



Dwelling, land and neighbourhood use by older home owners

Bruce Judd, Diana Olsberg, Joanne Quinn, Lucy Groenhart & Oya Demirbilek
City Futures Research Centre - Built Environment - UNSW
AHURI UNSW-UWS Research Centre

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Ageing in Australia



- Ageing population
 - low fertility, increased longevity and post-war baby boom

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- Preference for ageing in place
 - older people's independence, health and wellbeing
 - reducing economic burden of institutionalised aged care on government
 - supported by many policies and programs over the last 25 years
 - Home and Community Care (HACC)
 - Community Aged Care Packages (CACP)
 - Extended Aged Care at Home (EACH), Dementia (EACH-D)

Ageing in Australia



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 - older people's independence, health and wellbeing
 - reducing economic burden of institutionalised aged care on government
 - supported by many policies and programs over the last 25 years
- Can Australian housing stock and urban environments support a rapidly ageing society?
 - efficiency with which older people utilise housing stock
 - adequacy of existing design and housing market responses
 - role of neighbourhood design and infrastructure for ageing in place

Research aims

1. Understand the relationship between older home owners and their **dwelling types, sizes and locations**;
2. Examine the variation in these factors by **age, level of ability, household type and cultural background**;

3. Assess the **efficiency of housing stock** for older home owners, considering changes in household size and composition over time;
4. Explore measures that might help to **improve efficient use** of the housing stock and **liveability** for older Australians;

5. Establish the **costs and benefits** of **adaptable and universal housing design** and propose an economic model to assess the consequences for older Australians if not adopted;
6. Investigate the level of **demand and consumer support** amongst older home owners for **adaptable and universal housing design**

Research method

multidisciplinary approach



1. Literature and policy review of the ageing population
2. Quantitative analysis of Australian statistics
 - 2006 Australian Census, 1999 Australian Housing Survey
3. Australia-wide survey of older home owners
 - via National Seniors magazine '50 something'
 - 1604 valid responses
4. Qualitative in-depth interviews
 - 70 undertaken in five Australian states/territories
5. Cost-benefit analysis and economic modeling
 - custom modifications and Adaptable, Visitable & Universal Design

Key findings

dwelling and space utilisation

households and space utilisation

improving efficiency and liveability

housing design approaches

community participation and design

Key findings

2006 census:

Most older Australians living in single (23%) or couple (66%) households, in separate houses (82)% with 3+ bedrooms (83%), that were owner-occupied (84%).

CANADIAN OCCUPANCY STANDARD

- Children under the age of 5 of either gender can share a bedroom;
- Children from 5 to 15 years old of the same gender can share a bedroom;
- Those aged 16 or older, either married or in a de-facto partnership can share a bedroom. (ABS, 2000)

Key findings

dwellings and space utilisation

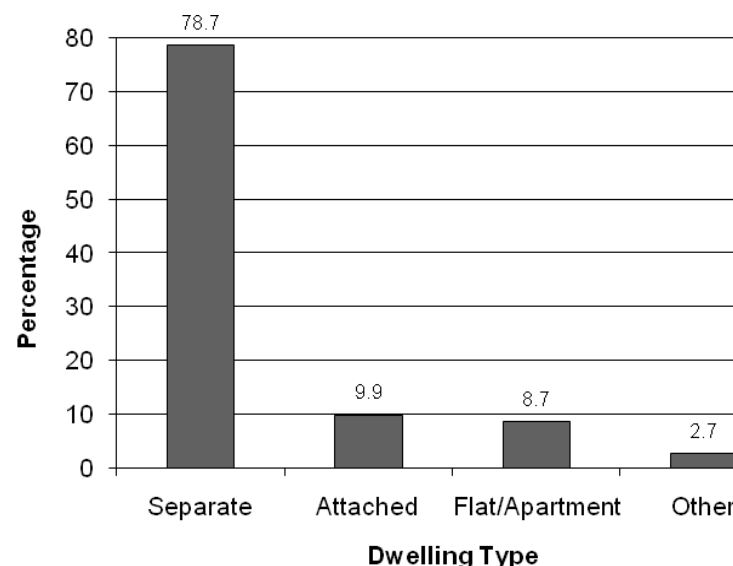


Key findings

dwellings and space utilisation

Older homeowners' dwellings (survey)

- dwelling types
 - 79% separate house
 - 10% attached house
 - 9% flat/apartment
- dwelling size
 - 49% area 100-199m²
 - 36% area 200+m²



Key findings

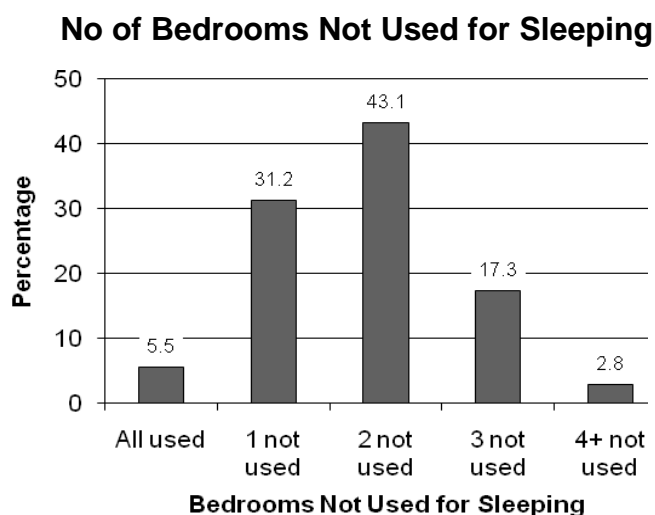
dwellings and space utilisation

Older homeowners' dwellings (survey)

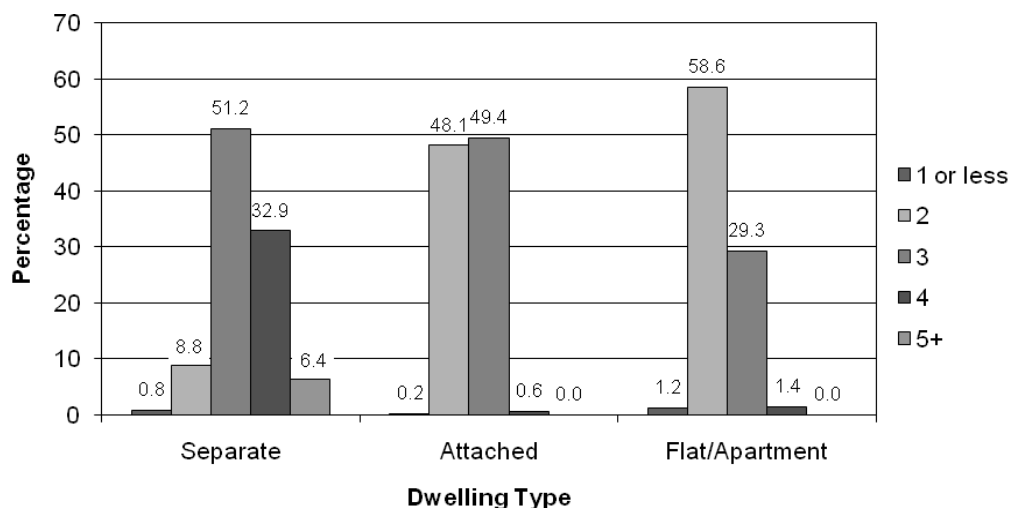
- bedrooms

- 81% 3+ bedrooms

- 94% 1+ bedrooms
not used for sleeping



Dwelling Type by No of Bedrooms



Key findings

dwellings and space utilisation

Older homeowners' dwellings (survey)

- other uses of bedrooms
 - 34% home office or study
 - 27% guest bedroom
 - 12% hobbies
 - 9% storage



Key findings

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Key findings

households and space utilisation



Key findings

households and space utilisation

■ Household size (survey)

→ Permanent residents

1 person: 38%

2 person: 54%

3+ person: 9%

→ Temporary residents

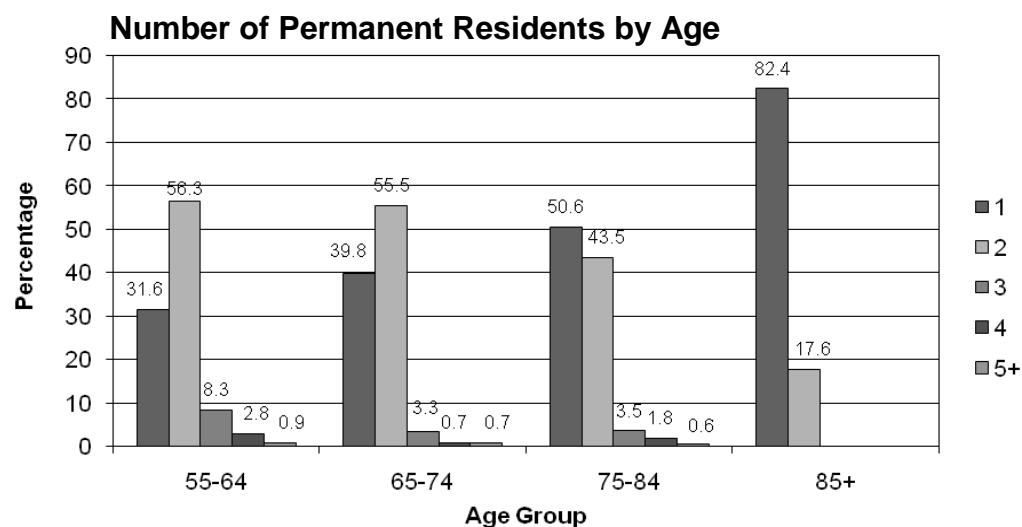
23% households also have temporary residents (stay 20+ nights per year)

- children: 37%

- grandchildren: 18%

- other relatives: 20%

- friends: 14%



Key findings

households and space utilisation

- Household size changes (survey)

- 6% increased in last 5 years

- Children moving in: 41%

- New relationship: 12%

- Boarder moved in: 9%

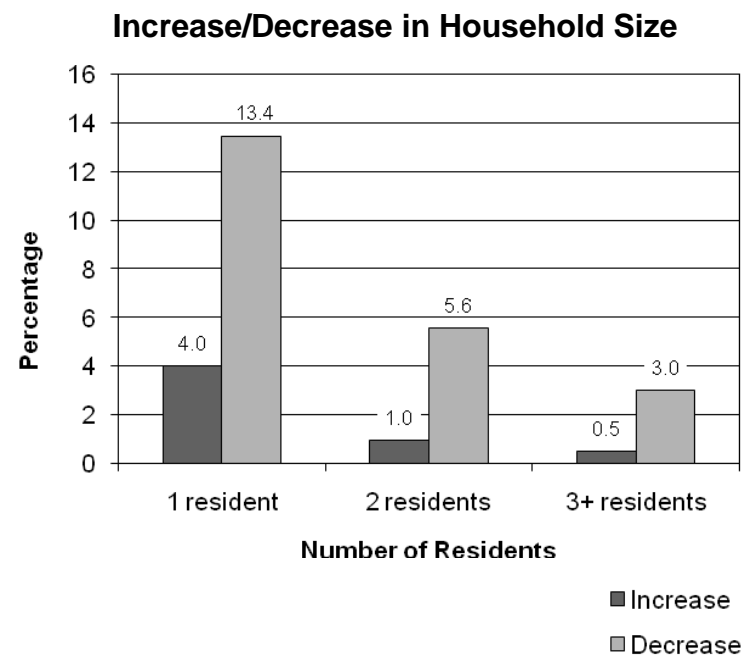
- Grandchildren moved in: 7%

- Parent moving in: 5%

- 22% decreased in last 5 years

- Children moved out: 53%

- Death of partner or relationship end: 28%



Key findings

households and space utilisation

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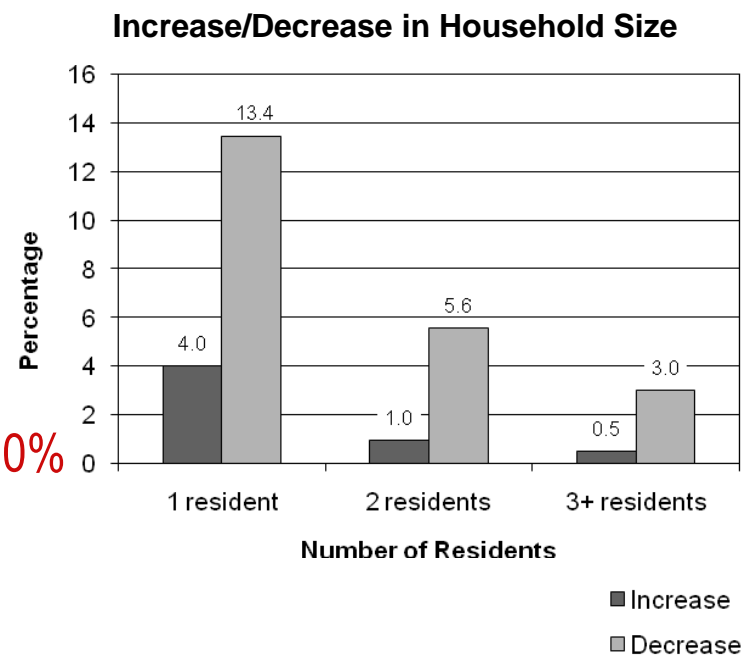
- Moved dwelling: 31%, Altered dwelling: 10%

- 22% decreased in last 5 years

- Children moved out: 53%

- Death of partner or relationship end: 28%

- Moved dwelling: 48%, Altered dwelling: 3%



Key findings

households and space utilisation

- Need for assistance (survey & interviews)

- 17% with one or more residents requiring assistance

- carer

 - in household: 48%

 - visiting friend/family: 10%

 - visiting professional: 14%

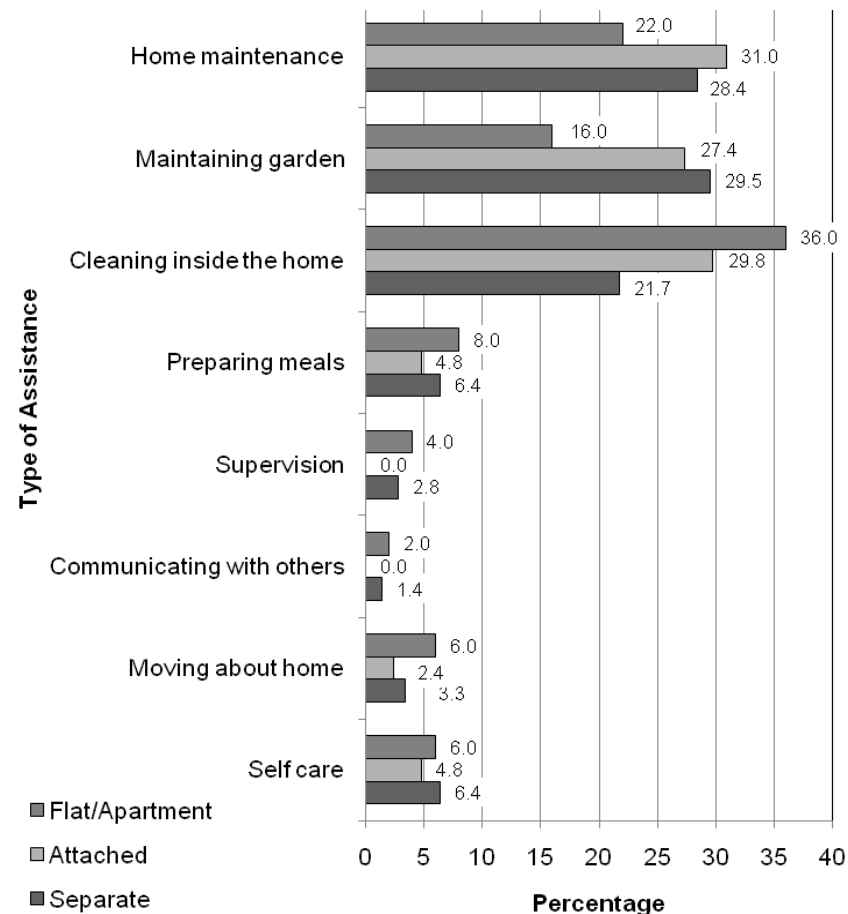
- additional demands on space

 - carer assistance

 - assistive devices

 - separate bedroom

Type of Assistance Required by Dwelling Type



Key findings

improving efficiency and liveability



Key findings

improving efficiency and liveability



- Dwelling suitability for number of residents (survey)
 - 91% regarded their home as suitable for the number of permanent and temporary residents

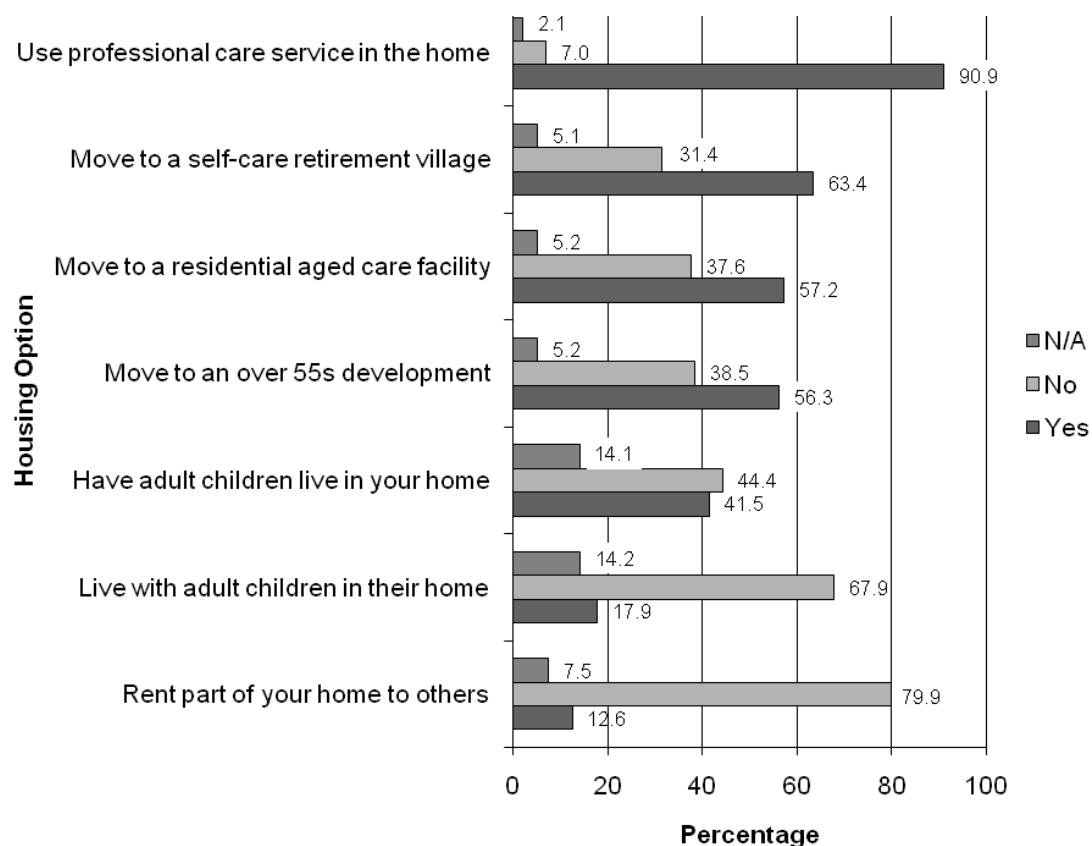
- Dwelling suitability for care needs of residents (survey)
 - 56% regarded their home as suitable for the special care needs of their households
 - 34% had already made modifications to their current dwelling
 - grab rails: 28% , bathrooms 26%, stairs 23%
 - 40% said that they were likely to modify their dwelling in future
 - stairs: 32%, ramps: 23%, grab rails: 22%, bathrooms 20%
 - 54% said they would be able to pay for these, 35% were uncertain and 11% said they could not afford to pay

Key findings

improving efficiency and liveability

- Options for improving efficiency (survey)

Consideration of Future Staying Put and Moving Options



Key findings

housing design approaches



Key findings

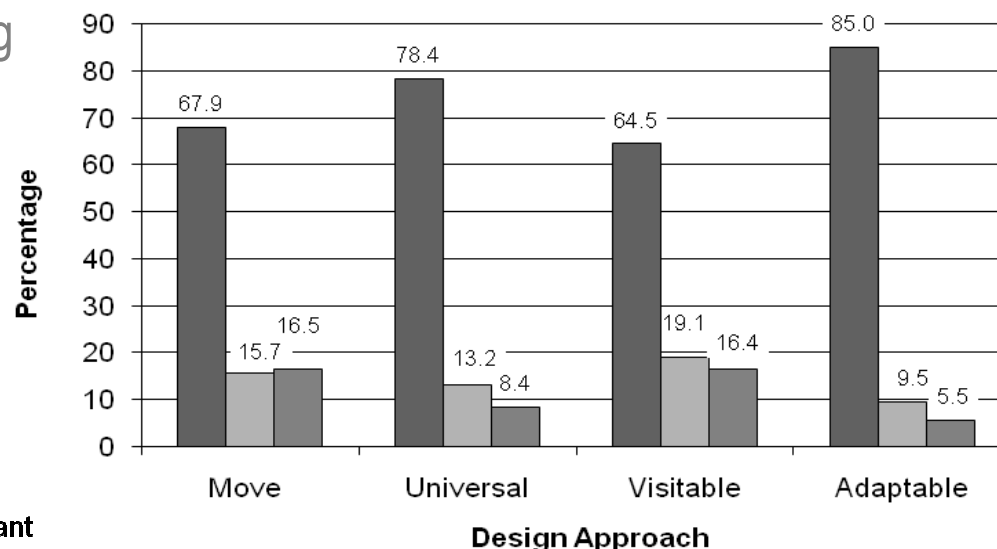
housing design approaches

- Consumer acceptance and demand (survey)

- Adaptable: 85%
Can be modified easily and at low cost
- Universal: 78%
Modification not required
- Move: 68%
To more suitable dwelling
- Visitable: 65%
Homes of friends
and family

■ Important
■ Neutral
■ Not Important

A Comparison of Support for Different Approaches to Design



Key findings

housing design approaches

- Consumer demand for Visitable features & need for regulation (survey & interviews)

→ Yes

Disability in family

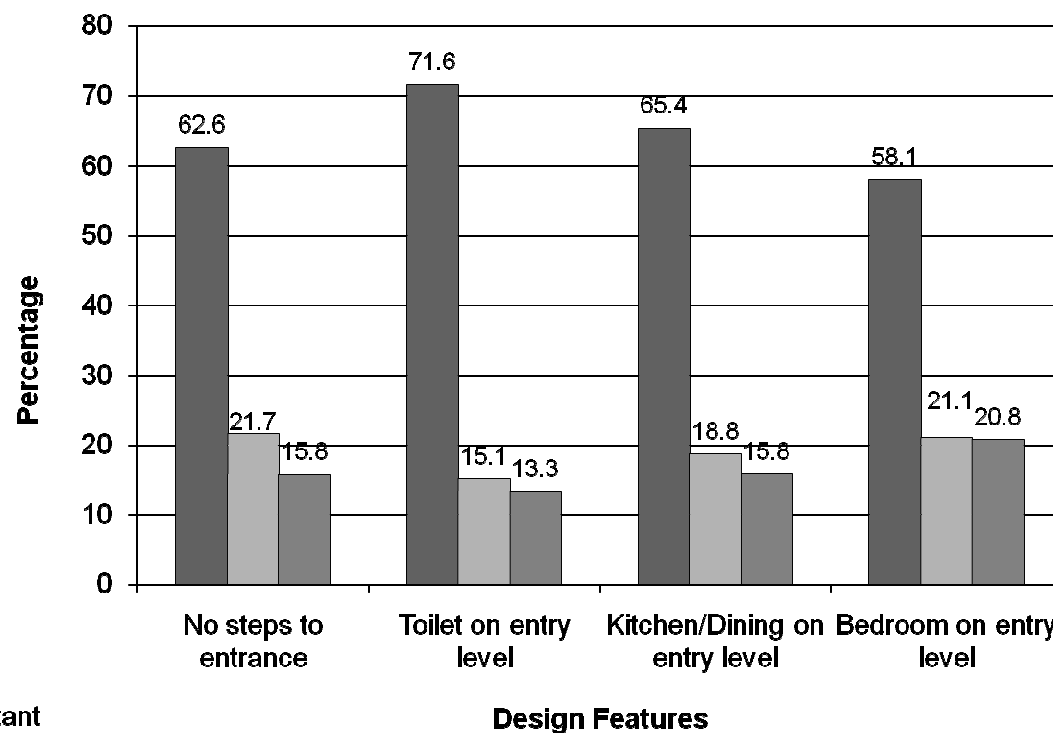
For temporary injuries

→ No

Personal freedom

Unfair costs

Importance of Visitable Design Features in Friends/Family Homes



Key findings

housing design approaches

- Cost-benefit analysis

Home Modification

Adaptable Design

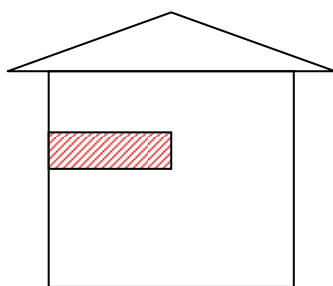
AS 4299-1995 Adaptable Housing - C

Universal Design

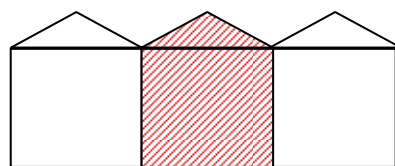
10 critical features - 3 sources

Visitable Design

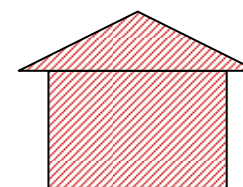
AS 4299-1995 Adaptable Housing



apartment
2 bedrooms



attached house
3 bedrooms



separate house
4 bedrooms

Key findings

housing design approaches



- **Cost-benefit analysis**

- **Approaches varied in design time and complexity**

- Visitable: most straightforward - provision of accessible entrance

- Adaptable: most difficult - two designs, ambiguity and complexity in criteria

- Universal: single design, avoids future changes

- **Inconsistency in design criteria**

- Differing feature requirements for Visitable, Adaptable and Universal criteria

- **Availability of products had direct bearing on feasibility**

- Opportunities for new home products

- **Policy Viability**

- Visitable design had lowest costs but fewer benefits

- Visitable, Universal, Adaptable (ground level) most viable

- Home modification had high cost, indicating sub-optimal policy

Key findings

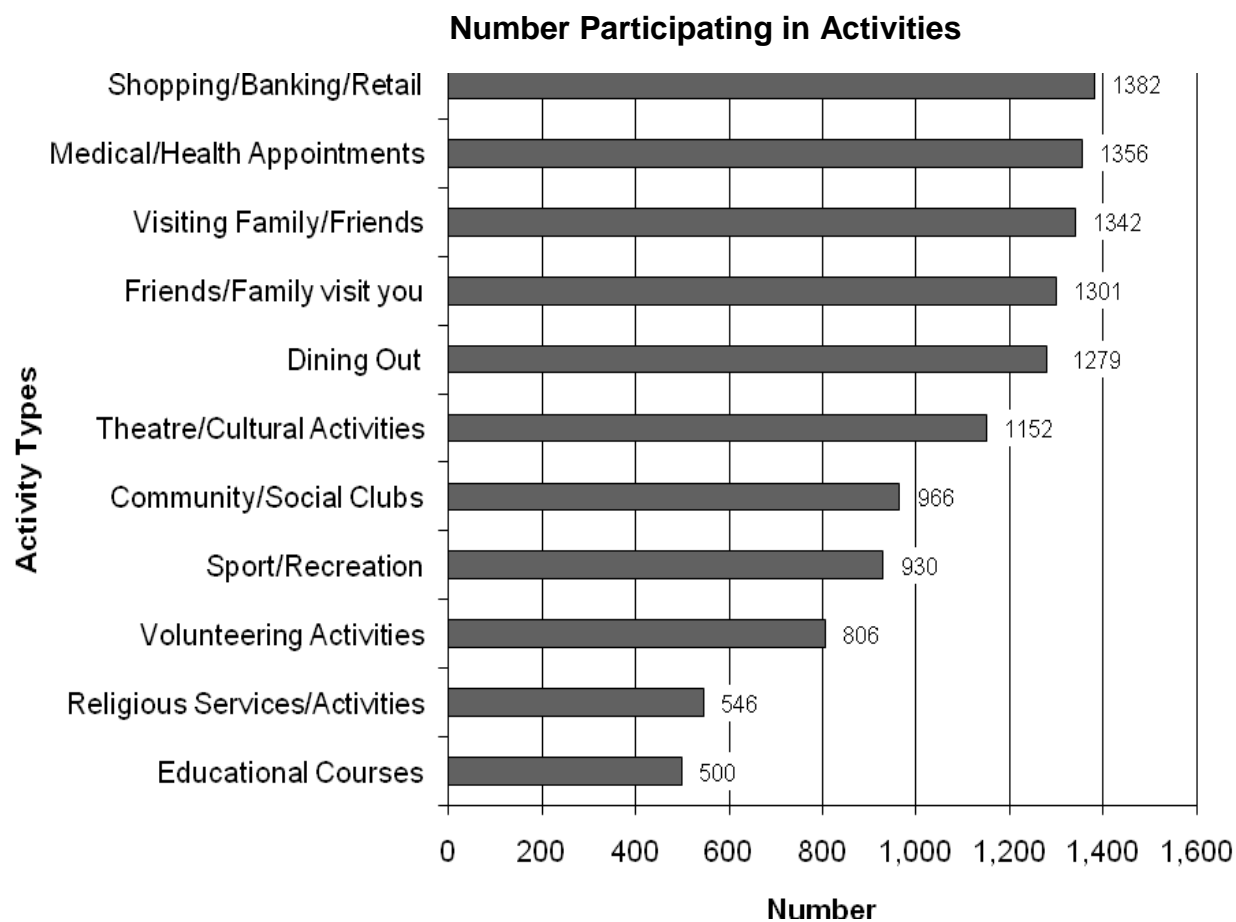
participation & neighbourhood design



Key findings

participation & neighbourhood design

- Participation in activities (survey)



Key findings

participation & neighbourhood design

- Participation in activities (survey)

1-4 times/week

88%

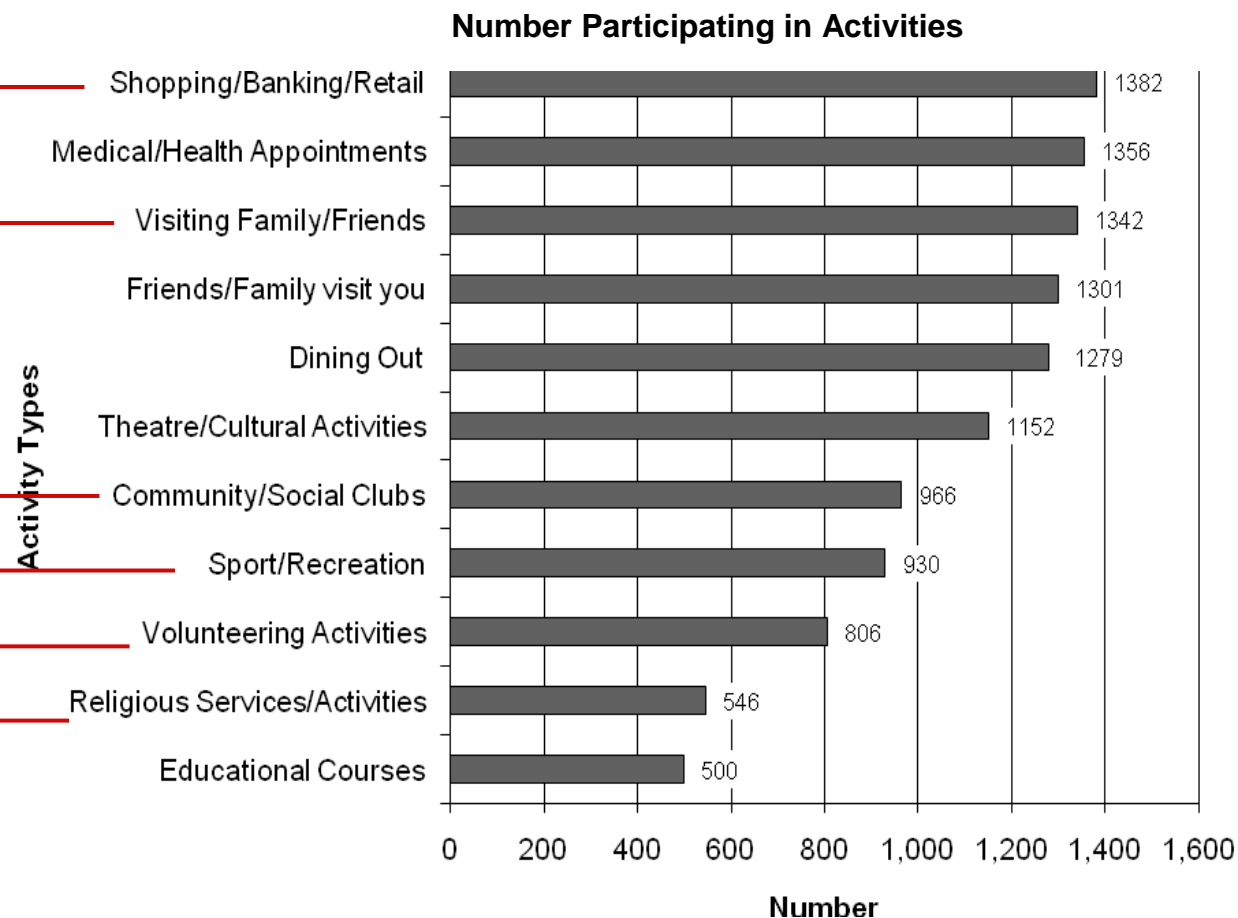
61%

55%

69%

56%

67%



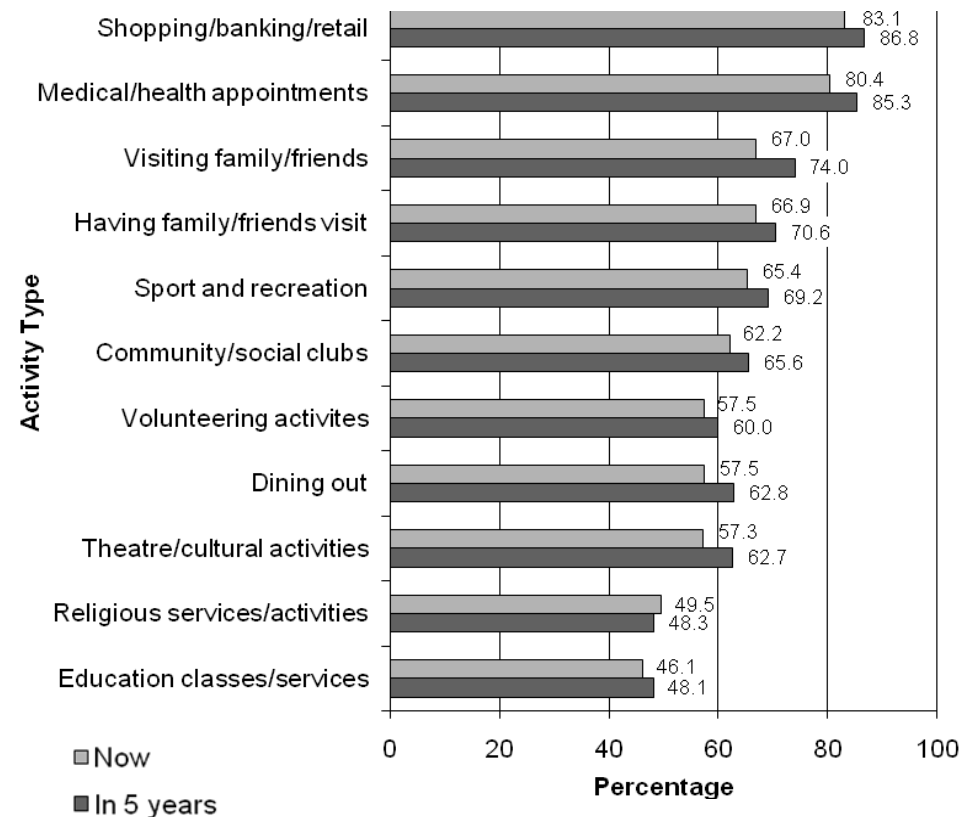
Key findings

participation & neighbourhood design

- Importance of proximity to activities (survey & interviews)

→ Proximity of activities often a reason for staying in, or moving to an area

Importance of Close Access to Activities Now and in 5 Years



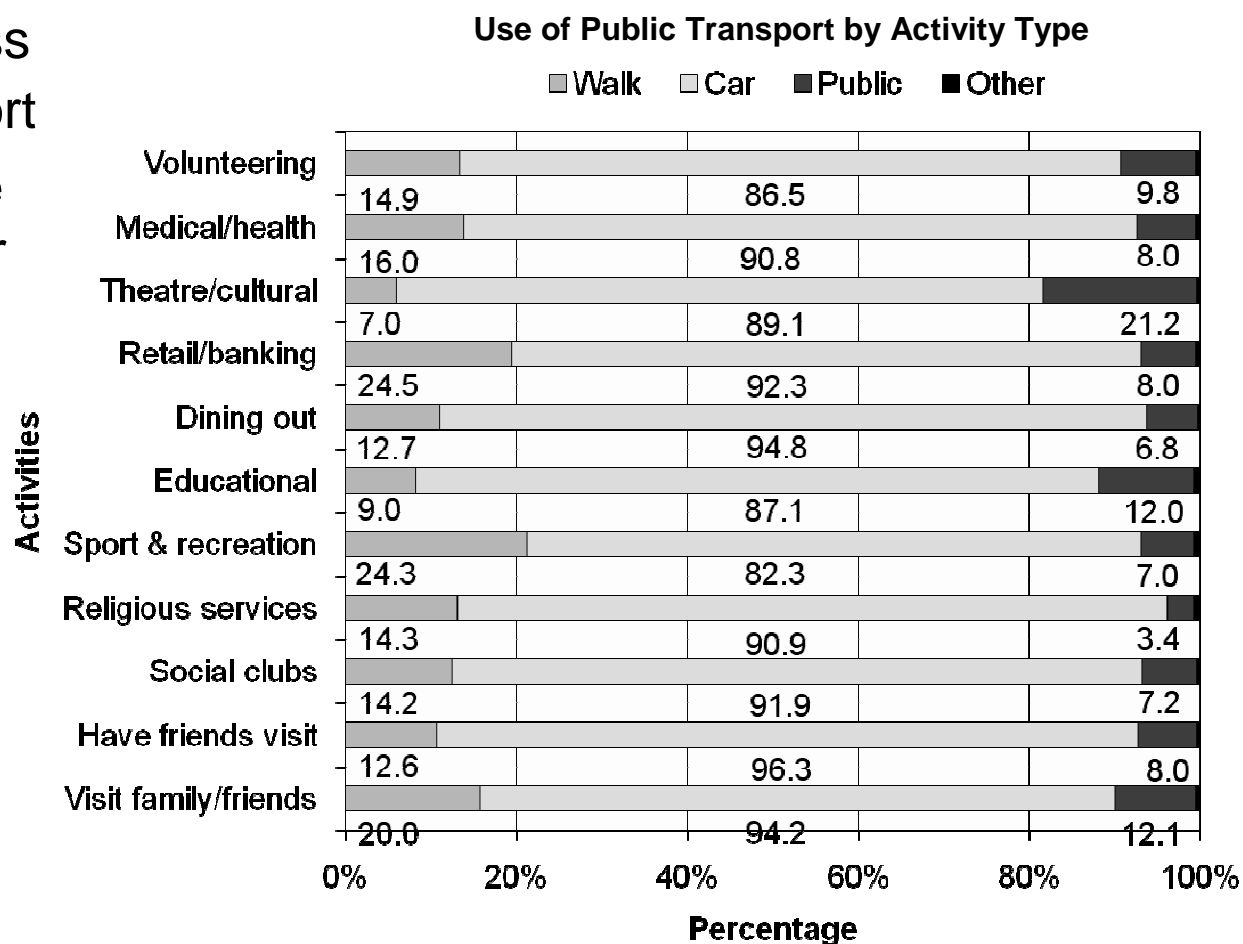
Key findings

participation & neighbourhood design

- Transport to activities (survey)

- 86% have access to public transport

- most use private motor vehicle for activities



Key findings

participation & neighbourhood design



- **Transport to activities (interviews)**

- **Barriers to public transport**

- Absence of services (outer suburbs & regional areas)

- Excessive distances or steep access to transport nodes

- Irregular or unreliable services

- Inconvenient or circuitous bus routes

- Changes or cancellation of bus routes

- Queues and lack of seating at bus stops

- Excessive transfer waiting times between modes

- Lack of parking at stations (middle of the day)

- Crowding on trains and buses

- Difficulty negotiating stairs at stations and onto buses

- Concern about crime and anti-social behaviour on public transport and at transport nodes

Key findings

participation & neighbourhood design

- Neighbourhood design – concerns (interviews)
 - Paths of travel



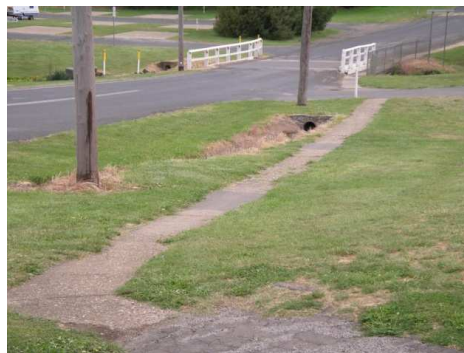
non-existent



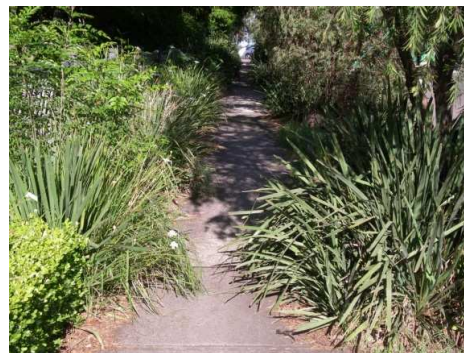
discontinuous



damaged



narrow/steep



obstructed



close to street

Key findings

participation & neighbourhood design



- Neighbourhood design – concerns (interviews)

- Paths of travel

- Transport

- Excessive distances or steep access to transport nodes

- Lack of seating and shelter at bus stops

- Lack of parking at railway stations

- Difficulty negotiating steps at stations or onto buses

“I have to walk up the hill [to the bus stop] and I rarely ever do that because it’s getting too difficult.”

(Female 65-69 living alone, attached house, pensioner, assistance required)

“It’s nice to get to [station name] for the train, it’s very quick to the city. But you do have to get there and there aren’t any [car] parks there. If you’re not there before 9:00am or 8:00am there’s no parking, so it’s a problem.”

(Female 60-64 yrs with partner, suburban, separate house, self-funded retiree, assistance required)

Key findings

participation & neighbourhood design

- Neighbourhood design – concerns (interviews)
 - Paths of travel
 - Transport
 - Buildings



"Well, the post office does not have access. It is two large steps and they are cut in like that. So when you come out the door you have got to watch you don't fall down that step there."

(Female 60-64 yrs, living alone, regional, separate house, self-funded retiree)

Key findings

participation & neighbourhood design



- Neighbourhood design – concerns (interviews)

- Paths of travel

- Transport

- Buildings

- Public open space

- Lack of parks

- Inappropriately designed or equipped parks

“[speaking of how often she used a nearby park] Not very often, no. I mean I have, but...Just because I find it’s got a slope on it, and again with my knees...Yes, and I just don’t find it easy to walk around the park. I’ve done it, but ... it’s not good for me, with my knees. ...You’ve got to walk on wet lawn... but it’s more the slope part that I find difficult.”
(Female 70-74 yrs, living alone, separate house, suburban)

Key findings

participation & neighbourhood design



- Neighbourhood design – concerns (interviews)

- Paths of travel
- Transport
- Buildings
- Public open space
- Street fixtures and furniture
 - Lack of, or damaged, seating;
 - Lack of, or damaged, public toilets;
 - Lack of handrails on stairs

“[The lack of benches] is [a problem], isn’t it? In fact that’s the reason why [partner’s name] can’t walk, because he needs to sit down every... five minutes or so, and he really can’t. It’s the same with shopping centres. He needs to sit down...so we only go to the shopping centres when he knows that it’s got seats, because he loves to go shopping, but you know. Benches would be fantastic. Benches at bus stops would be just lovely to have a bit of a rest.”

(Female 60-64 with disabled partner, separate house, suburban, self-funded retiree)

Key findings

participation & neighbourhood design



- Neighbourhood design – concerns (interviews)

- Paths of travel
- Transport
- Buildings
- Public open space
- Street fixtures and furniture
- Wayfinding

Legibility of street pattern

Confusing bus routes and signage

“I guess the main problem with the area is that it is not in squares, it goes around in circles and can be difficult for people to find us here. ...I’ve gone and collected people that have lost themselves.”

(Male 65-69 yrs with partner, separate house, suburban, working part-time, assistance required)

Key findings

participation & neighbourhood design



- Neighbourhood design – concerns (interviews)

- Paths of travel
- Transport
- Buildings
- Public open space
- Street fixtures and furniture
- Wayfinding
- Safety and security

- Unsafe walking at night (particularly women)

- Inadequate lighting

- Local crime hotspots (hotels)

- Vegetation providing concealment

Implications

- policy
- housing & development industry
- older Australians

Implications

policy



- Review measures of housing utilisation and efficiency
 - Consider factors other than just bedrooms and household size
 - permanent and temporary residents
 - alternative use of bedrooms for essential or desirable activities
 - permanent and temporary changes in household size
 - level of ability and need for assistance (which can require more space)

Implications

policy

- Review measures of housing utilisation and efficiency
 - Consider factors other than just bedrooms and household size
- Improving efficiency and liveability
 - Focus on housing older homeowner population in the general community rather than segregated 'aged' housing
 - Smaller dwellings with 'extra' bedrooms and flexible spaces
 - Independent 'accessory dwellings' for living with family

Implications

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 - Consider factors other than just bedrooms and household size
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 - Focus on housing older homeowner population in the general community rather than segregated 'aged' housing
 - Smaller dwellings with 'extra' bedrooms and flexible spaces
 - Independent 'accessory dwellings' for living with family
- Improving housing design to support ageing in place
 - Strong support for Adaptable and Universal design approaches but opinion is divided on regulating Visitable design
 - For those who move, there is strong market demand for housing in the community that will meet need for assistance.
 - Require evidence-based housing design criteria

Implications

policy

- Improving neighbourhood design for an ageing society
 - Design of neighbourhood and provision of facilities can enhance or inhibit participation
 - Older home owners wish to live in areas that are well serviced by commercial, retail, cultural and community service facilities
 - Despite access to public transport, home owners are highly car-dependant, in part due to transport barriers in many areas
 - Though some guidelines on urban design, healthy cities and sustainability address needs of older people, a national set of age-friendly guidelines for cities and neighbourhoods has yet to emerge

Implications

housing and development industry



- Meeting preferences for housing type, size and density
 - Focus on mainstream rather than specialised housing
 - Single-level dwelling, private outdoor area, safety, security
 - At least one 'extra' bedroom
- Designing housing that provides required safety, usability and access
 - Integrate access features to minimise future modification
 - More housing in community that is accessible, marketable to all
 - Flexibility in dwelling designs
 - Development of design criteria for more accessible housing
- Opportunities for innovation in housing & building industry
 - New home products and building methods

Implications

older Australians

- Dwelling size and design
 - Older home owners have a desire to remain in their own homes and neighbourhoods, and consider the size of their homes suitable
 - There is a need to clarify and better communicate information on housing design approaches, design criteria and their benefits, and modifications
- Neighbourhood design and facilities
 - Older home owners are conscious of the importance of the wider neighbourhood to active and healthy ageing in place.
 - Age-friendly neighbourhoods will require changes from low-density suburban development and car dependency, to more dense mixed-use neighbourhoods and increased use of improved public transport systems.



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