**Give us Space**

DRAFT

**Synthesis of literature review on**

**Inter-generational**

**Contents**

|  |  |  |
| --- | --- | --- |
|  | **Section**  | **Page**  |
|  | Executive summary | 3 |
|  | List of figures and tables | 5 |
|  | Introduction | 6 |
|  | Structure | 6 |
|  | Approach | 7 |
|  | Definitions | 9 |
|  | Findings | 10 |
|  |  Seniors: issue and needs | 15 |
|  |  Children and Young people: issues and needs | 29 |
|  | Comparison of Waitemata and Southern Initiative Areas | 57 |
|  | Summary | 61 |
|  | Conclusion | 62 |
|  | Recommendations for Auckland | 63 |
|  | Future research | 65 |
|  | References  | 66 |

**Executive summary**

This synthesis is based on a series of literature searches and reviews conducted during the second half of 2018 by groups of students on the Masters in Planning programmes. They were conducted with the aim of establishing the intergenerational needs and issues experienced by seniors and young people with regard to semi-public space in Auckland. 200 plus sources were identified relating to this topic alone.

The reviews identified relevant studies in the following countries; Australia, Canada, England, Ireland, Scotland, Slovenia. From Dublin to Brisbane and Los Angeles to Auckland, there are some consistent general themes.

The literature on the experiences, needs and priorities of children and youth in Auckland City has some similar themes to that of seniors. Children and youth want public places that are close to home, easily accessible, safe from traffic, have lots of natural elements and areas for activities. Making friends through play is important for children and youth. Children and youth make connections to their neighbourhood and city by being able to experience it in third, transitory and threshold places. Children in different areas and demographics of the city have different needs for public spaces.

There is often tension and intimidation between younger children and older youth so there is a need for all-inclusive spaces which include different types of equipment and activities. The independent mobility and experiences of children and youth is often determined by their parents. However, this does not stop them from wanting inclusion and advocacy in their city.

The needs and priorities differ and reflect the unique combination of social categories that define the local community members. For example, the experiences and needs of low-income children living in suburban areas is different from middle-income children living in suburban areas.

The research shows that public attitudes are an issue that affect both older and younger people, as well as environments which create a sense of fear or unease due to their proximity to traffic.

The needs that have been expressed by the participants of the selected studies appear to align with guidelines set out by the WHO in their Global Age-friendly Cities guide (2007), particularly those set out in part five of that document in relation to outdoor spaces and buildings. They are as follows:

1. Pleasant and clean environment

2. Importance of green spaces

3. Somewhere to rest

4. Age-friendly pavements

5. Safe pedestrian crossings

6. Accessibility

7. A secure environment

8. Walkways and cycle paths

9. Age-friendly buildings

10. Adequate public toilets

11. Older customers

(pp. 12-17)

The literature search and reviews highlighted the need for more intergenerational research.

**Acknowledgements**

I would particularly like to acknowledge the following students whose work has been drawn on for this report. Krystal Alferez, Meredith Dale, Joyce Habgood, Nick Mitchell.

**List of figures and tables**

|  |  |  |
| --- | --- | --- |
| **Figure**  | **Title** | **Page**  |
| 1 | Figure 1 Seniors’ suggestions for a senior friendly park. | 11 |
| 2 | Eight key age-friendly city topic areas as a result of senior consultation in Tauranga City | 12 |
| 3 | Aotea Square, showing the sculpture by Selwyn Mutu | 22 |
| 4 | Freemans Park, Auckland  | 34 |
| 5 | Fort Street, Auckland | 37 |
| 6 | Sign restricting play in communal area of an apartment building | 55 |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

**List of Tables**

|  |  |  |
| --- | --- | --- |
| **Table** **Number**  | **Title** | **Page**  |
| 1 | What makes an age-friendly city | 13 |
| 2 | Growing up in Boulder: Summary of themes from the Boulder Civic Area 2012 visioning process. | 31 |
| 3 | Comparing Watimata and the Southern Initiative areas | 57-59 |
| 4 | Demographics of Hibiscus and Bays, Waitemata and Southern Initiative | 60 |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

**Introduction**

The aim of this synthesis is to examine and provide insights into the lived experiences, issues, needs, and priorities facing younger and older people in relation to public open space in the city. Based on work carried out by Masters students’ as a starting point, this report provides a synthesis of a series of literature reviews carried out to determine what work has been published in the last 5 years between 2013-2018 on the intergenerational needs and issues for semi-public space. The aim of the literature reviews is to examine and provide insights to the lived experiences, issues, needs, and priorities facing younger and older people in relation to public open space in the city.

The kinds of questions which we hoped to find answers to were:

* What are the common issues and needs of younger and older people?
* What issues and needs are specific to Auckland?
* What gaps are there in the current literature?

**Structure**

The report starts by outlining the approach taken, then goes on to provide definitions of public space, the international context. The synthesis summarises the themes presented in the reviews, focussing on the issues and need of seniors and younger people, indicating where the research took place and provides a comparison between Waitemata and South Auckland.

**Approach**

This synthesis is based on a series of literature searches and reviews conducted during the second half of 2018. They were conducted with the aim of establishing the lived experiences, needs and priorities facing older people and children in Auckland.

The search time-period of 2012-2017 was chosen to limit the results and to identify the most recent and relevant research in this area. Some literature from before 2012 was identified from reference lists of key papers or in databases with limited resources.

The literature search method recorded sources, search terms and results, and an extract of the record is included in Appendix A. Databases including Web of Science, Google Scholar, Informit, JSTOR, FindNZArticles, nzresearch.org.nz, Proquest and EBSCO Host were used to find relevant academic journal articles and research papers for this review. Search words used were: “public space” or “public open space” (with or without “ ”), child\*, you\*, cit\*, urban, age, old\*, senior\*, people, stud\*, experi\*, interview, diary, need, New Zealand, age-friendly, qualitative, research. The list of search terms developed during the search. A combination of terms was chosen, depending on the number of search results and the target topic (i.e. older adults vs. younger people) and iterated until a reasonable number of relevant results was generated. For larger databases such as JSTOR, Proquest and EBSCO Host, searches were limited to the 2012-2017 period, English papers and, journal articles and thesis only. Where further refinement of searches was needed, searches were limited by relevant subject, such as ‘urban planning’, ‘public space’, ‘urban studies’, ‘older people’. For particularly relevant papers, a further search of their reference list was done to find similar relevant research around public open space, children and older adults and needs, priorities and experiences.

Students were asked to select 10 items for a detailed review. One student explained the rationale as follows: The papers were chosen for in depth review on the basis of:

- Qualitative research methods that would provide insight about the needs, priorities and lived experiences of the target study groups (older people and younger people).

- Research from countries and cities facing similar social and environmental challenges to Auckland, such as an ageing population and high-density or increasingly intensified community.

- Research from developing countries with similar cities and urban contexts to Auckland, New Zealand (e.g. UK, Australia)

- Research of people in inner-city or high-density neighbourhoods.

- Research that measured and discussed factors of intersectionality (e.g. socioeconomic status, gender, ethnicity, race).

Study topics were varied in their relevance to public open space with some focusing on neighbourhood aspects (Carroll et al 2015, Van Dijk et al 2015, Vine et al. 2012), some on the public realm (Bourke 2014) or formal public space specifically (Loukaitou-Sideris & Sideris 2010).

Studies which considered urban design interventions directly with the age-groups of interest were particularly valuable (Ward Thompson et al. 2014, Carroll & Witten 2015).

The Freyberg Square co-design study in Auckland written up in the audit paper published on kidsinthecity.ac.nz was found to be particularly useful (Carroll & Witten 2015), and published in a book ‘Designing Cities with Children and Young People: Beyond Playground and Skate Parks’ (edited by Kate Bishop and Linda Corkery, 2017).

Where specific NZ research was not available, the search focused on literature from studies of nations and communities with similar demographics to Auckland (e.g. developed countries such as Australia, UK, USA) and/or studies of communities located in the inner-city or high-density urban areas, similar and relevant to the Waitemata Local Board area (e.g. Hong Kong, Los Angeles).

A specific aim was to identify material from different perspectives (e.g., LGBTQ+ community, different ethnicities, genderfied views) was made, however, this was not entirely possible given the limiters placed on the database searches and the previously mentioned exclusion criteria.

**Definitions**

Auckland Council defines children as people between 0—14 years of age, and younger people are those aged 15 - 25 years of age (Auckland Council, 2014). Up to the age of 7, children are still dependent on parents, but have some freedom to play without supervision and children develop independent spatial mobility (Loukaitou-Sideris & Sideris 2010, Bourke 2014).

Within Auckland, there is also a strategic action plan in place to advocate for the rights and participation of younger people. This is called I Am Auckland. The purpose of this action plan is to place the needs of children and young people first, by working in collaboration with this sector of Auckland‘s communities (Auckland Council, 2014). I Am Auckland is a sister action plan to Thriving Communities.

For older adults, the literature also defined they study group as generally those over the age of 60, usually retired, and excluded those in care-facilities and institutions (i.e. those with the opportunity to ‘age in place’). In general, there was an adequate amount of qualitative research on children’s lived experiences and needs in public open space to be found in the literature. However, it was more difficult to find similar research related to older adults (60+).

Older people:As per the WHO definition within the Global Age-friendly Cities guide (2007), older people are defined as those 60 years of age and over.

As defined by Oldenburg (1989), Carroll et al. (2015) adopted the definition of public spaces as the ‘third place’, with home and school as the first and second places of importance to a child. Third places could be destinations (e.g. parks), thresholds (e.g. driveway) or transitory spaces (e.g. streetscape). These three descriptors to distinguish the elements of public space are adopted for this analysis to support comparisons with how different types of public spaces are experienced, their interrelation and what the needs and priorities they suggest for older people or children.

As defined by Oldenburg (1989), Carroll et al. (2015) adopted the definition of public spaces as the ‘third place’, with home and school as the first and second places of importance to a child. Third places could be destinations (e.g. parks), thresholds (e.g. driveway) or transitory spaces (e.g. streetscape). These three descriptors to distinguish the elements of public space are adopted for this analysis to support comparisons with how different types of public spaces are experienced, their interrelation and what the needs and priorities they suggest for older people or children.

**Findings**

Most of the sources studied people in lower socioeconomic or inner-city neighbourhoods, with some including comparisons with suburban or middle-income neighbourhoods.

**Auckland context**

Auckland, New Zealand’s largest city, is facing a future with a greater ageing population and an increasingly intensified urban environment. The inner-city has seen considerable growth as a residential neighbourhood in recent years (RIMU, 2014), more families with children are choosing to live in Auckland’s inner-city. The Auckland Unitary Plan (2016) provides for a higher density of residential and mixed-use developments in the inner-city and around transport hubs.

**International context**

***Child Friendly City***

Article 31 of the UN Convention on the Rights of the Child gives children the right “to engage in play and recreational activities appropriate to the age of the child … [and for] equal opportunities for recreational and leisure activity” (United Nations 1989). In 1997 UNICEF established a Child Friendly Cities initiative, an accreditation that cities can work toward.

In 1996, the international Child Friendly Cities Initiative was started in order to begin work on a resolution which was passed at the second United Nations Conference on Human Settlements, also known as Habitat II (UNICEF, 2009b). The initiative seeks to put into action the Convention on the Rights of the Child on a global scale, acting at the city level to promote the rights of children to safety, wellness, full participation, equity, and happiness. A Child Friendly City is one in which all aspects of life—be it governance, the provision of services, or the environment—can align to ensure those rights of the child are being upheld (UNICEF, 2004).

***The Age Friendly City***

With the rise of children‘s advocacy issues has come an increasing awareness of the needs of people at the other end of the age spectrum: older adults. In 2005 at the 18th IAGG World Congress of Gerontology and Geriatrics in Rio de Janeiro, the project for Global Age-friendly Cities was conceived. This is a World Health Organisation (WHO) initiative. It was realised that the world is rapidly ageing, meaning that, due to the number of younger people who are becoming older each year, the proportion of older people in relation to the entire population is increasing (WHO, 2007). The question that arises is this: are our cities equipped to provide for the diverse range of experiences faced by older people as our population ages?

The Global Age-friendly Cities project aims to facilitate active ageing in our cities. This means that the opportunities for ―health, participation and security in order to enhance quality of life‖ (WHO, 2007: p. 5) are optimised in all aspects of living, much in the same way as Child Friendly Cities attempt to do for children: through policy, service provision, and structures.

The Waitematā Local Board in Auckland recently gained accreditation under this initiative. This is supported by the Auckland Plan (2012) that aims to “put children and young people first and consider their well-being in everything that we do”.

Figure 1 Seniors’ suggestions for a senior friendly park.



Source: (Loukaitou Sideris, Levy-Storms, Chen and Brozen, 2016)

The non-traditional public spaces in the city are also important for seniors. Spaces that are used to get from one destination to the next, or transitory zones, are purposefully occupied by seniors and are not just places to simply move through (Gardner, 2011). Transitory zones need to allow for the slow pace of seniors and those using mobility scooters and wheelchairs. Seniors have positive experiences in the city when they are able to greet and converse with others at traffic lights, storefronts, and in queues at the grocery store, post office or bank (Gardner, 2011). Gardner’s (2011) participants in Adelaide, Australia also highlighted that interactions in threshold spaces, such as doorsteps and driveways, provided fun and convenient opportunities to stay connected to neighbours and their community.

**Tauranga**

A specific case study in New Zealand is Tauranga City. Tauranga City is a smaller city south of Auckland that is popular for retirees and seniors. Seniors make up approximately 20 percent of the city population and this is continuing to grow (Tauranga City Council (TCC), 2013). Therefore, creating an age-friendly city is becoming increasingly important. In a first for New Zealand Tauranga City Council has adopted an age-friendly city strategy in 2013 that identifies what actions need to be taken by multiple agencies to make Tauranga a liveable and vibrant city for seniors (TCC, 2013). To develop the 2013 strategy, extensive engagement occurred with seniors living in Tauranga to understand their experiences, and seek their views, opinions, needs and priorities for their city (TCC, 2013).

Figure 2 Eight key age-friendly city topic areas as a result of senior consultation in Tauranga City



Source: (TCC, 2013)

Figure 2 provides eight age-friendly city topic areas that were identified by consultation with seniors. These key topic areas were then expanded on to provide more specific details for strategy policies (TCC, 2013). Under the outdoor spaces and buildings topic area, key needs identified are: “Safe and inclusive design matters, good surface conditions, lighting and seating. Access is important, large clear signage, appropriate mobility parking, and pedestrian toilets. Accessible toilets, particularly in public buildings and especially the libraries. Would like more bench seating to support walking, and more trees for shade on walkways and beaches” (TCC, 2013, p. 12). Tauranga City is leading the way on age-friendly city design and Auckland City can follow their lead when designing it for age-friendliness in the future. The following table shows what makes a city age-friendly.

Table 1 What makes an age-friendly city



Source: WHO, 2007, 8-10

For the purpose of this report, the focus is on outdoor spaces and buildings. The priorities of which are listed in Table 2 overleaf (WHO, 2007 pp.12-19):

Table 2 The characteristics of age – friendly outdoor spaces and buildings



Source: (WHO, 2007, 12-19):

According to the World Health Organisation or WHO (2007, p.1), ‘an age-friendly city adapts its structures and services to be accessible to and inclusive of older people with varying needs and capacities’.

The level of comfort prescribed is reasonably detailed to take account of seniors’ needs. It would also benefit everyone else, including those at the other end of the age spectrum. The question is, how does Auckland rate as an age-friendly city? According to Grey Power President Anne-Marie Coury, Auckland already has some age-friendly qualities but it is yet to be WHO-accredited (Lynn, 2015). What follows therefore is a summary of both young people and seniors’ experiences at a time when there are still plenty of changes to be made.

As WHO refers to outdoor spaces and buildings, both will be taken as encompassing the ‘open’ or ‘public’ realm.

**Issues and needs of seniors**

There is constantly a need to improve cities and neighbourhoods, as cities become more densely populated more focus needs to be placed on developing spaces that can be used by a broad range of people at a variety of ages. One such group that may find themselves being pushed out of city is the elderly. With our elderly living longer, there is a longer period of time between retirement and death than ever before. The concepts of “healthy ageing” and “active ageing” are different in subtle ways, however both promote vitality, activity and minimisation of the negative consequences of biological (Schwanen & Zielgler, 2011). With mobility lessening and the ability to do many activities hindered, the type and quality of the surrounding environment becomes a factor in older peoples’ well-being and independence (Phillipson, 2004).

Research over the past decade indicates that whether or not an older person’s potential for movement is realised, depends upon a wide range of aspects including: urban design characteristics, house attributes and up keep, open and green spaces, driving status, and quality of and access to public transport (Vine *et al.* 2012). Research has predominantly focused on the quantitative measures of scoring an urban space, including its accessibility (Chaudhury *et al*. 2011). Although quantitate measures are good at measuring the physical features of an urban environment, they are not good at measuring the walking experience.

Studies have explored the use of qualitative measures and found that they generally convey general trends about the needs and desires of older people (Day, 2008, 2010; Michael *et al.,* 2006).

Day (2010) explores a study conducted across three villages in Scotland, which highlighted various means by which older citizens can be excluded from and within urban environments.

Day (2010) interviewed retirees aged 62 to 90 years old, from an inner-city neighbourhood, a suburban estate, and a small coastal town. The major discussion points to eventuate across all the study locations was the need for neighbourhood walkability, clean spaces, quite places and emotionally uplifting spaces which promote social interactions. Michael *et al.,* (2006) used a focus group approach for people aged 55 and up from ten different neighbourhoods in Portland, USA. It was found that access to shops and services were crucial for older people to be able to meet each other in walkable environments, with the overall quality of the natural environment encouraging them to walk more often and for further distances (Michael *et al.,* 2006).

Through the lived experiences outlined in Day (2008 & 2010) and Michael *et al.,* (2006), there are several reasons for which elderly are reliant on their cars for when they leave their homes, not simply due to an unavailability of transport or lack of availability to public transport (Vine *et al.,* 2012). To reduce the need of older people owning cars there needs to be better modifications to cities in order to allow for greater connectivity of the streets, higher density living and more varied land uses in order to reduce trip distances and increase the possible means of travel (Behan *et al.,* 2008, Judd *et al.,* 2010). Walkable environments are particularly important, given that neighbourhood walking increases not only older people’s opportunities for physical exercise but also social interaction (Leyden, 2003).

Aird and Buys (2014) explored the relationship of how mobile older people rated themselves and their actual out-of-home activity across four different settings (major city higher and lower density suburbs, a regional city, and a rural area). The study of 48 individuals over 55 used a survey, travel diary and GPS tracking to gather data on the mobility. Those people that rated themselves as “being active” was found to be positively correlated with the number of days spent away from home, however was not related to time being active (walking or cycling). Significantly no significant differences were found between the study locations despite the extreme differences in the built environments. The study concludes that researches and policy makers need to be aware of the fact that the built environment is only one factor that impacts how older people interact in the public domain. This indicates that methods of promoting active lifestyles for older people would work across the entire city.

Aird and Buys (2014) go further and suggest that modifications to the built environment may not be enough, with the real challenge being to get older people outdoors on foot and for fears of the falls and injury due to poorly maintained public spaces be diminished; a complete attitude shift away from the perceived comfort of the car is needed.

Older people have identified specific characteristics of public spaces and urban design features that they enjoy the most as green and open spaces (Alves et al., 2008) that are conducive to walking. Rossco *et al.,* (2011) indicated that there is no evidence of a direct correlation between built environment and walking behaviour; of all the features of the built environment investigated the most likely factors to have an effect on older people’s mobility were: high density intersections, street and traffic conditions, proximity to destinations, and green space. Day (2010) supported these findings stating factors such as poorly maintained footpaths, crossing and traffic as increasing fears surrounding personal safety for older people. This raises questions as to whether simply upgrading public spaces would be enough to increase patronage from older people, or if the entire access and routes would also need to be improved to make the spaces better used. The question is raised if parking spaces are needed in order to provide a source of safe mobility to public spaces in order to ensure that there is adequate usage by the older members of society.

A study by Bowling (2009) compared the perceptions of minority ethnic groups to those of more ethnically homogenous groups about ‘active-ageing’; the study revealed that ethnically diverse respondents were less likely to define active ageing in terms of good physical health and fitness, they were also less likely to regard themselves as ageing actively compared to the homogenous population group. A challenge for creating public space in Auckland may be in regards to how to make it active, but also provide for the groups who are not seeking to be active at an older age.

In 2007 the World Health Organisation (WHO) published its guide for cities to adapt to becoming Age Friendly Cities (AFC). The guide aim is for: “an age-friendly city encourages active ageing by optimizing opportunities for health, participation and security in order to enhance quality of life as people age” (WHO, 2007). Key to the document is the need to make adaptations to a cities structures and services to be more accessible and inclusive of older people with varying needs and capabilities (WHO, 2007). With the worlds population ageing rapidly, it is expected that 22% of the worlds population will be over the age of 60 by 2050, therefore the WHO recognised that the worlds cities need to adapt to this evolution. The key to the AFC guide is that it worked with focus groups in 33 cities around world by asking them their lived experiences in eight areas of city living. The AFC report recognises that older people require supportive and enabling living environments in order to make up for physical and social challenges.

The Age Friendly Cities report uses a checklist to suggest ways in which cities can improve spaces for older people. One of the most commonly mentioned features from the focus groups was the importance of well cared for green spaces, with some groups even suggesting spaces set aside for the elderly. One of the biggest requests/needs of older people in places spaces is age-friendly pavements. Features needed in a pavement include: a smooth, level non-slip surface; a sufficient width to accommodate a wheelchair; dropped curbs that tapper to roads; clearance of obstructions; and priority of access for pedestrians (WHO, 2007).

Pedestrian crossings can pose a significant issue for older people, not only can the lights change to quickly for their walking speed, but also visual and auditory aids are needed to indicate when it is safe to cross. Furthermore, safety was a paramount issue bought up within the discussion groups. The feeling of safety can directly impact the feelings of independence, physical health, social integration and emotional well-being. Increased passive surveillance, street lighting, and CCTV cameras can make areas safer for older people and the rest of the community. In general it is considered that age friendly buildings need: elevators, escalators, ramps, wide doorways, suitable stairs, non-slip flooring, rest areas, adequate signage and also toilets with handicap access.

Sugiyama *et al.,* (2009) conducted research into what aspects of neighbourhood open space play a part in maintaining and enhancing the lives of older people. The findings suggest that older people who have access to a pleasant and safe NOS within walking distance are more likely to be satisfied with life than those who do not have such space within walking distance.

Significantly the findings suggest a need for a pleasantness factor whereby children can play, adults can chat to others, variety of activities/entertainment, the quality of the landscaping, and the presence of facilities all played significant contributing factors. In terms of accessing the public open spaces, the Sugiyama *et al.,* (2009) study found that people who have good paths to the open space have twice the odds of being a more active/frequent walker. Compounding to this point, it was also noted that neighbourhood open spaces may be used as a place to “walk to”, but are not necessarily regarded as a place to “walk about”.

The lived experiences of older people are more thoroughly documented and studied than younger people. Their needs are connected to their values: Safety, stability, health, respect, independence. These needs are related to their satisfaction with their environment (Grebenc, 2014). The built environment should consider the enablement and constraints it possesses, and the resultant health outcomes of the design. The aim of a socially sustainable community is to improve the built environment for everyone. It also needs to change the stereotypical notion that it is an individual's responsibility to change to an existing environment rather than a collective responsibility to ensure that built environments are inclusive and accessible to everyone, regardless of age or mobility (Garvin, et al., 2012). Built environments should promote healthy ageing, injury prevention, enabling better community access for the entire population.

A study in Britain explores the relationship between the built physical and social environment and older people’s health. The residual neighbourhood is a central point to a low-mobility older person. This requires an understanding of the neighbourhood environment and the environmental features that best operate for older people. Neighbourhoods are not always geographically defined, but socially defined. This includes the infrastructure and environment of the areas that older people choose to socialize. The people in the study defined their neighbourhood by their social contacts, and the regular activities that create interaction with the wider community and create opportunities for activity (Milton, et al., 2015). Dog walking was considered a key activity to the people of the study. The saw it as a way to make friends, in the same way they made friends walking their children to school when they were younger (Milton, et al., 2015). The people in the study believed that within their neighbourhood there was no essential or useful facilities such as shops, pubs and playgrounds as there was “nowhere to go. I’m round my house, my gardening and that’s about all” (Milton, et al., 2015, 131). The lack of these social facilities is a loss of a community presence. More than one person commented on their loneliness as there were less people walking around as they were required to drive to shop and get to any of their activities (Milton, et al., 2015). This reduces any foot traffic and opportunities for older people to be included.

**Slovenia study**

A particularly in-depth study was taken in Ljubljana, Slovenia. Their research demonstrates that older people prefer to stay in their home because the familiarity provides them with a strong sense of meaning and belonging (Grebenc, 2014). This shifts the focus away from institutionalised forms of care, and requires a developing community based system of care.

Efforts should be towards finding and mobilising older people’s power and resources instead of drawing attention to their powerlessness (Grebenc, 2014). The purpose of this study was to give older people a voice and to trigger dialogue in the community about the perceived needs of older people (Grebenc, 2014). The study would provide advice on improving the network of services for older people to encourage them to venture into public spaces more often.

The general view of those in the study was that they enjoyed the achievement of reaching old age, but did not enjoy the stereotyped perception of ageing (Grebenc, 2014). The respondents were all used to living an active life, but noted that their environment hindered them in some activities due to their decrease in mobility. Some whose activities were hindered by their personal health commented that they needed support to visit public places and participation in the public was easier when there was organised events that were serviced for older people including shortened travel time, and comfortable seats provided (Grebenc, 2014). Although older people wish to venture out they did understand the risks associated both physically and safety wise. One respondent, a 96-year-old female commented that she had been attacked recently and fallen and injured her arm (Grebenc, 2014).

The older people in the study noted that having someone with them in public places reduces their lack of mobility in the environment as they can overcome design and architectural barriers. Older people consider health care services and do not consider social care services as an option. It is not as readily available and advertised to them (Grebenc, 2014). The importance of older people’s ability to get to public places, and have support once in them is rooted in a cities social care, and neighbourhood networks. Without this support, older people will not be able to facilitate the use of public spaces and embed themselves into society. It is not only the built environment that needs to be considered, it is the community connections that need to be enhanced in these spaces.

A study on older people’s perceptions of seasonal constraints on their neighbourhood has found key factors to older peoples use of public space. This research intersects between geography, gerontology, built environments, public health policy and ageing populations (Garvin, et al., 2012). The study found that gender, diversity, migratory patterns and location all influence older people’s decision to venture into public space (Garvin, et al., 2012). People from the study commented on their main concerns of public space. They were the lack of ramps, stairs, and railings; curb cuts, fear of others, obstacles and broken pathways, seating, public transit, aesthetics and cleanliness (Garvin, et al., 2012). Steps can be uneven and difficult to manoeuvre but the older people in the study noted that having bright colours to indicate this unevenness helped them navigate it (Garvin, et al., 2012). They also commented that the best seating was one's that were designed for all weather, made at an appropriate height for getting up and down, had hand rails for support and had a garbage can within reach (Garvin, et al., 2012). One participant voiced concerns on everyday dangers that relate to everyone but older people are particularly susceptible to them. One example was a temporary construction sign that had fallen over with its sticks exposed right on the sidewalk, the concern was “you can run into them, trip over them, impale yourself on it” (Garvin, et al., 2012).

On a more social basis, older people are concerned for their safety due to their mobile vulnerability. Their social environment is physically impeded by youth travelling at fast speeds on scooters, skates, and skateboards, reducing older, less mobile, people’s feelings of safety (Garvin, et al., 2012). The people in the study were considered resilient and in charge of their well-being and the built environment around them. A participant in the group had requested a railing for the stairs in her apartments public space outside to ensure she had access to its amenities (Garvin, e al., 2012). This active participation in their built environment enables them to articulate a need for change or to advocate for better built environments to meet their needs. This indicates the need to include them in design before construction takes place as they understand the built environment and how it affects their day to day needs.

**Hong Kong**

A case study in Hong Kong on active ageing in cities is focused on urban renewal of public spaces and the benefits that older people can gain from them. Definition of public space in Hong Kong is a “community space within the urban environment which is intended for amenities or physical recreation either for active or passive use” (Yung, et al., 2016, 115). Parks located near homes serve as leisure spaces and ‘extended living rooms’ to the residents (Yung, et al., 2016). The rhetoric that public space is only applicable to places such as parks and courtyards needs to be removed. Hong Kong has developed a standard for open space provisions due to it being highly compact and dense (Yung, et al., 2016). These provisions limit the amount of public space that is available and have been noted as detrimental for the residents, especially older people. Hong Kong has established handrails, ramps, and other precautionary devices for accessibility, but still has not addressed the social requirements of public space (Yung, et al., 2016)

The physical and safety needs of older people is often addressed in the design of public spaces, but the lack of social design reduces the physiological benefits for older people. Some older people commented on their use of active edges of open green space so that they could eat and have tea with friends (Yung, et al., 2016). Active edges also supplied them with seating and an ability to observe the park. Incorporating these edges into the design of public places enabled them to have social benefits. Older people commented that interacting is more important than being able to use the amenities public space provides (Yung, et al., 2016). This means that urban design should focus on communal seating and the ability for people to interact rather than providing exciting new features that are useless to older people without friends. The study notes the importance of sociocultural roots of the residents and community, and their wish for it to be incorporated in their public spaces (Yung, et al., 2016). This means that cultural heritage, memories and characteristics of the city should be considered in the design. This is reminiscent of Aotea Square in Auckland. It assembles culture and social opportunities in the square with a range of seating options and locality close to active edges and a cultural centre of theatre. The square itself is a scheduled Maori Heritage Site enhancing its cultural value, and harks on the values that the older people in Hong Kong desire in their own public spaces (Auckland Design Manual, 2017).

Figure 3 Aotea Square, showing the sculpture by Selwyn Mutu



An interview with Baroness Sally Greengross, an 81-year-old women and advocate for designing urban space to facilitate older people, shows the importance of older people having access to open public space. She claims that for an older person to be healthy, they require the will to get out of bed in the morning and engage themselves in cultural and physical activities (Greengross & Castle, 2014). An age friendly community would cater for a range of older people’s needs, including dementia. Providing housing and outside space that accommodates their needs can increase their quality of life and well-being. Their tendency to wander can be inhibited with circular walking routes in external spaces (Greengross & Castle, 2014). This would allow them to walk in a circle and end up where they started, reducing their isolation and ability to get lost. Further, the planting in areas with strong smells can evoke memories and allow them to find their way back if necessary (Greengross & Castle, 2014). The consideration of the urban environment is important to facilitate those with dementia, and any older person’s ability to get around. These added designs are specific for older people, but can also provide amenity values for the whole community.

Further, planning for older people in the built environment means that cobbled flooring will not be suitable for those will difficulty walking, and those who rely on walking sticks or motor devices to get around. Greengross also suggests that crossing times should be adapted to allow for older people’s slower walking pace (Greengross & Castle, 2014). Due to their reduced visibility with age signage needs to consider their impaired vision, and their needs to be sufficient lighting to allow for visibility and a sense of security. Greengross states that these adaptations to the urban environment and the adoption of age-friendly cities is a matter of “remembering who the population are” (Greengross & Castle, 2014, 18)

The study by Lindenberg and Westendorp (2015) in the Netherlands, seems to sum the issues and needs of seniors. A quote from a 70-year-old man from this study illustrates the point:



Source: Lindenberg and Westendorp (2015, 90)

This was a view shared by several other participants: that the chronological age of a person does not necessarily mean that they are experiencing life as others might assume they are. Furthermore, there was the acceptance of the ageing process and age-related physiological changes (one participant shared that he knew he needed corrective lenses for reading, while another talked about musculoskeletal changes), but there was the sense that these were not what defined ―being old. Another participant of this study admitted that ― being old ‘was generally associated with ― being needy’, and he did not identify with this connotation at all (p. 90).

So how does this affect how seniors use and relate to space?

Some older people found that activities carried out in public spaces such as volunteering, helping out contemporary peers, or looking after children in the family were sources of self-acceptance, and gave meaning (Risser, Haindl, & Ståhl, 2010). The same participants felt that staying at home, and not engaging in public life, made them feel passive, immobile, low in mood, and lonely.

One British female over the age of 80, in a study by Pliakas et al. (2015), shared that the idea of neighbourhood wasn‘t a physical concept or area, but rather was ― made up of people (p. 130). This was further seen in the use of public spaces and areas, including regular patronage of public transport, as places to form and maintain relationships with others.

Unfortunately, not all older people felt they had the ability to actually leave home, either because of the lack of amenities provided in public spaces (e.g., no useful services or things to do there), or the presence of barriers to reaching such spaces on foot (Vine, Buys, & Aird, 2012). It is important to use an intersectional lens, and acknowledge that within the defined group of ― older people, there are varying degrees of physical mobility and ability to move around their environment. As demonstrated in Vine et al. (2012), while many older people felt constrained in this way, there was one participant of the study who cycled everywhere he went, and was able to cover several kilometres per day on his bicycle.

Another important point to make is that some older people **felt overwhelmed and underserviced** by the public spaces they visited. In a 2016 study by Yung, Conejos, and Chan, carried out in Hong Kong, many older people felt that good public spaces were often too crowded, and there were not enough facilities to cater to everyone, most especially seating. Some older people in Australia felt that shared spaces and footpaths could at times be frightening – having to share with high-speed users such as cyclists was seen as a scary experience, as there was often no warning of incoming traffic, and some people felt there was a sense of ―animosity‖ between cyclists and pedestrians (Vine et al., 2016: p. 167).

To compare and contrast, how these experiences differ from or are similar to those of younger people, a participatory study by Derr & Tarantini (2016), found that children expressed similar feelings about the concept of age. There was the notion that spaces should be equitable for all ages, ― because we are all people (p. 1550).

Independence is important for all older people. An accessible neighbourhood is a prerequisite for independence, whether by car or walking to local amenities and facilities. Older people need to compensate for their losses and limitations to meet their needs and to live independently. Though it changes over time, features of the neighbourhood can support or inhibit their sense of control and autonomy in day to day life.

Seniors in the city are often subject to negative perceptions and marginalisation. As they do not actively contribute to the work force and economy, seniors are perceived as burdens (Taylor & Payer, 2017). Seniors balance the population composition towards less male dominated, and require specific care facilities in their communities (Taylor & Payer, 2017). The dominant concern of seniors is housing affordability and financial hardship, followed by concerns about crime and safety in their community (Taylor and Payer, 2017). An increasingly ageing population in Auckland and other global cities is putting pressure on affordable housing stock.

The literature on seniors in the city identifies their role and contribution to communities. In retirement, many seniors take up volunteering work to stay active in their community. The actions of seniors are often limited by health, but their activities have positive impacts on individual health and wellbeing (Wiles & Jayasinha, 2013). The study conducted in Wiles & Jayasinha (2013) found that the participant’s activities created stronger social interactions and social cohesiveness in their communities, enhanced sense of empowerment and increased positive attitudes.

A study was done on the needs and preferences of low income seniors in Los Angeles (LA), California, USA for parks in the city. Figure 4 on page 11 outlines the key design elements that city parks should have to make them senior friendly from the perception of the study participants (Loukaitou-Sideris *et al.*, 2016).

The size of each circle in Figure 1 is indicative of its importance relative to the other elements (Loukaitou-Sideris *et al.*, 2016). These wants and needs from senior citizens in LA are similar to those in Auckland. Seniors value parks that provide appropriate programs and facilities, opportunities to connect to nature and to enjoy other physical activities (Loukaitou-Sideris *et al.*, 2016). Because LA is diverse like Auckland, seniors from different ethnic groups had different concerns and values about inner-city parks (Loukaitou-Sideris *et al.*, 2016). In the LA study, Korean women would prefer parks to be fenced and gated with constant monitoring, with Korean men most concerned about uneven sidewalks and hilly walking paths (Loukaitou-Sideris *et al.*, 2016). Latino seniors focused concern is visibility and lighting, and White seniors were most concerned with available facilities, such as large picnic tables, and accessible water fountains and toilets (Loukaitou-Sideris *et al.*, 2016). Most interestingly, Korean seniors much prefer straight walking trails compared to all other seniors who prefer gentle winding paths (Loukaitou-Sideris *et al.*, 2016).

Literature on seniors’ experiences, needs and priorities in the city highlight the importance of providing public spaces that promote social connections, neighbourhood strengthening and participation. Seniors are more safety conscious with different cultures concerned about different aspects of safety in the city. Public spaces need to allow for the everyday, informal, casual social interactions that are important for seniors’ health and wellbeing. Senior inclusive facilities also need to be provided around the city, especially in parks where seniors want to go to connect with nature and their community.

**Adelaide study**

Gardner (2011) conducted a study of the social and physical dimensions of neighbourhoods from the experience of older women (seniors) in Adelaide, Australia. This study revealed the sites of significance for seniors that produce positive experiences in their neighbourhood. The participants felt more safe and secure in informal public spaces such as cafes, post offices and the main streets (Gardner, 2011). Small, single purpose shops were more accessible, physically and socially, than big box retail (Gardner, 2011). Small, intimate spaces of single purpose stores and community spaces are more welcoming for seniors. The participants felt more comfortable if the staff knew them and the spaces were more easily negotiable (Gardner, 2011). For the participants, the most simple, spontaneous, informal and everyday encounters with their neighbourhood offered the most joy and pleasure (Gardner, 2011). Urban planning for age-friendly cities needs to facilitate these simple interactions for seniors.

Seniors often experience the fear of getting lost and becoming unsure in the city, especially those suffering from dementia or other mental disabilities (Brittain, Corner, Robinson, & Bond, 2010). Senior participants in the study conducted by Brittain *et al.* (2010) talked about how physical landscapes and landmarks were used as guides, and familiarity with these landscapes and landmarks provided a sense of security. Everyday technologies of shops and signs are an important requirement for public spaces that allow accessibility by seniors (Brittain *et al.*, 2010). In parks particularly, seniors are fearful of becoming lost in wide, open spaces and therefore age-friendly parks should have clear designs and layouts that allow for easy orientation, a good grasp of the surroundings, and good wayfinding signage (Loukaitou-Sideris, Levy-Storms, Chen, & Brozen, 2016). Seniors are often unable to access the high tech, digital technologies that adults and young people use for location, so feeling safe and secure with signage and landmarks is a priority for seniors in the city (Brittain *et al.*, 2010).

**Issues faced by seniors**

In using public open spaces, older adults had identified several key issues. This included the following factors:

* Poor connectivity to and from public spaces, not in close proximity to living areas, or unwalkable route (Yung et al., 2016; Vine et al., 2012; Pliakas et al., 2015).
* Inadequate, uncomfortable, or uninviting seating (Yung et al.; Vine et al.).
* Poor availability of clean and safe public bathrooms (Risser et al., 2010; Vine et al.).
* Unwelcoming, inconsiderate, or condescending attitudes of others, including vehicle drivers, cyclists, and other users of public space (Lindenberg & Westendorp, 2015; Risser et al.).
* Feeling stigmatised or segregated from younger counterparts, especially in environments which cater to older people‘s needs (Lindenberg & Westendorp).
* Issues with the built environment (Vine et al.).

 Poorly maintained pathways

 Lack of handrails on stepped areas

 Un-even surfaces

 Steep terrain

 Overcrowded footpaths

 Shared spaces where pedestrian space is not clear

 Close proximity of footpaths to busy roads

 Pedestrian crossings not affording enough time for slower-paced walkers to cross safely and confidently

 Heavy doors

 Lack of shade and cover (Yung et al.; Vine et al.).

 Lonely spaces and feeling anonymous (Pliakas et al.).

 Loss of older local businesses such as the local post office or pubs, which have been replaced with impersonal big-box services and venues, resulting in the loss of community spirit and neighbourhood relationships (Pliakas et al.).

**Needs and priorities of seniors**

Amongst the chosen studies, there were several needs and priorities identified by older people in the design of public open spaces:

* Spaces which are able to fulfil a social need, e.g., for meeting with friends and family, liveliness, mental and physical stimulation, recreation (Yung et al.; Pliakas et al.).
* Mixed-use spaces which are perceived as rich in amenities (Lindenberg & Westendorp; Vine et al.).
* A strong sense of community where all age groups are able to mix and have mutual respect for each other (Lindenberg & Westendorp; Pliakas et al.).
* An environment which fosters independence and is distanced from the stigma of ― being old (Lindenberg & Westendorp).
* Green environment, natural elements, fresh air, and a quiet and pleasant ambience (Lindenberg & Westendorp; Yung et al.).
* Pedestrian priority and strong safety design elements (Lindenberg & Westendorp; Risser et al.; Vine et al.).
* Well-surveilled areas which enhance the feeling of security (Yung et al.).
* Abundant comfortable seating which is suitable for differing levels of mobility and strength and is well shaded (Yung et al.; Vine et al.).
* Covered walkways which are adjusted to suit use by walker, wheelchair, and mobility scooter users (Yung et al.; Lindenberg & Westendorp).
* Public toilets which are safe, clean, accessible, and widely available (Yung et al.; Risser et al.).
* Tighter regulations on vehicular traffic in or near pedestrian areas (Risser et al.; Vine et al.).

There is clearly a need for better inclusion of older people‘s views and experiences not only within the planning phase, but also in terms of ongoing maintenance and retrofitting (Vine et al., 2012). The needs that have been expressed by the participants of the selected studies appear to align with guidelines set out by the WHO in their Global Age-friendly Cities guide (2007), particularly those set out in Part 5 of that document in relation to outdoor spaces and buildings. They are as follows:

1. Pleasant and clean environment

2. Importance of green spaces

3. Somewhere to rest

4. Age-friendly pavements

5. Safe pedestrian crossings

6. Accessibility

7. A secure environment

8. Walkways and cycle paths

9. Age-friendly buildings

10. Adequate public toilets

11. Older customers

(pp. 12-17)

**Young people**

Children are having to grow up in cities that are becoming ever more intensified and developed. The notions of a traditional backyard are being challenged by the introduction of planning documents such as the Auckland Unitary Plan. The reliance on cars and the perception of some urban public spaces as dangerous and unattractive to children is prevalent in society (Valentine, 1995). As a consequence of the perceived danger, children are often chaperoned to public spaces, with young girls in particular having more constraints placed on their freedom (Karsten, 2003). Lofland (1985) found that children need to play, communicate and meet is order to develop as young people, it is essential part of them maturing. Importantly as it is difficult to meet other children in the city, the playground can form an active meeting place for children.

Diversity on playgrounds is not only by gender, but also by age, social class and ethnicity (Karsten*,* 2003). Liden (1997) found that children may be excluded on a playground based on their ethnicity. Therefore it is extremely important that children are members of diverse playgrounds from a very young age where they are encouraged to interact and socialise with children of different ethnicities.

When examining children’s use of public space, it is best viewed in terms of play (Biggs & Carr, 2015). Hart (2002) researched children’s playgrounds in New York City. The premise of the study was to examine the conceptions of childhood the need to ‘contain’ children within the built environment in order to remove the danger of traffic and unsavoury influences. Hart refers to the irony that opportunities to play do not necessarily increase with ‘development’.

Harts findings concludes that it is the appropriated play space that children value, and not the physical playground that matters. It is important for children to be able to explore a wider range of experiences than just the fenced off playground, they need to be able to be inquisitive and experiment with the wider physical environment. It is important for cities to create physical environments that are enabling for families to offer children the opportunity to explore at will (Hart, 2002). In the Netherlands, the *woonerf* is a alteration to the street layout which literally translates to English as a “residential yard”; the purpose of the *woonerf* is primarily to encourage the socialisation of neighbours and allow for children to play safely on the street (Appleyard & Cox, 2006).

UNICEF’s child-friendly cites, was created as part of the UN Conference on Human

Settlements (Habitat II) in 1996 which is focused on implementing the UN declaration on the Rights of a Child (UNICEF, 2004). Rights imply that there is a legislative and legal commitment along with a set of universal norms, however the child-friendly cities programme has attempted to grow child rights through the evolution of natural and built environments, including public spaces (Biggs & Carr, 2015).

Children have expressed the desire to become involved in the active care and stewardship of places within cities (Chatterjee, 2005; Malone, 2013), as for access to public spaces where than can express themselves freely (Derr & Kovacs, 2015). However, evidence from abroad has indicated that children and youth are becoming less tolerated in public spaces (Day & Wagner, 2010), and marginalised in public process (Vivoni, 2013). Cillers and Timmermans (2014) proposes that children should be incorporated into the planning process in order to introduce creativity and a fresh perspective into the design. Logically it makes sense to include the design influence of the people that you a creating a space for, there is no point in designing and building a place for a group whom will not use it once it is complete. In general children seek spaces that include the people that use it, including all ages, ethnicities and interests (Derr *et al*., 2013). Children generally also express a desire to enhance and care for the environment and the built environment (Vivoni, 2013).

City of Boulder in Colorado, USA has successfully implemented a child friendly city initiative called Growing Up Boulder (GUB) (Derr & Tarantini, 2016). The programme engages children in the cities programmes through using university interns to help develop their ideas into a report form. This process then grows the intern skills and thought process in the future to think about the needs of children, and it also allows children to develop and use spaces that they want to use. The programme is focusses on the cities least heard youth, specifically the youth from low-income, recently immigrated or ethnic minority neighbourhoods. The benefit of implementing child driven planning in these neighbourhoods is that schools and community centres generally do not have the facilities that a middle-upper class suburb may

Bartlett (2002) found that children face similar issues to older adults as previously discussed in that urban areas create danger for children in terms of their surroundings, traffic congestion, transportation issues and the availability of services and amenities. There appear to be many principles shared by children and older people in regards to their requirements, however there has been little research examining the two together (Carr *et al.,* 2013). Biggs *et al* (2012) makes the point that generationally intelligent spaces, ones that provide spaces for members of different generations to interact, meet and have clear indicators as to how the space is to be shared, will be key to a sustainable way of living. Buffel *et al* (2012) refer to the ‘paradox of neighbourhood participation’, as children and older adults tend to spend the majority of their time in their neighbourhood. Buffel *et al.,* (2012) continues in that older and younger people are often the last group of the community to be consulted in their needs or desires for the neighbourhood. Therefore it is extremely important to include the principles discussed in designing spaces in the city, with the foremost attention paid to consultation have. GUB works with a Participatory Action Research (PAR) framework (Kindon *et al*, 2007), with the majority of projects emerging from the cities needs and timelines.

Boulder City staff generally identify a potential project and then the GUB staff and volunteers create a project specific approach in which children can then be incorporated into the planning approach (Kindon *et al*, 2007). An example of a GUB project was the major redevelopment of Boulder’s Civic Area. The area near the city’s downtown includes the main public library, civic buildings, museums and markets and parks. The project activated 125 young people aged between 4 and 15 years old as part of the process. The key themes that became prominent in the 2012 visioning process for Boulder Civic Area are set out in

Table 2 Growing up in Boulder: Summary of themes from the Boulder Civic Area 2012 visioning process.



Source: (Derr ad Taratini, 2016).

The themes from the GUB visioning process re-affirm Derr *et al*., (2013) findings that in general children seek spaces that include the people that use it, including all ages, ethnicities and interests. With the exception of the space for playing, older people would be able to use all the other aspects of the proposed civic zone. Trivial ideas such as the duck slide proposed by the pre-kindergarteners in **Table 1,** would undoubtedly be popular with the elderly also as they would be able to watch the slide from a sedentary position such as a park bench. One of the major lessons from the GUB project is that city planning staff were left with a particular impression of children’s ideas once they had meet them and talked to them face to face about their ides, rather than from reports detailing their views (Derr & Tarantini, 2016). Bartlett (2002) found that children face similar issues to older adults as previously discussed in that urban areas create danger for children in terms of their surroundings, traffic congestion, transportation issues and the availability of services and amenities. There appear to be many principles shared by children and older people in regards to their requirements, however there has been little research examining the two together (Carr *et al.,* 2013). Biggs *et al* (2012) makes the point that generationally intelligent spaces, ones that provide spaces for members of different generations to interact, meet and have clear indicators as to how the space is to be shared, will be key to a sustainable way of living. Buffel *et al* (2012) refer to the ‘paradox of neighbourhood participation’, as children and older adults tend to spend the majority of their time in their neighbourhood. Buffel *et al.,* (2012) continues in that older and younger people are often the last group of the community to be consulted in their needs or desires for the neighbourhood. Therefore it is extremely important to include the principles discussed in designing spaces in the city, with the foremost attention paid to consultation.

**Middle School Aged Children**

There was also a sense of, at times, feeling excluded from public spaces. The same 2016 study recalled two specific experiences of middle-school-aged children from Colorado. Illustrating by way of anecdotes, the children felt that they were not welcome to share a public space, namely, a duck pond. In one instance, the children were stared at by upset adults when they had scared away some ducks with their behaviour, and in another instance, the children were told by a local fisherman to go away when they were throwing pebbles back into the water.

**Australia and New Zealand**

In a 2015 study by Ergler et al., preschool-aged children from Australia and New Zealand were invited to participate in focus groups around what makes a good city. The study found that children of this age are often excluded from serious conversations about design and planning because it is assumed that they are unable to understand or contribute anything meaningful. This study showed that children are able to form emotional attachments to special places, developing a sense of place at an early age and exhibiting concern for their physical surroundings and the people who use these spaces. The children in this study had accepted that cars were a normal part of the urban environment, but identified them as a hazard that needed to be mitigated, using signs and traffic-calming measures.

**Ireland**

Generally, children who accessed public spaces without an adult present did so for play (Bourke, 2014), or for walking to specific activities such as school. In the study carried out by Bourke in Ireland, young children were found to be using the public spaces in urban areas for an informal kind of play, that is, not in areas designed specifically for play such as playgrounds. The children, aged 9-11, favoured little pockets of the city or parts of the sidewalk. These in-between places were seen to be the most fun and exciting, as they were not limited to any socially-constructed limitations of the space as a playground would be.

**Melbourne**

This phenomenon is shared by children aged 5-12 using a Pop-Up Park space in Melbourne (McGlone, 2016). The participants of this study enjoyed the space as a sanctuary away from school, where they could do activities such as swapping trading cards with friends, which was disallowed at school. One child, aged 9, enjoyed the flexibility of the space, saying, ― Because it‘s a bit blank we can make it into whatever we want.‖ (p. 121.)

Many children enjoyed using public spaces to relax and socialise, much like older people. In the Pop-Up Park in Melbourne, the children‘s favourite activities appeared to be semi-structured play, physical movement, chatting with peers, games, lying on the grass, and watching nature (McGlone, 2016).

**New York**

There is some research focussing on the lived experience of young people who identify as part of the Lesbian, Gay, Bisexual, Transgender, and Queer (LGBTQ) community. From the experience of young adults aged 18-33 in New York City, planning and design of spaces is seen as very much a hetero-normative activity, meaning that it is based on the premise that heterosexuality is the ― norm, and any other identified orientation or identity is ― other. This becomes even more problematic with additional layers of identity, such as being a woman and a person of colour (Irazábal & Huerta, 2016). LGBTQ youths of colour found that some neighbourhoods were identified safe spaces, such as those in ― queer-friendly neighbourhoods, while others remained highly hetero-normative. Many LGBTQ residents in New York City felt that they had been displaced from queer spaces by tourists and the process of gentrification, where they did not have a voice.

The review by Alferez (2018) presented a clear statement of the issues and needs of older and younger people in relation to public space.

A thorough focus on New Zealand case studies allows younger people’s perceptions of public spaces to be translated into a local setting. An Auckland case study shows that in New Zealand urban design is focused primarily on accessibility for vehicles and adults. This excludes younger people from the planning practice, process and design. Younger people in Auckland perceive a good public space as a place to meet, play with friends and move around the area safely (Carrol et al., 2015).

The study also found that there was a diversity in younger peoples use of public space grounded on an individual basis rather than a neighbourhood one (Carroll., et al, 2015). Inner-city younger people recorded fewer trips to ‘third places’ and rated low on informal physical activity such as playing in parks or on the street (Carroll., et al, 2015). They commented on disliking dangerous traffic and traffic noise, homeless and drunk people, intimidating older children, and massage parlours and adult shops in and around public space (Carroll., et al, 2015). A concern was also for the safety of the environment. Younger people felt a desire to be independent but also feared the potential consequences of this freedom. Their independence is further hindered by the media and warnings of safety in the city by the public and their parents (Carroll., et al, 2015). One of the study participants recorded that she couldn’t play inside as the area was too small and she couldn’t play outside as there was nowhere to play, and her mother didn’t approve of her playing outside on the street (Carroll., et al, 2015). This shows the lack of available public space in Auckland City close to where people reside.

The most notable public space that was mentioned was Freemans Park. It has a communal area, access to shops and a park, and a car park that offers space for bike riding and scootering. Kids commented that it was a ‘part of my history’ (Carroll., et al, 2015). The park enables younger people to move around freely and independently and develop a sense of ownership. The younger people involved in the study took it upon themselves to give recommendations to Carroll (et al., 2015). They wished for slower traffic, more pedestrian crossings, easily accessible outdoor spaces to play in and, more space around apartments for play. To avoid the encroachment of adults or older children that limit the access to younger people and make them feel unsafe, they wished for height or age restriction areas and parks designed for the use of smaller children.

Figure 4 Freemans Park, Auckland



Source: (Caroll et al 2015)

Another case study in New Zealand, based in Christchurch focuses on younger people’s access to their local environment. This study focused on public space in the form of sidewalks and the natural environment. Natural environments allow younger people to manipulate the environment to build playhouses, dig, and to build forts; this allows younger people to create their own place which is difficult to do in a formal setting such as school (Tranter & Pawson, 2001). Although the environment is beneficial for development only 63% of those in the study could play on the street and utilise the available space in their neighbourhood (Tranter & Pawson, 2001). Further, those in the study commented that they preferred to walk places rather than have their parents take them. They could stop and explore if they were walking or biking but driving restricted their freedom and potential experiences (Tranter & Pawson, 2001). Having younger people walking to school would generate a safer environment and a community presence (Tranter & Pawson, 2001). It would facilitate both independence and safety on the street in a controlled fashion. The experiences of the younger people in this study showed that they considered public space to have a broad scope, and their use and facilitation of the space did not have to be organised, it just had to enable them to explore at their own accord.

Case studies have shown that If young people are safe and engage with their urban neighbourhood, their independence, resilience and social competence will be enhanced (Carroll., et al, 2015). Child development is associated with their interaction to their surroundings and experiences of place. Younger people need ‘third places’ that are accessible public spaces, separate from their homes and schools. They are an alternative to their dominant place of social and outdoor environmental interaction. Third places are for community and public interaction to facilitate informal social connections and establish a sense of place and belonging outside of formalised settings (Carroll., et al, 2015). Further, neighbourhood public spaces allow for opportunities of independent mobility and physical activity. (Carroll., et al, 2015). Younger people see the environment as a play opportunity, and have the imagination to play anywhere. They do not only play in formally built environments but also streets, alleys, vacant lots, and natural environments such as creeks and trees. This means that the notion of public space is different to younger people, and therefore the design of public space must compliment this notion to be successful (Tranter & Pawson, 2001). If public spaces are not being utilised by younger people their core purpose is redundant and cannot provide for society on a whole. The improvement of such places would benefit the community and anyone who interacts with the city and built environment.

A study on land use planning and its implications on younger people’s health has recognized the main aspects of a child-friendly community as supplying safety, greenspace, access and social integration (McAllister, 2008). The study focuses on the effect that changes in policy and design can have on public spaces, and their ability to reduce segregation of younger people from the wider society. McAllister (2008) focus on the encouragement of walking and cycling, improved access to spaces, and creating safer environments for both younger people and their guardians. The study addresses the lack of planning for and with younger people in the policy and design processes. The study found that this reduces an interest in community engagement and a desire for physical activity in an outside environment. Younger people should be consulted as their experiences differ from any other age group.

They are often competent in the way an environment can be modified to benefit themselves and the greater public to create greater community connectivity (McAllister, 2008).

The study pinpointed many factors that influenced younger people’s decision to use public spaces. The main factors were their sex and age, presence of courtyards, the proximity of the parks to their homes, the age of the neighbourhood, and the network of relationships between their neighbours (McAllister, 2008). These factors influence how McAllister recommends public spaces be designed to facilitate their use by younger people. Due to cities being designed for the convenience of vehicles, places are not often designed to facilitate walking and access to public places. To overcome this, McAllister (2008) recommends working with transport agencies to improve the conditions of traffic, pedestrian safety and accessibility to ensure public spaces are not encroached upon by the negative effects of vehicles. McAllister (2008) also recommends integrating younger people into the decision-making process of public spaces. Her research found that the inclusion of younger people will make spaces more accessible and more feasible for the wider community. Younger people are often seen as the problem in public spaces and an annoyance for the wider public. Involving them in the decision-making process is more likely to increase their feelings of belonging and stewardship over the area therefore, reducing their interruption of the space (McAllister, 2008). McAllister’s ideas have been translated in Fort Street Precinct in Auckland’s city centre. It is a shared street that has enabled an increase in pedestrian connectivity, and reduced levels of fear of both traffic and people (Auckland Design Manual, 2017). Of those surveyed on the street, 80% felt safer in the area, especially at night time, since they renovated it into a shared space (Auckland Design Manual, 2017).

Figure 5 Fort Street, Auckland



Source: (Greater Auckland, 2009)

An issue recognised in American cities, is the lack of parks being used by younger people (Loukaitou-Sideris & Sideris, 2010). A study by Loukaitou-Sideris & Sideris (2010) found that of the 451 younger people surveyed, 20% of them recorded never going to parks. Parks can be described as “an antidote to the commercialization of leisure” that creates a contrast with the experiences offered to younger people through electric toys, computers and television (Loukaitou-Sideris & Sideris, 2010, 89). Public spaces such as parks are less formal than home and school environments and enables younger people to develop in an unrestricted manner (Loukaitou-Sideris & Sideris, 2010). City parks are a site for development of physical exploration and social connections. This offers public space as an important connection between younger people, outside, and the living world. By understanding what brings younger people to parks, the parks can be designed in a manner that facilitates their use.

A study in America differentiated the use of parks by sex, race, ethnicity, and the inner-city vs suburban dwellers. The study found that significantly more Hispanic younger people recorded visiting the park during the week with their families, and recorded staying significantly longer than the average younger person of other ethnicities (Loukaitou-Sideris & Sideris, 2010). This is due to the social aspects of culture, and the familial relations that Hispanics in the city are known for. No other ethnicity was noted as having an exponentially high or low use of parks. The study also compared the use of parks by girls and boys. The girls present in the study noted that they used park equipment, opposed to the boys who preferred to use the open green space and playing fields (Loukaitou-Sideris & Sideris, 2010). The study found 39% of the girls used slides and swings the most in their local parks, and 45% of boys used playing fields the most (Loukaitou-Sideris & Sideris, 2010). As the girls did not display a preference to the open green space their use of parks was limited. This was due to playgrounds being tailored towards young children in primary school rather than middle age children, removing the main activity which they would go to parks for. A substantial proportion of the girls surveyed said that they had outgrown parks, and that they preferred friends’ houses, malls, or their own homes as they could facilitate better social interaction there (Loukaitou-Sideris & Sideris, 2010).

Another aspect of public spaces not often explored is younger people’s geographies of fear in them. A study of 250 young people was taken in Britain to explore their fears of public space. From the study group, 34% of girls, and 20% of the boys felt unsafe in their city centre’s public spaces (Bromley & Stacey, 2012). Those residing in wealthier neighbourhoods had a higher percentage of feeling unsafe in the city centre compared to those in poorer neighbourhoods (Bromley & Stacey, 2012). This is as younger people’s perceptions of safety are moderated by their own experiences and knowledge of their home area, rather than by the characteristics of the city itself. The younger people who resided in poorer neighbourhoods commented on the city centre as a place of safety under the public eye. The city centre provides them with social presence and formal social control in the form of police, security guards and informal control through concentration of people (Bromley & Stacey, 2012). This security is not available in a residential setting, and influences the notion of safety and control that the city can provide.

The younger people noted what they feared the most in the city, and how it influenced their decision to facilitate the public space offered there. The city is seen as a place of darkness, violence, drunkards, and threats from older people (Bromley & Stacey, 2012). The darkness was exacerbated by the people that were in the city at night and the younger people’s fear of being jumped or attacked. One boy commented on bushes alongside public areas that he avoided as they had the potential to hide attackers (Bromley & Stacey, 2012). Younger people’s main fear appears to be other people, and how the natural and built environment can support people in threatening them. Social disorder therefore needs to be addressed, and groups that are considered risks should be deconstructed to reduce levels of fear. Social control of the public space therefore provides natural surveillance with a mass of foot traffic and people.

**Issues faced by younger people**

In using public open spaces, younger people had also identified key issues, including:

* Lack of tolerance for children and young people (Derr & Tarantini, 2016).
* Cars, trucks, and other vehicular traffic being a source of fear and tension (McGlone, 2016; Ergler et al., 2015).
* Equipment that is not at a child-friendly scale (Ergler et al.).
* Fear of child abduction (McGlone).
* Areas designed for quiet activities being placed near areas designed for more free-spirited play (Derr & Tarantini).
* Lack of environments not conducive to playfulness or delight (Bourke, 2014).
* Perceived controlling gaze or behaviour of adults discouraging playfulness (Bourke).
* Oppressive spaces where LGBTQ youths feel unsafe to express themselves for fear of discrimination or hate crimes (Irazábal & Huerta, 2016).

The research shows that public attitudes are an issue that affect both older and younger people, as well as environments which create a sense of fear or unease due to their proximity to traffic.

**Needs of younger people:**

There appear to be shared needs and priorities between older and younger people. While the latter group does have unique needs in relation to its members developmental stage, there are also some overarching requirements which make a good public space in the eyes of both demographic groups. Needs and priorities identified from the selected literature are:

* Feelings of safety, security, inclusion, acceptance (Derr & Tarantini; Ergler et al; McGlone; Bourke; Irazábal & Huerta).
* Social spaces to be with friends and family that are not limited to child‘s play (Ergler et al; Derr & Tarantini).
* Interactive and innately playful informal spaces where younger people feel they are allowed to be (Derr & Tarantini; Bourke).
* Colourful and relaxing natural environments with trees, flowers, plants, and animal life closer to the ground level (Ergler et al; Derr & Tarantini).
* Areas which are comfortable and safe to sit in (Derr & Tarantini; McGlone).
* Spaces which are not only for children, but for others of all ages too (McGlone).
* Pedestrian priority, and tighter regulation of vehicular traffic in and near public open spaces and pedestrian areas (Ergler et al.; McGlone).
* Areas well-surveilled by trusted adults, as well as visible to street and shops, both for safety and feeling part of city life (McGlone).
* Good connectivity and mixed use so there is a lot to see and do (Ergler et al.).
* Spaces which are flexible in function and do not have prescribed uses (McGlone; Derr & Tarantini).
* Form which is both inviting and challenging for play, such as climbable structures (Derr & Tarantini; McGlone).
* Soft, non-abrasive surfaces to minimise injury (McGlone).
* Environments in which children can safely engage in learning about safety practices with their families (Ergler et al.).
* Spaces which are open and available to access safely until late evening (Irazábal & Huerta).

**Common themes**

Physical activity

For children, opportunities to be physically active, independently mobile and socially interactive are important for their cognitive and social development (Carroll et al 2015, Loukaitou-Sideris & Sideris 2010) and for older people physical activity is good for maintaining cognitive functioning (Yung et al 2016). Lack of green and recreational spaces contributes to obesity and social isolation (Platt 2012). In NZ, the rate of obesity and being overweight among children is increasing: over the last decade the rate of obesity has increased from 8% to 11%, and in 2017 21% of children were overweight but not obese (Ministry of Health). Children living in the most deprived areas were three times as likely to be obese as children living in the least deprived areas (Ministry of Health 2017). Opportunities for play support physical activity and can contribute to improved health and wellbeing.

For older people, though they mostly spend their time at home, the research indicates that the well-being challenges include obesity (Yung et al. 2016), mobility, independence and access to environments (Ward Thompson et al. 2014) and isolation or loneliness (Van Dijk 2015). The physical and social environmental characteristics affect older people’s experience of aging. ‘Ageing in place’ is preferred by older people, which supports independence and better health and well-being of older people. With mobility limitations and smaller social networks, older people are more dependent on their neighbourhoods for personal well-being (Wiles et al, 2012). The World Health Organisation (WHO) Age-friendly Cities guide was designed "to optimize opportunities for health, participation, and security in order to enhance quality of life as people age" (2007). Cities like Tauranga and Hamilton are working toward accreditation under the WHO age-friendly framework. However, Auckland plans do not have specific goals for becoming an age-friendly city. The Auckland District Council for Social Services (ADCOSS) has identified this gap and issued a paper in 2016 on age-friendly cities to collate suggested actions to make Auckland more age-friendly, and to begin a dialogue with agencies, groups and individuals about this issue.

Meredith Dale identified 9 themes running through the literature she reviewed. Core themes were established from the literature and are found to be quite interrelated, complex and co-dependent. For example, perceptions of safety about public open space influences parents fears and anxieties, which affect the level of independent mobility or access to public spaces a child is afforded.

1. Intersectionality: *Gender, age and ethnicity;* Lower income neighbourhood
2. Public spaces: beyond playgrounds
3. Proximity to public open spaces
4. Ease of access, mobility and walkability
5. Dependent relationships
6. Fear and safety perceptions
7. Social needs
8. Park features
9. Maintenance and cleanliness

**Intersectionality**

The literature shows that age is not the only factor that affects lived experiences of public spaces. Intersectionality is at play: the experiences, needs and priorities of both age groups are also influenced by socio-economic status, race, gender, health and neighbourhood density/form. From Dublin to Brisbane and Los Angeles to Auckland, though there are some general themes that are consistent, it is also clear that every community and their needs and priorities are different because of the unique combination of social categories that define the local community members. For example, the experiences and needs of low-income children living in suburban areas is different from middle-income children living in suburban areas.

**Gender, age and ethnicity**

Loukaitou-Sideris & Sideris found that boys and Hispanic children used parks the most, and females, blacks and Asians used the parks the least (2010). Boys enjoyed playing in the field the most, and girls preferred to use the play equipment. Interestingly, Hispanic children preferred to play soccer, basketball was preferred by blacks and Asians and baseball or softball by white children. This LA study also found that girls preferred play equipment, while boys played in the field the most (Loukaitou-Sideris & Sideris 2010). In LA, a higher percentage of inner-city children walked to the park, compared to suburban children. There was no gender difference in this statistic, though more boys biked to the park than girls (Loukaitou-Sideris & Sideris 2010).

Carroll et al. (2015) noted that safety concerns affected mobility and activity of boys and girls, but girls’ activity was more restricted by this. In Auckland, high rise apartment dwellers tended to be New Migrant, and medium density dwellings tended to be NZ European. The Waitemata Local Board area is two-thirds NZ European, however the Asian community (28.5%) is concentrated in the city centre (Waitemata Local Board 2017).

Evidently, the needs and preferences of children at play can differ depending on their ethnic background or gender. There is no research to show any play preferences by ethnicity in NZ. However, public spaces should be designed address differences among children, and distinct needs of particular neighbourhoods, rather than assume them as one homogenous group.

The Freyberg Square audit team identified that they had different views, needs and desires than adults (Carroll & Witten 2015). Among children, different age groups prefer different play equipment: playgrounds for younger children and skate parks for older children, or perhaps no interest in play equipment at all (Loukaitou-Sideris & Sideris 2010).

***Lower income neighbourhood***

In Auckland, the local park is an important place for children for informal and formal activities, but especially important for children in low-income areas (Carroll et al 2015). Informal play and physical activity in all manner of ‘third places’ was significant for low-income suburban children. These areas provide an affordable alternative to formal leisure activities (Elsey 2004).

Research from the US found that in lower income areas and high-density inner-city communities, parks are used more intensely by children. In LA, Hispanic children visited parks more often than other ethnicities (Loukaitou-Sideris & Sideris 2010). This is despite the fact that access to parks and other natural amenities was generally more limited in lower income areas in US studies. This contrasts with low density suburban areas where children have greater access to private recreation facilities or private open spaces to play (Loukaitou-Sideris & Sideris 2010).

The factors contributing to these trends among children in lower income neighbourhoods, include parental limitations, perceptions of safety, cleanliness, access to public spaces and proximity. These are discussed further in subsequent sections. Further intensification in lower income neighbourhoods, insufficient or poor quality third spaces, increasing traffic volumes and poor safety could further disadvantage poor children.

**Public spaces: beyond playgrounds**

Through planning, children are traditionally confined to token ‘child-friendly’ spaces like playgrounds: separate destination third spaces. However, most studies highlighted how children often make use of any available area for play, not necessarily a playground or ‘destination’ public space. The street or a car park or vacant lot can provide equal, if not better, opportunities for physical activity and social interaction, because they are closer to home, or to friends, and are a better alternative to formal parks that are perceived unsafe or are poorly maintained (Bourke 2014, Carroll et al 2015, Platt 2012).

Threshold third places provide play opportunities for children in suburban neighbourhoods, on driveways, berms etc. and, for inner-city children, in foyers, corridors and stairwells, though playing in these common areas was not always permitted by management (Carroll et al 2015). Children living in inner-city apartments were also aware of the need to be quiet to avoid neighbours’ complaints: some had been told off for playing loudly outside previously. Car parks next to apartment blocks were valued by inner-city children in Auckland: they used these spaces for scootering, biking, playing badminton, netball and football (Carroll et al 2015). Some commented that they could play in nearby carparks once the weekday workers’ cars had left.

Transitory third places also have value as places to play as you go: jumping on walls, balancing on kerbs, running, jumping skipping, avoiding cracks in the pavement, games with manhole covers and other street features (Bourke 2014, Carroll et al 2015). Children in suburban neighbourhoods reported more opportunities for this type of play, including ball games, riding bikes and scooters etc in quiet streets, where as busy footpaths and more traffic in inner-city areas limits play in transit.

There is value in improving street design to enhance children’s experiences in transitory third places. Shared streets, traffic calming, more pedestrian crossings can create more walkable and play-friendly transitory spaces, between apartments and formal play areas, to enhance play opportunities for children living in inner-city neighbourhoods both enabling access to public spaces for all its benefits, and to provide play opportunities on the way.

Here there is some synergy between the needs and priorities of children and older people. These street features will also contribute to the perceived safety, walkability (active aging), and access to neighbourhoods and support independent living for older people.

***Proximity to public open spaces***

Public open spaces near home are a convenient venue for social interaction and physical activity for young and old alike. Gehl wrote that children play where the most activity is occurring – in the street, the footpath, outside of home etc. (1987: Platt 2012). Jane Jacobs also talks about the watchful eye of neighbours, to allow children to play where community is strongest, on the footpath (1961: Platt 2012). In the Milwaukee study, children talked about playing in grassed vacant Lots such as ‘the field’, driveways, alleys etc close to home because formal public parks felt unsafe and were in poor condition (Platt 2012). These informal spaces were adopted primarily because they were accessible, abundant, with lots of play opportunities, and close to home near where parents could supervise.

**Los Angeles**

In the LA study, children said they were more likely to go to the park if it was close to home, or if friends would go to the same park (Loukaitou-Sideris & Sideris 2010). And, this study found that suburban children and more white children generally lived closer to parks (as was the suburban demographic). However, suburban children reported using the park less. This is likely due to the availability of alternative play spaces, e.g. organised recreational activities or private open space.

Factors preventing elderly going to public open space include accessibility, transportation and proximity to other amenities (Yung et al. 2016). For older people, access to public space can be an antidote to isolation (Gardner 2011; Meshram and O’Cass 2013: Carroll et al 2015). Close proximity to amenities is linked to quality of life, and easy access to shops and other facilities makes going about daily tasks easy for older people (Vine et al 2012).

**Rotterdam**

In Rotterdam, more independent and mobile older people appreciated good public transport networks close to home and being able to continue to visit their favourite people and places (Van Dijk 2015). In Brisbane, older adults predominantly drive outside of the immediate neighbourhoods for everyday goods and services (2012).

Barriers to accessing local amenities included cost and landscape topography. Some neighbourhoods in Brisbane had poor availability of public transport and thus low use of public transport. Suburbs that lack amenities, i.e. only residential land use, limited walking activity as there are no nearby facilities. But generally, cars provided the desired freedom to access everyday needs and activities for older Australian adults (Vine et al 2012).

**Ease of access, mobility and walkability**

Physical activity is important for physical and mental health and inactivity has poor health implications (Ward Thompson et al 2014). The WHO identified that loss of function with age makes the quality and type of environment a significant factor to well-being and independence of older people (2007).

Ease of access to public spaces in the local neighbourhood affects activity and perceptions of public open space among children and older people. Aspects of the physical environment are much more of a constraint on activity and mobility for older adults, compared to other adult ages.

Characteristics of the built environment that pose problems for older people include poor footpath quality or uneven surfaces, lack of steps with handrails or steep topography, busy roads, dogs (Vine et al 2012, Ward Thompson et al 2014). Also, footpaths in high density areas can be crowded and narrow which make them difficult to navigate for older people. In some cases, timed pedestrian crossings don’t give enough time for older people to safely cross the road (Vine et al 2012). However, these factors considered, does not hinder life satisfaction in Brisbane’s high density urban areas for older people. This satisfaction largely dependent on access to a private car. For the DIY streets study, being able to park your car outside home was found to be a predictor of time spent outdoors, and access to a car was a key predictor of number of outdoor trips (Ward Thompson 2014).

Participants in Yung et al’s study identified important features of public open space as community facilities (toilets, cafes, playgrounds, trails, fountains, interaction spaces) and a clean and pleasant environment (2016). Hindrances for going to public spaces include proximity to home, access to public transport and accessibility. Accessible and nearby facilities are of much higher value to older people, than other citizens (Menec et al. 2011: Van Dijk 2012).

Ward Thompson et al. (2007) established that walking is a major outdoor physical activity for elderly people. Going for a walk was the principal outdoor activity among older people, second to a walk to the shops and sitting outdoors (Ward Thompson et al 2014). Though only a short percentage of each day is used for outdoor activity, most older people spend their time at home (Van Dijk 2015, Vine et al. 2012). Nevertheless, out of home mobility (physical activity, exposure to the elements and social interaction) is correlated with well-being (Vine et al 2012). Mixed use neighbourhoods with good public transport links which support active ageing are a good start.

**UK DIY streets**

The UK ‘DIY streets’ intervention study found that post-intervention perceptions about neighbourhood walkability improved, but actual self-reported activity decreased (Ward Thompson 2014). None of the survey participants met the recommended weekly activity for health in older adults (150min of mod intensity activity in bouts of 10min or more). As Ward Thompson et al. hypothesised (2014), reliance on cars may be too strong for any significant access or availability improvements to make a difference to perceptions of walkability and actual walking physical activity among older adults (Vine et al 2012). Wider community engagement strategies could be employed to change norms around car-use and encourage walking. When an older person can no longer drive there will be significant access problems, and at that time proximity and access to amenities in the immediate neighbourhood will be imperative to support ageing in place.

Ward Thompson et al. found the best predictors for health and quality of life among older people was lack of barriers or nuisances to activity, good footpaths and cycle ways and enjoyable routes (2014). These were consistently associated with time outdoors and general good health.

The neighbourhood environment, including streets, footpaths, pedestrian crossings are in and of themselves public spaces - transitional ‘third places’. These spaces can provide or prevent opportunities for play (Bourke 2014), and support physical activity and social interaction either during the journey to public spaces and or by facilitating a visit a public space itself.

Older people prefer pathways that are easy to walk on and enjoyable (I’DGO 2007). The study and design guidance produced from I’DGO, identifies how different path widths can influence social exchanges and whether interactions with other walkers is supported. For people over 65, research has found higher levels of walking where there are good quality pavements, tree-lined walks en-route to an open space and cleanliness of the route and the space itself (e.g. no dog fouling) (Ward Thompson et al 2014). The pedestrian experience is vitally important for older people: for those who find it difficult to get around, it is often due to poor design or up-keep of neighbourhood features, especially footpaths (I’DGO 2007), and constrained mobility constrains their independence and wellbeing.

**Dependent relationships**

Both children and older people are dependent on others, in different ways, which affects how they experience their neighbourhoods and public open spaces.

**Children and parents**

Platt, Carroll et al, Loukaitou-Sideris & Sideris and Bourke all noticed the effect of parent’s anxieties and fears about public space on children’s physical activity, play opportunities and park visitation. Parental anxieties about safety can limit or exclude children’s access, or independent mobility to public spaces. Independent mobility is important for children’s development and building social capital, thus maintaining children’s access to the public realm is important.

The Kids in the City study in Auckland found that children’s independent mobility was restricted in all neighbourhoods, as influenced by parenting as well as neighbourhood characteristics (traffic volumes, access to amenities). Parent’s primary safety fears were traffic and ‘stranger danger’ (Carroll et al 2015). This affected both boys and girls, though girl’s independent mobility appeared more restricted. Though not a significant trend in NZ studies, other studies observed that many kids were driven to parks also, which adds another element of child-parent dependency for play activities (Loukaitou-Sideris & Sideris 2010).

The temporal and spatial boundaries of children’s mobility is largely determined by their parents. In LA, a majority of children they only went to the part with an adult (Loukaitou-Sideris & Sideris 2010). In Milwaukee, some parents placed spatial restrictions on their children due to ‘stranger danger’ (Platt 2012). Carroll et al. found that suburban children from low-decile schools were more likely to travel to schools and shops independently than children from more affluent neighbourhoods (2015). Many middle-income children were ferried between organised activities, or, parent-dependent mobility meant some kids only played in their backyard, or in apartments they stayed indoors and occupied the ‘fortified space of home’ (Kearns and Collins 2006, p118: Carroll et al 2015).

Parents are also increasingly busy, and where children are dependent on parents to drive them to a park or to supervise them, play opportunities become limited for children (Carroll et al 2015). In LA, a key reason why kids never went to parks was because they or their parents lacked time (Loukaitou-Sideris & Sideris 2010).

In the US, organised supervised activities in the parks seemed to be commonplace. These programmes run by the city would allay parent’s concerns about safety somewhat, and provide opportunities for children to be physically active and have social interactions without their parents’ supervision (Loukaitou-Sideris & Sideris 2010).

**Dublin - Ireland**

Bourke’s study of school children in Dublin found that children do regularly access public space without adults (2014). ‘Going out to play’ was reported by 83% of children as the primary reason they accessed public space without an adult. Carroll et al. found that social trips to visit friends are the most common trips to be done without adult supervision, with children from lower-income households having significantly higher independent mobility (7804%) than middle-income children (37.2%) (2015).

Interviews and discussions with children highlighted the limitations parents and other adults put on play in public spaces. Irish school children described how they didn’t like the rules that applied when walking with adults: “no running, stay on the footpath, go more slowly…” (Bourke 2014). The children’s photos and diaries revealed the intimate geographies of each child’s journey through adult-oriented public space (Bourke 2014). Children were aware of areas where playing is allowed or not. When asked to document a walk in their free time, children identified the appropriate places to play such as playgrounds. But when free from adult regulation, children preferred to play in informal places, where they can play more creatively and enjoy going to ‘out-of-bounds’ areas (Thomson & Phil 2004: Bourke 2014). In Freyberg Square, children also enjoyed play and exploring in ‘out-of-bounds’ areas up high and among bushes, playing hide and seek etc. Through the children’s audit of proposed redevelopment plans, designers maintained and enhanced this feature of the park (Carrol & Witten 2015).

Freeman’s Park is a neighbourhood development in Auckland that was noted by researchers as a place where children could play more independently (Carroll et al. 2015). It is a 201-unit complex with 3.5ha of communal grounds and a ready supply of playmates. Parents seemed to give children a license to roam this area unsupervised, and they moved easily between different dwellings. Children enjoy playing in grass areas, car parks, places for hide and seek and a favourite tree where children meet. Future redevelopment areas in Auckland could learn from Freeman’s Park, to create similar child-friendly neighbourhoods that support physical activity and social interaction.

**Living situation: older people**

The affordances of public spaces are different for older people versus children. For older people the sense of community and connection with others (strangers) is important, but in third places children largely avoid strangers. From the I’DGO study (2007), for older people living alone, higher importance was given to trees planted along the footpath and a short distance from home to open spaces. However, if living with someone, older people had higher importance on the provision of facilities like cafes and toilets, and car parks. Those with mobility limitations placed more importance on the provision of seats. Van Dijk’s study also identified different social needs and neighbourhood dependencies for wellbeing among older people living alone, compared to those living with a spouse or family (2015).

**Fear and safety perceptions**

In the Auckland, safety concerns permeated the lived experiences of all children. Children’s fears were reflected in their dislikes in their neighbourhoods and some fears self-restricted their mobility: they felt safer with family or close to home. In some cases, children’s fears were perceived as a reflection and re-telling of parents’ safety concerns.

Children in Auckland identified several things they had experienced in their neighbourhood that they disliked (Carroll et al. 2015), such as: dangerous traffic (inner-city and middle-income children especially), 'weird', homeless or drunk people in the inner-city, drunk people in lower-income suburban areas, older youth (bullies, intimidating people) in both areas, 'scary' dogs in the suburbs. In the suburbs, graffiti and rubbish were disliked and in the inner-city, markers of the sex industry were noted as 'disgusting'.

Children involved in the Freyberg Square audit noted that it would be a scary place to be at night, with ‘creepy’ alleyways and narrow streets. Also, bullies, rubbish and graffiti made them feel unsafe. In general, though, the children felt safe in the Square.

In US studies, perception of crime, statistics and news stories affected children’s fears about parks (Loukaitou-Sideris & Sideris 2010, Platt 2012). Perceived safety at parks or en route were key reasons why many children would not go to one park over another (Loukaitou-Sideris & Sideris 2010), or as a reason to play in a nearby alleyway or street instead (Platt 2012). Fear of strangers and the rate of reported crimes affect girls’ outdoor activity more than boys’ (Loukaitou-Sideris & Sideris 2010). In the LA study, three-quarters of parents interviewed said children didn’t go to the park without an adult, due to concerns about crime and traffic (2015). And, girls were observed to be less independently mobile than boys. In the US, perceptions of safety were generally lower in inner-city neighbourhoods among both parents and children. As noted above, in Auckland, perceptions of safety among children were lower in the inner-city and lower-income neighbourhoods.

In the LA study, most children reported feeling safe in the park, though in LA more boys felt safe than girls, and parents thought the parks were unsafe. In Milwaukee and Auckland, children reported that other people at the park, with various behaviour, were what made them feel unsafe (Platt 2012, Carroll et al 2015).

As previously discussed, safety concerns in public parks in Milwaukee led children to adopt informal and accessible play spaces in streets, alleyways and vacant lots where they felt safer (Platt 2012). Platt’s study has highlighted the importance of considering children’s fears along with their desire to play. Planners could try and address the source of fear or assist with formalising alternative accessible public spaces that they have adopted.

In Auckland, children recommend the following aspects to make inner-city neighbourhoods more child-friendly (Carroll et al 2015), addressing some safety concerns:

- Less and slower traffic

- More pedestrian crossings

- More accessible places to play

- Spaces in apartments to play, or shared leisure facilities.

For older people, feeling safe in the neighbourhood can mitigate against loss of social and physical wellbeing. Physical and social aspects of neighbourhoods are closely related and thus need to be considered simultaneously. In the UK DIY Streets study, community engagement activities as part of the intervention program may have involved social interaction, and indirectly contributed to the improved perceptions of safety walking after dark (Ward Thompson et al 2014). A safe public space is perceived as free from crime and fine to access at night time (I’DGO 2007).

**Social needs**

**Hong Kong**

The Hong Kong study, focused around urban renewal areas, noted that social needs of older people are often not addressed in the planning and design of urban renewal areas (2016). The physical needs and safety aspects are considered in planning usually. Participants in Yung et al.’s study expressed a desire for a community participative planning process that honours their socio-cultural ties to the area (2016).

Planning of public spaces in Hong Kong has been criticised for being too calculated and quantitative in nature: 15ha of public open space is provided per 100,000 people. This standard has not been reviewed for 15 years. New parks are including universal accessibility, but the social needs of the older people in urban renewal districts have not been fully addressed (Yung et al. 2016)

In urban renewal areas, people have established social networks and neighbourhood ties, which is not the case with new development areas. The purpose of going to public spaces was to walk and meet friends. For Hong Kong’s residents living in high-density compact homes, open space is a much better place to meet people.

The role of public open space in social interaction is to enhance a sense of community and safety and to provide opportunities to connect with nature and people (Yung et al 2016). A key social need for older people in public spaces was the need to talk to each other, and preferred activities were ones beneficial to self-esteem and psychological health (Yung et al. 2016).

A sense of belonging to a place facilitates successful adjustment throughout old age, maintaining a sense of identity and supporting general wellbeing (Yung et al 2016, Van Dijk et al 2015). Older people have specific social needs that should be maintained through the urban renewal process, e.g. the need for constant interaction with one another to avoid feelings of loneliness.

Neighbours who care about one another, providing mutual assistance and monitoring are crucial support networks. Among some frail older people, stronger social ties among neighbours is preferred over abundant physical facilities (e.g. parks, libraries) (Van Dijk 2015). Non-frail older people valued a well-kept neighbourhood with people they can relate to, that is where social and physical deterioration don’t occur. In the Rotterdam community, some rejected the immigrant majority in their neighbourhood because they found it alienating due to language and cultural barrier. Single people especially, value support from the neighbourhood.

The internet allows some older people to maintain social networks and prevent isolation, consequently they become less dependent on social or civic neighbourhood activities (Van Dijk 2015). The influence of online social networks in the social lives of older people will become increasingly clear in the coming decades, however currently it is not accessible or used widely among older people.

Along with a need for social interaction and support, older people were clear that excessive social contact is undesirable: they also need autonomy and privacy to a certain extent. Research participants highlighted downsides of a community where everyone knows everything about everyone, there is too much gossip or organised social activities (Van Dijk 2015).

Planning not just about providing open space, but about a creating a sense of place that is inclusive and caring to its residents, especially for elderly.

Children need to be included in ‘third places’, as public space is where they learn social skills and improvise a social life (Carroll et al 2015). The Kids in the City study found that children liked having friends that lived close by, places to play and a range of amenities in their neighbourhood. For Auckland children, there is a strong relational aspect to parks: parks are about play, but also about playing there with friends (Carroll et al 2015).

**Park features**

***Seating***

The children’s audit of Freyberg Square in Auckland provided some interesting insights into how children use and perceive seating in public spaces. They used the seating for jumping, running, gymnastics, balancing as well as sitting. Children had some ideas to improve the seating: for some seating to be face-to-face (e.g. picnic table) so that people could talk to one another, matching seating, or alternative seating like bean bags. A circular seat around a tree in the Square was liked as a good launch pad for climbing the tree, of a good height and rounded, to make it comfortable for swinging legs underneath. Design feedback included ways to support or facilitate climbing of the tree. Insights like this are valuable for designers to understand the hidden priorities children have with how the use public spaces. In Freyberg Square, climbing the tree, getting to high places, exploring ‘out-of-bounds’ places were priorities for the children which designers were able to enhance through the redevelopment (Carroll & Witten 2015).

The I’DGO research found that how often older people went outdoors was affected by the presence of facilities like seats, toilets, shelter in open space as well as good paths to access the space (2007). Seats along the access routes to public spaces were also preferred by older people. A seating area no more than 50m along a path was recommended as an easy to reach destination point for less mobile people. In addition, older people were observed using seating areas located where there were interesting things to watch, such as sport, wildlife, playgrounds.

In Freyberg Square, all the child-auditors liked the water feature. It provided varied opportunities for play, climbing up different levels, it made nice sounds and had movement, provided interactive fun (Carroll & Witten 2015). Children also liked the different levels in the Freyberg Square space, being able to be up high, and opportunities to play in among the bushes: ‘out-of-bounds’ areas. Designers incorporated this into the new design for the Square, with a discovery trail, to maintain some ‘wild’ places, perceived as out-of-bounds, for children to engage in more creative and spontaneous active play. The design included stairs and terraces within the enhanced water feature to give ‘up high’ opportunities. The water feature was enhanced to improve the interactivity and play opportunities, including lights in the water. This study shows how involving children in the decision-making process removes assumptions about how they experience public spaces, and allows adults to plan and design spaces relevant and appropriate for children’s needs and wants. The Freyberg Square example also highlights the specificity of the consultation - i.e. every space is different, and the local users of space will be different for every park.

***Maintenance and cleanliness***

The cleanliness of spaces was mentioned previously in relation to safety concerns. In LA, cleanliness was a key reason why children would go to one park over another (Loukaitou-Sideris & Sideris 2010). In Milwaukee, there were plenty of parks, and children didn’t indicate that it was difficult to travel to them, but the poor condition of the public parks meant they generally avoided visiting formal city parks and used the alternative play spaces closer to home (Platt 2012). In urban renewal districts of Hong Kong, older people expressed a priority for a clean and pleasant environment, a reflection of the old and dilapidated condition of their present neighbourhood (Yung et al 2016).

For the Freyberg Square children’s audit, comments were made that the current Square seemed dull, dirty and poorly maintained (Carroll & Witten 2015). Children commented on the uneven pavement, unsuitable for scooters, wheelchairs or skateboards. Patterned or textured surfaces seemed messy to the participants, they would prefer smoother surfaces for play. Smoother surfaces are also preferred by older people, for ease of access (I’DGO 2007).

In Auckland, children’s sense of ownership of parks was demonstrated through their annoyance when play equipment was vandalised, when they felt excluded from a space or their access was limited by other users, such as homeless people (inner-city) or teenagers (perceived as bullies) (Carroll et al. 2015). One child suggested a solution to bullies: segregated play areas. In the Freyberg Square audit, children stressed that the Square should be a place for all ages, and some suggested a play area specifically for babies, to be inclusive (Carroll & Witten 2015).

A study undertaken in Auckland City itself echoes the themes for a child-friendly city. The ‘Kids in the City’ study is a mixed-methods study exploring the experiences of children in their local neighbourhood, their independent mobility and physical activity (Carroll, Witten, Kearns, & Donovan, 2015). For children, the neighbourhood is a fundamental unit for everyday experiences and, like seniors, plays a vital role for overall wellbeing (Carroll *et al.*, 2015). Planning in New Zealand most commonly confines children’s use of public space to specific places such as playgrounds, swimming pools and libraries (Carroll *et al.*, 2016). This study divides the public space into three key areas that were coined by Oldenburg (1989). Accessible public spaces, such as parks, shops and streets, are called ‘third’ places, with the ‘first’ place being the home and the ‘second’ place is the workplace or school (Oldenburg, 1989). Similar to seniors, third places are key sites for independent mobility and social interaction, and the development of a child’s sense of place and identity (Carroll *et al.*, 2016).

Experiences of Auckland children in their neighbourhood are divided into likes and dislikes. This study examined three different demographic groups of children in Auckland to see if this impacted their experiences of public spaces (Carroll *et al.,* 2016). The three groups were inner city/high decile, suburban/mid decile, and suburban/low decile. Across all groups the most liked features of the city are having friends that live close by, having places in which to play and being close to a wide range of amenities (Carroll *et al.*, 2016). The most disliked features are dangerous traffic, homeless and/or drunk people, bullying and intimidating older youth, and scary dogs (Carroll *et al.*, 2016). For children, third place destinations are common anchors in their neighbourhoods and lives. The park and playgrounds were about play and playing with friends (Carroll, *et al.*, 2016). It was also mentioned by a few children in the Auckland study that quieter parks were great for taking time out, relaxing, and being away from technology (Carroll *et al.*, 2016). For Pacific and New Migrant children, churches are important public spaces, too (Carroll *et al.*, 2016). For youth in the Sunshine Coast, Australia, public spaces are places for meeting friends, away from judgemental adults (Osborne, Baldwin, Thomsen, & Woolcock, 2017). Youth, in particular, experience social inequality and exclusion in public spaces because of the ‘deviant, criminal youth’ stereotype (Osborne *et al.*, 2017). When adults are supervising children in a public space there is tension about the right of youth to use it, with youth often having to find somewhere else to go because of the power of the adults (Osborne *et al.*, 2017). In poorer neighbourhoods, the favourite public places of children are places close to home, places that are associated with familiar people (friends) and create feelings of comfort and safety (Castonguay & Jutras, 2009). Places that allow children to engage with multiple activities and have a strong presence of natural elements, such as trees and flowers, are more valued (Castonguay & Jutras, 2009).

Transitory third places that connect one destination to the next also provided places for experiences and play for children in the city. For children, streets are more than just thoroughfares. Streets and everyday infrastructure in the city are sites of adventure and play for children (Carroll *et al.*, 2016). Children can run, jump on walls, balance on kerbs, skip, spin in circles and much more (Carroll *et al.*, 2016). The imagination of children and transitory zones creates many opportunities to play various games that incorporate manhole covers, shadows and other everyday street features (Carroll *et al.*, 2016). Children relish the chance to use transitory zones to walk and talk with friends, and to look and engage with other people, gardens, graffiti, shop displays and cafes (Carroll *et al.*, 2016). Children in poorer neighbourhoods have more independent mobility and therefore are more likely to play outdoors. These children enjoy using speed bumps and uneven roads to ride over on their bicycles, scooters and skateboards (Castonguay & Jutras, 2009; Carroll *et al.*, 2016).

Children also have play experiences in threshold spaces between the home and the street (Carroll *et al.*, 2016). In the suburbs, threshold spaces are driveways and grass berms (Carroll *et al.*, 2016). But for inner-city children with limited outside space for play, foyers, corridors and stairwells are valued for play and friend making spaces (Carroll *et al.*, 2016). However, this is not always permitted as seen in Figure 3.

Figure 6 Sign restricting play in communal area of an apartment building



Source: (Carroll et al)

Inner-city children also value carparks adjacent to low- and medium rise apartment blocks for riding bikes and scooters, and playing ball games (Carroll *et al.*, 2016). However, this can only occur after all the cars have left once the business day ends (Carroll *et al.*, 2016).

The core theme of play is important when considering the experiences, need and priorities of children and youth in the city. Play is important for stimulating the senses, supporting wellbeing, challenging motor skills and helping in the development of physical and mental skills (Yankova, 2012). Adults and seniors can also use play to escape from the everyday routine and maintain good health and wellbeing (Yankova, 2012). In the Auckland CBD, there are limited day cares and schools, and only three designated playgrounds (Yankova, 2012). Play is an important tool for intersectionality in the city as it can be used to break down social barriers, because a common identity is created through play (Yankova, 2012). Play in public spaces allows for the overlap of age groups. While children are free to explore, learn and play, adults can pursue leisure interests for themselves or join with their children in play (Yankova, 2012).

Children and youth both expressed the need for dynamic public and play spaces that include all age groups and reduces tension and intimidation between younger children and older youth (Carroll *et al.*, 2017; Osborne *et al.*, 2017). Younger children in the Carroll *et al.* (2016) study suggested putting age and/or height restrictions on certain areas of playgrounds and skate parks. In general, youth suggested having a range of different activities that caters for all age groups (Osborne *et al.*, 2017). Participation in these activities and venues should also not be dictated by money or social status (Osborne *et al.*, 2017).

Children and youth are not exempt from wanting their voices heard when it comes to planning in the city. The participants in the Australian youth study had many suggestions for breaking down the divide between adults and youth and creating positive interactions in their community (Osborne *et al.*, 2017). One suggestion was the creation of an outdoor stage or amphitheatre that students could use to create, organise and promote events for the school and wider community (Osborne *et al.*, 2017). This creates opportunities for young people to create partnerships and work equally with their school, decision makers, and other institutions to create positive contributions to their neighbourhood and community (Osborne *et al.*, 2017).

**Comparison of Waitemata Local Board and Southern Initiative**

Joyce Habgood (2018) undertook a comparison of the Waitemata Local Board and Southern Initiative Areas using published information to establish spatial differences exist in Auckland.

The Waitemata Local Board and the Southern Initiative form the geographic scope of this section. They provide contrasting insights due to their different socio-economic levels. The former is significant for being the region’s key socio-economic hub. The latter is notable for having the highest number of children and young people whilst also having the highest levels of inequality in the region (Auckland Council, 2016a).

Waitemata includes the central business district (CBD), Westmere, Newmarket, Grey Lynn, Parnell, and Ponsonby (Auckland Council, 2017b). The Southern Initiative is made of Mangere-Otahuhu, Otara-Papatoetoe, Manurewa, and Papakura (Auckland Council, 2016a).

Table 3 Comparing Watimata and the Southern Initiative areas





Source: (Habgood, 2018)

**Seniors**

Seniors are defined as 65 years and over (Auckland Council, 2015). Table 4 presents the demographics of three areas where most live and within them, the main ethnic groups and the median income. As above, the Waitemata and the Southern Initiative were chosen for their socio-economic significance. Hibiscus and Bays were included for having the highest number of seniors in all of Auckland (Auckland Council, 2015). The issues compiled however pertain to the whole breadth of the region given the lack of area-specific research.

Table 4 Demographics of Hibiscus and Bays, Waitemata and Southern Initiative



As shown above, how young people and seniors use open spaces is shaped by the intersectionality of gender, culture, geography, sexual orientation, and disability. In the Southern Initiative, young people in low-income households do not even have basic amenities at home. Their lack of public transport could also affect their life outcomes if it is preventing them from seeking employment or maintaining social networks. In the Waitemata where there are higher income levels, there is equally a higher level of mobility for those in need of better housing. Transgender people have difficulty using public toilets. Older women, along with other non-European seniors, have to deal with discrimination, crime, or racism. Some seniors in the Pacific community need people to guide them across the street, or otherwise wheelchairs and scooters. This shows that the age-friendly principle is about breaking down barriers to access.

**Summary**

Public spaces and neighbourhoods that support health and wellbeing, provide opportunities for both physical activity and social interaction. Factors like gender, ethnicity, and socio-economic status as well as neighbourhood typology, proximity to amenities affect how people experience, public open spaces. For children, parents’ fears and anxieties influence on how they access public space. Playgrounds are traditional purposeful play areas for children, but research shows that play opportunities are present throughout the neighbourhood. Kids enjoy alternative play spaces, where they can be more creative, feel safer, be closer to home and explore ‘out of bounds’ areas. Streets could be designed to better support transitional play, as well as walkability for older people to support independent mobility. Proximity to amenities and public spaces is important for activity and independence for old and young. Seating and walkways in public spaces can meet the needs of young and old, when the priorities of each user is understood. Well-maintained spaces are more attractive, feel safer and are preferred by people.

Seniors and young people have unique experiences, needs and priorities in the city. Recognition of the inadequacy of cities to create liveable cities for seniors has created urban planning changes to promote ‘age-friendliness’. An age-friendly community can be defined as a place that actively involves, values and supports seniors with suitable infrastructure and services that consider and accommodate senior’s needs (Buffel & Phillipson, 2016).

Auckland City has a lot of parks and green spaces, but they are often inaccessible and unused by seniors because of their design and programming. Parks cater for adults and younger people, and are often too small in large, dense cities.

The literature on the experiences, needs and priorities of children and youth in Auckland City has some similar themes to that of seniors. Children and youth want public places that are close to home, easily accessible, safe from traffic, have lots of natural elements and areas for activities. Making friends through play is important for children and youth. Children and youth make connections to their neighbourhood and city by being able to experience it in third, transitory and threshold places. Children in different areas and demographics of the city have different needs for public spaces. There is often tension and intimidation between younger children and older youth so there is a need for all-inclusive spaces which includes different types of equipment and activities. The independent mobility and experiences of children and youth is often determined by their parents but this does not stop them from wanting inclusion and advocacy in their city.

**Summary - Common themes**

Importance of activity for young and older people

The literature shows that age is not the only factor that affects lived experiences of public spaces. Intersectionality is at play: the experiences, needs and priorities of both age groups are also influenced by socio-economic status, race, gender, health and neighbourhood density/form.

The literature notes a few similarities between youth and seniors. Youth also have strategies that are incorporated into child-friendly city plans that can be adopted by city councils. The common themes identified in the literature for child-friendly cities are: more access to services, nature and play, freedom from physical danger such as traffic, and opportunities for inclusion in the city (Derr & Tarantini, 2016).

Both children and older people are dependent on others, in different ways, which affects how they experience their neighbourhoods and public open spaces.

Yet the Freyberg Square audit identified that children had different views, needs and desires for the space compared to adults. They felt that input from young people could make public spaces more attractive to arrange of people: a more vibrant and welcoming space (Carroll & Witten 2015).

**Conclusion**

Public open space is a valuable resource in urban environments, especially in high-density and inner-city areas where private open spaces (e.g. back yards) are limited. A significant body of research shows that public open space and opportunities for play improve the health and well-being of residents by providing opportunities for physical and social activity.

The studies have tended to focus on either younger or older people and so this review has attempted to provide a more inter-generational focus.

Urban planning conventionally prioritises adults and their needs in public spaces, with a paternalistic approach, to the extent that older people and younger people, with different and more multifaceted needs, are excluded or inhibited from accessing and enjoying these spaces fully.

**Implications for Auckland**

There are echoes of these needs in both the I Am Auckland and Thriving Communities plans. However, neither document goes into great detail about how child-friendly public spaces might be designed. They do identify the need for greater provision of such spaces in Auckland. UNICEF also provides information about creating Child-friendly Spaces, but these are specifically for the provision of such spaces after an emergency or disaster has occurred (UNICEF, 2009a).

Extensive focus groups with both older and younger people in the Auckland setting be carried out, through an intersectional lens (i.e., examining the impacts of ethnicity, gender, sexual orientation, physical or mental impairments, and other factors in conjunction with age). This should be done with an urban design focus in mind, and an aim to apply findings uniformly to a comprehensive document such as the Auckland Design Manual (ADM).

**Suggestions for Auckland**

For Auckland, there is a real opportunity to find creative ways to facilitate play and enhance the urban childhood experience. For example, could we formally recognise the dual-role of parking spaces as play spaces in the inner-city areas? There are plans to create more shared spaces in the inner-city with slower traffic environments that can be safe and accessible transitory or threshold ‘third places’ for inner-city children. Regulations for provision of common space in and around apartment blocks could better provide for a need for play space for children living in them.

The overall sense was that the chronological age of a person does not necessarily mean that they are experiencing life as others might assume they are. Although there was an acceptance of the ageing process and age-related physiological changes, there was the sense that these were not what defined ― being old.

**Gaps in the current literature**

In carrying out this literature search, there was some difficulty obtaining recent first-hand narrative accounts of how younger and older people experience public open space, and within these limits, there was a dearth of research carried out in the Auckland setting specifically.

There was significantly greater difficulty finding literature for the older demographic, and much of it was focused on the design of aged residential care facilities such as rest-homes.

Related to older adults’ lived experiences and public spaces, there was no literature found that was specific to the New Zealand context. Several papers about children related to the Kids in the City study in Auckland give insight into the NZ context of children’s needs, priorities, and lived experiences of public open space.

There was significantly greater difficulty finding literature for the older demographic, and much of it was focused on the design of aged residential care facilities such as rest-homes.

**Further research**

Further research is required to determine the lived experiences and travel preferences of older people in the Waitematā Local Board area. There is a high density of public transport links, as well as pedestrian and cycling facilities in this area. Gold AT Hop cards were recently introduced in Auckland, which give free public transport to older people (65+) and reduce financial barriers to independence: visiting friends, being active and doing daily activities in old age.

**References**

Auckland\_Public\_Life\_Survey\_2010\_Part\_1.pdf

444. doi:10.1080/14649357.2012.696675

509-523. doi:10.1080/13549839.2010.487524

ADCOSS. (2016). *Age-friendly cities ADCOSS discussion document.* Unpublished manuscript.

ADCOSS. (2017). About ADCOSS | ADCOSS. Retrieved from <http://www.adcoss.org.nz/about/>

Aird, R. L., & Buys, L. (2015). Active aging: Exploration into self-ratings of "being active", out-of home physical activity, and participation among older Australian adults living in four different settings. Journal of Aging Research, 2015, e501823. doi:10.1155/2015/501823

Allen, R. E. S., Hayman, K. J., Keeling, S., Kerse, N., Palmer, A. J., & Wiles, J. L. (2009). Older people and their social spaces: A study of well-being and attachment to place in Aotearoa New Zealand. *Social Science & Medicine, 68*(4), 664-671. doi:10.1016/j.socscimed.2008.11.030

Alves, S., Aspinall, P., Ward Thompson, C., Sugiyama, T., Brice, R., & Vickers, A. (2008). Preferences of older people for environmental attributes of local parks. Facilities, 26(11/12), 433-453. doi:10.1108/02632770810895705

Appleyard, B., Cox, L. (2006) At in the Home. Planning, 72(9), 30-35.

Auckland Council (2016). Determinants of Wellbeing for Older Aucklanders. Available at http://www.aucklandcouncil.govt.nz/SiteCollectionDocuments/aboutcouncil/planspoliciespublications/technicalpublications/tr2016047determinantswellbeingforolderaucklanders.pdf (Accessed 6 June 2017)

AUCKLAND COUNCIL, 2012. Auckland Now and Into the Future. *The Auckland Plan.* Auckland, NZ: Auckland Council, pp. 18-29.

AUCKLAND COUNCIL, 2017-last update, Auckland Design Manual. Available: http://www.aucklanddesignmanual.co.nz/ [Jun 11, 2017].

Auckland Council. (2012). *Auckland plan.* Retrieved from <http://theplan.theaucklandplan.govt.nz/development-strategy/>

Auckland Council. (2012). *The Auckland Plan*. Auckland Council.

Auckland Council. (2014a). *I am Auckland - Children and young people's strategic action plan 2014.* Retrieved from <http://www.aucklandcouncil.govt.nz/EN/planspoliciesprojects/plansstrategies/Councilstrategies/Documents/iamaucklandstrategicactionplan2014.pdf>

Auckland Council. (2014b). *The Southern Initiative area profile.* Retrieved

Auckland Council. (2014c). *Waitemata local board census profile*. Retrieved from http://www.aucklandcouncil.govt.nz/SiteCollectionDocuments/aboutcouncil/localboards/waitematalocalboard/waitematalocalboardcensusprofile.pdf

Auckland Council. (2014d). *Hibiscus and Bays local board census profile*. Retrieved from <http://www.aucklandcouncil.govt.nz/SiteCollectionDocuments/aboutcouncil/localboards/waitematalocalboard/waitematalocalboardcensusprofile.pdf>

Auckland Council. (2015). *Older Aucklanders: Results from the 2013 census.* Retrieved from <http://www.aucklandcouncil.govt.nz/EN/planspoliciesprojects/reports/Documents/olderaucklandersresultsfromthe2013censusjune2015.pdf>

Auckland Council. (2016). *Auckland Unitary Plan Operative in part;*. Auckland Council.

Auckland Council. (2016a). *A profile of children and young people in Auckland*. Retrieved from http://www.aucklandcouncil.govt.nz/SiteCollectionDocuments/aboutcouncil/

Auckland Council. (2016b). *Youth mobilities in the Southern Initiative, Auckland: Transport practices and experiences of 15-24 year olds.* Retrieved from <http://www.aucklandcouncil.govt.nz/SiteCollectionDocuments/aboutcouncil/planspoliciespublications/technicalpublications/tr2016014youthmobilitiessoutherninitiativeauckland.pdf>

Auckland Council. (2017a). *Auckland’s population growth: By the numbers.* Retrieved from <http://ourauckland.aucklandcouncil.govt.nz/articles/news/2016/11/auckland-s-population-growth-by-the-numbers/>

Auckland Council. (2017b). Waitematā local board. Retrieved from <http://www.aucklandcouncil.govt.nz/en/aboutcouncil/representativesbodies/localboards/waitematalocalboard/pages/default.aspx>

Auckland Design Manual. (2017). About the ADM. Available at http://www.aucklanddesignmanual.co.nz/about-the-adm (Accessed 10 June 2017)

Auckland Design Manual. (2017). Case Studies. Available at http://www.aucklanddesignmanual.co.nz/resources/case-studies (Accessed 10 June 2017)

Auckland Design Manual. (2017). Design Principles for all Parks. Available at http://content.aucklanddesignmanual.co.nz/resources/tools/parks-design-guidance-summary/Documents/Design%20Guidance%20Summary%201%20Pager.pdf (Accessed 10 June 2017)

Auckland Design Manual. (2017c). *Auckland design manual.* Retrieved from http://www.aucklanddesignmanual.co.nz/resources/articles/designing-child-and youth-friendly-parks-and-open-spaces#/resources/articles?DesignSubject= Infrastructure

Auckland District Council Social Services (2016). “About ADCOSS”. Available at http://www.adcoss.org.nz/about/ (Accessed 25 May 2017).

Bartlett, S. (2002. Editorial: Responding to urban youth’s own perspectives. Environment &

Biggs, S., & Carr, A. (2015). Age- and child-friendly cities and the promise of intergenerational space. Journal of Social Work Practice, 29(1), 99-112.

Bourke, J. (2014). “No messing allowed”: The enactment of childhood in urban public space from the perspective of the child. *Children, Youth and Environments, 24*(1), 25-52. doi:10.7721/chilyoutenvi.24.1.0025

Bowling, A. (2009). Perceptions of active ageing in britain: Divergences between minority ethnic and whole population samples. Age and Ageing, 38(6), 703-710.

BRITTAIN, K., CORNER, L., ROBINSON, L. and BOND, J., 2010. Ageing in place and technologies of place: the lived experience of people with dementia in changing social, physical and technological environments. (Report). *Sociology of health & illness,* **32**, pp. 272.

Bromley, Rosemary D F., & Stacey, Robert J. (2012). Feeling unsafe in urban areas: Exploring older children’s geographies of fear. *Environment and Planning 44*(2). 428-444.

Buffel, T., Phillipson, C., & scharf, T. (2012). Ageing in urban environments: Developing ‘agefriendly’ cities. Critical Social Policy, 32(4), 597-617. doi:10.1177/0261018311430457*Cambridge, 35*(8), 1771-1795. doi://dx.doi.org.ezproxy.auckland.ac.nz/10.1017/S0144686X14000622

Carr, A., Kimberley, H. & Biggs, S. (2013). Child-friendly cities and age-friendly cities: Discussion paper prepared for hobsons bay city council. (Working Paper).

Carroll, P., & Witten, K. (2015). *Freyberg square and pioneer women’s and Ellen Melville hall upgrade – children’s consultation*. Massey University.

Carroll, P., Kearns, R. & Witten, K. (2011). Housing intensification in Auckland, New Zealand: Implications for children and families. *Housing Studies, 26*(3), 353-367. doi:10.1080/02673037.2011.542096

Carroll, P., Kearns, W. & Witten, K. (2016). Children’s everyday lives in inner-city Auckland. *Geographies of Children and Young People, 12*, 199-222. Retrieved from [https://link-springer-com.ezproxy.auckland.ac.nz/referenceworkentry /10.1007/978-981-287-035-3\_3](https://link-springer-com.ezproxy.auckland.ac.nz/referenceworkentry%20/10.1007/978-981-287-035-3_3)

Carroll, P., Witten, K., Kearns, R., & Donovan, P. (2015). Kids in the city: Children's use and experiences of urban neighbourhoods in Auckland, New Zealand. *Journal of Urban Design, 20*(4), 417-436. doi:10.1080/13574809.2015.1044504

CASTONGUAY, G. and JUTRAS, S., 2009. Children's appreciation of outdoor places in a poor neighborhood. *Journal of Environmental Psychology,* **29**(1), pp. 101-109.

Chatterjee, S. (2005). Children's friendship with place: A conceptual inquiry. Children, Youth and Environments, 15(1), 1-26. Retrieved from http://www.jstor.org.ezproxy.auckland.ac.nz/stable/10.7721/chilyoutenvi.15.1.0001

Chaudhury, H., Sarte, A. F. I., Michael, Y. L., Mahmood, A., Keast, E. M., Dogaru, C., & Wister, A. (2011). Use of a systematic observational measure to assess and compare walkability for city. Environment and Urbanization, 14(2), 135-148. doi:10.1177/095624780201400211

Collins, D. C. A., Kearns, R., & Mitchell, H. (2007). Nuances of neighbourhood: Children’s perceptions of the space between home and school in Auckland, New Zealand. *Geoforum, 38*(4), 614-627. doi:10.1016/j.geoforum.2006.11.012

consultation-document-pdf.pdf

CRC. (1989). Convention on the Rights of the Child. United Nations. Retrieved from:

Curtis, A. D., Hinckson, E. A., & Water, T. C. A. (2012). Physical activity is not play: Perceptions of children and parents from deprived areas. *The New Zealand Medical Journal, 125*(1365), 38. Retrieved from http://www.ncbi.nlm.nih.gov/ pubmed/23254499

Day, R. (2008). Local environments and older people's health: Dimensions from a comparative qualitative study in Scotland. Health & Place, 14(2), 299-312.

Day, R. (2010). Environmental justice and older age: Consideration of a qualitative

Day, R., & Wager, F. (2010). Parks, streets and "just empty space": The local environmental

DERR, V. and TARANTINI, E., 2016. “Because we are all people”: outcomes and reflections from young people's participation in the planning and design of child-friendly public spaces. *Local Environment,* **21**(12), pp. 1534-1556.

Derr, V., & Kovács, I. G. (2017). How participatory processes impact children and contribute to planning: A case study of neighborhood design from boulder, colorado, USA. Journal of

Dublin City Development Board. (2012). *Play here, play there, play everywhere: Dublin city play plan.* (). Dublin:

Elsley, S. (2004). Children's experience of public space. *Children & Society, 18*(2), 155-164. doi:10.1002/chi.822

Ergler, C., Smith, K., Kotsanas, C., & Hutchinson, C. (2015). What makes a good city in pre-schoolers‘ eyes? Findings from participatory planning projects in Australia and New Zealand. *Journal of Urban Design, 20*(4), 461-478. doi: 10.1080/13574809.2015.1045842.

Francisco Vivoni. (2013). Waxing ledges: Built environments, alternative sustainability, and the chicago skateboarding scene. Local Environment, 18(3), 340. Retrieved from <http://search.proquest.com/docview/1284158449>

GARDNER, P.J., 2011. Natural neighborhood networks — Important social networks in the lives of older adults aging in place. *Journal of Aging Studies,* **25**(3), pp. 263-271.

Garvin, Theresa., Nykiforuk, Candace I. J., & Johnson, Sherrill. (2012). Can we get old here? Senior’s perceptions of seasonal constraints of neighbourhoods. *Human Geography 94*(4). 369-389.

Gehl Architects. (2010). *Auckland public life survey 2010.* Copenhagen: Gehl Architects. Retrieved from http://www.knowledgeauckland.org.nz/assets/publications

gerontology. Ageing and Society, 24(6), 963-972. doi:10.1017/S0144686X04002405

Greater Auckland. (2009). Fort Street Shared Space. Available at https://www.greaterauckland.org.nz/2009/09/03/fort-street-shared-space/ (Accessed 10 June 2017)

Grebenc, Vera. (2014). Understanding the needs of older people: Shifting toward more community based responses. Revija za Socijalnu Politiku, 21(2).

Greengross, Sally., & Castle, Helen. (2014). ‘Remember Who You Are Designing For’: An Interview with Baroness Sally Greengross. Architecutal Design 84(2). 14-19.

Hall, S. (2015). *Submission on health of older people in New Zealand.* Auckland: Women’s Health Action Trust. Retrieved from <http://www.womens-health.org.nz/wp-content/uploads/2015/09/Submission-on-Health-of-Older-People-In-New-Zealand-final.docx>

Hart, R. (2002). Containing children: Some lessons on planning for play from new York

Hill, J. (n.d.). *Keeping our elders close…* [Online]. Retrieved from: <http://www.aucklanddesignmanual.co.nz/resources/articles/elders>.

Irazábal, C., & Huerta, C. (2016). Intersectionality and planning at the margins: LGBTQ youth of color in New York. *Gender, Place & Culture, 23*(5), 714-732. doi: 10.1080/0966369X.2015.1058755.

JOHNSON, P., 2016-last update, Path as Play: Barnetraak, TYIN Tegnestue and Rintala Eggertsson, Gran Norway, 2013. Available: http://www.play-scapes.com/play-design/contemporary-design/playscapes-based-on-a-box/ [Jun 11, 2017].

Karen Malone. (2013). "The future lies in our hands": Children as researchers and environmental change agents in designing a child-friendly neighbourhood. Local Environment, 18(3), 372. Retrieved from <http://search.proquest.com/docview/1284159681>

Karsten, L. (2003). Children’s use of public space. Childhood, 10(4), 457-473.

Laing, P., Park, J. & Scott, K. (2016). *Housing children: South Auckland.* Auckland: University of Auckland. Retrieved from <https://cdn.auckland.ac.nz/asset>

Leyden, K. M. (2003). Social capital and the built environment: The importance of walkable

Lindenberg, J., & Westendorp, R. G. J. (2015). Overcoming old in age-friendliness. *Journal of Social Work Practice, 29*(1), 85-98. doi: 10.1080/02650533.2014.993949.

*Local Environment, 21*(12), 1534-1556. doi: 10.1080/13549839.2016.1145643.

LOUKAITOU-SIDERIS, A., LEVY-STORMS, L., CHEN, L. and BROZEN, M., 2016. Parks for an Aging Population: Needs and Preferences of Low-Income Seniors in Los Angeles. *Journal of the American Planning Association,* **82**(3), pp. 236-251.

Loukaitou-Sideris, Anastasia., & Sideris, Athanasios. (2010). What Brings Children to the Park? *Journal of the American Planning Association 76*(1). 89-107.

Lynn, A. (2015). *Grey power pushing for Auckland to become an age-friendly city.* Retrieved from http://www.stuff.co.nz/auckland/local-news/central-leader/72431599/grey-power-pushing-for-auckland-to-become-an-agefriendly-city

Manchester City Council. (2016). *Age-friendly Manchester work plan.* Retrieved from <http://www.manchester.gov.uk/download/downloads/id/24149/age-friendly_manchester_work_plan_2016-17.pdf>

MBDP. (2012). Myers Park Development Plan. Waitemata Local Board. Retrieved from:

McAllister, Catherine. (2008). Child friendly cities and land use planning: Implications for children’s health. *Environments 35*(3).

McGlone, N. (2016). Pop-Up kids: Exploring children‘s experience of temporary public space. *Australian Planner, 53*(2), 117-126. doi: 10.1080/07293682.2015.1135811.

Michael, Y. L., Green, M. K., & Farquhar, S. A. (2006). Neighborhood design and active

Milton, S., Pliakas, T., Hawkesworth, S., Nanchahal, K., Grundy, C., Amuzu, A., […] & Lock, K. (2015). A qualitative geographic information systems approach to explore how older people over 70 years interact with and define their neighbourhood environment. *Health & Place, 36*, 127-133. doi: 10.1016/j.healthplace.2015.10.002.

Milton, Sarah., et al. (2015). A qualitative geographical information systems approach to explore how older people over 70 years interact with and define their neighbourhood environment. *Health & Place 36*. 127-133.

Ministry of Health. (2016). *Useful websites – Services for older people* [Online]. Retrieved on 26 May 2017 from: <http://www.health.govt.nz/your-health/services-and-support/health-care-services/services-older-people/useful-websites-services-older-people>.

Ministry of Health. (2017). *Children and young people living well and staying well: New Zealand childhood obesity programme baseline report 2016/17.* (). Wellington:

Michael, Y. L., Green, M. K., & Farquhar, S. A. (2006). Neighborhood design and active aging. Health & Place, 12(4), 734-740. doi:10.1016/j.healthplace.2005.08.002

New York City Council. (2013). *59 Initiatives: Age-friendly NYC.* Retrieved from <http://www.nyc.gov/html/dfta/downloads/pdf/age_friendly_report13.pdf>

New Zealand Herald. (2017, February 22). Kiwi teen hits out in video over school's transgender toilet policy. *New Zealand Herald* Retrieved from <http://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=11804688>

NSW Commission for Children and Young People. (2009). *Built4Kids: A good practice guide to creating child-friendly built environments*. Retrieved from: <http://content.aucklanddesignmanual.co.nz/resources/knowledge-base/bfk/Documents/AU_NSW%20Built4Kids.pdf>.

OLDENBURG, R., 1989. *The Great Good Place: Cafes, Coffee Shops, Bookstores, Bars, Hair Salons and other Hangouts at the Heart of a Community.* New York, USA: Marlowe & Co.

older adults in vancouver, british columbia and portland, Oregon neighbourhoods. Journal of Urban Design, 16(4), 433-454. doi:10.1080/13574809.2011.585847

OSBORNE, C., BALDWIN, C., THOMSEN, D. and WOOLCOCK, G., 2017. The unheard voices of youth in urban planning: using social capital as a theoretical lens in Sunshine Coast, Australia. *Children's Geographies,* **15**(3), pp. 349-361.

Phillipson, C. (2004). Urbanisation and ageing: Towards a new environmental

Phillipson, C. (2004). Urbanisation and ageing: Towards a new environmental

PHILLIPSON, C. and BUFFEL, T., 2016. CAN GLOBAL CITIES BE 'AGE-FRIENDLY CITIES'? URBAN DEVELOPMENT AND AGEING POPULATIONS.

*Gerontologist; Gerontologist,* **56**, pp. 207.

planspoliciespublications/technicalpublications/tr2016022profilechildrenyoungpeopleauckland.pdf

Platt, L. (2012). “Parks are dangerous and the sidewalk is closer”: Children's use of neighborhood space in Milwaukee, Wisconsin. *Children, Youth and Environments, 22*(2), 194-213. doi:10.7721/chilyoutenvi.22.2.0194

PORTLAND MEMORIAL GARDEN, 2017-last update, Friends of the Portland Memorial Garden. Available: http://www.portlandmemorygarden.org/PMG/Welcome.html [Jun 11, 2017].

Risser, R., Haindl, G., & Ståhl, A. (2010). Barriers to senior citizens‘ outdoor mobility in Europe. *European Journal of Ageing, 7*(2), 69-80. doi: 10.1007/s10433-010-0146-4.

Rootham, E. (2016). *Determinants of wellbeing for older aucklanders: Auckland Council technical report, TR2016/047.* Auckland: Auckland Council. Retrieved from <http://www.knowledgeauckland.org.nz/assets/publications/TR2016-047-Determinants-of-wellbeing-for-older-Aucklanders.pdf>

Rosso, A. L., Auchincloss, A. H., & Michael, Y. L. (2011). The urban built environment and mobility in older adults: A comprehensive review. Journal of Aging Research, 2011, e816106.

Roy, E. (2016). New Zealand's most shameful secret: 'We have normalised child poverty'. Retrieved from <https://www.theguardian.com/world/2016/aug/16/new-zealands-most-shameful-secret-we-have-normalised-child-poverty>

Satherley, D. (2017). Countdown reveals new transgender-friendly policy. Retrieved from <http://www.newshub.co.nz/home/health/2017/05/countdown-reveals-new-transgender-friendly-policy.html>

Schwanen, T., & Ziegler, F. (2011). Wellbeing, independence and mobility: An

Social and Economic Research Team, (RIMU). (2014). *Waitemata local board profile: Initial results from the 2013 census.* Online: United Nations, Convention on the rights of the child, Article 31, (1989).

Statistics New Zealand (2013). Census snapshot: children - article. Available at http://www.stats.govt.nz/browse\_for\_stats/people\_and\_communities/Children/census-snapshot-children.aspx (Accessed 9 June 2017)

STATISTICS NEW ZEALAND, 2013-last update, 2013 Census QuickStats about a place. Available: http://www.stats.govt.nz/Census/2013-census/profile-and-summary-reports/quickstats-about-a-place.aspx [Jun 11, 2017].

Statistics New Zealand. (2017). *Population projections overview.* Retrieved from <http://www.stats.govt.nz/browse_for_stats/population/estimates_and_projections/projections-overview/subnat-pop-proj.aspx>

Switzerland.

TAURANGA CITY COUNCIL, 2013. *Tauranga Age-Friendly City Strategy 2013-2023.* Tauranga City: Tauranga City Council.

TAYLOR, A. and PAYER, H., 2017. Population Ageing in Northern Australia: Seniors’ Voices on Ageing in Place. *Journal of Population Ageing,* **10**(2), pp. 181-196.

Teetasse. (2015). Baby and grandma [Image]. Retrieved from: https://pixabay.com/p-721364/.

Tranter, Paul., & Pawson, Eric. (2001). Children’s access to local environment: A case-study of Christchurch, New Zealand. *Local Environment, 6*(1). 27-48.

UNICEF. (2004). *Building Child Friendly Cities: A framework for action.* Retrieved from: <https://www.unicef-irc.org/publications/pdf/cfc-framework-eng.pdf>.

UNICEF. (2009a). *A practical guide for developing child friendly spaces*. Retrieved from: [https://www.unicef.org/protection/A\_Practical\_Guide\_to\_Developing\_Child\_Friendly\_Spaces\_-\_UNICEF\_(2).pdf](https://www.unicef.org/protection/A_Practical_Guide_to_Developing_Child_Friendly_Spaces_-_UNICEF_%282%29.pdf).

UNICEF. (2009b). *Child Friendly Cities: An international initiative promoting child participation in local government.* Retrieved from: <https://www.unicef.org/rightsite/sowc/pdfs/panels/Child%20Friendly%20Cities.pdf>.

Urbanism: International Research on Placemaking and Urban Sustainability, 10(1), 29-48. Urbanization, 22(2), 307-316. doi:10.1177/0956247810381211

Valentine, G. (1995). Stranger-danger: The impact of parental fears on children’s use of

Van Dijk, H. M., Cramm, J. M., Van Exel, J., & Nieboer, A. P. (2015). The ideal neighbourhood for ageing in place as perceived by frail and non-frail community-dwelling older people. *Ageing and Society;*

Vine, D., Buys, L., & Aird, R. (2012). The use of amenities in high density neighbourhoods by older urban Australian residents. *Landscape and Urban Planning, 107*(2), 159-171. doi: 10.1016/j.landurbplan.2012.05.013.

Ward Thompson, C., Curl, A., Aspinall, P., Alves, S., & Zuin, A. (2014). Do changes to the local street environment alter behaviour and quality of life of older adults? the 'DIY streets' intervention. *British Journal of Sports Medicine, 48*(13), 1059-1065. doi:10.1136/bjsports-2012-091718

Ward Thompson, C., Sugiyama, T., Alves, S. & Southwell, K. (2007). Inclusive design for getting outdoors: Parks and open spaces design findings and recommendations. Retrieved from <http://idgo.ac.uk/design_guidance/open_spaces.htm>

WHO. (2002) Active Ageing: A Policy Framework, World Health Organization, Geneva,

WHO. (2007) Global Age-friendly Cities: A guide, World Health Organization, Geneva,

Wiles, J. L., Leibing, A., Guberman, N., Reeve, J., & Allen, R. E. S. (2012). The meaning of “Aging in place” to older people. *The Gerontologist, 52*(3), 357-366. doi:10.1093/geront/gnr098 21

WILES, J.L. and JAYASINHA, R., 2013. Care for place: The contributions older people make to their communities. *Journal of Aging Studies,* **27**(2), pp. 93-101.

WLB. (2017). Waitemata Local Board Plan: Draft 2017, Auckland Council. Retrieved from:

World Bank. (2017). Life Expectancy at Birth. Retrieved from:

World Health Organisation. (2007). *Global age-friendly cities: A guide.* Retrieved from: <http://www.who.int/ageing/publications/Global_age_friendly_cities_Guide_English.pdf>.

World Health Organization. (2007). *Global age-friendly cities: A guide*. Geneva:

World Health Organization. Retrieved from http://www.who.int/ageing/publications/Global\_age\_ friendly\_cities\_Guide\_English.pdf s/arts/schools/ anthropology/rale-06.pdf

YANKOVA, Z.G., 2012. *The urbanism of childhood and adolescence: investigating the notion of play as a stimulus of social connections*.

Yung, E. H. K., Conejos, S., & Chan, E. H. W. (2016). Social needs of the elderly and active aging in public open spaces in urban renewal. *Cities, 52*, 114-122.

ZHAI, Y. and BARAN, P.K., 2017. Urban park pathway design characteristics and senior walking behavior. *Urban Forestry & Urban Greening,* **21**, pp. 60-73.

Appendix 1

Extract from Meredith Dale’s literature review to show how the search was recorded

