Submission to
Parliament of Victoria

Submission to the Inquiry on Growing the Suburbs:
Infrastructure and Business Development in
Outer Suburban Melbourne

9 December 2011

Deafness Forum of Australia
218 Northbourne Avenue
Braddon, ACT, 2612
02 6262 7808
Contents

Introduction .................................................................................................................................. 3
  About the Deafness Forum ........................................................................................................ 3
  Our consultation process ........................................................................................................... 4
  Scope ....................................................................................................................................... 4
  ‘State of Play’ ............................................................................................................................. 4

Comments .................................................................................................................................... 6
  Buildings ................................................................................................................................... 6
  Lifts .......................................................................................................................................... 7
  Emergency egress ..................................................................................................................... 7
  Public Transport ....................................................................................................................... 8

Conclusion ................................................................................................................................... 10

Contact ....................................................................................................................................... 10
Introduction

The social inclusion agenda and the recent ratification of the UN Convention on the Rights of Persons with Disabilities\(^1\) makes this the right time to ensure that people who are Deaf, Deafblind, have a hearing impairment or a chronic disorder of the ear, are able to participate in the social, economic, cultural and political life of the community.

Greater accessibility of public buildings, transport and community/social/entertainment facilities will also benefit older Australians with mobility constraints – which is increasingly important as our population ages. Hearing loss (and vision loss) is also closely related to ageing – more than 75% of Australians over 70 years have a significant hearing loss – so more than just mobility issues need to be considered for our ageing population.

Deafness Forum believes the Victorian Government has an opportunity to build new suburbs with infrastructure that not only includes all Australians today but provides access for all into the future. The new Australian Standards (including AS1428.5) have now been incorporated into the Building Code of Australia, and provide an excellent basis for planning accessibility for new infrastructure development. In addition, getting it right first time is more cost-effective and timely than retrofitting.

About the Deafness Forum

Deafness Forum is the peak body for deafness in Australia. Established in early 1993 at the instigation of the Federal government, the Deafness Forum now represents all interests and viewpoints of the Deaf and hearing impaired communities of Australia (including those people who have a chronic disorder of the ear and those who are Deafblind).

Deafness Forum exists to improve the quality of life for Australians who are Deaf, Deafblind, have a hearing impairment or a chronic disorder of the ear by:

- advocating for government policy change and development
- making input into policy and legislation
- generating public awareness
- providing a forum for information sharing and
- creating better understanding between all areas of deafness.

---

Our consultation process

Deafness Forum has consulted with members in all states of Australia to gather feedback on this topic. Our responses represent a number of comments received and our own deductions based on our continuing engagement with members and referral of complaints and questions.

Scope

Our comments relate solely to issues affecting people who are Deaf, Deafblind, have a hearing impairment or a chronic disorder of the ear.

‘Deaf’ relates to those people who use Auslan (Australian sign language); while people with hearing impairment may have any degree of hearing loss, who generally use English as their first language and may speak.

‘State of Play’

Currently, one in six Australians has some form of hearing impairment, and this is projected to increase to one in four by 2050. The projected increase is largely associated with the ageing population. Hearing loss is closely associated with ageing so communication access is a vital consideration for premises which are used by older people.

The number of Australians with a hearing loss is increasing because of long-term exposure to excessive noise (often in the workplace); noise injury; accidents; the environment; and the ageing of the population. Family history and other factors can also lead to hearing loss (e.g. being male, having diabetes, or being a smoker). Hearing loss is often described as the ‘invisible disability’ – partly because the aids etc. tend not to be so obvious; and partly because those affected are often isolated through lack of access to communications.

Three in every four people aged over 70 years have a hearing loss. Accordingly, it is imperative that the needs of this large and growing sector of society are satisfactorily met.

In Australia, hearing loss is more prevalent than all national health priorities except musculoskeletal conditions. This means hearing loss is more common than cardiovascular disease, diabetes mellitus, asthma, cancer and mental health issues.

---

2 Access Economics: *Listen Hear!* The economic impact and cost of hearing loss in Australia, February 2006, pp.42
3 Access Economics, ibid, p5
“Access to communications = Access to life.”

People who are Deaf, Deafblind, have a hearing impairment or a chronic disorder of the ear have the same right to communication access as any citizen with hearing – yet in Australia such access is limited. This situation is exacerbated by a lack of understanding of the nature of hearing impairment and the need for hearing augmentation and communication access in so many areas related to daily living.

In order to improve the overall quality of life for people with hearing loss, we need to ensure equity of access to:
- education;
- the world of work;
- entertainment;
- a social life;
- transport;
- and, above all, to communications; because

Access to communications = Access to life.

People with hearing loss want to be included in education, in the workplace, in their local community.

Inability to access activities in the built environment can be an isolating factor for people who are Deaf, Deafblind, have a hearing impairment or a chronic disorder of the ear. Studies have shown hearing impairment to be associated with multiple adverse effects on people – including depression, anxiety, anger, social isolation, and reduced cognitive functioning⁴.

Research also indicates that hearing impairment is a risk factor for cognitive decline in older people and that it may exacerbate the symptoms of dementia⁵.

---

⁵ Peters, Polter & Scholer, 1988; Uhlmann, Larson, Thomas, Koepsell, & Duckert, 1989
Comments

The inquiry has been asked to:

a) identify existing public and private infrastructure provision, including schools, hospitals, commercial and shopping precincts, transport and roads, telecommunications, water and power;

b) assess the capacity of existing infrastructure to accommodate increased population growth

Deafness Forum will address these first two areas in the context of equitable access for all Victorians who have some form of hearing loss.

Buildings

Improved building access will give people with mobility, vision and hearing impairments greater opportunities to access employment and other services, helping them to better connect with family, friends and the local community.

This includes all new shops, offices, factories, hotels and motels, bed and breakfasts, cabins in caravan parks, hospitals, aged care facilities, halls, cinemas and theatres and other entertainment venues, transport facilities, schools, TAFEs, universities, sporting venues, swimming pools and public toilets.

Hearing aids and cochlear implants use the ‘T-switch’ with a Hearing Augmentation system (such as hearing loop, FM or Infra-Red system) to increase the effectiveness of the hearing aid, to allow the user to understand what is being said. Recent changes to the Building Code of Australia mean that public buildings must have 80%+ coverage by a Hearing Augmentation system. The International Deafness Symbol is required to identify the venue (art gallery, train carriage, counter, public transport, classroom or lecture theatre, church, entertainment centre, etc.) where a Hearing Augmentation system is installed.

Most regulations, including Building Codes and the Access to Premises Standard now require that access to public and commercial building will include technologies such as Audio Induction Loop, FM radio, or Infra-Red communications systems to between 80% and 95% of the public space (depending on type of system installed. Of these the Audio Induction Loop has greatest applicability as the users are not required to identify themselves.

Maintenance of Hearing Augmentation Systems is a critical issue. Currently, in buildings where systems are installed, there are often difficulties in accessing the systems because they
are not working. A regular maintenance process must be included along with the design and installation.

In addition, it is essential all classrooms are fitted with SoundField systems, for our children with mild and moderate hearing loss, and fluctuating loss.

All Hearing Augmentation systems and SoundField systems must comply with Australian Standard AS1428.5 - 2010.

The move to a digital world has also meant there have recently been significant steps forward in terms of critical communications tools. For those involved in education or the workplace, real-time captioning (often captioned remotely) of lectures, classroom discussions, meetings, and conferences opens up enormous possibilities for those with hearing loss. Roll-outs of captioning are occurring in every field of public entertainment (free-to-air and paid TV, DVDs, the CaptiView technology in cinemas, web-based content, etc). The goal is to have every TV program, and every movie, close captioned at every timeslot or session on every day. Hotels are still an issue (while all digital TVs offer captioning options, the major provider of in-room entertainment does not provide a ‘TXT’ or captioning button on the remotes!).

**Lifts**

Anything that has an audible alert/alarm must have a corresponding visual alarm, as well as tactile indicators, so that so that people who are Deaf, Deafblind, have a hearing impairment or a chronic disorder of the ear have access to understand the location, progress and action of the lift. This includes how to make or receive emergency information eg contacting operator in event of lift stoppage.

**Emergency egress**

Smoke alarms are intended to warn dwelling occupants of a fire so they are less likely to be killed or injured by the fire or its effects. Early warning is assumed to be beneficial, so quick detection and rapid occupant response is desired. It is likely that the greatest benefit occurs when the occupants are asleep.

The key issue for emergency egress from buildings for people with a sensory disability is that information should be available through more than one sense. Audible information needs to also be visible (and vice versa for people with vision impairment). This is a general design and service provision principle reflected for example in captioning of the audio content of television and DVDs for hearing impaired people and audible information at traffic lights to assist blind people to cross the road.

Australian Standard (AS1670.1- (the Fire alarm installation code) details the general requirements for audible occupant warning in all buildings and large or high rise buildings. AS1670.4 is the Emergency Warning System installation code.
There is an Australian standard covering visual warning devices but not the location or brightness of these devices.

Recent studies have shown that when sleep stage is assessed, strobe lights have poor waking effectiveness. A 520 Hz square wave sound was more effective than bed shakers and strobe lights for sleep situations for people with normal hearing and mild hearing impairment. While bed shakers are required for people with severe to profound hearing impairment/deafness.

A plan for a hotel which relies on staff coming to wake up a person who is Deaf, Deafblind, has a hearing impairment or a chronic disorder of the ear, is simply at odds with OH&S legislation, with standard practice in the event of a fire emergency, and flies in the face of emergency authorities instructions. It means that people who cannot hear a fire alarm are discriminated against on the basis of their disability.

The use of 520 Hz square wave alarms where people who are Deaf, Deafblind, have a hearing impairment or a chronic disorder of the ear are employed is recommended.

Public Transport

*Visual Communication.*

Replacement and/or supplementation of audible communication with communication by sight offers the greatest potential to satisfy the greatest number of people with hearing impairment, whilst also aiding the Deaf. An important factor of visual communication is the need for the majority of the community to cooperate with the great need and ability of most people who are Deaf or have a hearing impairment to lip-read. This cooperation requires some training for those with a public interface role, particularly in providing transport/counter services. It also requires a greater degree of general public awareness of the issue. These two factors would significantly improve the access to information for the traveller who is Deaf or has a hearing impairment.

The main technological option is clear and timely visual displays. These need to be at any point where announcements are provided to travellers by loud speakers or other verbal means.

This should include information and ticket counters.

Audio Induction Loops are an ideal solution when personal interaction is required such as at sales counters with background noise (street or rail stations). Visual Displays combined with Inductive Loops offer the best current solution. Visual displays can be interactive and offer a much more realistic opportunity to afford equal access than any other method. However far

---

6 Strobe Lights, Pillow Shakers and Bed Shakers as Smoke Alarm Signals IAN THOMAS and DOROTHY BRUCK Centre for Environmental Safety and Risk Engineering (CESARE) and School of Psychology Victoria University 2008
more visual displays are needed and in particular displays, which are concurrent in real time with audio announcements are essential to bring the hearing impaired or Deaf person the same timely information as the person with normal hearing enjoys.

Captioning of information/entertainment screens in public places fits into the equal access requirements for people who are Deaf, have a hearing impairment or a chronic disorder of the ear.

Ticketing booths, reception areas, buildings where public gatherings/meeting take place, and so on are all places where there might be screens displaying information for the public, information that would not be equally available to someone who is Deaf or has a hearing impairment or cannot use (or doesn’t have) a T-switch. Where captioning of this type is provided, it must comply with AS1428.5.

Arriving at a local or suburban Transport Access Point.

The communications available to inform all travellers in most minor nodes or transport access points are no worse for a deaf or HI person than a hearing person. Road intersections, bus stops, train station entry points and similar access points generally are inadequately signed. However the problem is exacerbated for people who are Deaf or hearing impaired due to their inability to effectively communicate with passers by or other travellers to obtain information at an unattended location. The situation at medium and larger access points is discussed in the next few paragraphs.

Purchasing a ticket, Seeking information.

All ticket and information counters should be equipped with Audio Induction Loops together with a sign to advise the people who are Deaf or hearing impaired that there is an Audio Induction Loop and where. It is also important that the training of ticket and information clerks includes an understanding of the need for clear speech including positive lip movement to assist lip reading clients.

Timetable and Station Schedule Information.

Existing static signs are appropriate for the general community and for people who are Deaf or hearing impaired, provided they are clear and require no inquiry to clarify their meaning. The updating of existing visual displays in a timely manner is very important. The present situation in which some train station information is updated verbally but not on the station and platform displays until after the event leaves people who are Deaf or hearing impaired without appropriate updates and can lead to their getting on the wrong destination vehicle. Electronic interlocks between the announcement and the static visual display would be an advantage.

On-Board Information and Announcements.

Next stop or station information, arrival times and other general information are communicated by verbal announcements on trains, buses and light rail. These general announcements include reasons for delays, security and safety information, appropriate stops
for events, hospitals, schools, cultural and many other venues. They should be supplemented with real time moving visual displays, which should be of sufficient content and dwell to ensure that the elderly and the intellectually impaired have time to read them and comprehend. Audio Induction Loop systems installed in part of the seating and connected to the PA system would also enhance access to information for people who are Deaf or hearing impaired.

The Victorian Government should be attempting to achieve best practice and to follow international examples of public passenger transport services and infrastructure.

- on buses in Europe and trains, all the carriages have LED signs that indicate which stop you are at, or caption the loudspeaker messages so you can read them.
- at train and bus stops they have electronic timetables that tell you how far away the trains/buses are, and they update constantly so you know if you will be late etc.

Conclusion

At a time when there is an opportunity to incorporate good and equitable access at the planning stages of a new suburban infrastructure Deafness Forum recommends that the issues of access to buildings and public transport are looked into thoroughly to ensure that at the very least, access for people who are Deaf, Deafblind, have a hearing impairment or a chronic disorder of the ear are vastly improved and that the suburbs of Victoria plan for today and the future where there is social inclusion for all.

“It should not require such an extraordinary effort to live an ordinary life.”


Contact

If you have any questions about the information contained in this submission, please contact

Kris Newton, CEO,
Deafness Forum of Australia
218 Northbourne Avenue
Braddon ACT 2612
Phone 02 6262 7808
www.deafnessforum.org.au