

## **ABSTRACT**

Ageing population in Australia is exerting unprecedented changes in housing demand, location of housing and appropriate dwelling types. Availability of suitable, comfortable, affordable and accessible housing is important for older people, and will be a priority as the population in Australia ages. Current planning policy settings and reliance on market forces for housing provision is unlikely to deliver appropriate and affordable housing for all older Australians in the future, particularly for those with limited assets. The aim of the study is to understand demographic and housing pattern in South Australia and identify the housing options and supportive neighbourhood environments of aged population to assist positive ageing in place.

The study established that in provision of housing for aged population there is need to consider neighbourhood environment, access to service and facilities, social inclusion and suitable and comfortable house.

**Keywords:** Housing, Ageing, Demographic Change, Urban policy

# FROM NIMBY TO WIMBY... POSSIBILITIES FOR HOUSING OPTIONS AND NEW SPATIAL ARRANGEMENTS OF NEIGHBOURHOODS TO ASSIST POSITIVE AGEING IN PLACE

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## INTRODUCTION

It is well recognised that population throughout the world is ageing. By 2021, an estimated 18% of the population will be aged 65 years and over, and close to four in every 10 households will be occupied by at least one older person, the majority living alone or in a couple. These demographic changes are producing economic, social, and personal challenges for society, for families and individuals, and the issues for governments are numerous.

According to United Nations projections almost one third of the population (32.5%) will be aged 65 and above in 2050 (United Nations 2009). These estimates indicate the demand for housing the ageing population and the supply will not be sufficient (Demirkan 2007). Housing is not restricted to the house in which households live but includes surrounding environment, community facilities and services at neighbourhood level such as location and proximity to support services, availability and adequacy of open and green spaces, proximity to informal supports including family and friends, accessibility and usability of transportation, and security concerns (Golant 1984; Gomez-Jacinto and Hombrados-Mendieta 2002; Kaplan 1985; Levy-Leboyer and Ratiu 1993; Kart and Kinney 2001; Michael et al. 2006, Karuppannan and Sivam 2010, Sivam and Karuppannan 2008).

Housing plays a very important role in human life and it has direct relationship with the quality of life. Homes are safe place of protection where people put down family tree, feel a sense of belonging, and ultimately experience 'place identity' or uniqueness with the home (Proshansky 1978). Dwelling and the neighbourhood can be sources of physical and psychological revitalisation, which add to emotional attachment and the sense that the residence is the home (Casey 1993). Rioux (2005) argues that ageing people feel safe and comfortable in their homes if they have stronger sense of belonging. The housing preferences of Baby boomers will differ from earlier generations, as will their capacity to achieve them (Beer, et al 2006).

Residential satisfaction is important because housing provides social surroundings for aged people to interact with others in the community and live a quality life. However, planners from both public and private sectors, responsible for providing housing and services for the aged population, have two opinions. Some believes in full integration of the ageing communities whereas the other believes that aged people prefer a built environment that specifically caters to their particular needs (Rosenberg and Everitt 2001, Phillips and Yeh 1999).

As population ages, the suitability of housing influences the demand for social services, support and care in community. Ageing population will exert significant pressure on both neighbourhood design and dwelling unit. Unfortunately existing built environment in Australia predominantly low-density developments with high automobile dependency is not sympathetic to the needs of aged population. It is widely acknowledged that it is a great challenge for planners to provide age friendly neighbourhood and comfortable dwelling units.

Many studies from various parts of the world suggest that overwhelming number of aged population prefer to live independently and their preference is ageing in place (Beer and Faulkner 2009; Olsberg and Winters 2005; Mihailidis et al. 2004; Mihailidis and Fernie 2002; Karuppannan 2009). Literature on housing reflects that even in developed countries there is a growing lack of agreement between the occupants' requirements and housing standards. Major cause of this disagreement is the neglect of individual differences and housing tastes by designers and planners (Handy and Clifton 2001). Existing studies on housing standards are mostly restricted to evaluation of housing satisfaction ignoring the neighbourhood satisfaction, although they are closely interrelated. Some researchers argue that there is very little empirical study on social issues and neighbourhoods based on the perspectives of older people (Freedman et al. 2008).

The aim of the study is to understand demographic and housing pattern in South Australia and identify the housing options and supportive neighbourhood environments of aged population to assist positive ageing in place. This research adopted a triangulation approach using qualitative and quantitative method.

## RESULTS

Quantitative analysis of the Australian Bureau of Statistics 2006 census data provides the spatial Demographic and household patterns of Aged people in South Australia. The combination of quantitative and qualitative analysis of 85 household was conducted to capture the aged population views on their housing options and neighbourhood facilities priority for supportive neighbourhood environment.

The Quantitative analysis demonstrated that the proportion of the South Australia's senior population is higher and growing faster when compared with trends in other states and territories (refer Figure 1), resulting in a greater demand for a variety of housing options.

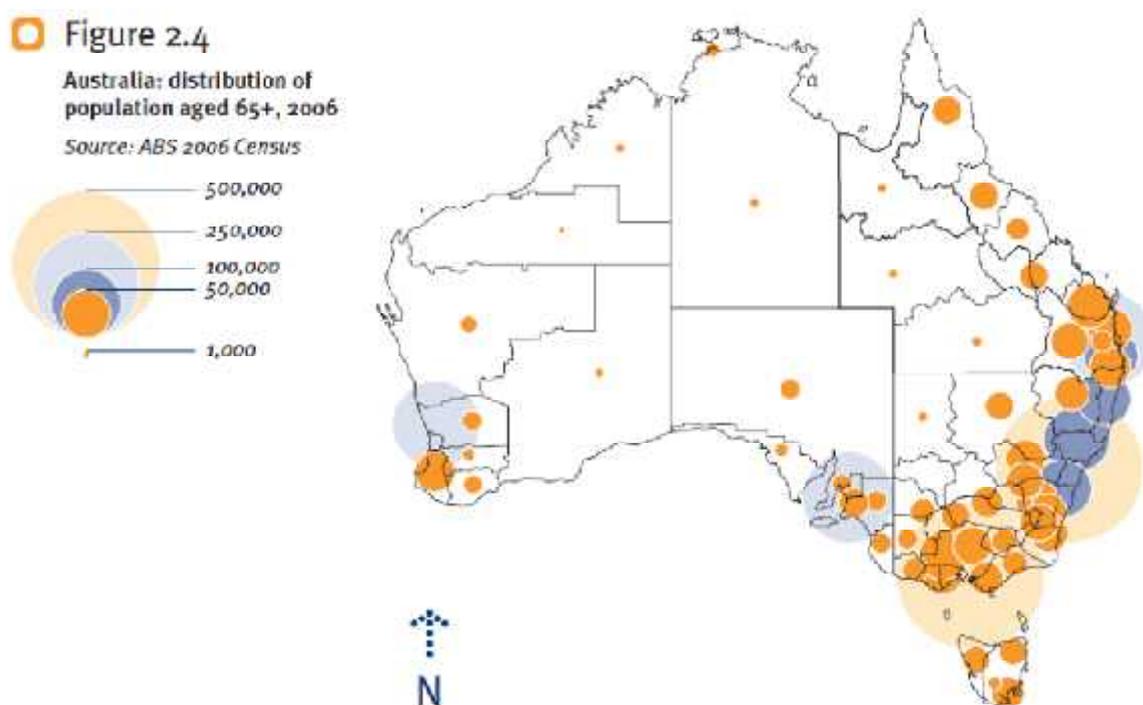


Figure 1: Distribution of population aged 65+, 2006

Source: Government of South Australia, 2009

A majority of aged people live in urban areas and research in this area suggests that large numbers of older people prefer 'ageing in place' as their first choice. The general pattern of high percentage of people aged 65-79 are in the 'middle suburban' ring Statistical Local Areas (SLA) that enclose the Adelaide CBD, as well as a high percentage in the Victor Harbor and surrounds, Gawler and Barossa. This implies that 65-79 age cohorts are still a very independent and mobile age cohort (refer figure 2).

The general patterns of a high percentage of the population aged 65-79 are in the 'middle suburban' ring Statistical Local Areas (abbreviated hereafter as SLA). SLA is a geographical unit adopted by the Australian Bureau of Statistics for the enumeration of census of population and housing carried out at five year intervals that enclose the Adelaide Central Business District (CBD). Outside the metropolitan Adelaide, Victor Harbor and its surrounds, Gawler and Barossa have a higher concentration of older population as illustrated in figure 2. This implies that the 65-79 age cohorts are still a very independent and mobile age cohort.

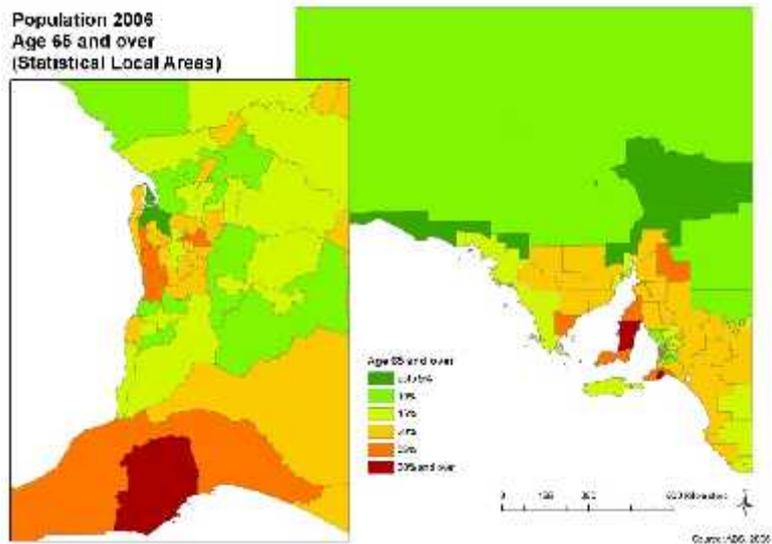


Figure 2: Population 65 and over (SLA)  
 Source: Author's analysis of Census of Population and Housing, 2006, Australian Bureau of Statistics.

SLAs with high percentage of the population aged 85+ are those that are centrally located in metropolitan Adelaide, as well as Victor Harbor and the Barossa.

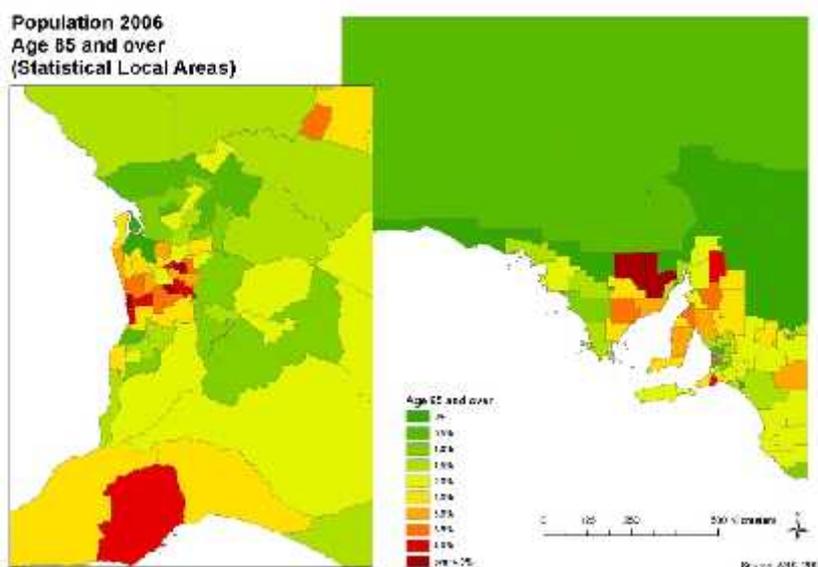


Figure 3: Population age 85 and over (SLA)  
 Source: Author's analysis of Census of Population and Housing, 2006, Australian Bureau of Statistics.

This trend suggest that the 85+ age cohort needs easy access to aged care services on account of reduced mobility and a higher incidence of disability and health problems. They are therefore either unwillingly forced to move to some form of institutional care or tend to be located in areas where required services are easily accessible.

It is observed that a very high proportion of 65-84 age cohort live at the same residence as they did five years ago (refer figure 4). The majority of people in this age group were living in their family home this may be because they do not prefer to move or are unable to move due to a number of constraints, such as financial problem, lack of public transport and availability of services within walkable distance and a sentimental attachment to their suburbs and their social networks in their neighbourhood.

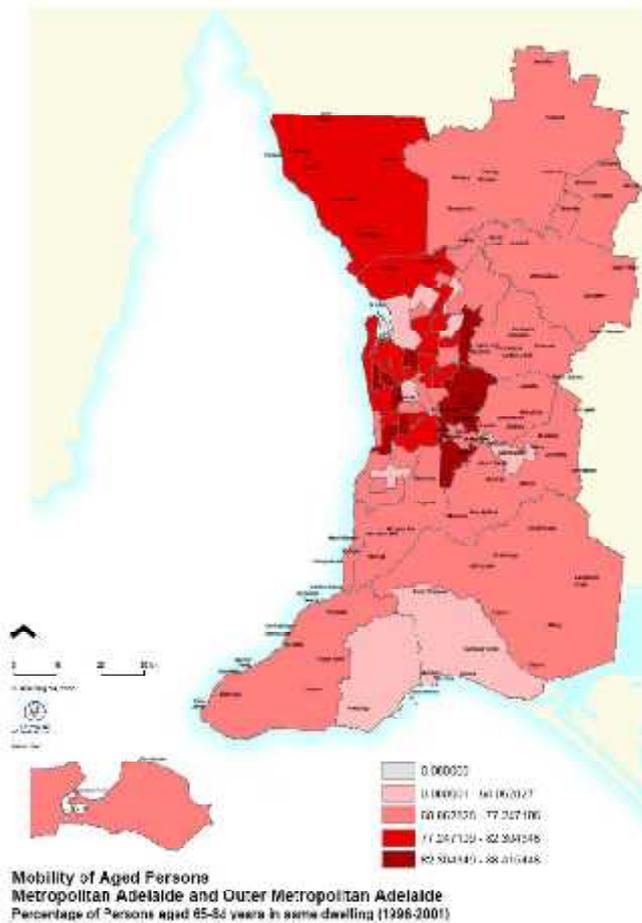


Figure 4: Mobility of aged persons  
 Source: Planning SA, Government of South Australia.

Therefore, it is imperative that if there were more suitable and affordable housing options available in the same neighbourhood, which is affordable and suitable for aged people, then they move to smaller unit. Compared to the 65-84 age cohort housing mobility levels of population aged 85+ is generally higher. This is likely to be because of disability and deteriorating health conditions.

In general, approximately 90% of the 65+ aged persons live in private dwellings and the remaining 10% in non-private dwelling<sup>1</sup>. People who live in non-private dwellings are the 85+ age cohorts (refer figure 5).

<sup>1</sup> Non private dwelling consist of institutions that provide high and low level care to the elderly such as hostels, nursing homes and supported residential facilities. These facilities are commonly known as Residential Aged Care Facilities (RACF).

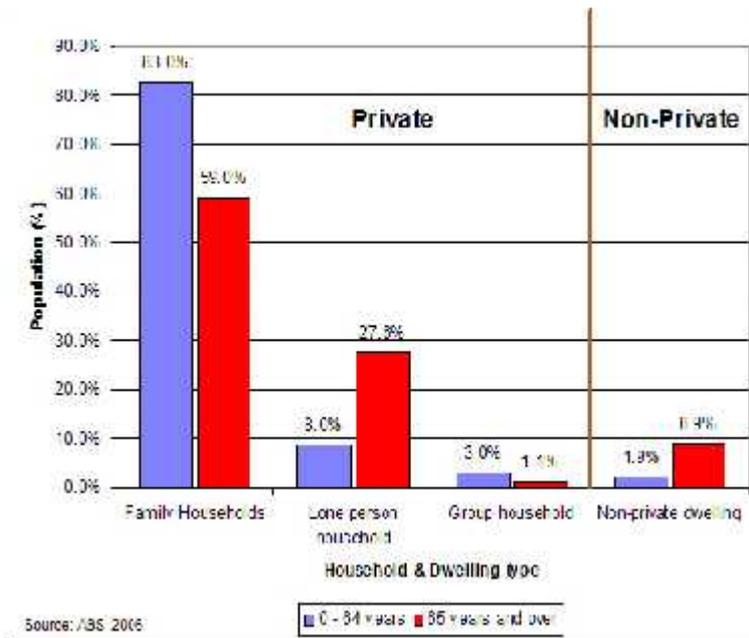


Figure 5: Household and dwelling type

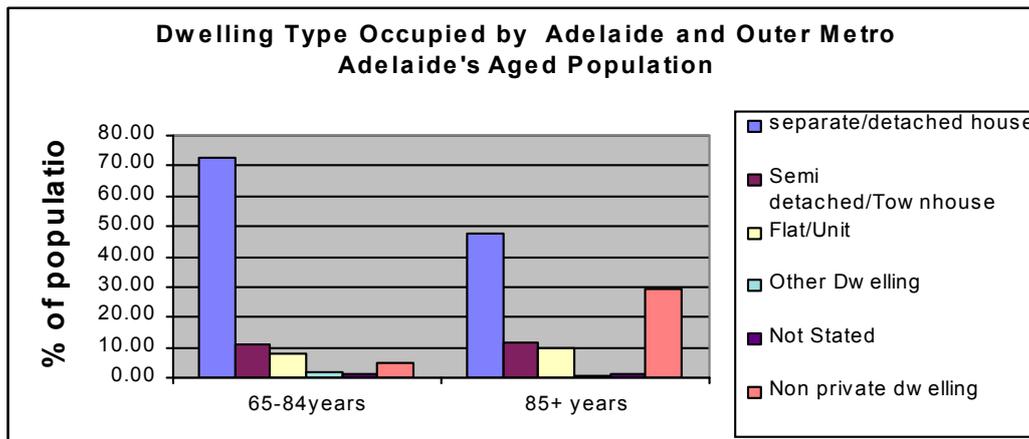


Figure 6: Dwelling Type Occupied by Adelaide and Outer Adelaide's Aged Population  
Source: Author's analysis of Census of Population and Housing, 2006, Australian Bureau of Statistics.

Figure 6 shows that 73% of population in age cohort 65-84 live in separate houses whereas only 48% of the aged 85+ live in separate house. Figure 4 demonstrates that high proportion (95%) of 65-84 age cohorts living in some form of private dwelling and very small percentage in private dwelling. Whereas 30% of 80+ age cohorts live in private dwellings. Due to increase in aged population there will be a need for more appropriate housing for the aged both in private and non private sector.

### Opinions of aged people on neighbourhood and preferred dwelling unit

There are many different dimensions of older persons' living environments that influence residential choice and satisfaction and thereby their well-being. The factors that might impact on older persons' residential satisfaction were explored in South Australia. It includes a number of key elements: built fabric such as interior and exterior dwelling characteristics, security concerns, informal social support including family, friends and neighbours, social services and community facilities around or near neighbourhoods.

Surveys of 85 households randomly selected from across South Australia were conducted to obtain the views of aged population across South Australia. First part of the section gives overview on existing dwelling unit occupied by aged people and second part presents their preference.

More than three quarters of respondents lived in fully-detached houses. The second most common housing type was semi-detached, single storey (8.2% of all households). The third most common housing type was independent living units (5.9% of all households). More than double the number of respondents in regional areas lived in independent living units in regional areas compared to Adelaide SD.

The most popular preference was still a fully-detached house (52.9% of all households). 7.6% more of respondents in regional areas preferred to live in fully-detached houses compared to Adelaide SD respondents. However, only 52.9% of all households preferred to live in a fully-detached house, compared to 76.5% currently living in them. The second preference for dwelling units was for independent living units, with 18.8% of respondents preferring them. This represents the greatest increase in preference compared to 5.9% of respondents currently living in them. Semi-detached, single-storey houses were the third preference overall, with 7.1% of all respondents preferring them, compared to 8.2% currently living in them. In regional areas, semi-detached, single-storey houses are preferred by less than half the respondents currently living in them. The third preferences of regional respondents were retirement units/supported hostels and retirement hostels/nursing homes (both with 6.1%). At present, no regional respondents lived in such dwellings. Retirement units/supported hostels also represent an increase in desirability amongst Adelaide SD respondents, with 5.9% preferring to live in them compared to 1.2% currently living in them. In Adelaide SD retirement units/supported hostels were as popular as flats/apartments, with 5.8% of respondents preferring to live in them and only 1.9% currently living in them.

Many respondents were very happy with their neighbourhood in which they currently live. The lowest ranking suburbs were Ottoway (1), Whyalla (1), Parkholm (3) and Mount Barker (4). The ratings of the neighbourhoods in which respondents live were generally consistent with their level of happiness with their neighbourhoods.

Top 3 most important features and top 3 least important features were identified to see whether these preferences were same in Adelaide Statistical Division (SD) and in regional areas. Firstly the highest and lowest ranking features for each respondent were identified (often the same rating out of 10 was given to more than one feature). Then the number of highest and lowest rankings for each feature was calculated.

Overall the most important feature was "live in an area where I feel safe", with 58 out of 85 respondents (68.2 %) giving this feature an importance ranking of 10 (extremely important). The second most important feature was "live near health facilities", with 43 out of 85 respondents (50.6%) giving this feature an importance ranking of 10 (extremely important). The third most important features were "live near family" and "live near shops", with 35 out of 85 respondents (41.2%) giving this feature an importance ranking of 10 (extremely important). This pattern is repeated in both Adelaide Statistical Division (SD) and regional areas, with the third most important feature being "live near family" for Adelaide SD and "live near shops" for regional areas.

Overall the least important feature was "live in a smaller dwelling", with 16 out of 85 respondents (18.8%) ranking it the least important feature. The second least important feature was "have a garden of my own", with 9 out of 85 respondents (10.6%) ranking it the least important feature. The third least important feature was "live near family", with 8 out of 85 respondents (9.4%) ranking it the least important feature. The least important features for Adelaide SD follow the overall trend and regional area respondents rank "living in a smaller dwelling" as the least important feature. However, regional areas depart from the pattern in the second least important features.

The most important features for Adelaide SD are consistent with the overall most important features. The most important feature was "live in an area where I feel safe", with 36 out of 52 respondents (69.2 %) giving this feature an importance ranking of 10 (extremely important). The second most important feature was "live near health facilities", with 26 out of 52 respondents (50%) giving this feature an importance ranking of 10 (extremely important). The third most important feature was "live near family", with 24 out of 52 respondents (46.2%) giving this feature and importance ranking of 10 (extremely important). "Live near shops" was the fourth most important feature, 23 out of 52 respondents (44.2%) giving this feature and importance ranking of 10 (extremely important).

The least important features for Adelaide SD are consistent with the overall least important features, with the addition of "living near friends" being a third least important feature, equal to "living near family". The least important feature was "live in a smaller dwelling", with 9 out of 52 respondents (17.3%) ranking it the least

important feature. The second least important feature was “have a garden of my own”, with 7 out of 52 respondents (13.5%) ranking it the least important feature. The third least important features were “live near family” and “live near friends” with 4 out of 52 respondents (7.8%) ranking these features least important.

The most important features for regional areas are consistent with the overall most important features. The most important feature was “live in an area where I feel safe”, with 22 out of 33 respondents (66.7 %) giving this feature an importance ranking of 10 (extremely important). The second most important feature was “live near health facilities”, with 17 out of 33 respondents (51.5%) giving this feature an importance ranking of 10 (extremely important). The third most important feature was “live near shops”, with 12 out of 33 respondents (36.4%) giving this feature and importance ranking of 10 (extremely important).

The least important feature for regional areas is consistent with the overall least important feature, with 7 out of 33 respondents (21.2%) ranking “living in a smaller dwelling” the least important feature. The second least important features for regional areas are “living near family”, and “living in a low maintenance dwelling” with 4 out of 33 respondents (12.1%) ranking these features least important. “Living near family” is less important for respondents in regional areas (for which it was ranked the second least important) than in Adelaide SD (for which it was ranked the third least important). “Living near friends” is more important for respondents in regional areas, with 1 out of 33 (3%) ranking it least important, compared to 4 out of 52 (7.7%) in Adelaide SD. “Living in a low maintenance dwelling” is much less important for respondents in regional areas than in Adelaide SD, with 12.1% ranking it least important in regional areas, compared to 3.9% in Adelaide SD. “Having a garden of [their] own” was more important for respondents in regional areas than in Adelaide SD, with 2 out of 33 respondents (6.1%) ranking it least important in regional areas, compared to 7 out of 52 respondents (13.5%) in Adelaide SD.

Opinion of stakeholders was obtained to understand their problem in provision of housing for old aged people.

### **Opinion of stakeholders**

The development Industry participants shared concerns about the ability of the housing industry to provide affordable housing in future for older people. They predict that the industry will experience significant consolidation into the future. They also mentioned that the retirement housing sector is now designing and building larger dwellings than in the past and the design have become a selling point. Design features now include the application of universal design principles. Industry participants expressed that high rise housing is becoming a popular option for older South Australians, but the current planning regulations makes it difficult to implement such projects.

## **DISCUSSION AND CONCLUSIONS**

Ageing in place was obviously the highly preferred option for aged people. However, most people were practical and stated that they would consider moving to more suitable accommodation when their health declines or they become disabled. Concerns were raised that if due to reasons such as health or housing property becoming unaffordable or just the want to downsize their housing for maintenance and upkeep reasons, their preference will be for housing that is well serviced, near public transport and well integrated with the community, instead of being located on the urban fringes or towns. The major concerns of most of the participants was the accessibility to public transport and other transport options, health facilities and community services which will help them to age in place. For the 55+ age group transport seems to be the key in overcoming isolation and it is seen as crucial when they will no longer be able to drive to the services and facilities they need.

Inner suburb participants reflected living in the inner city was important for most of the participants because they had very good access to the services, shops and the transport that they needed. It was easy for them to walk or catch free transport to the Central Market or the city centre. The location of family was not of central importance to this group because, as one respondent stated, ‘children move around, therefore it is better to be central rather than in close proximity to children’. The connector bus provided by the Adelaide City Council was mentioned by almost each participant as a key service that they used.

Preferred locations in old age include all suburbs, towns and those closer to existing services and infrastructure (transport, shopping centres and health facilities) rather than moving into large-scale retirement villages or residential parks. Retirement villages were not a preferred option – one participant stated that ‘I am scared of being put in a block of older people where the only outing is a funeral’. It has also emerged from the focus groups that their ability to delay the move to more intensive care accommodation was (and is)

being affected by the availability of minor home maintenance assistance for day-to-day needs. The 75 age cohort participants stressed the need for better and more ongoing after care options to support people to 'age in place'.

The research brought out that even though older people do not want to be socially isolated or segregated from the mainstream community, they prefer to be buffered to some degree from noise, crime, general antisocial behaviour and other disruptions right on their doorstep, they also want to be well linked to the services they require (including medical and health services and social activities/groups and accessible public transport options). The older peoples expect that the governments at various levels (federal, state and local) should provide more services to them as they age, which will allow them to 'age in place' and provide easily accessible information on such services for the aged people. It also emerged from the survey that their ability to delay the move to more intensive care accommodation was (and is) being affected by the availability of minor home maintenance assistance for day-to-day needs.

Older people especially feel that they should be able to walk a lot to different kinds of services and places. Many respondents from various social and economic groups said that services within walking distance provided a way to get exercise while taking care of daily activities. They mentioned that services are not within 15 to 20 minutes walkable distance and heavy traffic road inadequate pedestrian infrastructure is a concern. Due to lack of these facilities they feel unsafe and unpleasant to walk.

A few participants noted sidewalks serve as a buffer against traffic, especially when the sidewalks are wide. They also stated that a planting strip, or buffer zone, between the sidewalk and the street provide distance from traffic and increased walking. Participants disagreed about the usefulness of traffic calming devices such as speed bumps, traffic circles, and cross walks for encouraging walking by slowing traffic and enhancing pedestrian safety. Another concern was traffic signals with pedestrian controls essential to feeling safe at street crossings. However, the older adults felt that signals in their neighbourhoods did not provide enough time to safely cross the street. They also felt neighbourhood design does not encourage them walking because it is not safe, friendly and footpaths are not supportive to aged people and lack of community facilities or attractive open spaces to attract them for walking. Public transportation was the issue for participants. They emphasized the importance of public transportation in connecting them to important activities and people. Public transportation was described as important to older adults generally and essential for people with limited mobility. Participants mentioned that public transportation is not just an alternative to driving, but can help seniors to meet and connect with other people.

There is need to integrate housing, transport mobility, planning and housing to provide safe and age friendly environment. Built environment should enable full participation of people in the society to enhance the overall quality of life. Older people's leisure and other activities are a resource that helps to maintain health and engagement with life. The whole social and built environment where an older person lives must be able to offer opportunities to participate. Housing for older people needs to be considered as verb rather than noun. Housing is not only the shelter but it consists of activities.

For older adults, maximizing the attractiveness or safety of a walking path is more important than minimizing the distance to destinations. Safety emerged as the biggest concern that limits walking for everyday activities as well as exercise. Primary safety concerns were busy and trafficked streets and unsafe street crossings.

To address the multitude of questions, planners needs to work closely with public health professionals, experts in other fields such as architects, planners, policymakers, social scientists, traffic engineers, developers, law enforcement officers, economists, social marketers, and others. Neighbourhood needs to be designed to promote physical and mental health of all people. The design of a home, its suitability for adaptation and its location can significantly affect a person's ability to enjoy their home and carry out the tasks of self-care, home maintenance or enhancement, and satisfying hobbies. As the tendency toward reduced mobility and agility increases with advancing age, so too the need to take into account the extent to which factors to do with housing, rather than ageing, could contribute to a better lifestyle. To live successfully in the community by ageing in place, there must be the right balance between a person's abilities and the demands of the environment, regardless of age.

The paper concludes that due to low-density development and lack of public transport and inappropriate location of aged facilities and design of public spaces, built environment does not adequately support healthy ageing. Therefore, there is the need to create the safe pedestrian environment, easy access to public transport, shopping centre, recreation and public facilities. New urbanism principles could be employed to address these requirements. New urbanism believes in walkability, mixed use, good public realm, etc. These elements could substantially improve the built environment and will lead to healthy ageing for older people by including them in society.

The study also reveals the need to assess the availability of suitable land for the development of aged care facilities and other types of housing including large demand for aged care facilities in the future. There will be need to develop various type of housing options such as assisted communities, unassisted , shared, supported and conventional.

In summary main aspects of the living environments that may influence residential satisfaction of older persons in South Australia can be: physical characteristics of housing such as the condition of the homes and surrounding environments such as security, lighting, parks etc; availability of community facilities and social services such as transportation, health centre, meals-on –wheels, and shopping; social support such as the support offered by the older person's relatives, friends and neighbours; provision for older people and families who want to live near but not with each other (e.g. granny flats); and diverse housing options for aged people such as ageing in place, assisted living, retirement village, mix and affordable housing, significant supply of rental housing, private self content unit..

The main challenge for the planner is to support ageing in place and provide alternative housing in their current suburb, access to services and facilities, avoid social isolations, provide accessible support services and social and recreational activities, appropriate facilities for ageing in place and suitable and comfortable dwelling units. Planning and development of a wide range of facilities can have a significant impact on the quality of life of older people and can influence the way they enjoy and participate in their local community. However many barriers exist in the current planning and development processes towards the provision of age-friendly infrastructure, timely completion various housing requirements. Issues of ageing in South Australia will become more predominant by 2021.

Therefore, an issue of housing the aging population needs to be addressed sooner than later. Planning policy need to be revised to be flexible to support provision of various options of housing in both private and public sector, improvement of neighbourhood to support ageing in place, provision of land. Planners need to adopt integrated approach to develop strategy to support ageing in place by including public transport and other public and social facilities along with housing provision to improve the mobility of the aged people.

Even though the findings are drawn from research carried out in South Australia, they are relevant to all cities in Australia because the requirements and expectations of seniors are more or less similar. Their major concern is accessibility to public transport and other transport options, health and community services that will help them age in place. The research clearly demonstrate that planners in every cities of Australia need to think beyond planning and providing housing merely as a basic community requirement and take into account the unique requirements for age friendly housing for the ageing population. This requires upgrading neighbourhood street furniture, providing mix land uses, and health and community facilities available within walking distance, increasing pedestrian crossings safe for elderly people thus provide enabling built environment for seniors to move around freely and feel safe. It will also involve improving quality of footpaths with adequate lighting and safe quality footpath surface to make them feel safe. The study also demonstrated overwhelming preference for in-situ rather than in-place housing as ageing population do not like to be socially isolated. It calls for explicit policies towards planning and developing age friendly communities built on sound and sensible design of built environment.

This study is based on very small sample size of 85 household surveys and therefore the aim of this study was limited to identification of area, which needs modification rather than developing a guideline. Detailed household survey will be required to estimate the housing requirements of ageing population in terms of housing type, locations, size of the dwellings and analyse market trends. Also there is need to involve the various stakeholders responsible for provision of transport, health and community facilities and infrastructure to make strategy more practical oriented and healthy living for aged population.

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