

---

# Building Dementia and Age-Friendly Neighbourhoods



## **Acknowledgements**

This paper has been developed by the Policy and Information Unit, Alzheimer's Australia NSW.

We gratefully acknowledge the contribution of members of the Alzheimer's Australia NSW Regional Consumer Committees and the people with dementia who provided us with valuable feedback about their opinions and experiences.

We also gratefully acknowledge Alzheimer's Australia NSW staff and volunteers who assisted in the collection and processing of data and the library staff who assisted in the retrieval of research literature.

© Alzheimer's Australia NSW 2011

The information in this publication is the copyright of Alzheimer's Australia NSW. Subject to the inclusion of acknowledgement of the source, any written material, visual images, tables and graphs in this publication can be reproduced in whole or part for personal or in house use, without formal permission. Reproduction for purposes other than those stated above requires written permission from Alzheimer's Australia NSW.

July 2011

Alzheimer's Australia NSW  
PO Box 6042  
North Ryde NSW 1670  
Telephone: (02) 9805 0100  
Facsimile: (02) 9805 1665  
Website [www.alzheimers.org.au](http://www.alzheimers.org.au)  
Dementia Helpline 1800 100 500

**ALZHEIMER'S AUSTRALIA NSW**

## Contents

<b>Executive summary</b>	4
<b>Recommendations</b>	5
<b>Alzheimer's Australia NSW Dementia-Friendly Outdoor Design Checklist</b>	6
<b>Purpose</b>	8
<b>Background</b>	8
The concepts of 'built environment' and 'neighbourhood'	10
The research and literature	11
<b>Alzheimer's Australia NSW consumer consultations</b>	12
Methodology	12
The findings - what consumers told us	12
Summary of the findings	20
<b>Discussion</b>	21
Maintaining independence and social inclusion	21
The impact of disability rights	22
Technology	22
<b>Policy and planning</b>	23
<b>Conclusion</b>	25
<b>Recommendations</b>	26
<b>Bibliography</b>	27

## Executive summary

With Australia's population ageing and the numbers of people living with dementia predicted to increase from 269,000 in 2011 to nearly one million by 2050 we need to plan now to future-proof our homes and communities so they can adapt and change with the needs of an ageing population and the needs of an increasing proportion of people in our communities living with dementia (*Access Economics 2010*).

The needs of people with dementia and other types of cognitive impairment have helped shape the design of residential facilities, but the issue of accessibility to public places and spaces for people with dementia and their carers has been almost completely neglected.

In a series of focus group consultations we asked members of the eight Alzheimer's Australia NSW regional consumer committees to describe how they experienced their surrounding neighbourhoods once they stepped outside the safety and familiarity of their front gate and made their way to the local shopping centre, park, doctor's surgery or club.

What we found was that along with the need for safety and accessibility and design features such as better lighting, more public toilets and seating, there was a significant view expressed by participants in the consultations around the role of the community in helping people with dementia navigate and engage with their outdoor environment.

This paper identifies features that can help create optimum dementia and age-friendly outdoor environments. Those features have been compiled into the *Alzheimer's Australia NSW Dementia-Friendly Outdoor Design Checklist*, which is intended to help guide planners and policy makers when developing Community Strategic Plans, Development Control Plans (DCPs) and other planning instruments.

The paper also examines the literature, discusses the issues and makes recommendations for policy change to help ensure people with dementia and their carers can remain living in and connected to their neighbourhoods for as long as possible.

***"There is broad consensus about the optimal design features of buildings for people with dementia, but the external environment has been neglected until recently...we should do all we can to help them remain independent by giving due thought and attention to them. We do it for people with visual and hearing impairment and for those with mobility problems. It's time we addressed the needs of people with cognitive impairment so they can participate as fully as possible in society."***

*In the forward by Mary Marshall, Retired Director of the Dementia Services Development Centre, Stirling, Scotland in 'Inclusive Urban Design, Streets for Life' (2006).*

## Recommendations

1. The NSW Government, through the Division of Local Government, encourages the policy recommendations and dementia and age-friendly design features in this discussion paper, such as the need for pedestrian-only walkways, unisex toilets and the use of handrails, to be addressed in local government 10-year Community Strategic Plans and council management plans.
2. The NSW Government encourages the inclusion of dementia and age-friendly design features in local government planning documents such as the *Planning and Reporting Manual* that guide the development of Community Strategic Plans.
3. Local councils in NSW consider dementia-specific features outlined in this Discussion Paper, such as the need for more drive-in/drop-off points outside facilities and better signage at strategic points outside lifts, at corners and pedestrian crossings, in their Disability Action Plans.
4. The NSW Government recognise the vital role of the community in helping people with dementia navigate and engage with their outdoor environment by funding dementia education and awareness programs for shop, club, council, transport and hospital workers as part of a broader public awareness campaign.
5. The NSW Government recognise the need, and provide funding for, more Australian research on building dementia-friendly neighbourhoods.
6. That planners, architects and engineers through their professional organisations such as the Planning Institute of Australia, the Royal Australian Institute of Architects and Engineers Australia acknowledge and support the recommendations and design features outlined in this discussion paper.
7. The NSW Department of Local Government includes the Alzheimer's Australia NSW discussion paper, *Building Dementia and Age-Friendly Neighbourhoods*, on its new web page on planning for an ageing population.

***“Design for the young and you exclude the old; design for the old and you include the young.”***

*Bernard Isaacs, Founding  
Director of the Birmingham  
Centre for Applied Gerontology.*

## **Alzheimer's Australia NSW Dementia and Age-Friendly Outdoor Design Checklist**

### **Design pedestrian-only walkways**

Walkways provided for pedestrians-only can promote a feeling of safety and encourage outdoor activity.

### **Provide more drive-in/drop-off points**

More drive-in/drop-off points outside public venues such as clubs and theatres as well as outside hospitals and other medical facilities can help support carers and people with dementia. This could be supported by dementia trained staff.

### **Cluster similar shops together in large malls and shopping areas**

Clustering similar shops together in the one area of a large mall or shopping centre can help avoid confusion for people with dementia.

### **Avoid shiny, slippery floor surfaces**

Slippery, shiny floor surfaces can cause confusion and insecurity. Secure, non-slip surfaces should be used.

### **Ensure glass doors and openings are clearly marked**

A person with dementia may not be aware of a glass barrier unless it is clearly marked.

### **Create seamless, wide footpaths with well-defined edges**

Wide, even footpaths with defined edges can help make a person with dementia feel more secure.

### **Provide multiple seating and resting points**

More seating in waiting areas of theatres, hospitals, transport hubs and in foyers of public venues is needed. Providing a quiet space in public venues for people who may be distressed or disorientated would also be welcomed. More seating is also needed in public spaces such as parks and along waterfronts.

### **Ensure good lighting in public spaces**

Better lighting is essential around toilets areas, in car parks, at pedestrian crossings and in all recreational areas to provide better visibility and to increase feelings of safety and security.

### **Design and provide dementia-friendly symbols and signs in public areas**

Dementia-friendly symbols and signs should be used to help guide people to toilets, exits and parking areas in shopping centres, churches, airports, clubs and recreational facilities. Fire and exit pathways in large public venues need to be more visible and directional signs when exiting lifts would be useful.

**Provide accessible dental units**

Mobile dental units are needed to visit residential care facilities and remote regions. Dental units could also be included in hospitals, supported by trained staff.

**Use a dementia symbol in hospital settings**

The use of a dementia symbol to identify patients in acute care hospital settings is supported by people with dementia and their carers.

**Provide more unisex toilets**

More unisex toilets should be provided large enough to accommodate both the person with dementia and their carer. Include clear signs marked 'toilet' not just the male and female symbols.

**Use travelators not escalators**

Travelators are easier than escalators for the person with dementia and their carer to negotiate.

**Centrally locate lifts**

Locate lifts in malls, hospitals and clubs in a central, easily accessible location.

**Design smaller, more accessible shopping centres**

Smaller, more accessible shopping areas such as those found in regional centres and country towns are preferred by people with dementia and their carers.

**Provide dementia-trained staff to support people with dementia and their carers**

Dementia-trained staff in clubs, shops and public venues can help the person with dementia navigate and find their way around.

**Ensure more handrails at pedestrian crossings and islands**

Handrails should be provided at pedestrian crossing and safety islands, at bus stops and along beaches and waterways.

## Purpose

The purpose of this discussion paper is to examine what features help create optimum dementia and age-friendly outdoor environments. It looks at the type of policy change necessary to ensure public spaces can adapt to meet the needs of an ageing population and the four-fold increase in the numbers of people with dementia in our communities expected over the next 40 years. It then suggests recommendations to help ensure best practice principles are implemented in the future.

## Background

***“If designers and importantly, the people who commission design, exclude older people from their target market or user group then the choices older people have will be limited and they will be effectively excluded from the mainstream of everyday life.”***

*Roger Coleman in 'Living Longer the New Context for Design'.*

Dementia is an umbrella term that refers to symptoms caused by changes in the functioning of the brain. These can include alterations in memory, personality and behaviour. A person with dementia may find it hard to do previously familiar tasks such as writing, reading, showering and using numbers. Dementia can happen to anyone, but it is more common after the age of 65. However people in their 30s, 40s and 50s can also have dementia (<http://www.health.gov.au/dementia>).



Adequate seating, wide footpaths and plenty of shaded areas are preferred.

An estimated 269,000 Australians currently live with dementia. Without a medical breakthrough that number is expected to soar to about 981,000 by 2050. In NSW, an estimated 92,000 people live with dementia, which is expected to grow to 302,500 by 2050. Each week there are a staggering 1,500 new cases of dementia diagnosed in Australia. That number is expected to grow to 7,400 new cases each week by 2050 (Access Economics 2010).

Dementia is already the single greatest cause of disability in older Australians aged 65 years and older and one of the fastest growing sources of major disease burden. It is currently the third leading cause of death after heart disease and stroke (ABS 2008). Some experts predict that by 2050 dementia will be the leading cause of death in NSW (Access Economics 2010).

In economic terms, dementia will become the third greatest source of health and residential aged care spending within two decades. These costs will be around 1% of GDP. By the 2060s, spending on dementia is set to outstrip that of any other health condition. It is projected to be \$83 billion (in 2006-07 dollars), and will represent around 11% of the entire health and residential aged care sector spending.

As dementia progresses, a person gradually loses the skills needed to navigate the outdoor world such as short term memory, the ability to learn and understand new information and cognitive mapping skills (Blackman et al. 2003).

Dementia can not only cause disorientation and memory loss, but can exacerbate the effects of physical impairment, so people with dementia often have difficulty moving around as well. However there are cases, such as with younger onset dementia, where

a person with dementia may be still physically healthy and active for a long period of time while experiencing cognitive decline. So although much of the research, literature and planning for creating age-friendly environments is applicable to dementia-friendly environments, there may be additional elements that need to be considered.

Across the UK, USA and Australia, planners and designers have historically created public spaces for the young and able-bodied. This planning bias is described by Imrie (2001) as 'architectural apartheid' where assumptions are made about a person's mental and physical ability to utilise their environment in certain ways. As a result, it is not uncommon for older people and people with cognitive or physical disabilities to experience public spaces and places in towns and cities as inaccessible and sometimes inhospitable, and as a result, they become increasingly isolated and excluded. Examples of this type of planning 'apartheid' include not enough lifts and easy access points at railway stations, escalators in malls instead of ramps, a lack of unisex-accessible toilets, not enough comfortable seating in public spaces, a lack of clear signposting, a lack of safe pedestrian crossings, and an absence of proper rails and supports at beaches and other public spaces.

The challenge is to create outdoor environments that allow people of all ages and abilities to continue to participate in their communities and live as independently as possible. The concept of age-friendly planning and design creates an inclusive design paradigm that encompasses all ages and physical abilities and assumes that as people age they need more structural and community support to continue to remain independent.

The World Health Organization (WHO) defines an age-friendly city as one that adapts its structures and services so as to be accessible to, and inclusive of, older people with varying needs and capacities. The *2007 World Health Organization Global Age-Friendly Cities Guide* and *Checklist of Essential Features of Age-Friendly Cities* identify eight categories nominated by older people from 33 cities around the world. Six of those categories relate directly to the public domain. The eight categories demonstrate how the optimum age-friendly environment has interrelated structural and social components.

## World Health Organization

**“One of the determinants of active ageing is the physical environment”**

### WHO eight domains of an Age-Friendly Environment

- Outdoor spaces and buildings
- Transportation
- Housing
- Social participation
- Respect and social inclusion
- Civic participation and employment
- Communication and information
- Community support and health services

### The concepts of ‘built environment’ and ‘neighbourhood’

***“The built environment has a powerful impact on mobility, independence, autonomy and quality of life in old age and can also facilitate or impede the quest for a healthy lifestyle at all ages.”***

*In ‘Promoting Healthy Ageing in Australia’ 2003, p 47.*

In the literature, the concept of the ‘built environment’ is a common term used to include all buildings, spaces and products created or modified by people. It includes homes, schools, work places, parks/recreation areas, business areas and transportation systems. Technically, the concept also extends overhead to include electric transmission lines, underground to include waste disposal sewage and includes mass transport systems such as railways, highways and airports. It also includes land use planning and policies and how they impact communities in urban, rural and suburban areas (Abbott et al. 2009).

This paper limits itself to a discussion of the outdoor built environment and recognises how structural elements can have an impact on a person’s quality of life. It takes the concept a step further to include the notion of ‘neighbourhood’ and ‘community’ and how social inclusion, community education and participation can help people with dementia and their carers safely navigate and remain engaged in their local communities. The word ‘neighbourhood’ was deliberately chosen as it invokes a sense of inclusiveness and participation that is particularly significant considering the Alzheimer’s Australia NSW’s consultation’s findings.

## The research and literature

Research shows that most people prefer to remain at home in their familiar surroundings for as long as possible and that familiarity and neighbourhood become increasingly important as people age, particularly for people with dementia (Axia et al. 1991; Greenberg, 1982; Laws, 1994). Research also finds that removing a person with dementia from their familiar environment tends to compound their confusion and ability to cope (Fogel 1992; Goldsmith 1996) and that providing the opportunity and support for a person to continue to live at home can help give them a sense of consistency, familiarity and safety.

There is almost no research either in Australia or internationally that specifically considers a person's cognitive capacity and their ability to navigate the outdoor environment. There is much more literature available on creating 'age-friendly environments' and 'livable' and 'healthy' communities and literature that debates the interface between a person's physical capabilities and the organisation of space in the outdoor environment. For example, studies by Gant (1997) and Imrie and Kumar (1998) are typical of research on accessibility issues that focus on physical rather than cognitive impairments. Gant draws attention to the increasing prevalence of disability in the ageing population, but no mention is made of the huge predicted increases in the numbers of people with dementia.

The only dementia-specific research related to the outdoor built environment has been conducted in the United Kingdom by researchers Mitchell, Burton and Ramen. The research investigated the relationship between the built

environment and cognitive impairment and included an extensive literature review that helped inform their later fieldwork (Mitchell et al. 2003).

Mitchell et al. interviewed 20 people with dementia and 20 people without dementia in two UK towns. They asked the participants in-depth questions about how, why and when they went outdoors and what helped or hindered them when they did so. From the research they developed *Neighbourhoods for Life: Designing Dementia-Friendly Neighbourhoods*, which included a set of principles and accompanying design recommendations intended to enable planners and designers create optimum outdoor environments for people with cognitive impairment. The researchers identified six major requirements for outdoor environments to be dementia friendly: they needed to be familiar, legible, distinctive, accessible, comfortable and safe. Recommendations around the six major requirements were compiled into a *Checklist for Planners and Designers*. Many of the common design elements identified in the UK study are similar to those found in the Alzheimer's Australia NSW consultations.

## The Alzheimer's Australia NSW consumer consultations

*"It all comes back to awareness training."*

*Al, a carer.*

### Methodology

Recognising the need for more information about how people with dementia experience their outdoor environments in communities across New South Wales, Alzheimer's Australia NSW initiated a series of consultations with its regional consumer committees during the months of September and October 2010. Focus groups were conducted with the committees totalling around 60 participants comprised of carers and people with dementia in Sydney, Newcastle, Wollongong, Port Macquarie, Armidale, Bega, Orange and Wagga Wagga. The results of those consultations have been collated and integrated into this discussion paper.

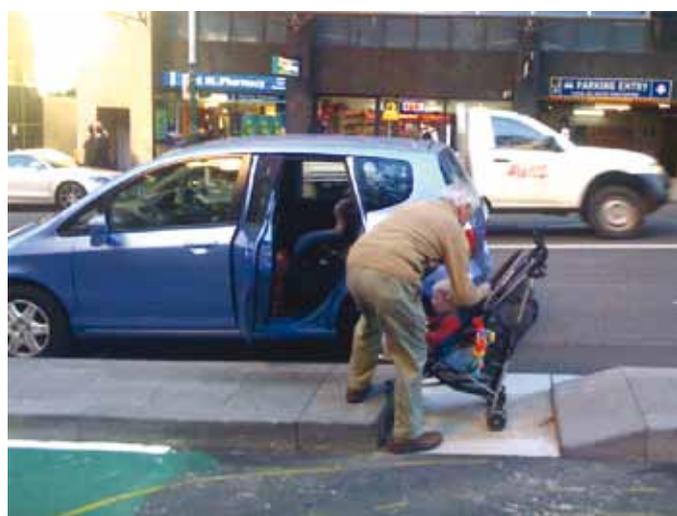
### The findings – what consumers told us

Participants were asked to consider six key areas in the outdoor environment and to look at both their positive and negative experiences of those areas. Some areas overlapped and similar issues arose across categories, for example, the need for more seating and unisex toilets.

1. Indoor leisure environments (clubs, theatres, sport and recreation facilities etc)
2. Shopping centres and retail outlets
3. Places of worship
4. Streetscapes and transport
5. Medical and dental facilities
6. Outdoor leisure environments (beaches, parks, bush walks, etc)



Slippery floors and bad seating discourage inclusion.



More drive-in/drop-off zones are needed.

## 1. Indoor leisure environments

*“Dementia-trained personnel to assist people in and out of a venue such as a club or medical centre would be good.”*

*Mary, a carer.*

Common themes emerged when carers and people with dementia discussed how to access and navigate their way around public venues such as clubs, recreation centres, restaurants, theatres and libraries. Some of those themes were identified across other areas such as shopping centres as well.

Issues raised included slippery floor surfaces, the need for wheelchair-friendly and unisex toilets, large print signs marked ‘toilet’ as well as the usual symbols, suitable parking close to entrances, and more seating in waiting areas, particularly in theatres. Dangers included automatic opening doors, glass panes not clearing marked and slippery walkways in swimming centres.

The most important structural improvement suggested in this category were drive-in/drop-off points outside facilities. This structural element was linked by the participants to the importance of community participation and education. Carers suggested that it would be useful for staff to be available and trained in dementia education and awareness so they could support the person with dementia and their carer. In the case of the drive-in/drop-off point, a staff member would be available to care for the person with dementia while the carer parked the car. This need for trained dementia-friendly staff was, according to participants, a critical element in navigating and using public amenities.

### Major findings: indoor leisure environments

- More drive-in/drop-off points outside facilities
- Provide more dementia-trained staff
- Eliminate slippery, shiny floor surfaces
- Provide more larger unisex toilets outside the male and female toilets
- Provide large print signs marked ‘toilet’ not just the usual symbols
- Create suitable parking close to entrances
- Provide more seating in waiting areas
- Dangers exist around the use of automatic doors and glass panes with no markings



Provide more unisex toilets.

## 2. Shopping centres and retail outlets

*“There could be a ‘safe shop concept’ like the safety house network where a shop could have a ‘we are dementia friendly’ sign.”*

*Ted, a carer.*

Similar issues emerged in the shopping centre category as the indoor leisure category, but many participants raised the issue of the size, noise and confusing layout of large malls and shopping centres. Highlighted were the dangers of moving escalators, slippery surfaces, confusing signs and stores and cafes that encroached onto walking areas. All these factors contribute to making a large shopping mall inhospitable for many carers and people with dementia.

These observations and descriptions of large, busy urban shopping centres contrasted with the experiences of carers and people with dementia from rural towns. They found comfort in the relaxed atmosphere and familiarity of the smaller shopping areas and staff in familiar shops who often knew the carers and people with dementia by name and could offer assistance if needed.

Suggestions for improvement included clustering similar shops together in one area to minimise confusion, making fire and exit pathways more visible, providing plenty of comfortable seating with arms and backs that were high off the ground, and adequate parking and drive-in/drop-off points. The issue of accessible toilets also emerged in this category with participants suggesting toilets on every floor of the mall and larger ‘unisex’ marked toilet cubicles separate to the male and female toilets to accommodate both the person with dementia and their carer.

Other ideas included a ‘quiet space’ with seating and a bathroom if the person with dementia became agitated or stressed and centrally located lifts available in more areas of large shopping centres.

The major findings in this category included a general feeling that large urban and suburban shopping malls were inhospitable and that smaller, more familiar shopping areas – such as those often found in regional towns – were better for people with dementia and their carers. Another social inclusion and community participation theme emerged linked to structural improvements – the suggestion of a ‘dementia friendly’ shop denoted with a symbol that indicated that staff inside the shop were trained to support people with dementia. This idea was raised by participants across the groups. The ideal shopping centre of the future for older people and people with dementia would be designed around smaller, more familiar spaces staffed by dementia-friendly trained personnel.



Travelators are preferred to escalators.

Major findings: shopping centres and retail outlets

- Large, multi-story malls are inhospitable and confusing
- Cluster similar shops together in large malls to minimise confusion
- Make fire and exit pathways more visible
- Provide more comfortable seating with arms, backs and flat seats at an appropriate height
- A need for a 'dementia friendly shop' denoted by a symbol with dementia-trained staff
- Escalators are not dementia friendly
- Centrally located lifts and travelators are preferred to escalators
- Unisex toilets on every floor, clearly marked
- Slippery, shiny floor surfaces should be avoided
- Provide a quiet space with seating and a bathroom where a confused person and their carer can recuperate
- Cafes that encroach on walking areas are obstructive
- Smaller, more familiar shopping centres are preferred

### 3. Places of worship

*"The minister sends me emails with the words of the hymns and I print them for Mum in large print so she can sing along."*

*Betty, a carer.*

Places of worship emerged as an important area of community inclusion for people with dementia and their carers, providing comfort, support and familiar rituals such as prayers and hymns.

Some issues emerged however, such as the need for more ramps and comfortable seating. Some participants reported that church pews were sometimes difficult to navigate. Other participants had positive things to say about the amenities often provided in and around churches such as plenty of accessible parking, handrails and supports, and wide, shallow steps into the church. Areas for improvement included better signage, more unisex toilets and better lighting and audio facilities.

Major findings: places of worship

- Churches provide comforting rituals
- More ramps are needed
- Church pews difficult to navigate
- More comfortable seating
- Better signage, lighting and audio facilities
- More unisex toilets

#### 4. Streetscapes and transport

*“We have a new Woolworths on one side of the highway and a retirement village on the other and no safe way to cross the road.”*

*Robert, a carer.*

Having safe and easy to navigate streets, including wide, even footpaths and safe crossings between amenities are critical for ensuring that people with dementia can navigate their communities safely. Focus group participants reported there were a lack of pedestrian crossings near shopping areas, medical facilities and transport hubs. They also talked about pedestrian crossing safety and that often there was not enough time to cross the street safely. Participants also complained about narrow footpaths with raised uneven surfaces or footpaths that needed to be shared with bikes, scooters and prams. Both aspects can make navigating difficult and can be intimidating for the person with dementia. Some suggested more handrails and supports at corners, at lights and on safety islands.

In discussions of streetscapes and transport, what emerged from the focus groups was a general feeling

that roads, footpaths and walkways were not designed around the needs of older people and people with cognitive challenges and difficulties. In many cases, little attention had been given to ensure safe crossings and environments for older people and people with dementia who may be more dependent on walking and public transport, than those still driving cars.

The group also discussed the need for providing more transport alternatives for people with dementia and their carers. Many participants spoke about the versatility of community transport and how it could be better utilised in their communities as an integral part of service delivery of health and aged care services.

Participants revealed that design elements such as walkways along beaches and through parks, that created wide shared pathways to accommodate skateboarders, bicycle riders and walkers, could often intimidate and alienate people with dementia and their carers. Local environmental plans and community plans that promote ‘healthy living’ may inadvertently exclude people with dementia by not considering the need to ensure the provision of adequate seating, handrails and safe walking areas.



Sheltered bus stop with handrails and good seating.



Inadequate pedestrian crossing from retirement village to shopping area.

Major findings: streetscapes and transport

- It is dangerous for people with dementia to share walkways and footpaths with skateboarders, bicycles and scooters
- Wide footpaths with even surfaces can help increase confidence
- A need for more pedestrian crossings linking amenities to accommodation
- More handrails at crossings, bus stops, safety islands and corners
- Community transport could be better used as a flexible part of health and aged care service delivery



Wide walkways with plenty of seating are optimal.



Seating with supportive arms and backs are favoured.

## 5. Medical and dental

*“A sign or symbol above the bed letting hospital staff know I have dementia wouldn't worry me at all.”*

*Andrew, a person with dementia.*

Participants reported that, in most cases, hospital staff needed more education about dementia and to be aware that carers should be included in conversations about the health of the person with dementia. So the need for 'dementia-savvy' staff across medical facilities was crucial to enable the person with dementia and their carer to navigate their way around the facilities.

Participants explained how waiting rooms could be difficult places if the person with dementia became agitated. They suggested the need for a 'quiet space' or access to an outdoor walking area where the person with dementia could be taken to help them feel more comfortable. One carer described how one health professional was happy to move outside where the person with dementia was more comfortable, rather than insist that they come inside for the consultation.

Other comments focused on a lack of accessible parking, a lack of suitable drive-in/drop-off zones, long waiting periods, inadequate signs in large hospitals and too many forms to fill out in waiting rooms.

People with dementia and their carers supported the idea of a symbol in hospitals that clearly indicated that the patient had dementia. However, the use of the symbol had to be accompanied by dementia education for hospital staff. The groups also suggested the need for more signs when exiting lifts to help direct a person to the right location.

Similar issues were discussed with regard to dental clinics. Discussion revealed particular challenges such as lack of parking and difficulties transferring the

person with dementia into the dentist chair. Participants suggested innovations such as a mobile dental unit to visit residential care facilities, retirement homes and remote locations. Others suggested incorporating a dental unit into hospitals to ensure emergency dental procedures and oral care is better accessed and included in health care for older people and people with dementia.

Again, in this category it was not just about the structural environment, but also about the importance of dementia education and the attitudes of staff. This observation around the need for dementia-trained staff and volunteers, along with suggestions and support for a dementia symbol or sign to alert hospital workers about the special needs and requirements of patients with dementia, were two significant findings in relation to hospital environments.

### Major findings: medical and dental

- Dementia-trained staff in hospitals is essential to help the person with dementia feel orientated and safe
- The need for a dementia sign or symbol in hospital settings
- The need for a 'quiet space' in hospitals and medical facilities
- Mobile dental units to visit residential care facilities and rural and remote regions
- Difficulties transferring a person with dementia into a dentist chair
- More drive-in/drop-off points and accessible parking at medical and dental facilities
- More signs for navigating, particularly when exiting lifts
- Dental units in hospitals supported by dementia trained staff

## 6. The outdoor leisure environment

*“The outdoors is uplifting of spirits and is a very important place for people with dementia.”*

*Meredith, a carer.*

Carers spoke quite a lot about the need for more accessible toilet facilities in this category, particularly the need for more unisex toilets so the carer could accompany the person with dementia into the toilet. Some carers also suggested the disability symbol be changed to denote not just physical impairment, but other types of impairment such as cognitive impairment as well.

Participants also talked about the inaccessibility of beaches and other water-side parks. There were suggestions for more handrails and safer walkways along water areas and boardwalks and better accessibility and seating in beach areas, particularly on the beach, where it is often difficult for older people to sit on the sand.

More calming environments need to be created, with plenty of trees and walkways with wide, bordered pathways that provided even, secure footing. Parks need more seating and the seating areas need to be shaded with access to toilets nearby. Again, many in the groups spoke about the feeling of discomfort and insecurity when having to share footpaths with runners, bicycle riders and skateboarders.

Companion dogs emerged in this category as an important aid to help people with dementia navigate their environment and feel safe. Many spoke of how dogs were used to aid the blind, but were under-utilised to help people with cognitive difficulties.

Caravan parks also emerged as an important low-cost recreation alternative for carers and people with dementia and many carers spoke about the need to make caravan parks more accessible and dementia-friendly by providing better access to unisex toilet and shower facilities.

### Major findings: the outdoor leisure environment

- Wheelchair signs need to be changed to a new symbol that is inclusive of people with cognitive disabilities
- More unisex toilets in public areas such as parks and beaches
- A need for more handrails and safer walkways along beaches and waterways
- Better seating and accessibility to beach areas
- Wider pathways with secure even footing
- More seating with toilets nearby
- Companion dogs to support those with cognitive difficulties
- Make caravan parks more accessible with unisex toilets and showering facilities

## Summary of the findings

*"It all comes back to stigma, it's all about education."*

*Miriam, a carer.*



This pathway is unsafe for people with dementia as it is shared with bikes and prams and provides no safety rail or even surface.

There were many elements identified in the Alzheimer's Australia NSW consultations that have commonalities with both 'age-friendly' and 'livable' design features. For example, consumers identified the need for wider, non-slip footpaths for pedestrians, more seating in public areas and smaller, more accessible shopping areas. In addition, many characteristics were shared across the six categories and have been summarised in the *Alzheimer's Australia NSW Dementia and Age-Friendly Outdoor Design Checklist*.

Many of the carers in the Alzheimer's Australia NSW consultations assumed a person with dementia would never venture outside alone without their carer. This could be because the Alzheimer's groups were mostly comprised of actively involved and engaged carers. This contrasted with the UK study that found that many people with dementia continued to go outdoors alone every day.

One of the most significant findings from the Alzheimer's consultations was the role of people in the community such as shopkeepers, club and hospital staff as enablers to help people with dementia navigate their environment. While the groups recognised the need to improve the outdoor physical environment, they emphasised that improving physical elements alone was not enough and that the participation and understanding of people in the communities in which people with dementia and their carers lived, was equally important.



Handrails and wide even walkways along beachfront.

## Discussion

### Maintaining independence and social inclusion

The findings from Alzheimer's Australia NSW consultations and the UK study echo Blackman et al. (2003) who suggests there is a need to extend thinking about dementia to society in general and to consider an inclusive social model of dementia; a model that considers people with dementia living in society, not separate from society. An accessible built environment can help facilitate greater inclusion and participation and is recognised as a core element for the realisation of a society based on equal rights.

The Alzheimer's Australia NSW consultations indicated that people with dementia have a wish to remain connected to, and participate in, their local neighbourhoods. That connection is facilitated first by their carer, and then by others in the community who can help the person with dementia navigate and find their way around. It is also equally important for the carer to remain connected to their communities, as caring for a person with dementia can have an isolating effect.

In most cases, people living with dementia have a carer, however there are still a proportion of people living with dementia, particularly in the early stages, who live alone. With increasing numbers of people predicted to be living alone with dementia over the next 40 years, a more in depth examination of the issues for people with dementia living alone and their future needs is required. While the current policy in Australia is to keep people living at home for as long as possible, it is important to ensure they are well supported and do not run the risk of becoming more isolated and excluded from their communities.

In 2006 the Australian Department of Health and Ageing held a nation-wide program of workshops with the theme, *A Community for all Ages – Building the Future*. The aim was to identify a number of initiatives that would drive improvements in the public domain for the benefit of all ages and abilities. In 2007 the Independent Living Centre Australia developed a project called *You're Welcome* from the workshops to address the need to create a fully accessible public domain for people of all ages and abilities. The project, funded by the NSW Department of Community Services Area Assistance Scheme, involved local government areas in Western Sydney. The objective was to identify barriers in community spaces and apply solutions that met criteria set down in the NSW *Towards 2030: Planning for our changing population* strategy and the Disability Discrimination Act, 1992. The project urged local government authorities, business operators, shopkeepers and community groups to work together to identify barriers that prevented older people from participating in, and accessing, their local communities. A project such as this is an excellent social inclusion initiative that could be easily modified to include dementia-specific recommendations to ensure the needs of people with cognitive impairments are recognised and addressed as well.

## The impact of disability rights

***“The rights of people with dementia have been less strongly advocated than those of people with physical disabilities. This is particularly the case with environmental planning and design.”***

*Blackman, et al. 2003 p. 357.*

There has been a significant influence in Australia, the UK and the US of disability rights and anti-discrimination legislation that has caused a shift in attitudes towards the design of both indoor and outdoor spaces for those with a disability. This movement has caused a shift to more inclusive design principles. Now, more work is needed to recognise the rights of people with cognitive disabilities to ensure that the design of both indoor and outdoor spaces reflect their needs as well. However, as the Alzheimer's Australia NSW study has revealed, there are many elements common to dementia-friendly design that are also considered to be 'disability-friendly' or 'age-friendly' as well.

## Technology

New technology offers the opportunity to help support people with cognitive disabilities to maintain their mobility and independence; however the use of technology was not raised by participants in the consultations.

Technology such as Alzheimer's Australia's 'Safe to Walk' GPS system provides technology to help the person with dementia remain independent for as long as possible. Devices that can help those with cognitive disabilities to be more independent should be subsidised in the same way as aids for physical disabilities.

## Policy and planning

***“A safe pedestrian environment, easy access to shopping centres, a mix of housing choices, nearby health centres and recreational facilities are all important elements that can positively affect the ageing experience.”***

*Age-friendly built environments – opportunities for local government, 2006 ALGA p. 3.*

While state and local governments recognise how the built environment can affect health and lifestyle, it is more common to see factors such as ‘healthy living’, ‘livability’ and ‘active living’ as planning priorities rather than a specific planning focus for an ageing community. Nevertheless, good age-friendly and dementia-friendly features are often the outcome.

For example, The University of Newcastle Research Association (TUNRA) initiated *The Building Liveable Communities in the Lower Hunter Region* (Wells et al. 2007), a project that investigated the health impacts of the urban environment and the processes that shape it in the lower Hunter region. The strength of the research was that it tackled the relationship between the built environment and health, and its relationship with urban development and acknowledged the future role that the development sector would play in creating sustainable ‘liveable’ communities.

The recommendations from the research were designed to help the urban planning industry incorporate health and social outcomes into proposed developments. It was also intended to act as a guide for local government and health professionals in assessing the health and social outcomes of proposed development. Community consultations revealed four major components that make up a community: physical structures, natural features, service provision and social principles. The result is *Key Elements of a Liveable Community* (Wells et al. 2007) that contains many features identified in the Alzheimer's Australia NSW consultations, age-friendly research and the UK *Streets for Life* research.

Many researchers believe that creating age-friendly communities is one of the most effective policy approaches for responding to demographic ageing and that good urban planning and design are enablers for inclusion and connectedness. Unfortunately, local governments around NSW have had an inconsistent approach to applying age-friendly design principles to local government planning.

The Australian Local Government Association has developed *Age-Friendly Built Environments: Opportunities for Local Government* (ALGA 2006). The document is intended to provide age-friendly strategies for local governments, recognising that, “age-friendly environments can make neighbourhoods more liveable for all ages, reduce costs associated with health and aged care and yield a range of social and economic benefits by extending and expanding seniors’ contribution to community life.” (ALGA 2006 p. 5).

The *Opportunities for Local Government* document acknowledges that good urban design can play a major role in allowing older people to stay living at home and remain active and independent for as long as possible – but it is only intended as a guide.

Community Strategic Plans, Development Control Plans (DCPs) and Disability Action Plans (DAPs) are examples of policy and planning instruments that could be used to help implement the recommendations and design guidelines in this discussion paper.

Councils are now required under the NSW Local Government Act 1993 to develop Community Strategic Plans. The plans form part of the wider integrated Planning and Reporting Framework and sit at the top of a council's planning hierarchy. The Community Strategic Plans are intended to identify a community's main priorities and expectations for the future and how to achieve those goals. They are based on strong consumer engagement and consultation and address key issues related to social, environmental, economic and civic leadership.

The issues, recommendations and design guidelines in this discussion paper could be addressed at a local government level through Community Strategic Plans and included in the *Social Planning and Reporting Manual*, which supports the development of the Community Strategic Plans.

For example, the *Reporting Manual* already includes a development assessment resource and navigational tool from the Premier's Council for Active Living, *Development and Active Living: Designing Projects for Active Living* (Lette & Wiggins 2010).

The *Development and Active Living* tool was created to assist councils and the state government with incorporating active living principles into development control plans (DCPs) or address active living principles in their existing policies. It was also intended to provide an improved legal basis for addressing active living matters in the development application (DA) process. In the absence of a guiding policy, the document is intended to advise consultants/applicants and assessment officers at both the state and local level on matters for consideration, and design and siting action that will promote active living in development proposals.

The NSW Department of Local Government is also working on a web page for planning for an ageing population, which could include this discussion paper and the *Alzheimer's Australia NSW Dementia and Age-Friendly Outdoor Design Checklist*.

In addition, under the Commonwealth Disability Discrimination Act 1992, organisations such as Councils are encouraged to develop Disability Action Plans (DAPs). DAPs allow local councils to explain what provision they make for people with disabilities in their policies, plans and standards. The DAP is lodged with the Australian Human Rights Commission and usually exist for a period of five years before it is updated. The benefit of a DAP is that it is council-wide (all sections and personnel, including councillors), whereas a DCP may be restricted to certain sections of council such as planning and engineering.

## Conclusion

The Alzheimer's Australia NSW consultations reported in this discussion paper provided valuable information regarding dementia-specific design elements for outdoor environments. Those elements have been summarised in the *Alzheimer's Australia NSW Dementia and Age-Friendly Outdoor Design Checklist*. In addition, this paper examines existing literature and research, highlights issues and suggests recommendations for policy change.

The findings also amplify discussions in the Alzheimer's Australia NSW Discussion Paper 2, *Addressing the Stigma Associated with Dementia*, around the importance of community participation and education to enable people with dementia and their carers to remain connected and involved in their communities.

The Alzheimer's Australia NSW consultations indicated that consideration of both social and structural elements together can help ensure the future inclusion and participation of increasing numbers of older people living with dementia, their carers and families in their local neighbourhoods and communities.

The role of community support and education, along with the inclusion of dementia-specific design features in the planning of outdoor environments, will become more important as the numbers of people with dementia living with dementia increase in our communities and the supply of both paid and unpaid carers decrease over the next 40 years.

There are existing policy guidelines and design principles that can enhance the neighbourhoods of people living with dementia and their carers. However, the recommendations and elements listed in this discussion paper form the basis of the first Australian-based investigation that looks at the specific needs and challenges experienced by people with dementia and their carers in their local neighbourhoods.

The NSW Government, local councils and planners now have the opportunity to go a step further and support the inclusion of the *Alzheimer's Australia NSW Dementia and Age-Friendly Outdoor Design Checklist* and recommendations in this discussion paper into policy documents and planning and development resources to ensure people living with dementia and their carers can participate in their communities and neighbourhoods for as long as possible.

## Recommendations

1. The NSW Government, through the Division of Local Government, encourages the policy recommendations and dementia and age-friendly design features in this discussion paper, such as the need for pedestrian-only walkways, unisex toilets and the use of handrails, to be addressed in local government 10-year Community Strategic Plans and council management plans.
2. The NSW Government encourages the inclusion of dementia and age-friendly design features in local government planning documents such as the *Planning and Reporting Manual* that guide the development of Community Strategic Plans.
3. Local councils in NSW consider dementia-specific features outlined in this Discussion Paper, such as the need for more drive-in/drop-off points outside facilities and better signage at strategic points outside lifts, at corners and pedestrian crossings, in their Disability Action Plans.
4. The NSW Government recognise the vital role of the community in helping people with dementia navigate and engage with their outdoor environment by funding dementia education and awareness programs for shop, club, council, transport and hospital workers as part of a broader public awareness campaign.
5. The NSW Government recognise the need, and provide funding for, more Australian research on building dementia-friendly neighbourhoods.
6. That planners, architects and engineers through their professional organisations such as the Planning Institute of Australia, the Royal Australian Institute of Architects and Engineers Australia acknowledge and support the recommendations and design features outlined in this discussion paper.
7. The NSW Department of Local Government includes the Alzheimer's Australia NSW discussion paper, *Building Dementia and Age-Friendly Neighbourhoods*, on its new web page on planning for an ageing population.

## Bibliography

- Abbott PS, Carman N, Carman J, Scarfo B, 2009. *Re-creating neighborhoods for successful aging*, Health Professions Press, Baltimore, Maryland.
- Access Economics, 2010. *Caring places: planning for aged care and dementia 2010-2050*. vol.1. Alzheimer's Australia.
- Australia Bureau of Statistics. Causes of Death, Australia, 2008, accessed Dec 2010, <http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/3303.02008?OpenDocument>
- Australian Department of Health & Ageing, 2006. *A Community for all ages: building the future*. The findings and recommendations of the National Speaker Series. [http://www.health.gov.au/internet/ministers/publishing.nsf/content/1B753AB330258D41CA257089001C423C/\\$File/bis138.pdf](http://www.health.gov.au/internet/ministers/publishing.nsf/content/1B753AB330258D41CA257089001C423C/$File/bis138.pdf)
- Australian Local Government Association, 2006. *Age Friendly Built Environments. Opportunities for Local Government*.
- Axia G, Peron EM, Baroni MR, 1991. 'Environmental assessment across the life span', in Garling T, Evans GW, (eds) *Environment, Cognition and Action. An integrated approach*, CPA, London.
- Blackman T, Mitchell L, Burton E, Jenks M, Parsons M, Raman S, Williams K, 2003. 'The accessibility of public spaces for people with dementia: a new priority for the 'open city'', *Disability & Society*, Vol. 18, No. 3, pp. 357-371.
- Burton E, Mitchell L, 2008. *Inclusive urban design: streets for life*. Oxford Architectural Press.
- Australian Department of Health & Ageing. Viewed 22 February 2011. <http://www.health.gov.au/dementia>
- Dumbaugh E, 2008. 'Designing Communities to enhance the safety and mobility of older adults: a universal approach', *Journal of Planning Literature*.
- Gant R, 1997. 'Pedestrianisation and disabled people; a study of personal mobility in Kingston town centre', *Disability & Society*, 12, pp. 698-706.
- Goldsmith M, 1996. *Hearing the voices of people with dementia. Opportunities and obstacles*. Jessica Kingsley, London.
- Greenberg L, 1982. 'The implication of an ageing population for land-use planning', in Warnes A, (ed), *Geographical perspectives on the elderly*, John Wiley & Sons, Chichester.
- Imrie R, 2001. *Inclusive design: designing and developing accessible environments*. Spon. London.
- Imrie R, Kumar M, 'Focusing on disability and access in the built environment', *Disability & Society*, 13, pp. 357-374.
- Laws G, 1994. 'Aging, contested meanings, and the built environment', *Environment and Planning, A*, 26, pp. 1787-1802.
- Lette J, Wiggins D, 2010. *Development and active living: designing projects for active living. A development assessment resource & navigational tool*. Premier's Council for Active Living NSW.
- Mitchell L, Burton E, Raman S, Blackman T, Jenks M, Williams K, 2003. 'Making the outside world dementia-friendly: design issues and considerations', *Environmental and Planning B: Planning and Design*, 30, pp. 605-632.
- Mitchell L, Burton E, Raman S, 2004a. *Neighbourhoods for Life; a checklist of recommendations for designing dementia-friendly outdoor environments*. Oxford: OCSD and London, Housing Corporation.
- Mitchell L, Burton E, Raman S, 2004b. Dementia-friendly cities: designing intelligible neighborhoods for life, *Journal of Urban Design*, 9(1), pp. 89-101.
- Michell L, 2004. Sustainable neighbourhoods for older people. Paper given at the 6th symposium of the International urban Planning and Environment Association, Louisville, USA.
- Wells V, Licata M, Mackenzie A, Gilham K, Hodder R, Butterworth I, 2007. *Building Livable Communities in the Lower Hunter Region*. Hunter New England Population Health.
- World Health Organisation. Global age-friendly cities: a guide. Viewed 8 December 2010, [http://www.who.int/ageing/publications/Global\\_age\\_friendly\\_cities\\_Guide\\_English.pdf](http://www.who.int/ageing/publications/Global_age_friendly_cities_Guide_English.pdf)

