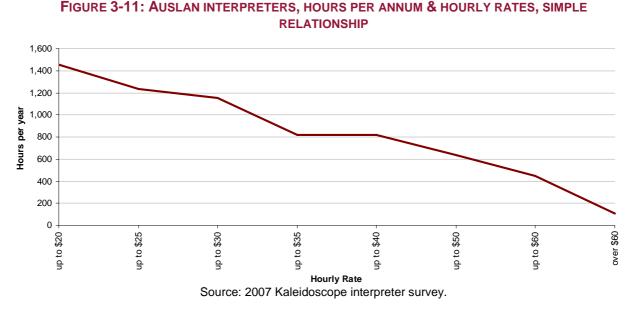
FIGURE 3-10: PROPORTION OF INCOME DERIVED FROM INTERPRETING (%TOTAL)

Source: 2007 Kaleidoscope interpreter survey.

This 'secondary income effect' and the dualistic nature of the interpreting workforce leads to some perverse results. In most occupations, the greater hourly rates firms offer, the more hours employees will chose to work. In economic terms, this is known as an upward-sloping labour supply curve. Eventually if rates get high enough to meet all their needs with fewer hours, workers may start taking more leisure time, and the labour supply curve turns to start sloping downwards. In economics this is referred to as a 'backward-bending' labour supply curve. The backward bend in the labour supply curve is evident in other workforce analyses undertaken by Access Economics, notably for GPs, optometrists and anaesthetists. It is



estimated by asking individuals how much labour they would supply at a series of hypothetical hourly rates. This detailed information was not able to be incorporated in the Auslan interpreter 2007 workforce survey, and the simple data shows a predictable problem – that, without controlling for individual preferences, hourly rates are inversely related to hours worked (Figure 3-11).



Such a simple analysis of the data might seem to imply that increasing remuneration would reduce hours worked, which is clearly contrary to economic theory and to what is likely to happen in the real world. Another factor may well be influencing both hourly rates and hours worked. The factor underlying this pattern is the division of labour discussed above. On the one hand, there are in-house interpreters, with fairly low hourly rates, but with lots of hours (and job security). On the other hand, there are many whose other commitments preclude more hours, but who pick up casual engagements at comparatively high hourly rates. A different picture thus emerges if the workforce is disaggregated not by hourly rates, but by overall salary. The group earning over \$45,000 respond to higher hourly rates – over \$34/hour – by putting in longer hours. Freelancers dominate this 'high income' group.

Dividing the interpreter workforce into groups by overall earnings from interpreting, there are 'normal' supply-side effects (Table 3-2), with the average hours per year increasing as the wage rate rises across each group. However, to obtain a robust estimate of the wage elasticity of supply, intra-group studies would be desirable.



Overall interpreter earnings	Average \$/hour	Average hours/year
Low income (average \$23,092 pa)	\$26.10	885
Average income (average \$25,244 pa)	\$27.12	930*
High income (average \$52,500 pa)	\$34.73	1,512

#### TABLE 3-2: POSSIBLE RESPONSE TO INCREASED REMUNERATION

Source: 2007 Kaleidoscope interpreter survey.

Note: figures here only include respondents who indicated both total income and total hours.

\* This differs from the average of all respondents of 948 hours reported above as it reflects only the respondents who also responded to income questions.

#### 3.2.6 **PROFESSIONALS AND PARA-PROFESSIONALS**

Government agencies generally require accredited interpreters. There are two levels of accreditation for Auslan interpreters set by the National Accreditation Authority for Translators and Interpreters.

- 'Level 2 Para-professional' covers general conversations and non-specialist interpreting.
- ❑ 'Level 3 Interpreter' is the minimum level of accreditation for professional interpreting and requires interpreters to be able to interpret across a wide range of subjects and situations, such as specialist consultations and presentations. The skills cover areas such as law, health, business, banking and social and community services.

Professionals earn more than paraprofessionals and are employed for more hours per year than their less accredited colleagues (Table 3-3). Yet para-professionals appear to earn more per hour than professionals; possibly, professional qualifications are required to access those positions that offer security of tenure. One participant commented:

"I believe many sincere people enter the interpreting profession, but find they cannot earn enough money to make a living when they start out as a paraprofessional. They then find employment in a different area or profession. It seems you can get more work once you get level 3 professional status."

Accreditation Level	Hours per year	\$ / hour	Annual income (\$)
Para-professional	865	35.98	22,267
Professional	1,108	29.79	26,731
ratio	1.28	0.83	1.20

#### **TABLE 3-3: ACCREDITATION DIFFERENCES**

In the survey, there were almost three times as many people who identified themselves as para-professionals than professionals (74 to 26). Again, at first glance this appears odd, given that attaining the higher level qualification brings higher income. Partly the reason may be, as noted above, that for many people, interpreting is something they do more almost as a hobby on top of a regular (well paying) job. However, lack of access to training also appears to be a significant factor. One participant noted:

"Currently there are a lot of paraprofessionals who will not try to pass into the professional level as it has only been possible recently to sit the NAATI test ... this has caused the pool of Professional interpreters to remain relatively small."



# 4. SUPPLY MODELING

# 4.1 CURRENT SUPPLY IN AUSTRALIA

The last reliable estimate of the headcount of active Auslan interpreters was 302 (excluding freelancers), in 2004 (FACS, 2004). The 2007 Kaleidoscope survey shows that 13% of the workforce are freelancers. Moreover, the size of the workforce has probably changed since 2004, which is calculated from the model itself assuming that: (for 2004 to 2007 only):

- there are 15 new entrants per year (5 from the survey factored up to the population); and
- the new entrants equal the number of exits and those moving into the 65+ category.

The 'opening stock' of interpreters in 2007 is thus estimated as 361.<sup>11</sup>

- Of these, an estimated 287 were women and 73 were men (Table 4-1).
- An estimated 277 interpreters were located in metropolitan areas, 66 in regional areas and 17 in remote areas (Table 4-2).

These 361 interpreters supplied an estimated 269,506 hours. Using the FTE equivalence of 1,374 hours per year, in 2007 there were 196 FTE interpreters supplied, 10 less than the estimated FTE demanded. FTE breakdowns are also provided in the tables.

	Headcount				FTE	
	Female	Male	Total	Female	Male	Total
20 or under	3	1	4	1.5	0.4	1.9
21-25	22	6	28	12.1	3.1	15.2
26-30	31	8	39	19.0	4.9	23.9
31-35	39	10	49	18.2	4.6	22.8
36-40	59	15	74	32.7	8.4	41.1
41-45	47	12	60	26.5	6.8	33.3
46-50	50	13	63	28.0	7.2	35.2
51-55	14	4	18	7.8	2.0	9.8
56-60	8	2	11	4.7	1.2	5.9
61-65	6	1	7	3.1	0.8	3.9
65+	8	2	11	2.5	0.6	3.1
Australia	287	73	361	156.1	39.9	196.1

TABLE 4-1: AUSLAN INTERPRETERS, BY AGE AND GENDER, 2007 (HEADCOUNT & FTE)

Source: Access Economics estimates.

<sup>&</sup>lt;sup>11</sup> NABS estimated around 403 interpreters registered on their database in March 2008. The difference between estimates is likely to be due to: (1) NABS numbers are 2008 while these estimates are 2007 (there was a jump in registrations around January/February due to training completions after which there typically can be attrition); (2) some interpreters may be registered but not necessarily active (NABS identified 14); (3) there may possibly be duplication/misspelling in the NABS database, but that is likely to be minimal; and (4) there may have been an actual average increase (entries minus exits) greater than the historical patterns on which the estimate of 361 was based.



## Auslan interpreter services in Australia

Headcount	Metro	Regional	Remote	Total
NSW	73	45	-	118
VIC	87	2	-	89
QLD	53	8	11	72
WA	30	4	2	36
SA	27	-	-	27
TAS	-	8	1	8
ACT	6	-	-	6
NT/Other	-	-	4	4
Australia	277	66	17	361
FTE				
NSW	39.8	24.5	-	64.3
VIC	47.4	1.2	-	48.6
QLD	29.1	4.2	5.8	39.0
WA	16.5	2.1	1.0	19.6
SA	14.8	-	-	14.8
TAS	-	4.1	0.5	4.6
ACT	3.2	-	-	3.2
NT/Other	-	-	2.0	2.0
Australia	150.7	36.0	9.4	196.1

TABLE 4-2: AUSLAN INTERPRETERS, BY JURISDICTION & REGIONALITY, 2007 (HEADCOUNT & FTE)

Source: Access Economics estimates.

# 4.2 SUPPLY PROJECTIONS

The model does not split the workforce by gender as the relatively few male interpreters are too small in number for demographic influence or for statistical inference. The regional splits are applied to jurisdiction estimates retrospectively, also due to small cohort size.

## 4.2.1 ENTRIES

The age distribution of entries reflects the pattern evident from the survey (Table 4-3).

Age group	Headcount*
20 or under	2.0
21-25	4.1
26-30	2.6
31-35	3.1
36-40	1.8
41-45	0.9
46-50	0.3
51-55	0
56-60	0
61-65	0
65+	0
Australia	14.8

TABLE 4-3: NEW AUSLAN INTERPRETERS, BY AGE, 2007 (HEADCOUNT)

Source: Access Economics estimates.

\* Headcount is estimated to one decimal place for entries, due to the small numbers.

Over time, there is the option to grow entries at different rates. In the base case, entries are projected to grow in line with population growth -1% per annum.



## 4.2.2 **Exits**

Although not measured directly in the survey, exits are able to be derived as a residual in the model based on starting exits, the starting age distribution of the workforce, and entries. The distribution reflects the factors noted in the survey case (recall Figure 3-2), with some interpreters taking time off to start families in their late twenties, with temporary exits mostly returning in their early thirties, and with net exits steadily increasing till age 60 years (Table 4-4).

Age group	Starting headcount*	% total net exits
20 or under	-	0%
21-25	0.1	1%
26-30	0.7	5%
31-35	-0.6	-4%
36-40	0.3	2%
41-45	0.7	5%
46-50	1.5	10%
51-55	2.2	15%
56-60	2.2	15%
61-65	1.5	10%
65+	6.1	41%
Australia	14.8	100%

#### TABLE 4-4: AUSLAN INTERPRETER NET EXITS, BY AGE, 2007 (HEADCOUNT)

Source: Access Economics estimates.

\* Headcount is estimated to one decimal place for exits, due to the small numbers.

People in the 65+ category do not all exit in one year. The ratio of 65+ interpreters in 2007 to the number in each year of age prior suggests that it takes around ten years for all exits from this group to occur. This pattern is maintained in projections.

#### 4.2.3 **JURISDICTIONAL SPLITS**

A few possibilities are modelled for changes in supply patterns in the future, by jurisdiction. In the base case, the opening shares are maintained (ie, the current distribution, based on FACS, 2004 shares). Another option in the model is that, over time, the shares move towards those in the population, to reach population shares by 2030. This has the advantage of reflecting demographic change in supply sources.

#### 4.2.4 **HOURS WORKED**

The hours worked are base on those in the survey. Given the small sample size, some of the age cohorts were aggregate in order to calculate more robust averages (Table 4-5).



Age group	Average interpreter hours supplied*
20 or under	746
21-25	746
26-30	853
31-35	639
36-40	768
41-45	768
46-50	768
51-55	768
56-60	768
61-65	768
65+	412

Source: Access Economics estimates. \* Adjusted down by 20% from survey data to allow for travel time.

The hours worked are then converted into the FTE at the same conversion rate as for 2007 over the projection timeframe. The base case assumption of 20% of time spent in travel is modifiable in the model.

# 4.3 BASE CASE SUPPLY PROJECTION

In the base case, supply increases from **361 interpreters in 2007 (FTE of 196) to 423 in 2030 (FTE of 230), a 17% increase**. There would be fewer FTE interpreters per 100,000 population in 2030 (0.82 per 100,000) than in 2007 (0.93 per 100,000) under the base case. The State shares all increase by the same amount in the base case, and mean age of the workforce increases from 40.1 years to 41.1 years (Table 4-6).

Key outputs	2007	2030	% change	absolute change
Headcount	361	423	17.3%	63
per 100,000 people	1.7	1.5	-11.8%	-0.20
Hours	269,506	316,350	17.4%	46,844
FTE	196.1	230.2	17.4%	34.1
per 100,000 people	0.93	0.82	-11.8%	-0.11
Entries	14.8	18.6	25.7%	3.8
Exits	9.3	15.6	67.0%	6.2
Mean age	40.1	41.1	2.5%	1.0
FTE				
NSW	63.6	74.7	17.4%	11.1
VIC	53.2	62.5	17.4%	9.3
QLD	30.5	35.8	17.4%	5.3
WA	12.3	14.5	17.4%	2.1
SA	9.7	11.4	17.4%	1.7
TAS	19.5	22.9	17.4%	3.4
ACT	4.5	5.3	17.4%	0.8
NT/Other	2.6	3.0	17.4%	0.5

TABLE 4-6: AUSLAN INTERPRETER PROJECTIONS, BASE CASE, KEY OUTPUTS, 2007-2030

Source: Access Economics estimates.

The age profile is illustrated in Figure 4-1.



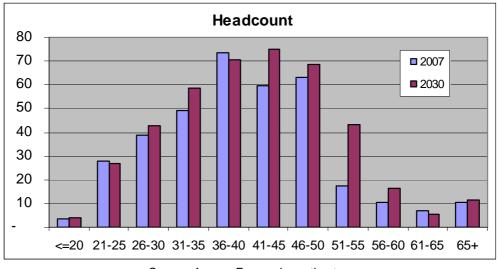


FIGURE 4-1: AGE PROFILE OF AUSLAN INTERPRETERS, BASE CASE, 2007 AND 2030

# 4.4 SCENARIOS

As with the demand model, a high and low scenario are modelled for supply, as well as a variation in the jurisdictional distribution.

### 4.4.1 HIGH SCENARIO: FASTER RECRUITMENT

In the high scenario, supply increases from 361 interpreters in 2007 (FTE of 196) to 642 (compared to the base case of 423) in 2030 (FTE of 350 compared to the base case or 230), a 78% increase (compared to the base case of 17%). FTE interpreters per 100,000 population would increase from 0.93 per 100,000 in 2007 to 1.25 per 100,000 in 2030 (compared to 0.82 in 2030 under the base case). Mean age falls from 40.1 to 38.8 years (compared to 41.1 years in the base case) reflecting that recruits are younger (Table 4-7).

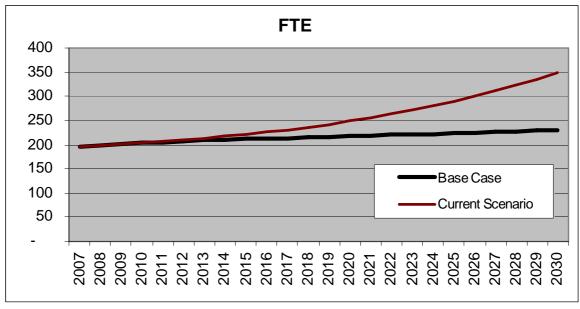


FIGURE 4-2: HIGH SCENARIO - RECRUITMENT OF 5% PER ANNUM, 2007-2030

Source: Access Economics estimates.



Source: Access Economics estimates.

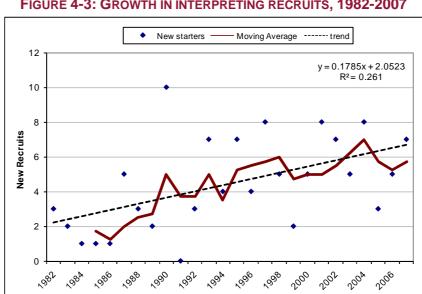
## Auslan interpreter services in Australia

Key outputs	2007	2030	% change	absolute change
Headcount	361	642	77.9%	281
per 100,000 people	1.7	2.3	33.7%	0.58
Hours	269,506	480,822	78.4%	211,316
FTE	196.1	349.8	78.4%	153.8
per 100,000 people	0.93	1.25	34.1%	0.32
Entries	14.8	45.4	207.2%	30.6
Exits	9.3	18.2	95.4%	8.9
Mean age	40.1	38.8	-3.2%	-1.3
FTE				
NSW	63.6	113.5	78.4%	49.9
VIC	53.2	95.0	78.4%	41.7
QLD	30.5	54.4	78.4%	23.9
WA	12.3	22.0	78.4%	9.7
SA	9.7	17.4	78.4%	7.6
TAS	19.5	34.8	78.4%	15.3
ACT	4.5	8.1	78.4%	3.6
NT/Other	2.6	4.6	78.4%	2.0

### TABLE 4-7: AUSLAN INTERPRETER PROJECTIONS, HIGH SCENARIO, KEY OUTPUTS, 2007-2030

Source: Access Economics estimates.

There is some evidence from the 2007 survey that a higher recruitment rate may be possible, as the numbers of new recruits in the sample slowly increased (Figure 4-3)<sup>12</sup>, at an average annual rate of 4.7%. However, the main factor working against this may be the relatively low remuneration.



### FIGURE 4-3: GROWTH IN INTERPRETING RECRUITS, 1982-2007

Source: 2007 Kaleidoscope interpreter survey.

<sup>&</sup>lt;sup>12</sup> This chart is based on starting year given by survey participants. There would have been other recruits who have since dropped out. The assumption is that, given the wide spread of recruitment ages, that such drop outs would have been evenly spread over the years covered.



### 4.4.2 LOW SCENARIO: 10% FEWER HOURS PER INTERPRETER

Further feminisation of the workforce, or disenchantment from relatively low remuneration may cause the average number of hours worked to fall. The low scenario depicts a 10% fall in the hours worked per person occurring gradually over the period to 2030. As Figure 4-4 shows, this leads to a significant decrease in the availability of interpreting hours and FTE.

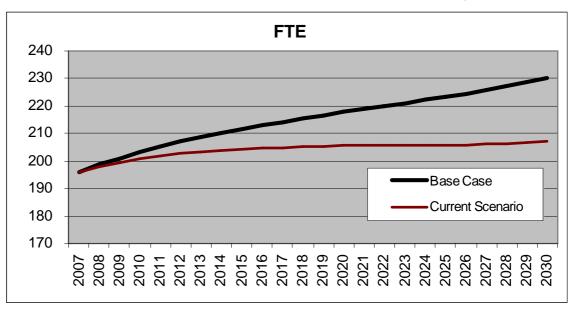


FIGURE 4-4: LOW SCENARIO – 10% FEWER HOURS PER INTERPRETER, 2007-2030

In the low scenario, the headcount supply is the same as in the base case, increasing from **361 interpreters in 2007 to 423 in 2030. However, the FTE only increases from 196 to 207, rather than the base case or 230), a 6% increase (compared to the base case of 17%).** FTE interpreters per 100,000 population would fall from 0.93 per 100,000 in 2007 to 0.74 per 100,000 in 2030 (compared to 0.82 in 2030 under the base case). Mean age is the same as the base case (Table 4-7).



Source: Access Economics estimates.

Key outputs	2007	2030	% change	absolute change
Headcount	361	423	17.3%	63
per 100,000 people	1.7	1.5	-11.8%	-0.20
Hours	269,506	284,715	5.6%	15,209
FTE	196.1	207.2	5.6%	11.1
per 100,000 people	0.93	0.74	-20.6%	-0.19
Entries	14.8	18.6	25.7%	3.8
Exits	9.3	15.6	67.0%	6.2
Mean age	40.1	41.1	2.5%	1.0
FTE				
NSW	63.6	67.2	5.6%	3.6
VIC	53.2	56.2	5.6%	3.0
QLD	30.5	32.2	5.6%	1.7
WA	12.3	13.0	5.6%	0.7
SA	9.7	10.3	5.6%	0.5
TAS	19.5	20.6	5.6%	1.1
ACT	4.5	4.8	5.6%	0.3
NT/Other	2.6	2.7	5.6%	0.1

### TABLE 4-8: AUSLAN INTERPRETER PROJECTIONS, LOW SCENARIO, KEY OUTPUTS, 2007-2030

Source: Access Economics estimates.

### 4.4.3 **FINAL SUPPLY SCENARIO: CHANGE IN JURISDICTIONAL DISTRIBUTION**

A final supply scenario is to adjust the jurisdictional shares gradually over the forecast period from the current shares to those of the population in 2030. This does not change the base case headcount, hours, FTEs or mean age from those shown in Table 4-6, but only changes the population shares, to those shown in Table 4-9.

FTE	2007	2030	% change	absolute change
NSW	63.6	70.2	10.4%	6.6
VIC	53.2	55.5	4.2%	2.2
QLD	30.5	52.6	72.3%	22.1
WA	12.3	25.9	109.7%	13.5
SA	9.7	15.5	58.9%	5.7
TAS	19.5	4.5	-76.8%	-15.0
ACT	4.5	3.6	-20.8%	-0.9
NT/Other	2.6	2.4	-7.2%	-0.2
	Source: Ace	one Economica optin	nataa	

### TABLE 4-9: AUSLAN INTERPRETER PROJECTIONS, JURISDICTIONAL CHANGE SCENARIO, 2007-2030

Source: Access Economics estimates.

The largest impact is on Tasmania, which would experience a fall of 15 FTE over the period, compared to a rise in the base case of 3.4 FTE (Figure 4-5). Queensland would experience the greatest increase in supply relative to the base case, reflecting population growth projected for that state in the future.



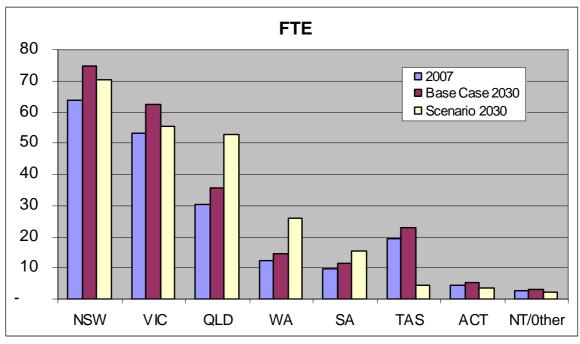


FIGURE 4-5: JURISDICTIONAL CHANGE SCENARIO, 2007-2030

Source: Access Economics estimates.



# 5. IMPLICATIONS OF THE PROJECTIONS

# 5.1 SUMMARY OF DEMAND AND SUPPLY PROJECTIONS

In this section, the base case, high and low scenarios from the demand and supply chapters are compared to each other to ascertain a likely, 'worst' case and 'best' case situation given the possible changes that may arise in the Auslan interpreter workforce in the coming decades (Table 5-1).

- □ In the base case, demand exceeds supply by 10.4 FTE in 2007, with the shortage increasing to 196.5 FTE by 2030.
- In the worst case, with interpreters reducing their average hours over time (possibly due to continued feminisation or disenfranchisement with conditions) and with travel time between services increasing, demand would exceed supply by 39.8 FTE in 2007, with the shortage increasing to 280.5 FTE by 2030.
  - Less than half the workforce would be available relative to that demanded.
- In the best case, if recruitment could achieve 5% per annum growth and in the absence of greater demand from real income growth, demand would exceed supply by 10.4 FTE in 2007, but by 2030 there would be a surplus of 25.6 FTE.
  - Queensland, however, may have a shortage of 22 FTE, with shortages also in WA and SA, unless measures are taken to correct the current maldistribution situation in supply.

		Base Case	e	W	orst Case	e		Best Cas	e
FTE	Base demand	Base supply	Shortage	High demand	Low supply	Shortage	Low demand	High supply	Shortage
2007									
NSW	68.1	63.6	-4.5	77.9	63.6	-14.2	68.1	63.6	-4.5
VIC	51.0	53.2	2.3	58.3	53.2	-5.0	51.0	53.2	2.3
QLD	42.1	30.5	-11.6	48.1	30.5	-17.6	42.1	30.5	-11.6
WA	18.4	12.3	-6.1	21.0	12.3	-8.7	18.4	12.3	-6.1
SA	15.8	9.7	-6.1	18.1	9.7	-8.3	15.8	9.7	-6.1
TAS	5.9	19.5	13.6	6.7	19.5	12.7	5.9	19.5	13.6
ACT	3.3	4.5	1.3	3.8	4.5	0.8	3.3	4.5	1.3
NT/Other	1.9	2.6	0.7	2.1	2.6	0.5	1.9	2.6	0.7
Australia	206.4	196.1	-10.4	235.9	196.1	-39.8	206.4	196.1	-10.4
2030									
NSW	132.0	74.7	-57.3	150.8	67.2	-83.6	100.3	113.5	13.2
VIC	102.2	62.5	-39.7	116.8	56.2	-60.6	77.7	95.0	17.3
QLD	100.6	35.8	-64.7	114.9	32.2	-82.7	76.4	54.4	-22.0
WA	42.1	14.5	-27.6	48.1	13.0	-35.1	32.0	22.0	-10.0
SA	29.4	11.4	-18.0	33.6	10.3	-23.3	22.4	17.4	-5.0
TAS	10.3	22.9	12.6	11.7	20.6	8.8	7.8	34.8	26.9
ACT	6.4	5.3	-1.1	7.3	4.8	-2.5	4.9	8.1	3.2
NT/Other	3.7	3.0	-0.7	4.2	2.7	-1.5	2.8	4.6	1.8
Australia	426.7	230.2	-196.5	487.6	207.2	-280.5	324.3	349.8	25.6

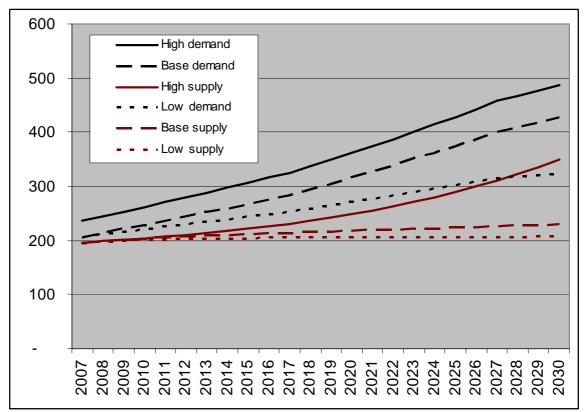
### TABLE 5-1: AUSLAN INTERPRETER PROJECTIONS, DEMAND AND SUPPLY, 2007-2030

Source: Access Economics estimates.



Figure 5-1 displays the six workforce projections for Australia over the forecast horizon. Notably, all the demand scenarios exceed all the supply scenarios until the year 2027, when the high supply scenario exceeds the low demand scenario (the best case surplus above).

FIGURE 5-1: DEMAND AND SUPPLY SCENARIO SUMMARY, SHOWING SHORTFALL, FTE, 2007-2030



Source: Access Economics estimates.

# 5.2 MECHANISMS TO BRIDGE THE GAP

This section discusses means to bring the supply projection in line with the base case demand projection, while also addressing maldistribution issues. Important aspects would be:

- 1 measures to increase recruitment strongly in early years and enhance retention in later years;
- 2 measures to increase average hours worked; and
- 3 measures to correct the maldistribution across jurisdictions.

### 5.2.1 RECRUITMENT AND RETENTION INITIATIVES

Most Auslan interpreters appear motivated by a 'labour of love' for the Deaf community, the language, or both. 'The 'big five' most common responses in the 2007 survey to the question about reasons for 'initial attraction' to Auslan interpreting work were:

- 1 passion for the language;
- 2 love of cultural diversity;
- 3 flexibility of work;
- 4 influence/encouragement of others; and
- 5 desire to make a difference.



**Recommendation**: Emphasise these five positive factors in recruitment initiatives.

Although entries increased historically at 4.7% on average, this may be difficult to achieve in future, and retention may also increasingly become a problem, if particular workforce issues are not addressed. The survey indicated a high proportion of interpreters currently considering leaving the workforce (13%) in addition to those who responded they had just left (7.5% of respondents). The second Intergenerational Report notes that general workforce participation by women between the ages of 55 to 64 has increased from around 30% to nearly 45% over the last ten years.<sup>13</sup> It may thus be possible, as the Auslan workforce is predominantly female, to reduce the currently high rate at which interpreters resign or retire at these ages.

This section summarises feedback from the survey responses to summarise the issues driving recruitment and retention problems in the Auslan interpreter workforce. The next section (5.2.2) looks more closely at remuneration issues specifically, although these are inseparable from the major workforce dissatisfaction aspects listed below. Section 5.3 provides more detailed survey feedback in support of the summary here.

# Workforce dissatisfaction issues raised in the survey, that threaten retention and recruitment

- 1 **Inadequate remuneration.** Pay scales do not take into account relevant academic qualifications, skill level, years of service and the nature of assignments.
- 2 **Variability of remuneration rates, titles and recognition.** What interpreters are called and pay scales nationwide vary depending on the employer, awards and other factors.
- 3 **Income uncertainty, job insecurity and poor conditions of service.** Many employers favour casual arrangements rather than permanent contracts. There is little security for interpreters and generally no income over holiday periods.
- 4 Lack of a career path. This is partly due to lack of consistent structures so the tasks of one role are not directly comparable with the duties somewhere else.
- 5 Occupational overuse syndrome (OOS). There can be lack of awareness or provisioning for appropriate OHS conditions, so burnout and injury are common and/or interpreters cannot effectively work.<sup>14</sup> Solutions such as tandem interpreting may be specified but not observed. Interpreters who may sustain a workplace injury are likely to have a difficult time making claims eg, for an interpreter working across agencies, insurance companies can demand the (near impossible) proof that the injury occurred due to working for a specific client and thus can avoid liability.

"Injuries are not paid out, documented or supported by insurance companies. The path to having a workplace injury accepted is fraught with difficulties and obstacles."

6 **Quality can be variable.** Lack of formal qualifications can be a problem in some areas and adherence to a code of ethics is not monitored. Professional development is not a compulsory part of being an interpreter.

<sup>&</sup>lt;sup>14</sup> The majority of interpreters who are employed full-time or part-time by a state Deaf Society would supplement their income via freelance work, which has significant ramifications for occupational health and safety issues (particularly OOS, essentially from too much interpreting).



<sup>&</sup>lt;sup>13</sup> Commonwealth of Australia (2007)

- 7 Lack of workplace support. Because the interpreter is the point of communication for clients, the interpreter may become an emotional support, educator, sharer of health and personal confidences and so the role may be psychologically and personally demanding. There can be lack of awareness and provision for debriefing or mentoring so vicarious trauma, isolation from peers, deterioration of confidence and skills may occur, particularly in regional areas.
- 8 **Other problems in regional areas** are minimal networking opportunities, lack of job variety, lack of a Deaf community, no opportunities for tandem work (with consequent higher OHS risk), little or no PD and attending PD is much more expensive and harder to get to.
- 9 Lack of information about workforce opportunities. Interpreters do not have clear information and access to what vacant jobs and positions are available as interpreting jobs are not advertised at one centralised website.
- 10 Lack of community awareness and the 'welfare sandwich'. Interpreters are working for a traditionally oppressed minority group who may not know about the issues that effect interpreters, so interpreters have to sensitively educate about appropriate pay and adequate conditions. Interpreters may feel torn between providing a needed service for a disadvantaged group and meeting their own (family) needs.

### **Recommendations (for FaCSIA implementation)**

- 1 Remuneration and defined career paths. Develop nationally uniform pay scales for Auslan interpreters that reflect educational qualifications, experience (skills and years of service) and the nature of assignments. Pay scales should be benchmarked to comparable professional remuneration levels and should adequately reimburse travel time and costs. In general, scales should reflect permanent contract arrangements and thus address leave entitlements, superannuation and other standard professional provisions. (Leave entitlements could be structured to coincide with educational sector holidays when this sector is the employer, as with teachers.)
- 2 Occupational protections: Provide and monitor more mentoring and debriefing opportunities for workers.<sup>15</sup> Develop and enforce consistent nationwide OHS guidelines for Auslan interpreters that protect against OOS, burnout and other workplace hazards, including by allocating multiple interpreters for longer jobs and through periodic breaks. Provide employer assistance with claims processing if injuries occur.
- 3 Service quality: Support and encourage minimum levels of training and adequate levels of ongoing PD for Auslan interpreters. Greater opportunities should be afforded for professional-level training possibly including provider training programs and a national curriculum (which may work well if linked to a national award or enterprise bargaining agreement). Training needs to be far more flexible in delivery and move away from only being offered face-to-face in cities<sup>16</sup>. Initiatives already undertaken by some Deaf Societies, such as Internship and graduate programs, could be extended. Monitor adherence to nationally consistent ethical codes. Provide information and opportunities for professional solidarity and networking.

<sup>&</sup>lt;sup>16</sup> NABS currently runs a flexible delivery mode (on-line) interpreting course (Level 2) with WA TAFE (who is the registered training provider). At the end of this course (June 2008) there will be 12 new accredited interpreters ready to work within regional/rural settings across Australia.



<sup>&</sup>lt;sup>15</sup> NABS provides access for their interpreters to Interlock Counselling Services –a national company specialising in confidential counseling.

- 4 In **recruitment initiatives**, emphasise passion for the language; love of cultural diversity; flexibility of work; influence/encouragement of others; and desire to make a difference.
- 5 **Equal access**: Monitor conditions in regional areas to bring them more into line with those in metropolitan areas, especially in relation to access to mentoring and training *in* country areas (reducing travel burden). Access could also be increased through Video Relay Interpreting.

"No permanency in work, wages, isolated work conditions, lack of OHS adherence by those who book us, always have to be assertive to claim right to breaks, not much support or interaction from booking firms, very lonely profession."

"I am paid the same as other people in my local area who do not have qualification or as much experience as me. My income is equivalent in my local area to that of someone who stacks shelves at the local supermarket or works at the local petrol station (someone who doesn't necessarily have any skills or qualifications). Unskilled workers (requiring no study at all) in my local area are paid up to 50% higher than I am and I have studied formally already for five years and am undergoing further study (another three years). Upon completion of this course I will not receive a pay increase in my current job. I commenced on the 'top' pay scale available for my position (despite being low) so there is no further increment to move up for years of service etc. I am not recognised and paid for the qualifications I do have. I am not called an interpreter and therefore paid as one. I am not paid extra for the mentoring, seniority or the specialisation I do. I am not paid more when I have up-skilled."

### 5.2.2 INCREASING REMUNERATION TO INCREASE AVERAGE HOURS WORKED

Relatively low remuneration was a fundamental issue arising in the survey, which was borne out when comparing the remuneration of Auslan interpreters to average earnings (let alone earnings of other trained professionals).

The discussion in the previous section noted the effect on recruitment and retention, while this section looks at what could happen if hourly remuneration were raised, resulting in an increase in average hours supplied, particularly by the large body of casual and part-time interpreters, who comprise over three quarters of the workforce.

An estimate of wage elasticity of supply is derived from Table 3-2, based on the more conservative elasticities at the lower end of the income spectrum. In this range, a 3.9% increase in hourly rate is associated with a 5.1% increase in average hours supplied, which suggest an elasticity of around 1.3 (930-885)/885/[(\$27.12-\$26.10)/\$26.10]. In practice, this is equivalent to raising a minimum wage payable to interpreters by 3.9% in real terms.

Using this estimate of wage elasticity of supply, a 10% increase in average hours may be achieved through a 7.7% real increase in wages, or a 15% increase through an 11% real pay rise.

### 5.2.3 **MALDISTRIBUTION**

Workforce maldistribution for health and social services is a ubiquitous issue. The shortages in regional and remote areas are partly due to the factors discussed in Section 5.2.1 above. Given the relatively young age distribution of the Deaf community (in contrast to the severely hearing impaired total population, which includes many with later adult-onset hearing loss), the



jurisdictional maldistribution of Auslan usage reported in the Census is a little curious (recall Table 2-7). Moreover, the over-representation of Tasmanians in Auslan users might be expected to lead to greater shortage of interpreters in Tasmania but, in contrast, that state is most over-supplied. This is also unusual as the State is largely classified as regional/remote.

The actual distribution of Auslan interpreters in 2007 can be compared to the distribution on the basis of population share. Table 5-2 shows the results – with nearly 15 extra FTE in Tasmania and with shortages in QLD, WA and SA. These features drive the maldistribution in all the results, and might be addressed by **concentrating recruitment and retention initiatives initially on those three states**.

	,
FTE	Total
NSW	-0.6
VIC	4.7
QLD	-8.5
WA	-7.3
SA	-5.0
TAS	14.9
ACT	1.4
NT/Other	0.6

 TABLE 5-2: AUSLAN INTERPRETERS, BASE CASE FTE SHORTAGE RELATIVE TO POPULATION SHARE

 BY JURISDICTION, 2007 (FTE)

Source: Access Economics estimates.

### 5.2.4 A SCENARIO TO ENABLE SUPPLY TO MEET DEMAND

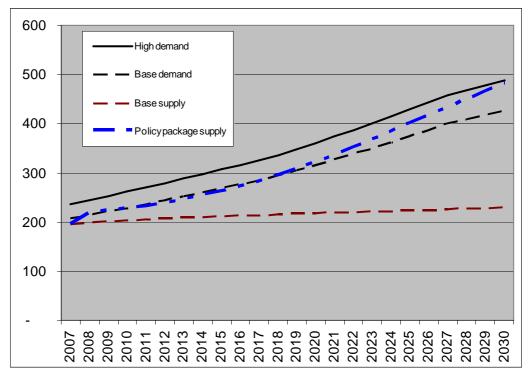
The final scenario has been devised to enable supply to meet base case demand through a policy package of four key strands:

- 1 measures to increase recruitment strongly in early years (targets of 10% per annum 2008-2012, 7.5% per annum 2013-2017, 5% per annum 2018-2022 and 1% per annum thereafter)
- 2 measures to enhance retention in later years (reducing current exit rates by 10% in each age group between the ages of 40 and 60 years);
- 3 increase in average real remuneration of 7.7% to increase average hours worked by 10% over the period to 2030; and
- 4 recruitment and retention measures focused on Queensland, WA and SA to correct the maldistribution across jurisdictions so as to align with population shares by 2030.

The policy package would result in supply increasing beyond base case demand in 2015 and potentially beyond the high demand scenario in 2027. However, it is recommended that the Auslan interpreter workforce is re-evaluated in 2013 to assess the effectiveness of policies and realised demand changes. Details are depicted in Figure 5-2 and Table 5-3.



FIGURE 5-2: PACKAGE OF POLICIES TO ADDRESS SUPPLY CONSTRAINTS, 2007-2030 (FTE)



# TABLE 5-3: AUSLAN INTERPRETER PROJECTIONS, POLICY PACKAGE SCENARIO, KEY OUTPUTS,2007-2030

		007-2030		
Key outputs	2007	2030	% change	absolute change
Headcount	361	802	122.3%	441
per 100,000 people	1.7	2.9	67.2%	1.15
Hours	269,506	661,631	145.5%	392,126
FTE	196.1	481.4	145.5%	285.3
per 100,000 people	0.93	1.72	84.6%	0.79
Entries	14.8	47.2	219.5%	32.5
Exits	8.7	20.3	132.4%	11.6
Mean age	40.1	38.6	-3.5%	-1.4
FTE				
NSW	63.6	146.9	130.8%	83.2
VIC	53.2	116.1	118.0%	62.8
QLD	30.5	110.0	260.4%	79.5
WA	12.3	54.1	338.6%	41.8
SA	9.7	32.4	232.3%	22.6
TAS	19.5	9.5	-51.4%	-10.0
ACT	4.5	7.5	65.6%	3.0
NT/Other	2.6	5.0	94.0%	2.4

Source: Access Economics estimates.

# 5.3 SURVEY COMMENTS ABOUT WORKFORCE ISSUES

This section provides a sample of comments about workforce problems/dissatisfaction from the 122 survey respondents, in support of the summary in the previous two sections. The



authors have conducted a number of workforce analyses and have never before encountered such consistency in the nature of responses and repeated reinforcement of the key messages regarding serious workforce problems. Almost all respondents felt strongly enough to fill the 'free-fields' with comments – in many cases detailed comments, and this is unusual in itself. For this reason, it was decided to include this sample of responses in the report, as they compellingly convey the extent of the problems.

- 1 I would be more satisfied if working conditions were better and I was recognised as a professional.
- 2 I am looking for other work to keep financial.
- 3 I have got RSI in both arms and I am a sign language interpreter.
- 4 I think that I will leave the industry because there is no career path or defined structures to work through in Australia so that you can climb a 'professional ladder' as it were. The lack of multi-tier employer pay scales that recognise more than NAATI accreditation is a major issue.
- 5 OOS injury limits my working hours at present.
- 6 No career path.
- 7 Was working as an educational interpreter however the pay (SSO2) was shocking so had to find other work.
- 8 More of a job than a career not really a steady source of income.
- 9 There is a lack of support for interpreters working in regional areas lack of mentoring for non-accredited interpreters.
- 10 I have got OOI (occupational overuse injury) in both arms.
- 11 Have previously contemplated leaving the profession quite seriously due to uncertainty of being able to sustain an income and my health.
- 12 Working conditions leading to Occupational Overuse Syndrome.
- 13 Bored with the job poor pay and working conditions.
- 14 Injury to arms, no ongoing work with holidays.
- 15 I have always worried about the inconsistent income that comes from interpreting, especially months where I do more private freelance work and being made to wait three months to be paid by government departments.
- 16 The pay isn't high enough for the type of work.
- 17 Lack of support, lack of hours, not enough pay to support any sort of mortgage.
- 18 Occupational overuse. Stress.
- 19 The work is not always regular, so you never know what your 'weekly wage' will be; the distances which are needing to be travelled for some jobs; overwork for the more higher skilled and 'in demand' interpreters.



- 20 Poor pay and work conditions. Over-worked RSI/OOS issues. Irregularity of work (for some).
- 21 Burnout, OOI, lack of support, working conditions, income.
- 22 Lack of permanent roles in organisations, lack of multi-tier pay scales recognising NAATI accreditation as well as education qualifications, areas of specialisation and years of service, highly casualised workforce that is seasonal, lack of career structure and future opportunities.
- 23 High demand and pressure, poor remuneration and recognition.
- 24 Assignments too challenging, physical health (overuse syndrome), not enough consistent work.
- 25 Can be a very stressful field to work in.
- 26 Work Pressures. Interpreters often have to wear many hats and sometimes it can get too much.
- 27 Lack of regular work/reliable income; Occupational Over use syndrome from interpreting; Stress from working with people ignorant of interpreters and the interpreting process.
- 28 Lack of support, lack of job security, injury.
- 29 Injury, lack of advancement potential in the career path, lack of monetary reward.
- 30 We could be out in the community all day but only have 2 jobs. These two jobs could be at both ends of the metropolitan area. Therefore not earning enough money to pay the bills.
- 31 Irregularity of employment.
- 32 Education is a large employer and all interpreters end up vying for same jobs during holidays.
- 33 1.renumeration 2.lack of work over summer time sometimes you need to have two jobs to survive 3.lack of professional solidarity 4. lack of the code of ethics being enforced
- 34 Low renumeration, pressure, isolation.
- 35 Dissatisfaction with the work, OHS issues.
- 36 Lack of progressive opportunities, advisory bodies are not user-friendly, RSI, most Auslan Interpreters are women, many of them have families or are starting families, child care is expensive.
- 37 Injury. Lack of confidence in self. Being overwhelmed by the demands of the job especially in education. The jump from level of training to the level required in the field is huge. Paraprofessionals rarely work in paraprofessional settings if they want to eat and pay rent. Uncertainty about income. Lack of understanding in the community about interpreting (ie, lack of job status). Vicarious trauma. Income is low compared to jobs in other industries. Feelings of isolation. Not enough support for new interpreters.
- 38 RSI and burn out rate is high.



- 39 Lack of stability. Once at an experienced level qualification of professional level there is no real career path apart from specialising. ASLIA and interpreter training mainly focuses specific training for newer interpreters. Often this is not suitable for more experienced interpreters who are left to their own devices to seek out further training.
- 40 Lack of consistency in the type of work available
- 41 Poor working conditions leading to overuse no longer physically able to carry out the job. I have retired from more than one interpreting panel because they did not respect my availability and continually requested me to work at times and places not suitable.
- 42 Not being valued and respected as a professional. Not recognized via salary. Lack of education about the importance of having interpreters in schools and equal opportunity for deaf people. Not consistent work. Regional areas, lack of support and opportunity to improve skills etc.
- 43 Working conditions leading to Occupational Overuse Syndrome
- 44 Seasonal nature of the job, lack of professional rapport/contact with other interpreters,
- 45 Can't make a living out of it.
- 46 Not enough stability in the job for breadwinners.
- 47 Fluctuating work, inadequate pay, exhaustion, occupational overuse syndrome, better permanent position.
- 48 No career structure, no stability, inadequate remuneration.
- 49 Poor working conditions leading to overuse. If you work fulltime in the field it would be difficult to remain injury-free. For some people the irregularity of the work is too risky.
- 50 Not having reliable work or on regular basis. Wanting a reliable income for mortgage or financial commitments. No contingency for sickness or provision for holidays etc. No work over holiday season (10-12 weeks or more). Feeling like you are at the end of the work chain relying on the whim of agencies as to how much work is accessible. OHS-injury (arm, neck, shoulder etc) due to intensity of work.
- 51 Lack of work, unreliable jobs, little to no work in holiday times, exhaustion and stress.
- 52 Irregularity of work, rate of pay, travel, negative experiences.
- 53 Lack of regular income, isolation and loneliness, lack of accountability, lack of support from service providers or lack of knowledge in how to obtain support, lack of compulsory debriefing and lack of follow up on skill development especially in the medical field ie, hospital interpreter services; once hired that's it you are on your own.
- 54 Too much stress. Not enough consistency of work. Not enough pay. Not enough recognition or respect of the industry.
- 55 Very few permanent/fulltime positions
- 56 Work not reliable enough to earn a consistent living.



- 57 You cannot work full time at being an interpreter and unless you also work for an agency or have other paid income, it's very difficult. I also believe there are too many "hoops" people are expected to jump through and I think it's putting people off. I understand and am committed to PD, but not in a "punishment" set up. More needs to be done to encourage unaccredited people and also those who do no PD to progress however, those who are doing the right thing should be encouraged not forced to jump through hoops. We already don't have enough interpreters in our field!! I also think that people over work themselves and therefore need time out from the profession and its demands I hope something can be done to stop this from happening in the future. Also, I believe it can be a very "political" field sometimes and you need time out from that too.
- 58 Casual employment, lack of contracts being over a semester, the instability of work and cancellation within 24 hours.
- 59 Insecurity, inconstant work load.
- 60 Burn out and demands of minority communities.
- 61 Lack of consistent hours, especially outside of school terms.
- 62 Limited career paths, poor pay, difficult to get loan mortgages on causal work.
- 63 Fear of failing to provide service. Remuneration on a regular basis Finding that working with people did not meet expectations.
- 64 Males income is too low to sustain a family. Females 'burn out' lack of debriefing support. Generally lack of support entering the profession. Working conditions, pay, politics.
- 65 Lack of consistency for employment opportunities.
- 66 Interpreting is not an easy job, from the language skills needed to the rate of remuneration. Some people are simply not suited to the profession of interpreting. A person needs a specific set of skills, skills that are often not included in the thinking about interpreting skills, such as vocabulary, extensive general and specific knowledge, interpretsonal and intrapersonal skills.
- 67 Injury, lack of support, bad experiences, lack of confidence, isolation.
- 68 I believe many sincere people enter the interpreting profession, but find they cannot earn enough money to make a living when they start out as a paraprofessional. They then find employment in a different area or profession. It seems you can get more work once you get level 3 professional status.
- 69 Remuneration, lack or recognition in the field, difficulty in keeping steady and ongoing work, family reasons.
- 70 Lack of permanent work, security etc.
- 71 Burn out from over work and lack of support from employers and sometimes clients.
- 72 Injury, compassion fatigue, poor career paths, poor employment conditions, lack of regular income, lack of job stability.
- 73 Not enough pay, very seasonal work, no career path, no respect from other professionals.



- 74 Poor support and lack of Deaf community involvement in the provision of the service. Very disjointed and disenchanted Deaf community. Power struggles between staff who run the interpreter service. Poorly funded and run interpreter service. Unhealthy situation for both interpreters and Deaf clients. Needs a full review and new structure, proper Government support and new supportive staff.
- 75 Not enough support and working too much and getting burnt out.
- 76 Burn out. All the good interpreters end up as interpreter trainers or in community service/management positions, or research. So I guess they are still 'in the field' but less so as practicing terps.
- 77 Low pay.
- 78 Burnout, dissatisfaction with pay levels and conditions.
- 1 think there are a whole host of reasons, the main one being that it can be seasonal. I think when there is regular work with Uni & TAFE that interpreters feel safe however the holidays are hard times. I think that some interpreters pigeon-hole themselves into educational work so people who are freelancing more are 'safer' during the holiday periods. I personally stopped doing any one assignment regularly (other than private work) so as not to put all my eggs in one basket. I looked at how to run as a business and put a lot of hard work into generating clientele to ensure I am busy. This has taken over 18 months. I don't know if everyone has the drive or commitment to put in the hard yards when you can work regularly for an educational institute and know what income you have coming in during the semesters. I think that people's motivations for becoming an interpreter also impact on the longevity of their life as an interpreter. I know people who have started working unaccredited at places like TAFE because they can earn \$30+ per hour without any qualifications. When they don't have any work the following year because accredited interpreters are used they fall away.
- 80 Lack of career path, no guarantee of income/work, profession not afforded the status it deserves, lack of support from peers or employers, difficulty in becoming "known", remuneration does not match complexity of work, extent of experience, or skill level.
- 81 I believe interpreters are under paid for the work we do and the amount of study that is required to achieve the qualifications we need to perform this job.
- 82 Time taken to travel and the associated costs as well as preparation to execute our work reduces our "hourly" rate considerably. With ongoing PD our expertise especially in specialised areas is rarely recognised by anyone including the community and other professionals with whom we work.
- 83 [Pay] is not sufficient when having to spend 1/3 of your day driving to work full time, and to finance down periods such as Christmas.
- 84 Different agencies offer different pay rates. I only work for the agencies that pay adequately.
- 85 It is very low as a profession compared to other industries of professionals hence why I need to continue to work in my other field.
- 86 [Pay] should be uniform across agencies.
- 87 [Pay is inadequate] as it is only for 42 weeks of the year.



- 88 For such a specialised field the training and subsequent recognition and pay is inadequate.
- 89 Some agency's pay rates are adequate. Other agencies will pay \$10-\$12 per hour less with no recognition of travel.
- 90 I can earn more money in an alternative part time position.
- 91 There is a massive inconsistency in rates of pay between agencies and employers, some pay an adequate amount, others do not. This is a massive factor in my decisions about who I work for and which jobs I accept. Travel is often not adequately remunerated.
- 92 As an in-house interpreter my pay is the same as those on reception regardless of my skills and training in interpreting.
- 93 Conditions are appalling.
- 94 Freelance is fine but award wages for contracted/in-house interpreting are extremely low.
- 95 Occasionally a lot of prep time is involved for a job and we don't get any recognition for it from either the Deaf or the hearing... that would be nice to get paid for... or at least recognised.
- 96 Penalty rates should apply for after hours/weekend. Rates should be higher for conference work.
- 97 There are different rates paid by different agencies. Centrelink has never increased its rate in the 13 years I have been working with them and the pay is very low when compared to other agencies.
- 98 If we undergo training to become qualified, and then regular professional development, our pay rate should reflect this.
- 99 It's not bad at first glance, but it doesn't take into account the fact that sign language interpreters cannot physically work more than about 5 hours a day (or whatever the ASLIA OHS policy stipulates). It's also almost always a casual rate, so no sick leave, annual leave, etc.
- 100 It is a highly skilled profession and often the jobs are for 2 hours and therefore a large chunk is taken from the day for \$70 before tax and the travel and time between jobs makes this amount definitely not an income you can fully survive on.
- 101 Given the conditions eg casual work, insecure conditions at times, a 24 hour notice period (which really is not very much at all) and constant 'on' nature of the work I remember being taught 'full time' interpreting work was 20hrs/week for this reason.
- 102 The amount of travel, tolls, parking and time involved getting to and from busy city locations eat into the hourly rate and is mostly consumed by car expenses, my accountant keeps asking me why I bother with this profession as it isn't worth it financially.



# **APPENDIX – KALEIDOSCOPE SURVEY**

### 1. Kaleidoscope of Practice - A National Survey of Translators and Interpreter...

In this survey you are asked about different aspects of your job as a Translator or Interpreter in order to develop a detailed profile of the profession and practitioners' professional practice. This will help to inform future research, training and policy decisions. Therefore, it is important that you answer each question honestly.

The survey is divided into sections and instructions on how to answer the questions are given at the start of each section (or at the beginning of the survey). Please answer each question as it applies to you and your situation.

This survey is anonymous. We are not asking for your name and all data is CONFIDENTIAL. No single person will be identified. Summary information only will be reported.

Note: Please do not fill out this survey more than once either electronically or in hardcopy.

For inquiries about this survey, or further information and feedback on the results, please contact Helen Slatyer - Ph: 02 9850 8651. Email: helen.slatyer@ling.mq.edu.au

This survey has been jointly founded by AUSIT, ASLIA, AFDS and Macquarie University

EXPLANATION AND EXAMPLES OF HOW TO ANSWER THE QUESTIONS

Multiple choice items are indicated by radio buttons, please click on the response that is appropriate for you.

### EXAMPLE:

You may find a pull-down menu where there is a selection of responses.

### EXAMPLE :

Other times, you are asked to provide answers in your own words. This is indicated by a space or dash, or the words please specify.

### EXAMPLE:

Circle answers - only one possible answer Square answers - multiple answers



2. Nature of work
1. Are you a Translator Interpreter if interpreting ONLY, please answer Qs11-20, if translating ONLY, answer Qs 2-10
2. If you are translating, do you do General Work Non specialised work, i.e. a bit of everything Mostly specialised work Other, please specify
a v
3. If you do specialised work, what is the area of your specialisation?  Business Conference Education Government bodies (e.g. Centrelink, Immigration) Legal Literary Media (subtitling, etc.) Medical/Health Technical other, please specify
<ul> <li>4. At what age did you start translating?</li> <li>5. What year did you start translating ?</li> </ul>
6. In your translating activities, do you work - In House



) Full time in house tra	
5	
<u></u>	al in-house translation
Average hours/week	
50 A	
To your tranels	ating activities, do you work as a
이번 전에서 이번 것이 없는 것이 가지 않는 것이 없다.	영상 김 집안 에 관계에 해외했다. 영화 영화 이 것을 알려야 하는 것은 것은 것은 것은 것을 하는 것이다.
01-	ual work contracted through :
Service provider	
Agency	
Labour-hire firm	
Total hours over 12 m	onths
	eelance translation work by direct arrangement with own
lients : total hou	urs over 12 months
4	
). Do you have a	dequate translation work?
More than I can accep	
J	7
) Just the right amount	
Just the right amount	
Just the right amount Not enough work	
$\leq$	
Not enough work	
Not enough work	d are you with your work as a translator?
Not enough work	
Not enough work Not enough work Not enough work UO. HOW satisfied Satisfied	d are you with your work as a translator?
Not enough work Not enough work Not enough work UO. How satisfied Very satisfied Satisfied Neither satisfied nor o	d are you with your work as a translator?
Not enough work Not enough work Not enough work UO. HOW satisfied Satisfied	d are you with your work as a translator?
Not enough work	d are you with your work as a translator?
Not enough work Not enough work Not enough work Very satisfied Satisfied Neither satisfied nor o Dissatisfied	d are you with your work as a translator?
Not enough work Not enough work Not enough work Very satisfied Satisfied Neither satisfied nor o Dissatisfied Very dissatisfied	d are you with your work as a translator?
Not enough work Not enough work Not enough work Very satisfied Satisfied Neither satisfied nor o Dissatisfied Very dissatisfied	d are you with your work as a translator?
Not enough work Not enough work Not enough work Very satisfied Satisfied Neither satisfied nor o Dissatisfied Very dissatisfied	d are you with your work as a translator?
Not enough work Not enough work Not enough work Not enough work Very satisfied Neither satisfied nor o Dissatisfied Very dissatisfied If dissatisfied, give the	d are you with your work as a translator? dissatisfied e main reasons
Not enough work Satisfied Satisfied Neither satisfied Neither satisfied Neither satisfied Neither satisfied Satisfied If dissatisfied, give the Satisfied If dissatisfied, give the Satisfied If dissatisfied, give the Satisfied are integrated	d are you with your work as a translator? dissatisfied e main reasons terpreting, do you do
Not enough work Not enough work Not enough work Very satisfied Satisfied Neither satisfied nor o Dissatisfied Very dissatisfied If dissatisfied, give the	d are you with your work as a translator? dissatisfied e main reasons terpreting, do you do
Not enough work Satisfied Satisfied Neither satisfied Neither satisfied Neither satisfied Neither satisfied Satisfied If dissatisfied, give the Satisfied If dissatisfied, give the Satisfied If dissatisfied, give the Satisfied are integrated	d are you with your work as a translator?
Not enough work	d are you with your work as a translator?



12. If you do specialised work, what is the area of your specialisation?
Business
Diplomatic
Education
Government bodies (e.g. Centrelink, Immigration) Legal
Medical/Health
Police
Technical
Other, please specify
n.
13. If you do conference interpreting, do you specialise in one direction only?
Yes. 37 Yes, why ?
No. If No, why not ?
14. At what age did you start interpreting?
15. What year did you start interpreting ?
16. In your interpreting activities, do you work In-House
Full-time in house interpreting
Part-time and/or casual in house interpreting
Average hours/eeek
17. In your interpreting activities, do you work as a Contractor -
Casual interpreting work contracted through
Service Provider



Agency
Labour-bire firm
Total hours over 12 months
18. In your interpreting activities, do you work Freelance -
Freelance interpreting work by direct arrangement with own clients : total hours
over 12 months
1
19. Do you have adequate interpreting work?
More than I can except
Just the right amount
🗍 Nat erough work
20. How satisfied are you with your work as interpreter?
Very Settefield
attified
Meither satisfied nor dispatisfied
Disastiafied
Satisfied Meither satisfied nor dissatisfied Dissatisfied Very dissatisfied
If distablefed, what would you like to be different?
21 C
21. Your primary work activity is
Translating only
interpreting only
Lioth, translating and interpreting
Other, plage specify
ar i
22. How many hours per week do you work as a
Translator
Intergreter
Ditter job, please specify



23. How many weeks a year do yo	u work as a		
Translator			
Interpreter			
Other job, please specify			
24. Is your work seasonal in			
	Tes	No	8,04
Translating		8	8
Interpreting	0	0	0
25. Would like to have more work i			
25. Hourd like to have more work i			
Translating	Tes	No	N/A
Interpreting	H	H	H
•	Interpreting/translating		
	<b>1</b>		
26. Do you do any voluntary (pro-l	ono) translatio	n or interpretin	a work ?
26. Do you do any voluntary (pro-t	oono) translatio	n or interpretin	g work ?
Q 14	oono) translatio	n or interpretin	g work ?
⊖ ¥+# №	oono) translatio	n or interpretin	g work ?
Q 14	ono) translatio	n or interpretin	g work ?
8 Y44 No	ono) translatio	n or interpretin	g work ?
8 Y44 No	ono) translatio	n or interpretin	g work ?
8 Y44 No	ono) translatio	n or interpretin	g work ?
⊖ ¥+# №	ono) translatio	n or interpretin	g work ?
⊖ ¥+# №	ono) translatio	n or interpretin	g work ?
⊖ ¥+# №	ono) translatio	n or interpretin	g work ?
⊖ ¥+# №	ono) translatio	n or interpretin	g work ?
⊖ ¥+# №	ono) translatio	n or interpretin	g work ?
⊖ ¥+# №	ono) translatio	n or interpretin	g work ?
⊖ ¥+# №	ono) translatio	n or interpretin	g work ?
⊖ ¥+# №	ono) translatio	n or interpretin	g work ?
⊖ ¥+# №	ono) translatio	n or interpretin	g work ?
⊖ ¥+# №	ono) translatio	n or interpretin	g work ?
⊖ ¥+# №	ono) translatio	n or interpretin	g work ?



3. Linguistic Profile
27. Which is your
First language (x)
Second language (x)
Dominant language (r)
28. In which language did you receive your
Primary education
Secondary education
Tertiary education
29. Which language(s) do you currently use at home?
30. What are your language qualifications?
so, macare your language quanteauons.
31. What is (are) your working language(s) ?
32. Are you a bilingual worker (Centrelink officer, tour guide) ?
⊖ No



4. Translation	& Interpreting (T&I) related qualifications
Which of the following q he respective fields.	ualifications do you hold? Please click those that apply and complete responses in
33. Accreditation	
🔿 No SAATI Accreditation	
34. NAATI - Seni	or Advanced Translator LOTE<>English
Year qualified	
Language direction	
35. NAATI - Adva	nced Translator LOTE <> English
Year qualified	
Language direction	
36. NAATI - Tran	slator LOTE <> English
Tear Qualities	
Language direction	
37. NAATI - Para	professional Translator (Languages)
Year qualified	
Language direction	
38. NAATI - Seni	or Conference Interpreter (Languages)
Year qualified	
Language direction	
39. NAATI - Conf	erence Interpreter (Languages)
Year qualities	
Language direction	
40, NAATI - Inte	rpreter (Languages)
Tear qualified	



Language direction			
41. NAATI - Paraprofe	ssional Interpreter (L	anguages)	
Tear qualified			
Language direction			
42. NAATI - Recognise	d Translator/interpre	ter (Languages)	
Tear qualified			
Language direction			
43. NAATI Language A	ide / LAPA / CLAS (la	nguages)	
Tear qualified			
Language direction	-		
44. Overseas accredita	tion, please specifiy		
Type of accreditation			
Keer qualified		1	
Language direction			
45. If you obtained NA	ATI accreditation, ple	ase state your reasons	
1. Entry to profession	N. S. S.		
2. Receptition of professional	ela tua		
Interligitation     A. Other, plants specify			
	s.		
	1		
46. Translator and Inte	erpreter related educa	stion	
🔿 a) University qualifications			
47. PhD			
Title		i i	
tratitution		1	
fear completed			



48. M.A.	
Field of study	
Institution	
Year completed	
49. B.A.	
Major in	
Institution	
Year completed	
	_
50. Advanced di	ploma
Institution	
Year completed	
51. Diploma	
Institution	
Year completed	
52. Other, pleas	e specify
Qualification	
Institution	
Year completed	
Qualification	
Institution	
Year completed	
E2 b) TAFE out	
53. D) TAFE qua	lifications, please specify
Qualification	
Institution	
Year completed	
Qualification	



Institution		
Year completed		
54. c) VET/ACE quali	fications, please specifiy	
Qualifications		
Institution		]
Year completed		
55. d) Private institut	ion qualification, please spe	ecify
Qualifications		
Institution		]
Year completed		
56. Other, please spe	city	
Qualifications		
Institution		]
Year completed		



i. T & I career path	2
57. Your translator and/or interpreter	work
In your career at the moment	
was your career but isn't at the moment	
🔵 way pecane your career	
🔵 may never become your cereer	
Please explain	-
58. If you are working as a translator,	
비행 것 것 같아? 집 것 같아? 것 같아? 그 그의 것 가 봐요?	now dia you enter the protession ?
Through another career gath	
Sherive seer of LOTE	
Through a course Other, please specify	
C) const busine shering	
59. If you are working as an interprete	r, how did you enter the profession ?
<ul> <li>Through adother career path</li> </ul>	
Retive peer of LOTE	
Through a course	
🔿 Olber, please specify	
	A
60. If you are working in the T & I field	
	, what attracted you initially to work as a
60. If you are working in the T & I field, Translator, please explain Interpretes, please explain	
Translator, plesse esplain	
Translator, please explain Interpreter, please explain	, what attracted you initially to work as a
Translator, please applyin Interpreter, please applyin 61. Are you considering leaving the T &	, what attracted you initially to work as a
Translator, please explain Interpreter, please explain 61. Are you considering leaving the T &	, what attracted you initially to work as a
Translator, please explain Interpreter, please explain 61. Are you considering leaving the T & Tex 1 Tex	, what attracted you initially to work as a
Translator, please explain Interpretec, please explain 61. Are you considering leaving the T & Tex	, what attracted you initially to work as a I field in the next 12 months?
Translator, please copiain Interpretes, please copiain 61. Are you considering leaving the T & Tes 80 B yea, please provide your reasons / if no, what keeps yo	, what attracted you initially to work as a I field in the next 12 months?



62. If you currently don't work as a translator or an interpreter, please state your reasons
w.
63. What do you think are the general reasons for people leaving the field?
<u></u>
In your view, what is the extent of the demand or need for translation/interpreting in your most frequently used working $language(z)$ (up to 4) ?
64. Language 1.
Language
Noderate
Severa
65. Language 2.
Language
Low
Moderate
Severa
66. Language 3.
Language
Law
Moderate
Savara



67. Language 4.
Language
Low
Noderate
Savera
68. In Australia is there the possibility for progression in the profession for
translators ?
() Yes
Õ No
O Don't know
Please elaborate on your answer
A.
69. In Australia is there the possibility for progression in the profession for
interpeters ?
Q Yee
○ Yest ○ No
Q Yee
Ver No Don't know
Yes No Don't know Please elaborate on your answer
Yes No Don't know Please elaborate on your answer
Ves No Don't know Please elaborate on your anower



6. Demographic Profile
This section is about your personal background, so that a better understanding can be gained of how people's views differ with respect to the aspects of professional practice asked in the survey.
70. Gender:
O ***
O Fecale
71. Age
72. Your highest level of education completed
C School Certificate
O Higher School Certificate
Higher School Cectificate     TAFE Cectificate or equivalent     University Degree     Other, please specify
Other, please specify
73. In which postcode do you live?
Australian Hew South Northern Queensland Tanavania Victorie Western Capital Wales Territory Queensland Tanavania Victorie Australia Territory
74. Postcodes
74. Postcodes
Postcodes
75. What is your country of birth ?
76. Number of years you have lived in Australia



7. Section - Incom	e
is information is really value	able in addressing issues of remuneration in the industry. PLEASE REMEMBER. rMOUS and all information will be treated in strictest confidence.
77. What is your esti	mate of your annual income from Translation services in the
last 12 months?	
) 40 - 414,998	
115,000 - 119,999	
1 #20,000 · #24,999	
\$25,000 - \$29,999	
115,000 - 119,999 120,000 - 124,999 125,000 - 124,999 100,000 - 124,999 100,000 - 124,999 1015,000 - 109,999 140,000 - 144,999 145,000 - 149,999 155,000 - 1	
335,000 - \$39,999	
) \$40,000 · \$44,999	
) \$45,000 - \$49,999	
) \$50,000 +	
) 10% ) 20% ) 40% ) 50% ) 60% ) 70% ) 90% ) 109%	
79. What percentage	of your translation income comes from
four local area four State Other States, which ones Geenaad, which countries	

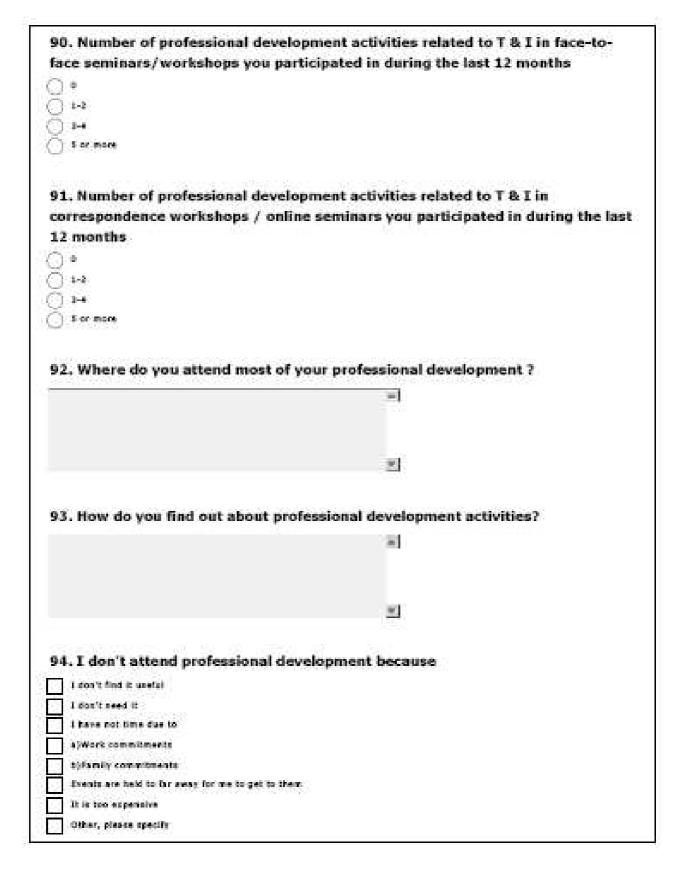


Present subsorth on your assesser          81. What is your estimate of your annual income from Interpreting services in the last 12 months?         10 - 11 - 12 months?         11 - 11 - 12 months?         12 - 11 - 12 months?         13 - 11 - 12 months?         14 - 11 - 12 months?         15 - 12 - 12 - 12 - 12 - 12 - 12 - 12 -	translation work you do?	
Press status on your assume         S1. What is your estimate of your annual income from Interpreting services in the last 12 months?         10 - 114.000         10.000 - 104.000	( ] Tak	
81. What is your estimate of your annual income from Interpreting services in the last 12 months?         10 - 11.599         10.000 - 10.599         10.000 - 10.599         10.000 - 10.599         10.000 - 10.599         10.000 - 10.599         10.000 - 10.599         1005         1005         1005         1005         1005         1005         1005         1005         1005         1005	( ) Ho	
St. What is your estimate of your annual income from Interpreting services in terms 12 months?   10-11C399   10-11C399   105.000-10C399   106.000-10C399   107.000-10C399   108.000-10C399   109.000-10C399   109.000-10C399 <td>Please elaborate on your answer</td> <td></td>	Please elaborate on your answer	
81. What is your estimate of your annual income from Interpreting services in the last 12 months?         10 - 010,000         10,000 - 010,000         100,000         100,000         100,000         100,000         100,000         100,000         100,000		m
81. What is your estimate of your annual income from Interpreting services in the last 12 months?         10 - 010,000         10,000 - 010,000         100,000         100,000         100,000         100,000         100,000         100,000         100,000		
the last 12 months? 10 - f14.998 135.000 - f35.999 135.000 - f35.999 195.000 - f35.999 195.000 - f34.999 195.000 - f44.999 195.000 - f44.99 195.000 - f44.999 195.000 - f44.999		
the last 12 months? 10 - f14.998 135.000 - f35.999 135.000 - f35.999 195.000 - f35.999 195.000 - f34.999 195.000 - f44.999 195.000 - f44.99 195.000 - f44.999 195.000 - f44.999		
the last 12 months? 10 - f14.998 135.000 - f35.999 135.000 - f35.999 195.000 - f35.999 195.000 - f34.999 195.000 - f44.999 195.000 - f44.99 195.000 - f44.999 195.000 - f44.999	R1. What is your estimate of your ann	ust income from Interpreting services in
0 - 114,999         111,000 - 119,999         125,000 - 134,999         125,000 - 134,999         125,000 - 134,999         125,000 - 144,999	the last 12 months?	
82. What percentage does the above represent in terms of your total income?         10%         20%         30%         60%         50%         60%         70%         10%         50%         60%         70%         10% </td <td>10 - 114,999</td> <td></td>	10 - 114,999	
82. What percentage does the above represent in terms of your total income?         10%         20%         30%         60%         50%         60%         70%         10%         50%         60%         70%         10% </td <td>115,000 - 119,999</td> <td></td>	115,000 - 119,999	
82. What percentage does the above represent in terms of your total income?         10%         20%         30%         60%         50%         60%         70%         50% </td <td>C 120,000 - 124,999</td> <td></td>	C 120,000 - 124,999	
82. What percentage does the above represent in terms of your total income?         10%         20%         30%         60%         50%         60%         70%         50% </td <td>a23,000 - 129,999</td> <td></td>	a23,000 - 129,999	
82. What percentage does the above represent in terms of your total income?         10% </td <td>0 x30,000 - x34,999</td> <td></td>	0 x30,000 - x34,999	
82. What percentage does the above represent in terms of your total income?         10%         20%         30%         60%         50%         60%         70%         50% </td <td>C 135,000 - 139,999</td> <td></td>	C 135,000 - 139,999	
82. What percentage does the above represent in terms of your total income?         10% </td <td>( \$40,000 - \$44,999</td> <td></td>	( \$40,000 - \$44,999	
82. What percentage does the above represent in terms of your total income?         10%         20%         30%         60%         50%         60%         70%         50% </td <td>G \$45,000 - \$49,999</td> <td></td>	G \$45,000 - \$49,999	
82. What percentage does the above represent in terms of your total income?         10%         20%         30%         60%         50%         60%         70%         50% </td <td>→ 150,000 +</td> <td></td>	→ 150,000 +	
so%   toer state   toer state   toer state		
so%   toer state   toer state   toer state	an and a second second second	
S3. What percentage of your interpreting income comes from tear local ares tear States Other States, which case 7		represent in terms of your total incomer
S3. What percentage of your interpreting income comes from tear local ares tear States Other States, which case 7	(_) 10%	
Some         Some <t< td=""><td>Q 10%</td><td></td></t<>	Q 10%	
83. What percentage of your interpreting income comes from thear facial area Thear Status Other Status, which asses 7	Q 30%	
Some         Some <t< td=""><td>Q 40%</td><td></td></t<>	Q 40%	
Some         Some         Some         S3. What percentage of your interpreting income comes from         Moor local ares         Year States         Other States, which coses 7	() 50%	
83. What percentage of your interpreting income comes from teer local ares Teer States Other States, which asse 7	(j) 40%	
83. What percentage of your interpreting income comes from toor local ares Toor States Other States, which ones 7	0 70%	
83. What percentage of your interpreting income comes from Tour local area Tour States Other States, which cose 7	· 물건하게	
83. What percentage of your interpreting income comes from toor local area Toor States Other States, which ones 7	슬날 사람이 다	
Tool local ares Your States Other States, which ones 7	() 100%	
Your States, which ones 7		
Your States, which ones 7	83. What percentage of your interpre	ting income comes from
Other States, which ones 7	Your local area	
	Your State	
Divertiesan, which countries 7	Other States, which ones 7	
	Dyspess, which countries 7	



<u> </u>	
Other (please specify)	
	83 83
	= 4.
8. Professional Development	
85. Are you currently engaged in	1 T&I related study ? Yes at
University, please specify	
TAPE, please specify	
VET/ACII Dector, piezes specify	1
Private institutions, please specify	
Other, please specify	
oo, sale you currentily engaged it.	i i a i related study f
30. Are you currently engaged in <sup>No</sup>	i i a i related study r
) <b>*</b>	
⊖ == 87. Are you currently engaged in	n non-T & I related study? Yes at
<ul> <li>MS</li> <li>87. Are you currently engaged in</li> <li>University, please specify</li> </ul>	
S7. Are you currently engaged in University, plane specify TAPE, plane specify	
<ul> <li>MS</li> <li>87. Are you currently engaged in</li> <li>University, please specify</li> </ul>	
No     No     S7. Are you currently engaged in University, please specify twitt,ACE rector, please specify Frivate institutions, please specify	
Mo 87. Are you currently engaged in University, please specify TAPE, please specify VET/ACE rector, please specify	
No     No     S7. Are you currently engaged in University, please specify twitt,ACE rector, please specify Frivate institutions, please specify	non-T & I related study? Yes at
No     No     S7. Are you currently engaged in     University, please specify     TARE, please specify     VET/ACE rector, please specify     Other, please specify	non-T & I related study? Yes at
Mo     S7. Are you currently engaged in     University, please specify     tard, please specify     vet/Act rector, please specify     univer, please specify     cuter, please specify     sec. Are you currently engaged in	non-T & I related study? Yes at
No     No     S7. Are you currently engaged in     University, please specify     twitt, please specify     WIT/ACE rector, please specify     invate institution, please specify     Cutter, please specify     S8. Are you currently engaged in     No	non-T & I related study? Yes at
No     No     S7. Are you currently engaged in     University, please specify     twitt, please specify     WIT/ACE rector, please specify     invate institution, please specify     Cutter, please specify     S8. Are you currently engaged in     No	non-T & I related study? Yes at non-T & I related study ?



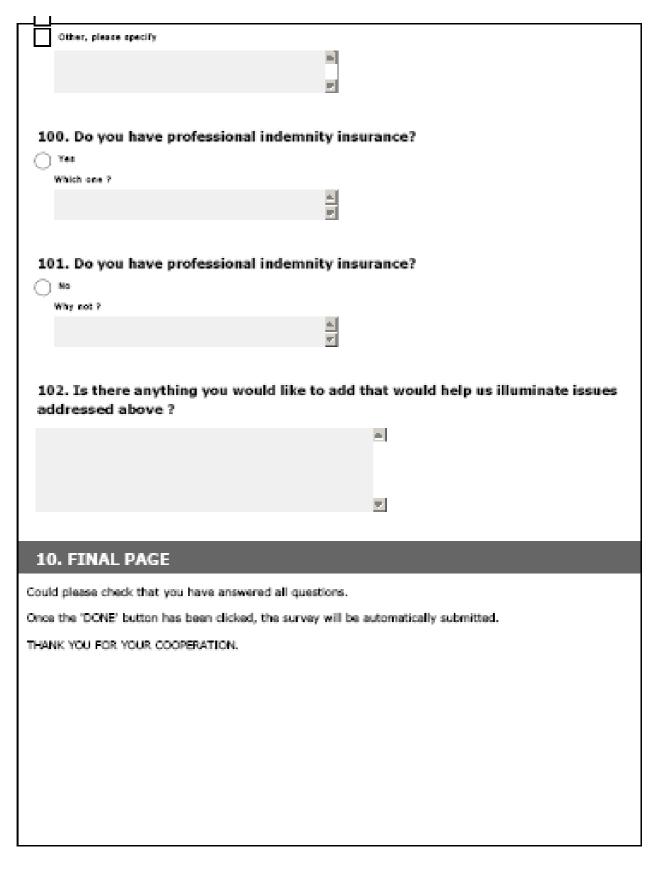




9. Membership of professional association
95. Are you a member of a T & I related association ?
96. Which associations are you a member of:
WAITI AIIC AITC AALITRA
PALT PALT Other TAL related antociation, pleane needly
97. Are you a member of any other non-T&I related professional bodies?
Which one(x), please specify
98. Are you a member of any other non-T&I related professional bodies?
99. If you are not a member of a professional association, please state your reasons?
Too espendire
No benefit No interest
Motavere .
This not my main professional activity
Ideological objections



Auslan interpreter services in Australia





# REFERENCES

- Access Economics (2006) Listen Hear! The Economic Impact and Cost of Hearing Loss in Australia, Report for VicDeaf and CRC HEAR, February.
- Australian Association of the Deaf (2007) Position paper on the supply and demand for Auslan interpreting: the Deaf perspective, AAD, Brisbane.
- Commonwealth of Australia (2007), *Intergenerational Report 2007*, Canprint Communications Pty Ltd, Canberra.
- Deaf Society of New South Wales (1998) Hands up NSW: a profile of the Deaf community of NSW, Deaf Society of New South Wales, Sydney.
- Johnston T (2004) 'Whither the Deaf Community? Population, Genetics and the Future of Australian sign language' *American Annals of the Deaf* 148(5):358-375.
- Hyde M, Power D (1991) *The use of Australian Sign Language by deaf people,* Centre for Deafness Studies and Research, Griffith University, Brisbane.
- Family and Community Services (2004) *Supply and Demand for Auslan Interpreters across Australia*, Report prepared by Orima Research for FaCS, available at http://facs.gov.au/disability/auslan\_report/easy\_english/EE\_AuslanOrimaReport.pdf last accessed 30 January 2007.
- Ozolins U, Bridge M (1999) Sign Language interpreting in Australia, Language Australia, Melbourne.

