



Office for Ageing Well Housing for Life: Designed for Living



Government
of South Australia

SA Health



Photo Credits

Front cover:

Each apartment at Wohnfabrik, St Gallen, Switzerland has its own outdoor space – Guy Luscombe.

Clockwise above:

One of the interesting loft style apartments in a converted factory that is the self-managed seniors cohousing development Wohnfabrik, St Gallen, Switzerland – Guy Luscombe.

A dementia courtyard in a multilevel seniors' and aged care complex in Breda, The Netherlands – Guy Luscombe.

An individual group home courtyard in De Hogeweyk, Weesp (Amsterdam), The Netherlands – Guy Luscombe.

Stand Out Report are acknowledged for their contribution to the development of this report.

Foreword

Housing is key to positive ageing, to ageing in your community, to being independent and minimising the need for services and formal support, but requires appropriate design and tailoring to individual needs. However, there are few examples of housing designed specifically to fulfil these outcomes in South Australia. Most housing is designed for family groups and any that is designed with older people in mind is most likely to target those with high level care needs. There has been little co-design with older people and this is reflected in the significant gap in housing that supports independent living and ageing well.

This unmet need presents a major opportunity for architects, interior designers, urban planners, landscape gardeners, builders, property developers and Smart Living technology suppliers. There is a need to better understand the diverse housing needs of older people and the economic opportunities generated through designing houses and precincts that support positive ageing. This was the motivating factor for the **Innovation in Social Housing 90 Day Project**, which was undertaken in 2017 by the then Office for the Ageing (now Office for Ageing Well).

The Project challenged a number of assumptions about ageing, reminding us all that whilst people may have retired from work they do not retire from life and that older age can be a time of continued growth, contribution and involvement. The Project also highlighted the extreme diversity of our older population and that we can no longer assume that one-size-fits-all products and services will work for everyone. There are more opportunities in the Ageing Well Economy when this diversity is understood.

This report seeks to share the learnings of the Project, the key principles that were identified by older people as critical for housing to meet their needs into the future, the innovation and inspiration provided by industry, and the challenges that we still need to resolve. It also shares a unique approach to design with and by older people that taps into their expertise and experience and enables partnership with industry to deliver homes and neighbourhoods that are designed for living.

Ageing Well Industry: Housing and urban design

It is increasingly recognised that how well most people age depends not just on their genetic makeup, or how much attention they pay to healthy living, but also on the extent to which their surroundings enable them to do so. Well-designed homes and age friendly neighbourhoods have a critical role to play in enabling people to remain independent and connected with their community as they age.

While a number of industries are developing to support people to age well, significant untapped potential exists in relation to housing and urban design.

By working with older Housing SA tenants in a co-design process (described below), the Innovation in Social Housing 90 Day Project identified a set of seven Guiding Principles that reflect what is important to them in the design of their homes, and the neighbourhoods in which they are located.

Principles for age friendly housing and neighbourhood design

The following overarching principles emerged at the Co-design Forum as critical to embed in any future planning around housing and precinct design for older Housing SA tenants:

- > **Choice:** Older people want to have choices about how they live, and scope to personalise their homes.
- > **Quality:** It is better to invest in quality fixtures and fittings now for better efficiency and maintenance in the long term.
- > **Wellbeing:** Wellbeing is a direct result of connectedness with community and home.
- > **Design:** The concept of passive and flexible design that adapts to people's changing requirements, needs to be central to new Housing SA builds.
- > **Cost:** Older people prefer smart investment and the ability to personalise their homes, to ensure cost efficiencies are retained, but without sacrificing good design.
- > **Smart:** The integration of smart technology and renewable energy ensures these homes stand the test of time and remain affordable.
- > **Access:** Proximity to transport, services and the community is fundamental to living and ageing well, as are neighbourhoods that are easy to get around and foster active travel choices.

Opportunities brought by an ageing population

Significant economic opportunities arise from an ageing population that is not only growing in size, but with changing expectations about how older people can, should and want to live. Unprecedented progress in science and technology means that people not only live longer but now are living better for longer. They will be more able to do this if businesses can tailor their products to support active ageing, and as consumers, older people will be attracted to products that match their expectations for living well.

A number of factors affect people's capacity to age well, but they can be grouped into those associated with the individual (heredity and behaviours like healthy eating and exercise) and those related to their environment (especially housing and neighbourhood design, and the use of 'smart' technologies in homes).

The extent to which older people are enabled to pursue lives that are healthy and have purpose, to continue engaging in the lives of their families and friends, and are valued for their contributions, will determine whether or not growing older is a positive experience.

Our ageing population has been identified as an economic opportunity for South Australia, and the strong role of older people as consumers, market drivers and co-designers, has been recognised. This reframes outdated views of older people as passive recipients of services to being active consumers, shaping and choosing products that will enhance their lives and provide a positive experience.

Industry needs to catch up with the demand to age well.

A photograph of an elderly couple standing on the porch of a brick house. The man is on the left, wearing a white shirt and light-colored trousers. The woman is on the right, wearing a light green top and shorts. They are both smiling. The porch has wooden pillars and a railing. The house is made of brick and has a green roofline.

Our ageing population has been identified as an economic opportunity for South Australia

The importance of co-design

The Ageing Well industry relies on partnerships between older South Australians, industry, business, universities and policymakers, and these are actioned by co-design – linking end users to designers through approaches, such as Living Laboratories.

The Office for the Ageing and the South Australian Government have made co-design part of policy development. Co-design values the diverse expertise and lived experience of older people and recognises the importance of working with them to better understand their needs. This approach enables older people to shape the world in which they live, improving the health and wellbeing of individuals and communities alike.

What is co-design?

Co-design is a process that enables end-users to be involved in the creation of products and services intended for them.

Originating from the 1970s Scandinavian participatory design movement, co-design is more than a process of simply consulting or seeking feedback. It is a fundamental change in the traditional designer/developer and end-user relationship that recognises end-users as experts. For older people, this is especially empowering.

Co-design also makes sense from a business perspective because it ensures that a product is fit for purpose and will be adopted by its intended end-users.

The concept of Living Laboratories applies co-design techniques by bringing together industry, researchers and community to participate in product and service design, development and testing.

The importance of well-designed localities

Project findings highlighted the critical role played by the location in which housing is situated, with four key design requirements identified:

- > Accessible regardless of a person's condition, making walking easy and facilitating physical activity.
- > Encouraging social interaction with other people.
- > Public transport nearby.
- > Close to shops, services, etc.



Age friendly, universal, home design

Universal design principles accommodate changing capacities by ensuring that ageing or disability do not present barriers to living well and independently. They enable participation in community activities, regardless of life phase, and encourage intergenerational exchange.

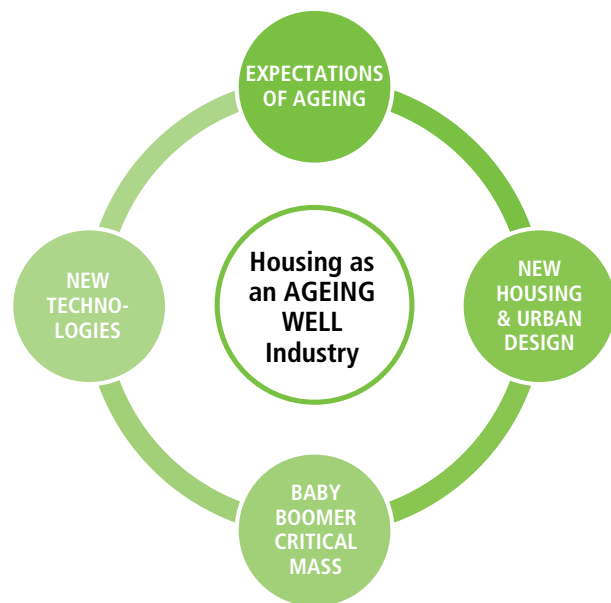
The rapidly growing 'Smart' living market holds significant economic opportunity when it links expertise on ageing with technological expertise - for example, by designing homes that address both 'Universal' and 'Smart' design, and applying co-design methodology. At present, this is a largely untapped opportunity.

Age friendly housing and urban design reflects an understanding that as people grow older their needs change, and housing can influence how well they age by:

- > enabling them to continue to live independently;
- > enabling them to remain connected with their local community; and
- > providing living environments that support wellbeing.

Age friendly housing works at the intersection of four major change factors:

- > Changing expectations about ageing and how people want to live their lives.
- > Critical mass provided by the Baby Boomer generation as they grow older.
- > Developments in housing and urban design that promote a sense of wellbeing and connection with the community.
- > New technologies that support independent living.



A role for smart housing

An older person's home can be designed to support continued independent living in the community, and is one of the most critical factors affecting their ability to do so. Increasingly new technologies are able to support this outcome.

Some of these are specifically designed with older people's needs in mind – for example, flooring designed to be non-slip that avoids the need for grip rails, and embedded sensors that detect if someone has fallen. However, some are designed for the wider community and older people benefit from these in the process.

Innovation in Social Housing 90 Day Project

Office for the Ageing (OFTA) led a 90 day project and worked with older Housing SA tenants, industry and government to explore innovative, age friendly social housing models for South Australia.

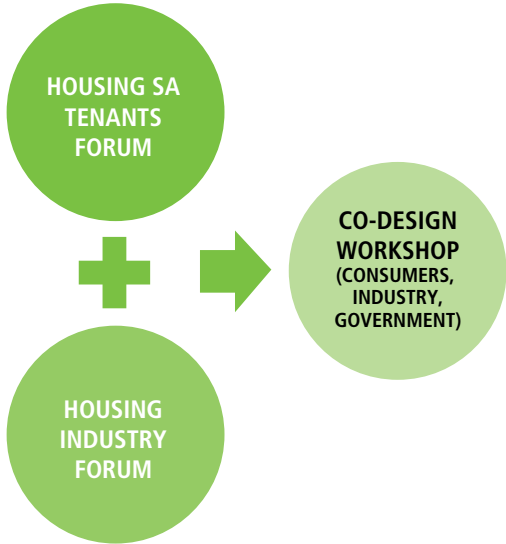
The opportunity to trial innovative, age friendly housing through co-design was offered through Renewal SA's urban renewal program. Renewal SA wants to better understand and respond to Housing SA tenants' needs as they grow older, so that new homes are designed-for-purpose – able to meet diverse support, care and lifestyle needs now, and in the future.

An Expert Advisory Panel was convened to guide the project with membership from UniSA, Flinders University, City of Adelaide, Housing SA, Renewal SA, Office for the Ageing, The Australian Centre for Social Innovation (TACSI), Public Health SA Health, ECH, Helping Hand Aged Care and COTA SA.

The project information collection process

The Project obtained significant insight into the housing needs of older people by applying a three-part process:

- > A Forum with Housing SA tenants (facilitated by TACSI).
- > A Forum with the Housing Industry – architects, developers, interior designers, state and local government, aged care providers, and ageing experts (facilitated by matchstudio, UniSA).
- > A Co-design Workshop with Housing SA tenants, industry and government representatives (facilitated by Democracy Co with OFTA Community Conversationalists).



Community Conversationalists, older volunteers trained and supported by OFTA, assisted as Facilitators in the co-design process.







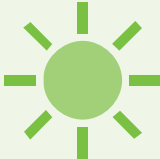
Older people's expectations of home and neighbourhood design

The initial workshop with Housing SA tenants¹ identified three factors that defined the meaning of home, beyond the basic purpose of providing shelter.

1. **Home is an Asset** – anchoring people to where they belong. Security of tenure (with or without home ownership) and having control over when and where people move is essential to a sense of stability, self-determination and belonging as people age.
2. **Home is a Gateway** – connecting people to their community, their friends and family, and to a range of services and supports, as well as regulating the flow of relationships.
3. **Home is an Expression of Identity** – enabling people to express who they are, by personalising their space and connecting them to their personal history.

From these conversations with Housing SA tenants, five themes emerged. These are plotted in the table below against their implications for design, and the three characteristics that define the meaning of Home.

Housing design: The perspective of older people





Essential Feature	Design manifestation	Meaning of Home	
 <p>Space</p>	Utilising space to the fullest, and minimising 'wasted space'	Home is an Asset	
	Protecting 'personal space' eg through soundproofing, having access to private external and internal space		
	Having space to undertake hobbies and other self-expressive activities		
 <p>Connection to Nature and the Environment</p>	Having a garden		
	Access to parks and recreational facilities		
	Security features that safely let in fresh air		
	Natural light		
 <p>Connection to Community</p>	Being surrounded by people of different ages and backgrounds		Home is a Gateway
	Avoiding age-based or public housing-based concentrations which act to segregate		
 <p>Security</p>	Positioning of doors and windows, fencing; provision of security locks		Home is an Expression of Identity
	Neighbours who look out for each other		
 <p>Energy Management</p>	Greater control over energy management in order to minimise costs		
	Attention to insulation, skylights, natural light to reduce reliance on artificial lighting		
	Design of window and door placement to support cross-ventilation		
	Provision of solar panels, ceiling fans and rain water storage		

1. Informed by TACSI's Innovation Age Initiative

Housing industry expectations of housing and locality design for older people

In the second workshop, housing industry representatives identified a number of features of good design for older people. These were distilled into four *Design Principles and Tactics* which are summarised below, and plotted against 19 identified Indicators of Good Quality Housing for Older People. Many of these align with the design requirements articulated by older people.

Housing Design: The perspective of housing industry representatives

Essential Feature	Design manifestation	Indicators of Quality Housing
 <p>Design Principle 1: Tactics that convey a sense of home</p>	Unlocking 'home' through form and scale	> Adaptive re-use
	Using traditional housing typologies in new ways	> Passive Design
	Reinterpreting front yards	> Ventilation
	Providing 'slack' space	> Views
	Designing facades as wayfinding devices	> Energy
 <p>Design Principle 2: Tactics that improve spatial characteristics</p>	Free space promotes flexibility	> Privacy
	Varied volumes create welcome differences	> Noise
	Flexible and adaptable storage improves liveability	> Storage
	Narrow footprints allow light and breeze	> Private Gardens
	Adaptable spaces	> Green Space
 <p>Design Principle 3: Tactics that enhance outdoor relationships</p>	Generous open space proportions	> Pets
	Public building perimeters	> Security
	Private building perimeters	> Visitor Accommodation
	Staggered spaces	> Social Accessibility
	Angled balconies	> Self Sufficiency
 <p>Design Principle 4: Tactics for improved social cohesion</p>	Continuous public space	> Car-Free Space
	Meaningful shared space	> Reliable Transport and Integrated Network
	Inner sanctums	> Local Shops
	Shared utilities	> Integrated Workplace and Walkable Precincts
	Active facades	

New design principles and innovation

At a design level, the Design Principles act as a set of strategies rather than complete solutions.

Design Principle 1: Conveying a sense of 'home'

Memories may be awakened, making a housing development seem like home, for example, using traditional housing types such as the semi-detached house in new ways to generate apartment buildings, or by reconfiguring the traditional terrace house from a block form to clustered zones.

> Unlocking 'home' through form and scale

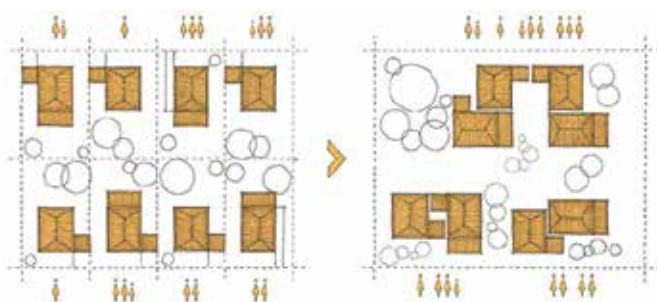
An apartment building can be made more familiar by breaking down its elements into those of a more human scale. Verandahs can become balcony canopies and window mouldings reinterpreted as window hoods.



An example of unlocking homes through form and scale

> Using traditional housing typologies in new ways

Create dwellings and gardens that are dispersed across the site to create a variety of built and unbuilt scales. These smaller in-between garden spaces might be shared across two or three dwellings.



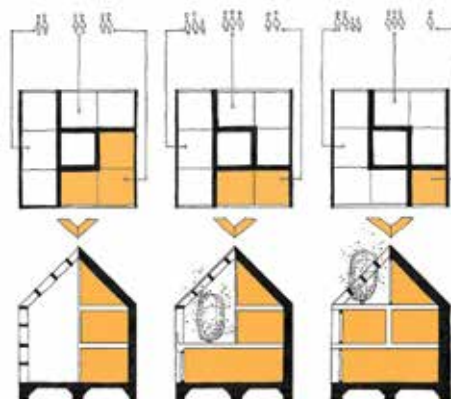
An example of using traditional typologies in new ways

Design Principle 2: Improving spatial characteristics

Compressing or releasing space and mixing low elements with high elements vary a building's volume. Spatial perception can be enhanced by staggering building footprints and facades. Connecting rooms with free movement as opposed to via single doors can make small spaces feel bigger.

> Adaptable spaces

Repeated room sizes does not have to mean repeated dwelling types. Additionally, not all parts of a building have to be built at the same time. Allowing space for additions can accommodate a new building program years later.



An example of adaptable spaces

> **Free space promotes flexibility**

Designing a building as a mix of hard infrastructure and free space encourages users to tailor the use of a dwelling to meet their own needs.



An example of space promoting flexibility

> **Varied volumes create welcome difference**

Cross-over apartments see the same volume reconfigured differently.



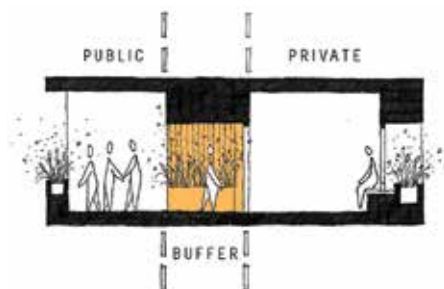
An example of how varied volumes create difference

Design Principle 3: Enhancing outdoor relationships

These tactics acknowledge the importance of a sound landscape design and maintenance programme, and offer ways in which strong relationships with such spaces might be enhanced. Access to high-quality landscaped spaces was stated as highly desirable for participants in the Industry and Co-design Workshops.

> **Public building perimeters**

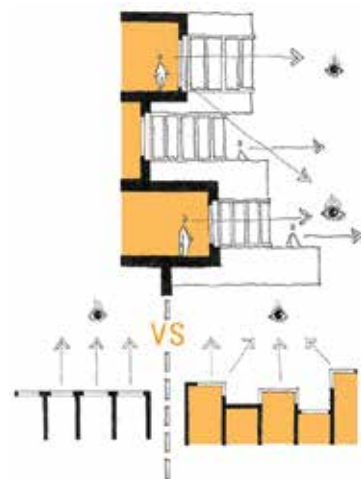
Ground level walkways and upper level circulation balconies can be buffered from dwellings with semi-private courtyards before a dwelling's front door is reached.



An example of public building perimeters

> Staggered spaces

Renewal SA's House Design Guide for apartments acknowledges that staggering a building can reduce external noise transmission and promote passive desirable surveillance of the public domain and privacy for residents.

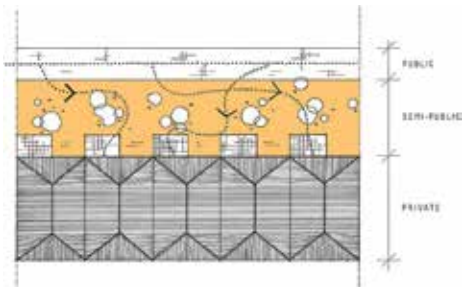


Design Principle 4: Improving social cohesion

Providing public spaces that physically, visually and socially connect dwellings can increase a housing group's sense of community. Privacy for individual dwellings remains important when housing density increases, but the privacy expectations for residents must often shift to notions of 'relative' privacy.

> Continuous public space

Landscape elements keep common areas continuously linked, but visually and physically separated from residents' front doors and windows.



An example of creating public space

> Active facades

Facades that provide the resident opportunity to tailor their balconies or windows provide a sense of ownership.



An example of active facades

More detail can be found in *Innovation in Social Housing – 90 Day Project, Design Principles Report*. Art, Architecture and Design, University of SA (matchstudio, UniSA 2017).

Co-designed age friendly design features: Matching consumer and industry expectations

Working together at the Co-design Workshop, older people and housing industry representatives identified six essential features of age friendly home and precinct design.

These are summarised below together with their accompanying design features.

"Home is a place of safety and retreat. ...when I am there I have no boundaries. It's a place to be my true self and stop all pretences."

Housing design: The co-designed perspective

Essential Feature	Design manifestation
1. Living with others	<ul style="list-style-type: none"> > Supporting communal activities > Supporting personal space eg soundproofing > Access to a caretaker/concierge > Integrated private and public housing
2. Precinct Sharing and Privacy	<ul style="list-style-type: none"> > Clear boundaries around private and shared spaces > Avoiding overlooking and a perception of surveillance > Flexible access and secure parking spaces > Shared common areas and shared utilities
3. Build Quality	<ul style="list-style-type: none"> > Investment in quality for long term savings > Initial smart design rather than retrofitting later
4. Wellbeing and a Sense of Pride	<ul style="list-style-type: none"> > Designs that support social interaction and physical activity > Proximity and access to shops, services, community and faith > Scope to personalise spaces > Quality that cultivates pride
5. Accessibility and Mobility	<ul style="list-style-type: none"> > Planning precincts around pedestrians with access for vehicles other than cars, such as bicycles and mobility scooters > A range of practical accessible design ideas
6. Improved Affordability	<ul style="list-style-type: none"> > Passive design > Use of solar and shared utilities

Distilling the lessons

The Project's Expert Panel highlighted the importance of age friendly housing and neighbourhood design, attention to ongoing maintenance, and a thoughtful approach to tenant mix, in providing home environments, neighbourliness and security that support positive ageing for Housing SA tenants.

The Project identified a number of key lessons for designing houses and local environments to support ageing and living well – not only for Housing SA tenants, but for the wider South Australian population. A number of these are also reflected in the Underpinning Principles developed during the consultation process (see Box on page 4).

- > There is significant economic opportunity to be gained by addressing housing, social and ageing-related needs through innovative design.
- > Technology has a critical role to play in meeting unmet needs for independent living, connected living and well-designed housing.
- > Older people are an extremely diverse group and no single design will meet all needs. Age friendly housing options should be as diverse as the people who will live in them. However, there are core principles that apply across this population group and from these, flexible design can be developed.
- > Co-design between the housing sector and end-users is essential for accurate and relevant design.
- > Quality design and product are highly valued and of equal importance to design features that address ageing-related challenges.
- > Features that are valued in age friendly housing and neighbourhood design are energy efficiency, natural lighting, connection between indoor and outdoor spaces, walkability, proximity to transport and services, connection to community balanced with privacy and security, and capacity for personalisation.

Sources

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