

**7<sup>th</sup> Australasian Housing Researchers' Conference**  
**6<sup>th</sup> – 8<sup>th</sup> February 2013**  
**Esplanade Hotel, Fremantle, Western Australia**

**Then, now and tomorrow: housing for an ageing population**

**Caryl Bosman\***  
Griffith University

**\*Corresponding author:**

Caryl Bosman  
[c.bosman@griffith.edu.au](mailto:c.bosman@griffith.edu.au)

**Abstract:**

The housing histories of many Australian boomers will influence their housing choices as they move into the second decade of the 20 Century. Most Retirement Village providers acknowledge that new housing models are required to cater for the aspirations, needs and requirements of the boomer generation as they get older. In addition, climate change and concerns around sustainable living patterns are gaining prominence. The key to future boomer housing is the provision of sustainable and affordable housing landscapes that promote the health and wellbeing of residents for the duration of their life. This paper focuses on Gold Coast housing landscapes, a current hot spot for retirement living, where a number of innovative boomer housing projects are currently being developed. Research will map past and current boomer housing trajectories and ask what of tomorrow's housing landscapes and what can be learned from past housing practices? And in particular with regard to the health and wellbeing of residents, housing affordability and sustainability. To this end a comparative analysis is undertaken between existing 1980s suburban development (the 'Then' of our story) and more recent development in the mid 2000s (the 'Now' of our story). The aim of this analysis is to identify factors that foster healthy ageing of residents and position these at the centre of calls for sustainable and affordable boomer housing landscapes for tomorrow. This research is significant because it contributes to the growing body of knowledge around housing for an ageing population. There is an urgent need for policies to reflect and support these emerging housing landscapes and this paper will go some way to inform decision making processes.

**Keywords:**

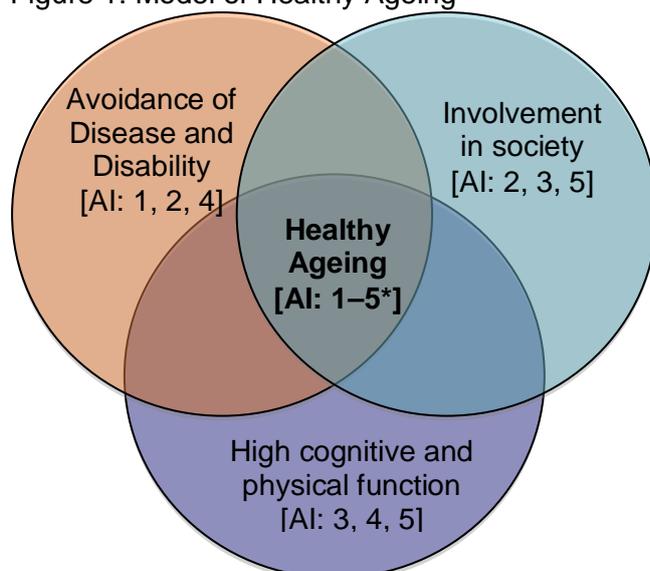
Healthy ageing, Suburbia, Active Adult Lifestyle Communities

## Introduction

As the boomer cohorts age there will be a significant increase in the number of people requiring healthcare and age care services and this has fiscal implications, not only for the Health System. An ageing population will also cost local government agencies more as people become eligible for rate subsidies, remissions and concessions (Kurko and Holden 2012). This also suggests there will be less funding for the sorts of infrastructure that will contribute significantly to health and wellbeing of people as they age; especially those that choose to age in suburban place. Embellishing Bernard Salt's (2010) quote we argue that 'there's nothing that should concern a government (at any level) more than a bored *and insalubrious* baby boomer in the burbs [italics added].' For those boomers that choose to move from normative suburbia, the 'essential' health and wellbeing infrastructure comes at a price.

The planning and development of urban environments that foster healthy ageing is primarily concerned with residents' living a socially and physically active lifestyle, one in which the 'work ethic' of the workforce is replaced with the 'busy ethic' of retirement. The relationship between healthy ageing and an active, socially engaged lifestyle (see Fig 1) is well established and is informed by the literature that tells us about the benefits of being both mentally and physically active (World Health Organisation 2002, Elderhostel Inc. 2007, Walters 2005). The World Health Organisation (1946) define health as 'a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity'. The literature also warns us of the risks if we do not engage in physical and mental activities: heart disease, obesity, memory loss, depression and dementia, to name a few of the most well known. Research demonstrates that baby boomers are more likely, than any other cohort, to suffer from obesity, multiple chronic conditions, mental illness and diabetes (Buckley et al. 2013). This is partly due to biological ageing which increases in childhood and declines in later life. The rate of decline can be influenced and reversed by implementing measures to increase health and activity as people age (World Health Organisation 2002) and thereby reduce fiscal implication. Important ingredients in the production of healthy ageing include independence, living in a secure, stable, 'normal' environment (one that minimises negative affects) and one that also promotes neighbourliness and social interaction. Research clearly indicates that, perhaps not surprisingly, many boomers have a desire to live such a life in retirement (Beer et al. 2009).

Figure 1: Model of Healthy Ageing



Source: Adapted from J.W Rowe and R.L. Kahn, 1997

\*AI Area of Inquiry, see Methods.

By contrast most existing suburban landscapes are seen to promote social isolation, fear, boredom, poor physical health and dependence. This is largely due to the lack of infrastructure and accessible amenities and facilities appropriate to the needs and requirements of individuals as they age (Smith 2009; McDonald and Kippen 1999, Walters 2005).

There have been and continue to be a number of significant changes to the housing landscapes designed specifically for ageing boomers in particular, as this paper indicates. Active Adult Lifestyle Communities (AALCs) are a relatively recent (post 2005) phenomenon in the housing market (Bosman 2012). Almost all aspects of the making, marketing and lived experience of these age segregated boomer developments are infused with a healthy ageing agenda. Health and wellbeing, community relations, safety and security and the experience of a fulfilled, purposeful, happy everyday are at the core of AALCs. Independence and living in a secure environment that also promotes neighbourliness and social interaction are without doubt important aspects of most peoples housing aspirations. For many boomers these housing options though are limited to those who have the means to afford them. There is a real concern in our current time in relation to housing affordability, not just for the first home owner; also for the potential and actual retiree. Fisher (2011) suggests, that there is currently 'an unprecedented shortage of affordable housing for seniors.' Catherine Bridge writes in Australian Ageing Agenda (2011):

by 2051, one-third of older people could be without secure and appropriate accommodation, with just one in 40 of those aged over 65 expected to own their home outright. The ... [2010] National Housing Supply Council, 2nd State of Supply report ..., states that, in the same period, as a result of population ageing, older people's households will double, increasing the demand for dwelling types better suited to the needs of this group.

This paper maps past and current boomer housing trajectories and ask what of tomorrow's housing landscapes and what can be learned from past housing practices? And in particular with regard to healthy ageing, housing affordability and sustainability. The aim of this analysis is to identify factors that foster healthy ageing of residents and position these at the centre of calls for sustainable and affordable boomer housing landscapes for tomorrow. This research is based on the assumption (Boldy et al. 2009) that there are, and will continue to be, equally significant numbers of people aged between 55-75 who will choose to either move house in preparation for (or otherwise) retirement or decide to age in place. The paper begins with an outline of the research methods. Following on from this a summary of the case study findings is presented and the subsequent discussion draws out the conclusions. The paper ends with looking at possibilities for future boomer housing.

## **Methods**

To determine the potential for health and wellbeing of residents and thereby healthy ageing, a simple comparative matrix was designed. The aim of the matrix is to evaluate factors that contribute to healthy ageing in past and current suburban development patterns and in particular AALCs. This analysis highlights some of the key areas that policy makers, planners and others need to consider in the provision of future housing for an ageing population. The matrix draws from the NSW Health 'Healthy Urban Development Checklist' and WHO 'Checklist of essential features of age-friendly cities' (NSW Department of Health 2009, World Health Organisation 2007) and includes the follow five key areas of inquiry and associated questions:

1. Opportunity for physical activity within the case study areas.
  - a. Does planning of the zone encourage physical activity?
  - b. Are footpaths and cycle paths provided?
  - c. Are streetscapes designed to be attractive, interesting and welcoming to pedestrians?

- d. Are pedestrian areas universally accessible?
  - e. Are there everyday facilities within a reasonable walking distance (400-500 metres) of the zone?
  - f. Does the zone include public open space to meet the needs of residents'?
  - g. Are public open spaces appropriate for all sections of the population?
  - h. Do open space and recreational facilities encourage a broad range of activities?
2. The provision of public open space.
    - a. Are amenities such as picnic areas and cooking facilities (barbeques) included in park design?
    - b. Are public open spaces connected via trails, footpaths and public transport?
    - c. Can people using wheelchairs get to, and move freely about, the space?
    - d. Are public open spaces sufficiently buffered from traffic in terms of noise, fumes and pedestrian safety?
    - e. Do public open spaces offer clear lines of sight, with few "hiding" or unobservable spaces?
    - f. Are public spaces designed to accommodate community celebrations, festivals and other events?
  3. Investment in social capital (meaning social relations that have productive benefits).
    - a. Are communal areas provided within the zone?
    - b. Does the zone include active mixed-use centers or hubs that will provide a focal point for local residents?
    - c. Are communal areas conveniently located and accessible by public transport?
    - d. Are public art or design features present that will encourage a sense of place?
    - e. Does the zone promote social integration with adjacent areas?
    - f. Does the urban form exacerbate socio-economic divisions?
    - g. Is social mix encouraged through housing diversity?
  4. The design of housing and the urban form.
    - a. Does the zone promote physical integration with adjacent areas?
    - b. Are houses within the zone maintained and of good quality?
    - c. Is there a diversity of lot sizes and housing types?
    - d. Is affordable housing identifiable?
    - e. Does the urban form encourage adaptation to meet the needs of people as they age?
  5. Perceptions of and or provision for safety and security.
    - a. Do the public areas include places of possible concealment?
    - b. Does the zone provide opportunities for surveillance from adjoining buildings or from nearby streets, shops etc?
    - c. Is the layout/planning pattern simple and logical with appropriate signage and way finding?
    - d. Are entrances and exits of public areas clearly signed and easily accessible?
    - e. Are spaces appropriate for the intended use?
    - f. Is there consideration of appropriate night time usage?

To undertake the analysis two case studies were chosen (see figures 2 and 3) so that data could be verified:

1. Halcyon Waters, an AALC and an adjoining suburban area in Helensvale; Postcode 4212 and
2. Golden Crest Manors, an AALC and an adjoining suburban area in Nerang; Postcode 4211.

In each of the two case studies an area within a 400 meter radius was identified (see figure 3). These 'zones' were then ground truthed and all anomalies between map and reality were

noted and taken into account in the analysis. Both AALC zones were developed after 2005 and both the suburban zones date back to the early 1980s. The two AALC sites were chosen for their difference in locational and socio-economic characteristics and the adjoining suburban sites were chosen because they are representative of development in that specific suburban area (see table 1). Halcyon Waters, is located on recently developed Hope Island to the north of Surfers Paradise and Golden Crest Manors is located in Nerang, which is one of the earliest settlement township in the Gold Coast region (see figure 2). Halcyon Waters is located within a protected wetland area and Golden Crest Manors is located on a rise overlooking light industry and bulk retail outlets. These two case studies are particularly compelling and offer interesting analyses with regard to density, diversity, amenity and integration/segregation among other things.

Table 1: Statistical comparison of the two case studies (four zones) highlighting key socio-economic characteristics of the different areas.

	<b>Halcyon Waters</b> SA1 3125322	<b>Helensvale</b> SA1 3125232	<b>Golden Crest Manors</b> SA1 3124718	<b>Nerang</b> SA1 3124818
Median age	65	38	72	32
Households with Children	NA	58%	NA	59.3%
Lone persons	20.2%	22.9%	39.9%	12.8%
Median household weekly income	\$830	\$1154	\$601	\$1249
Low income households	27.6%	18.2%	45.2%	18.6%
Unemployment	NA	6.7%	NA	11.4%
2+cars/household	43.9%	56.1%	17%	65.1%
Dominant dwelling	separate house	separate house	separate house	separate house
Dominant tenure	fully owned	being purchased	fully owned	being purchased
Renting	NA	23.7%	NA	23.3%

Data taken from 2011 ABS (.id the population experts 2013)

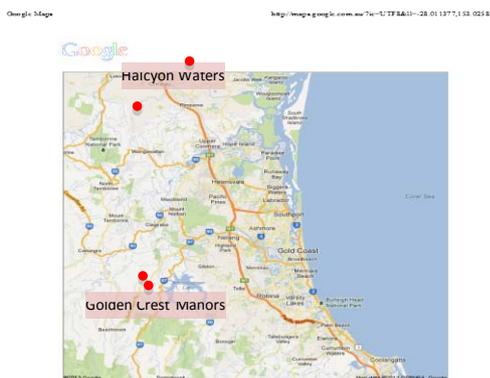


Figure 2: Location map of the 2 case studies (4 zones): Halcyon Waters and Helensvale to the north and Golden Crest Manors and Nerang to the south. Source: Google maps 2013

Halcyon Waters, Hope Island



Helensvale



Golden Crest Manors



Nerang

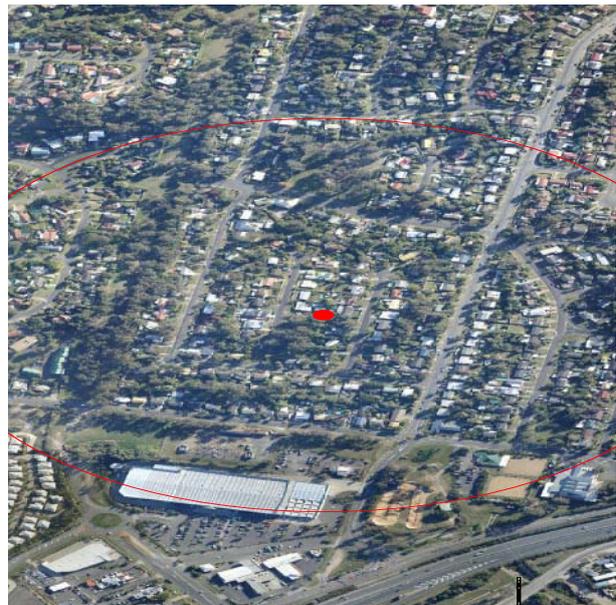


Figure 3: The two case studies showing the four zones included in the analysis. Source: nearmap 2011, produced by Gold Coast City Council.

### Case Study Summaries

Planning for the suburb of Helensvale began the mid 1970s in response to high population and strong economic growth in what is now the Gold Coast City. The area was predominantly sugar cane plantation prior to its suburban transformation. The suburb was designed to incorporate substantial open space in the form of a centrally located golf course and a series of interconnected linear parks that provided most houses with access to open space. By 1991 the suburb had both a primary and high school and a shopping centre (The University of Queensland, 2013). The adjacent suburb of Hope Island was also a sugar cane plantation with the majority of the land being floodplain for the adjacent Coomera River. After significant dredging and engineering works, the first residential development emerged in the mid 1980s. Development on Hope Island is consciously exclusive, being at the high end of the property market and consisting in the main of gated residential estates. Halcyon Waters

(2005-2013) is one such masterplanned lifestyle residential resort, planned and designed specifically for the over 50 active cohorts (i.e. baby boomers).

Planning and development of Golden Crest Manors in Nerang began around the same time as its Hope Island counterpart. Residential development in Nerang however is not typically exclusive. The township was surveyed in 1865 and by 1876 is was a small rural settlement and a rail head for local produce and timber. Prior to 1995 the town was the seat of local government for the then Albert Shire. In 1995 the Albert Shire Council merged with the City of Gold Coast Council to form the current Gold Coast City and Nerang has maintained its claim to being a seat of local government. During the population and economic booms of the region in the 1970s and 80s the town grew and piecemeal residential subdivisions replaced pastoral landscapes. The Nerang case study zone, like Helensvale, was strategically planned.

As already mentioned the following case study comparative analysis is based upon a matrix designed to identify factors that contribute to healthy ageing. The aim being to position these factors at the centre of calls for sustainable and affordable boomer housing landscapes for tomorrow. For the purposes of this paper each of the five key areas of inquiry are summarised individually. Where significant differences occur across the two case studies the specific zone is named, otherwise the following summary reflects both case study sites.

#### 1. Opportunity for physical activity within the case study areas.

The physical planning of all four zones encourages some sort of physical activity. Landuse in Helensvale and Nerang is not specifically designed to encourage walking as the topography is steep and the zones are suburban and car dependant. Landuse within both AALCs however is specifically designed to encourage physical activity with the location of recreational facilities and letterboxes planned to encourage walking.

Most houses in the Helensvale and Nerang zones are within 400-500m of a bus stop and have pedestrian access to open green space. Neither AALC is on a public transport route however all foot and cycle paths within the estate are interconnected and destinational. Importantly, AALC streetscapes are designed to be attractive, interesting and welcoming to pedestrians and they are universally accessible. This is not the case in the suburban zones where the 'carscape' is predominant, not all roads have footpaths and pedestrian areas are not all universally accessible. In these two zones the street pattern comprises cul-de-sacs and loop roads and the majority of everyday facilities (schools, shopping centre, community centre) are within a 1.5 km radius of the zone. These facilities are accessible for cyclists and pedestrians. The development to the north and east of Golden Crest Manors comprises light industry and fast food outlets and a hardware retailer. These amenities are not easily accessible by foot because the topography is steep and the roads are not conducive to either cycle or pedestrian travel. At Halcyon a medical precinct and age care facility are planned for adjoining greenfield sites and there is a small shopping complex within 1.5 km, accessible by motor vehicle.

All four zones include public open space that potentially meets the needs of residents. These open spaces are however limited to an appropriate range of activities specific to the current statistical demographic (see table 1) of the area.

#### 2. The provision of public open space.

Given the steep topography of the open green space in both Helensvale and Nerang there are limited amenities provided within the parks: basic children's' play equipment and seating. In both AALCs there is good provision of seating and for socialising in public open areas, with all public open spaces being interconnected by a network of footpaths. In the suburban public open spaces there are no dedicated foot nor cycle paths through the open green spaces. These spaces are primarily recreational, for active able bodies, and as such they

are not universally accessible. In all zones the public open spaces are buffered from traffic in relation to noise, fumes and pedestrian safety and all offer clear lines of sight with few 'hiding' places. The suburban green spaces are largely open grassland with a few mature native trees and the topography offers good views of the park areas. In all cases the provision of these green spaces is maintained and they do encourage a broad range of activity choices for the current statistical demographic of the area. In the suburban zones local residents comprise mainly families with school aged children which is perhaps why the green spaces are so well appropriated. These spaces are not conducive for small children to play in nor for less able bodied individuals to engage with.

### 3. Investment in social capital.

In the suburban zones the only communal areas/social infrastructure are the green open spaces whereas AALC residents are provided with a range of informal and formal communal areas from a club house to barbeque areas to herb gardens and sporting and club facilities. Most of this social infrastructure is located to create an active mixed-use hub that provides a focal point for residents. This hub is conveniently located and accessible by foot for all residents. In addition, public art and design features encourage a sense of place within these developments. Because the communal areas in the Helensvale and Nerang zones are informal and low maintenance there is no provision for specific placemaking design features. These green spaces are however interconnect with adjoining green spaces within the wider area thereby promoting physical and social integration of the zone. The communal areas and social capital infrastructure within both the AALCs are only available to residents, as these developments are gated and privatised. In this respect the urban form of the AALCs reinscribe socio-economic divisions. Also because they are AALCs, the degree of social mix within the development is limited: all residents are of similar age and abilities and housing tenure is all owner occupied. In the suburban areas, some houses are rented although there is no affordable nor social housing within the zones.

### 4. The design of housing and the urban form.

Residential development at Hope Island mostly comprises privatised, gated communities and as such there is little physical integration with adjacent areas, and Halcyon (situated within 100 acres of wetland and built on about 14 hectares) is no different. Golden Crest Manors (sited on 27 hectares of steep terrain) is also physical, visually and socially separated from the adjacent areas. The suburban zones are integrated with the surrounding land forms and uses largely through road networks and a uniform aesthetic, primarily detached houses developed in a particular style. These houses are generally of good quality and the urban form is well maintained. The major differences between the AALCs and the suburban zones is the age of the development and the extent of and budget allocated to maintenance. Both AALCs are recent developments and are immaculately maintained by the Body Corporate. In addition, residents are obliged to comply with a suite of stringent covenants. Partly because of this there is a degree of homogeneity to the urban form. This is heightened by a lack of diversity in lot sizes, housing types and architectural aesthetic, all be there a range of architecturally designed house variations to choose from. At Halcyon houses have an eight star energy rating and are constructed from Hebel blocks (masonry construction). At Golden Crest Manors houses are light weight construction. Both developments offer detached 2-3 bedroom, mostly single storied houses on 250-350sq.m blocks. Helensvale primarily consists of project houses boasting facebrick veneer and on-ground slab construction, and including a smattering of architecturally design houses, on 800-1000 square meter allotments. Nerang is characterised by lightweight prefabricated houses, mostly pole construction about two meters off the ground, on approximately 800 square meter allotments.

In neither of the two case studies is there identifiable affordable housing and no social housing is evident. The cost of an AALC house is significant higher than one in the neighbouring suburban area with the Halcyon 'dream' selling for something between \$445-

850K plus expenses and a Helensvale property going for around \$350,000. The urban form of the AALCs is designed to meet the needs of active boomers. Partly because the development is gated and partly because the lifestyle and planning emphasis is on the active years of the boomer cohorts, the urban form may not be suitable for those AALC boomers who wish to age in place, particularly if they require specialised care. In the suburban areas some house designs can be adapted to meet the needs of people who wish to age in place however the topography and density of the suburb and the reliance on vehicular transport suggest the opportunities for physical and social activities will be limited.

#### 5. Perceptions of and or provision for safety and security.

Perceptions of and the provision for safety and security are key to many people choosing to move into an AALC (Bosman 2012). Perceptions of safety in the AALC case study zones emerge from living in a community where everyone is known, where only residents have access to facilities and where there is monitored and restricted access and egress to the development. The planning and design of the urban form also contributes to perceptions of safety. Public spaces are designed to exclude places of possible concealment and to maximise opportunities for surveillance. The street layout in both AALCs is simple and logical and way finding is easy. Spaces are specifically designed for intended uses including night time use. Perceptions of and the provision for safety and security in the suburban case study zones are very different. Landscaping of the public areas is designed to minimise places of possible concealment however surveillance from adjoining houses is limited. In Nerang high fences on allotment perimeters physically and visually separate the open green space from adjoining residences suggesting that the place is not 'owned' by the local residents. In Helensvale some properties open up directly onto the adjoining green space giving the impression that there is some degree of community ownership of these spaces. In both suburban zones the street pattern in combination with the topography do not make for easy way finding and there is little consideration of appropriate night time usage of the public green spaces.

#### **Healthy Ageing: AALCs and suburbia**

In terms of opportunities for healthy ageing the clear winner, according to the results of the matrix, are the AALCs. AALC developments are specifically designed to encourage physical activity and develop social capital albeit within the gated perimeter of the development. Both AALCs include manicured open space and recreational facilities that encourage a broad range of activity choices: a club house and gym, tennis courts, swimming pools, adequate and well maintained public open space etc. These facilities are so arranged to be accessible to all residents without the need to drive to any of them. To encourage this physical exertion street networks throughout the development are connected, pedestrian friendly and green and leafy. Both developments are designed to be universally accessible and to provide for safe movement of pedestrians. A major drawcard for some AALC residents is the provision of a club house, which also acts as a venue for events, activities and to socialise with other residents. An important design feature, that also contributes to promotion of healthy ageing is the location of letter boxes within the development. Post in both case studies is delivered to a single location and residents usually walk to collect their mail. The journey to and from the mail collection points are often characterised by some form of social interaction. Active and engaged, independent and self-reliant subjects are also produced through a raft of structured activities developed and facilitated by community officers employed by the management. In addition to structured activities AALCs promote Lifelong learning courses targeted at 'learning for pleasure'. By these means the mental, social and physical wellbeing of the individual is enhanced and risks to self, the community and the state minimised. That is, residents of AALCs will not be a burden on family, neighbours, the community or the state. Because these are active adult communities all infrastructure and resources for encouraging healthy ageing are geared towards the 50-75 ish cohorts. The ACTIVE ageing cohorts. This of course excludes those sorts of activities appropriate for children and the non active adult. Nonetheless, it is possible that AALC's are providing access to resources which

model healthy ageing, in which desired outcomes are maximised such as involvement in society and increased cognitive and physical function and the minimizing of undesirable outcomes, such as avoiding disease and disability by remaining active and involved (Kinsella and Phillips, 2005).

The suburban areas offer some recreational opportunities, these are not appropriate for all sections of the population; suburban street networks are not all connected and are not designed to encourage pedestrian travel. As Kurko and Holden (2012) say in relation to the value of urban design and health 'it is the combination of features and the extent to which they are made context-specific that counts.' AALCs, after all, were specifically designed to encourage healthy ageing and the suburbs were designed to encourage use of the motor vehicle. Intervention in these suburban sites is difficult. AALCs are however limited to those boomers who have the financial equity and the desire to be part of such a community; healthy ageing has become a commodity affordable to those who have the means and the desire to purchase it.

AALCs reflect the current raft of policies and guidelines that have a healthy ageing agenda, primarily aimed at reducing the government's fiscal costs related to an ageing population. As Katz (2000: 136) explains 'the decline of the welfare state has encouraged neoliberal policies and market-driven programs to "empower" older individuals to be active to avoid the stigma and risks of dependency.' The implications of healthy ageing policies are that 'a lower standard of living, inactivity, mandatory retirement, disability, dependency and social isolation are presented as personal risks and challenges, not social issues' (Labiberte-Rudman, 2006: 193-4). By promoting and regulating healthy living in the planning and development of AALCs planners and developers are inscribing ethical and disciplinary modes of behaviour into the housing landscapes (Laurian, 2006). Many argue that healthy ageing must be the intent of policy rather than a possible outcome and that policy has a significant role to play in influencing health and wellbeing for all generations and life forms (Bacon et al, 2010; Fleuret and Atkinson, 2007). Laurian (2006) urges planners and policy makers to reflect upon moral determinisms embedded in active living and positive ageing agendas before writing them into plans and regulations. Notwithstanding, AALCs score highly in the healthy ageing matrix and are therefore worthy of study. There are however two significant areas of concerns in relation to these housing landscapes: environmental sustainable development (ESD) and affordability.

### **Sustainable affordable housing provision**

Over the first decade of the 21<sup>st</sup> century there has been growing evidence of ESD in residential housing landscapes. ESD is implemented at different scales and to differing degrees in a variety of housing typologies: From exclusive masterplanned suburban developments like the Ecovillage in Currumbin, Queensland developed by Landmatters, to urban infill, medium density, communal inspired developments like Christies Walk in Adelaide, South Australia. At a smaller scale and at the affordable/socially inclusive end of the housing market, individual buildings are emerging like Eko:Bode in Surfers Paradise, Queensland developed by the Horizon Housing Company. All three of these projects are inspired by an environmental philosophy and the design and built form demonstrates, to some degree, an integrated approach to ESD. Such an approach is more than just the fitting of low energy light bulbs, the instillation of water saving devices, insulation, rainwater tanks and solar panels. As Ramirez-Lovering (2011 p. 59) states a fully integrated approach to housing provision 'must consider the creation of new financing models, the application of whole-of-life costing, the development of inclusionary planning models, the creation of different tenure models, the application of district-wide systems and the application of innovative construction systems.' To fully realise this approach is perhaps utopian and trade-offs are inevitable in order to achieve a viable product. Recent literature demonstrates that such an approach to housing provision does, however, have merit (Wiesel et al. 2012, Crabtree and Hes 2009).

The Horizon Housing Company on the Gold Coast, a not for profit primarily social housing provider, has successfully completed the Eko:bode project in the centre of Surfers Paradise. Although not targeted at boomers this project does demonstrate that ecological sustainable development practices and affordability can come together to produce accommodation that scores really well on all five of the areas of inquiry established for this research. It incorporates the best of both the suburban and the AALC developments to achieve sustainable and affordable accommodation. The 'house' is designed to target net zero energy and water consumption. It comprises eight studio units with shared domestic facilities available. There is a communal vegetable garden, shared bicycle storage and the development is located close to bus stops, the new rapid transit line and major amenities.

## Conclusion

This paper has mapped past and current boomer housing trajectories using a comparative matrix to identify factors that foster healthy ageing of residents. Two case studies were identified and within each of these case studies two zones of a 400m radius were established as the sites of investigation. Each case study consisted of a typical 1980s suburban zone and a recently developed AALC zone. In both cases the matrix compared past housing patterns (1890s suburbia) with the AALC (current boomer housing trajectory). Five key areas of inquiry were included in the matrix: the opportunity for physical activity, the provision of public open space, investment in social capital, the design of housing and the urban form and aspects of safety and security. Not surprisingly, research found that the AALCs provided a residential environment that fostered a high degree of healthy ageing (albeit for the active boomer cohorts) in all five areas of inquiry. The typical suburban areas did not score well, planning and design of these suburbs was not intended to accommodate residents who would age in place. The current demographics of both suburban areas demonstrates that most boomers have moved out of these areas. A real concern is the provision of affordable, sustainable and healthy residential landscapes for boomers. AALCs are only affordable to a small percentage of the boomer cohort and they do not deliver a fully integrated approach to ESD and housing provision as defined by Ramirez-Lovering (2011). The key to future boomer housing is the provision of sustainable and affordable housing landscapes that promote health ageing of residents for the duration of their life. Not just the 50-75 age bracket (the so call active boomer ages) as catered for in many AALCs. Although there are no known examples of these possibly utopian housing developments, recent literature on affordable and sustainable housing provision and emerging developments like Eko-Bode provide hope for the possibilities of realising ecologically sustainable and affordable housing that promotes health and wellbeing for boomers as they age.

## References

- .id the population experts, 2013. *atlas.id: Social atlas* [online]. Available from: <http://atlas.id.com.au/gold-coast> [Accessed 27 March 2013].
- Bacon, N., Bacon, N., Brophy, M., Mguni, N., Mulgan, G., Shandro, A. 2010. *The State of Happiness: Can public policy shape people's wellbeing and resilience?* London: The Young Foundation.
- Beer, A., Faulkner, D., Baker, E., Tually, S., Raftery, P., Cutler, C. 2009. *Our Homes, Our Communities: The aspirations and expectations of older people in South Australia*. Adelaide: Flinders University.
- Boldy, D., Grenade, L., Lewin, G., Karol, E., Burton, E. 2009. *National Seniors Australia: Actions, Choices and Preferences of Western Australian Members related to 'Ageing in Place'*. Curtin University of Technology.
- Bosman, C. 2012. Gerotopia: Risky housing for an ageing population. *Housing, Theory & Society*, 29(2), 157-171.
- Bridge, C. 2011. A matter of design. *AAA*, November-December, 15-16.

- Buckley, J., Tucker, G., Hugo, G., Wittert, G., Adams, R., Wilson, D. 2013. The Australian baby boomer population-Factors influencing changes to health-related quality of life over time. *Journal of Aging and Health*, 25(1), 29-55.
- Crabtree, L. and Hes, D. 2009. Sustainability Uptake on Housing in Metropolitan Australia: An Institutional Problem, Not a Technological One. *Housing Studies*, 24(2), 203-224.
- Elderhostel Inc., 2007. Mental stimulation and lifelong learning activities in the 55+ population [online]. Available from: <http://www.bradley.edu/continuelisresearch/LifelongLearning55.pdf> [Accessed 29 September 2009].
- Fisher, D. 2011. Green buildings come of age. *AAA*, November-December, 46-47.
- Fleuret, S. and Atkinson, S. 2007. Wellbeing, health and geography: A critical review and research agenda. *New Zealand Geography*, 63, 106-118.
- Katz, S. 2000. Busy Bodies: Activity, Ageing, and the management of everyday life. *Journal of Aging Studies*, 14(2), 135-152.
- Kinsella, K. and Phillips, D. R. 2005. Global Aging: The Challenge of success. *Population Bulletin*. Washington DC: Population Reference Bureau.
- Kurko, J. and Holden, G. 2012. The built environment and public health: from theory to practice. *46th Annual conference of the architectural science association, ANZAScA*, Griffith University, Gold Coast, 1-11.
- Laliberte-Rudman, D. 2006. Shaping the active, autonomous and responsible modern retiree: an analysis of discursive technologies and their links with neo-liberal political rationality. *Ageing & Society*, 26(2), 181-201.
- Laurian, L. 2006. Planning for active living: Should we support a new moral environmentalism? *Planning Theory & Practice*, 7(2), 117-136.
- McDonald, P. and Kippen, R. 1999. Ageing: the social and demographic dimensions. *Policy implications of the ageing of Australia's population*, Melbourne, 18-19 March 1998, 47-70.
- NSW Department of Health, 2009. *Healthy Urban Development Checklist*. Sydney.
- Rowe, J. and Kahn, R. 1997. Successful Aging. *The Gerontologist*, 37(4), 433-440.
- Salt, B., 2010. Cashing in on baby boomer plans. *The Australian*. February 11 [online]. Available from: <http://www.theaustralian.com.au/business/property/cashing-in-on-baby-boomer-plans/story-e6frg9qx-1225828942095> [Accessed 27 March 2013].
- Smith, A. E., 2009. *Ageing in urban neighbourhoods: Place attraction and social exclusion*. Bristol: Policy Press.
- University of Queensland, 2013. *Helensvale* [online]. Centre for the Government of Queensland. Available from: <http://queenslandplaces.com.au/helensvale> [Accessed 13 March 2013].
- Walters, P. 2005. Growing old on the suburban fringe: master planned communities and planning for diversity. *State of Australian Cities*, 30 November-02 December 2005 Griffith University, South Bank, Brisbane.
- Wiesel, I., Davison, G., Milligan, V., Phibbs, P., Judd, B., Zanardo, M. 2012. Developing sustainable affordable housing: a project level analysis. Melbourne: Australian Housing and Urban Research Institute.
- World Health Organisation, 1946. *WHO definition of Health* [online]. Available from: <http://www.who.int/about/definition/en/print.html> [Accessed 27 March 2013].
- World Health Organisation, 2002. *Active Ageing: A policy framework*. Geneva: WHO.
- World Health Organisation, 2007. *Checklist of essential features of age-friendly cities*. Geneva: WHO.