Are outdoor spaces important?

An investigation into the provision of outdoor space for medium density housing developments

Katrina Gray

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The provision of a large backyard, the ‘quarter acre dream’, has historically been a key feature of housing development throughout New Zealand. However, in Auckland, due to a rapidly increasing population, rising housing prices and housing policies aimed at intensification, housing density is increasing. Medium density housing has emerged as a key housing form which provides an affordable option compared with stand-alone housing and provides a wide variety of housing and outdoor space types. Medium density housing is generally associated with decreasing private outdoor space. A related change is the increasing number of communal outdoor spaces. As private and communal outdoor spaces change, so too does the use and value of public outdoor space. Given the importance of outdoor space, this study seeks to examine the changing provision of outdoor space in medium density housing developments. Albany is a rapidly developing area of Auckland which already has a significant number of medium density housing options and is predicted to have many more as it develops. Therefore, the focus for this research is on medium density housing developments in Albany.

This research found that, generally, the current provision of outdoor spaces is working well. There was increasing demand for medium density housing due to issues of affordability and schooling, as well as an ethnic relationship. Private, communal and public outdoor spaces were considered to be important for residents and are used for a range of recreational and social activities. Interestingly, each type of outdoor space provides for different uses and needs. Nonetheless, the most important form for residents was private outdoor space. This research also found that the size of residents’ private outdoor space is already, or is likely to be compensated for by communal or public outdoor spaces. Complete compensation of private outdoor space is not likely as communal and public outdoor spaces are not able to offer the privacy which private outdoor spaces afford. Overall, resident satisfaction with their outdoor spaces was high, however, there was a diversity of responses. The diversity of responses shows the importance of providing a wide range of housing and outdoor space types, so that the housing needs of a variety of residents are achieved.
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1 INTRODUCTION

1.1 Suburban Development

In the United States, Canada, Australia and New Zealand, planners and policy makers historically adopted strategies of low density suburban expansion (Turner, et al., 2004). These strategies were facilitated through the development of extensive motorway systems and the low cost of private vehicle ownership. This development pattern made available the ‘suburban dream’, a stand-alone house on a large private section where residents could escape from the negative health effects associated with inner city living (Belzer and Autler, 2002; DiCarlo, 2008).

However, this form of development created a number of unforeseen negative effects; reliance on private vehicles, traffic congestion, increased travelling distances and significant vehicle emissions (Giles-Corti, 2011). With the aim of remediying these negatives, policies of intensification emerged and are currently considered to be key planning tools which can reduce the negative effects of suburban expansion and increase the sustainability of cities (Ancell and Thompson-Fawcett, 2008; Carroll, et al., 2011; Abrahamse and Witten, 2011).

Urban intensification is defined by Waghorn (2011: 47) as “the process of increasing the number of people per square meter in a city”. There are numerous theories for intensification including the Compact City, Smart Growth, New Urbanism and Transit Oriented Development. These theories have similar themes, they not only aim to increase the density of an area, but seek to increase the mixing of land-uses, public transportation systems and accessibility to amenities and services.

A result of the implementation of these theories is the creation of medium density housing. Medium density developments reduce suburban expansion by increasing the number of dwellings per square metre. The definition of medium density housing used for this research is; “housing at densities of more than $150m^2/unit$ and less that $350m^2/unit$” (Turner, et al., 2004). Interestingly, medium density housing provides a much greater variety of housing form and design compared with traditional low density housing (Turner, et al., 2004). This diversity of housing design is able to provide for a wide range of residents’ needs and preferences.
Medium density housing is capable of providing successful and desirable living environments, which offer residents security, privacy and access to outdoor space (Turner, et al., 2004). It can also be an attractive option for people who desire a low maintenance house (Morrison and McMurray, 1999). Evidence of the potential for the development of medium density housing is visible through the successful development of this housing form in other countries; “for many urban dwellers all over the world medium and high density housing is the norm” (Dupuis and Dixon, 2002: 423). However, critics of medium density housing suggest this type of housing development lacks private outdoor space (Zhao, et al., 2011), is prone to increased levels of crime (Turner, et al., 2004) and decreased levels of privacy in the home (Auckland Regional Council, 2010). Medium density housing developments have sometimes been referred to as “the slums of the future” (Dupuis and Dixon, 2002: 423).

1.2 Auckland

Parallel to international examples, housing development in Auckland occurred through low density suburban expansion, facilitated by investment in motorways and low housing prices on the periphery (Dupuis and Dixon, 2002). The idea of the perfect home for many families in New Zealand has been closely associated with this development pattern, the ‘suburban dream’ as a standalone house on a quarter acre section (Ferguson, 1994). However, by the 1970s, akin to similar cities globally, planners and policy makers became aware of problems the sprawling suburbs in Auckland were causing (congestion and long commuting distances) and began to discuss methods to remedy these negative effects (Auckland Regional Council, 2010).

The effects of suburban expansion were especially noticeable due to Auckland’s rapidly increasing population. An additional 400,000 dwellings are required by 2040 to meet projected demand (Auckland Council, 2012). In order to ensure the sustainability of Auckland, the Auckland Regional Council implemented the Regional Growth Strategy (1999) (Dupuis and Dixon, 2002). This strategy set the vision and direction for how the region would grow in the future. It changed the development focus in Auckland from low density urban expansion to increased intensification, based on the principles of the Compact City (Waghorn, 2011). It aimed to increase intensification through higher density housing development, including medium density in selected suburban areas (Dupuis and Dixon, 2002). Since the implementation of this policy there has been significant development of medium density housing throughout Auckland.
Nevertheless, the concept of medium density housing is at odds with the ‘suburban dream’. Intensification in Auckland is associated with decreasing lot sizes and reduced private outdoor space for residents. Therefore, there are a number of residents who have reservations about this new housing form (Turner, et al., 2004). These reservations have been stimulated by examples of poor quality medium density housing. It is important that the effects of these significant changes in housing form are examined.

Within the Auckland context an area which is rapidly developing is Albany. Albany is predicted to be a main metropolitan area in the future and has a significant number and range of medium density housing developments. There has been little research on medium density housing in this newly emerging area of Auckland. It is for these reasons that Albany has been chosen as the focus area for this research.

1.3 Rationale

It is important that this intensification results in socially acceptable and successful outcomes for Aucklanders. Research into medium density housing in New Zealand is limited (Turner, et al., 2004) and transforming Auckland into a city which is home to significant medium density housing is likely to be challenging (Abrahamse and Witten, 2011). Improvement in the design and quality of medium density developments is a key factor to ensure public acceptance of this type of housing (Turner, et al., 2004).

There are many aspects of medium density developments which are important and contribute to residential satisfaction. Provision of a large private outdoor space has been a key feature of housing development in New Zealand in the past. Criticisms of medium density housing often cite the lack of private outdoor space as a negative feature of this type of development. Therefore, this research will focus on outdoor spaces to examine what is occurring. Medium density housing development has also given rise to an alternative outdoor space form, communal outdoor space. Communal outdoor spaces for the purpose of this research are defined as spaces which are shared by residents of a housing development, but are not available to the general public. They are usually managed by the residents themselves and often provide a wide range of facilities such as a swimming pool, grassed area, tennis courts and spa pool. Public outdoor spaces are also a key feature of suburban environments, therefore, this research will explore their role and importance as intensification increases. The information gained from this research could be used in the future by councils or developers to ensure that the outdoor spaces provided in medium density housing developments meet the expectations and needs of residents.
1.4 Research Aim and Research Questions

The main aim of this research is to explore the provision of outdoor space in medium density housing developments in Albany. It is essential that medium density developments are built in a form which creates socially acceptable outcomes and provide residents with a high quality of life. In order to explore this aim six research questions were developed to guide this research.

*Research Question 1: What is the demand for medium density housing?*

With the rise in the development of medium density housing it is important to understand what the demand is for this housing form. This research question aims to understand whether residents want to live in this type of housing and what factors are influencing residents’ decisions.

*Research Question 2: How do residents use their outdoor spaces?*

In order to know how to best provide outdoor spaces, it is important to first know how these spaces are used. This research objective intends to discover what uses residents have for private, communal and public outdoor spaces.

*Research Question 3: Are outdoor spaces important housing features?*

It is stated in the academic literature (see Section 2.7) that outdoor space is an important housing feature for residents. This research question examines whether this assumption correctly identifies how important outdoor spaces are for residents. The importance of private, communal and public outdoor spaces will be examined. A sub-theme within this question is whether private outdoor space is able to be substituted for increased provision of communal or public outdoor spaces.

*Research Question 4: Are residents satisfied with their outdoor spaces?*

The typical stand-alone house on a quarter acre section has long been the ideal for many New Zealanders. However, with the provision and form of outdoor space changing, this research question aims to determine whether residents of medium density housing developments are satisfied with their outdoor spaces.
Research Question 5: Do developers and the Auckland Council consider outdoor spaces to be important?

The views of developers and the Auckland Council are sought to determine whether they believe outdoor spaces are important in medium density housing environments. As these are the stakeholders who drive housing development, their views on the importance of outdoor space are likely to affect how housing developments are provided into the future.

Research Question 6: Are outdoor spaces being provided in a manner which reflects best practice?

There are numerous academic texts and reports which provide guidelines for how to most effectively design outdoor spaces. This research question seeks to determine whether outdoor space for medium density housing developments is being provided to meet these guidelines.

1.5 Methodology

This research is conducted using a mixed methods approach, using both quantitative and qualitative methods of data collection. It provides an insight into the thoughts, ideas and experiences of residents and experts. Both primary and secondary data collection techniques are utilised for this research. Primary data is collected through; semi-structured interviews with members of the Auckland Council, local developers, real estate agents, property managers and residents; a postal questionnaire of residents of the case study locations; and field observations. Secondary data is presented in the form of a literature review and document analysis which examines key themes and policies regarding housing development and outdoor space.

Albany was chosen as an area to focus on as it is a newly and rapidly developing part of Auckland, which is home to a large number and wide variety of medium density housing developments. The four case study locations; Point Ridge, The Avenue, Fields Parade and Pannill Place, were chosen as they each represent a different design of medium density housing. Both Point Ridge and The Avenue provide residents with both private and communal outdoor spaces and are built through a terraced type development. Fields Parade and Pannill Place both provide residents with a private outdoor space but no communal outdoor space. Fields Parade consists of stand-alone or semi-detached housing, whilst, Pannill Place contains a variety of terraced developments.
1.6 Report Structure

This report is split into seven chapters. Chapter One has provided a brief introduction to the background and context of this research. Chapter Two is a review of the relevant literature regarding intensification, medium density housing development and outdoor space. Chapter Three explains the research methodology and describes why particular methods of data collection and interpretation are employed. Chapter Four discusses the context of this research including; housing development, Auckland, the North Shore, Albany and the case study locations. Chapter Five analyses the policy document which influence the development and creation of medium density housing in Albany. Chapter Six presents the results of this research and Chapter Seven discusses these results and compares them to the current body of knowledge explored in the literature review. Chapter Eight presents the conclusions of this research and Chapter 9 explores the recommendations for how to proceed with the design of outdoor space for medium density developments in the future.
2 LITERATURE REVIEW

2.1 Introduction

"One of the central concerns of planning is how to make cities ‘good’ places for people to live in" (Ancell and Thompson-Fawcett, 2008: 423).

A key aspect of making any city a good place for people to live is the adequate provision of housing. The purpose of this literature review is to examine existing literature regarding suburban development, medium density housing and outdoor spaces. The following review is important as the themes within the current literature have guided this research’s aim and research questions. First, suburban development throughout the 20th century is discussed, as this is the development pattern which has created the ‘suburban dream’ of low density, stand-alone housing with a private outdoor space. Second, the concept of urban sprawl is examined as a negative consequence of low density suburban development and a key reason for the implementation of development strategies which aim for residential intensification. Third, literature regarding intensification and theories of intensification are explored. It is these theories which are a key factor in changing suburban development patterns and the increased development of medium density housing. Fourth, medium density housing is discussed as a newly developed housing form, which is associated with decreased provision of private outdoor space. Fifth, outdoor space provision and use is explained and the importance of outdoor spaces is examined. Finally, these themes are discussed within the Auckland context, providing an understanding of how Auckland relates to international housing trends.

2.2 Suburban Development

Development throughout the 20th Century has been driven through rapid exodus of residents from cities to the suburbs in a process termed suburbanisation. Suburbanisation emerged due to overcrowding, poor sanitation, crime and pollution in cities, which prompted those who could afford it to move out of the city into surrounding areas (Belzer and Autler, 2002; Miller, 2008; Howley, 2009). Residents saw the suburbs as a place which provided ‘the good life’ in the country, where quality of life for residents was considered to be higher than in high density urban areas (Lilley, 2006; Howley, 2009). Advances in transportation aided this movement out of the city. The development of the automobile and the construction of highways allowed residents living in the suburbs to travel quickly and easily into and out of the city centre (Belzer
and Autler, 2002). A lack of investment in public transport also increased the dependence on private transportation as public transport was often impractical for residents (Howley, 2009).

A further factor which encouraged rapid suburbanisation was the affordability of rural land compared with higher prices within the city (Miller, 2008). This enabled residents to gain ‘more for their money’, a larger section and bigger house in the suburbs compared with the city centre. The resulting form was the development of suburbs which have a low density, homogenous form and where the prominent housing type is a stand-alone house on a large, private section (DiCarlo, 2008). This form was designed to maximise individual lot size, with minor preservation of open spaces or natural areas (Kearney, 2006). The planning process of zoning also contributed to suburbanisation; zoning policies facilitated the separation of land uses, leading to an increased reliance on private transport for residents to be able to meet their daily requirements (Howley, 2009).

The benefits of suburbanisation have continued to drive the development and expansion of the suburbs (Downs, 1999). Suburbanisation has created housing options where many millions of residents desire to live (Bruegmann, 2008). This development form provides residents with private outdoor space, cheaper housing than in cities, increased access to open spaces and communities which have high quality local services (Downs, 1999; Barton, et al., 2010). However, this development pattern has also created numerous unintended negative effects and has been termed ‘urban sprawl’. Countries such as the United States, Canada, Australia and New Zealand all followed the same development patterns and now face similar issues.

### 2.3 Urban Sprawl

There are various definitions of urban sprawl throughout the literature. Urban sprawl can be defined in relation to a sprawl index, which quantifies sprawl in relation to indicators such as density (Berlin, 2008). Urban sprawl is also defined through the use of qualitative definitions. Miller (2008: 16) defines urban sprawl as “unplanned expansion of urban development into rural areas surrounding cities”, whilst the Sierra Club (2008: 159) define sprawl as “irresponsible, poorly planned development that destroys green space, increases traffic, crowds schools and drives up taxes”. The three main drivers of sprawl are increasing population, improvements in transportation and increasing prosperity (Miller, 2008).

It is important to note that sprawl is not merely suburban growth of any kind, but growth with specific features (Downs, 1999). The most common features of urban sprawl include; low density housing and land use, reliance on automobiles and segregation of land uses (Graham,
2005). However, Downs (1999) argues that the concept of urban sprawl is often over simplified and identifies ten key features;

1. Unlimited outward development
2. Low density residential and commercial settlements
3. Leapfrog development (where development is not continuous and is separated by green or open space)
4. Fragmented powers over land use between different councils
5. Dominance of transportation by private automotive vehicles
6. Lack of centralised planning or control of land uses
7. Widespread strip or commercial development
8. Significant fiscal disparities among localities
9. Segregation of types of land uses in different zones
10. Reliance on the trickle-down or filtering process to provide housing to low income households

Urban sprawl has a number of negative effects for residents and the environment. Key issues include; traffic congestion, social segregation and increased travelling distances (Benfield, et al., 2001; Kearney 2006). The separation of residential, commercial and retail services both forces and encourages residents to drive their car to work, the supermarket, to drop their children off at school or to any other places they may need to go. Most residents have no other transportation choices than the automobile due to poorly developed and unsustainable public transport systems and the large distances required to reach their destinations (Belzer and Autler, 2002).

The cost of urban living has also increased as a result of urban sprawl due to the high cost for private transportation, which will only increase as oil prices rise (Zhao, et al., 2011). In the United States residents pay more for transportation than any other household expense (other than housing) (Belzer and Autler, 2002). This is a major cost, especially for the poor who are either forced to spend a significant portion of their wages on private transportation or experience reduced levels of mobility (Belzer and Autler, 2002). These costs along with the lack of housing and living options in sprawling cities have resulted in decreasing quality of life for some residents.

Reliance on the automobile also causes health and environmental issues associated with air pollution and lack of physical activity (Belzer and Autler, 2002; Graham, 2005; Clean Water Action Council, 2008). Increases in air pollution are linked to global issues of climate change and also enhance the occurrence and severity of health problems such asthma and other respiratory
diseases (Belzer and Autler, 2002). A reduction in physical exercise may also contribute to obesity. These issues are important considering the potential devastating consequences of climate change and obesity worldwide. Climate change has the potential to cause a rise in sea level and increases in extreme weather events such as floods and droughts (New Zealand Government, 2013). In the United States obesity is considered to be a factor in 300,000 – 500,000 deaths each year (DeGraff, et al., 2008).

Urban sprawl also generates high infrastructure costs; as new suburbs are developed a range of new infrastructure is required to be built and services provided. These include; roads, schools, sewage, water, police and electricity (DeGraff, et al., 2008; Environmental Literacy Council, 2008). Providing these services in low density development patterns is much more costly than at higher densities (Belzer and Autler, 2002). Burchell (1992) has estimated that continued growth of sprawling suburbs, as opposed to more compact forms of growth, will cost about 20 percent more for the provision of infrastructure. Residents who benefit from low density housing developed through sprawl often do not pay the total cost of this infrastructure, as it is spread over the whole population (Downs, 1999). Nevertheless, many residents may consider paying an extra charge in order to receive the benefits (Downs, 1999).

Urban sprawl also creates other environmental consequences, loss of productive farmland and wildlife habitats can threaten biodiversity as environments are destroyed and replaced by new subdivisions and other developments (Benfield, et al., 2001; Berlin, 2008). Water quality can also be affected due to decreased permeability of surfaces, through the creation of hard surfaces such as concrete roads and buildings. These surfaces increase the amount of storm water runoff and reduce the replenishment of aquifers (Belzer and Autler, 2002).

The academic literature provides a number of solutions to urban sprawl, all of which have the principal theme of urban intensification. Intensification theories aim to increase densities and diversity of uses within neighbourhoods. The most commonly practiced theories which aim to implement urban intensification in order to counter the negative effects of urban sprawl include; the Compact City, Smart Growth, Transit Oriented Development and New Urbanism.

2.4 Intensification

Internationally, policies and strategies which aim to intensify cities have been implemented to counteract the negative effects of urban sprawl and produce cities which are more liveable and sustainable (Turner, et al., 2004; Giles-Corti, 2011; Melia, et al., 2011). Developers are also facilitating this change as denser residential developments increase profits (Blandy, et al.,
There is no specific definition for intensification, nevertheless, it usually involves the implementation of strategies which aim to make an area more compact by increasing the density and efficiency of housing, infrastructure and services (Williams, et al., 1996; Abrahame and Witten, 2011; Thompson-Fawcett, 2011).

The implementation of intensification policies may include a number of strategies and tools (Williams, et al., 1996). Often these strategies seek to concentrate higher density development near existing urban service centres which provide residents with increased access to amenities and services and public transport (Haarhoff, et al., 2012). Williamson et al. (2007) argue that intensification is able to provide highly liveable environments for residents. Resulting housing types include higher density options such as high rise apartments and medium density housing options such as small scale apartments, terraced houses and stand-alone houses on smaller sections.

A key benefit of intensification is the increased sustainability of cities (Giles-Corti, 2011; Waghorn, 2011). Sustainability is increased as higher densities enable the provision of an extensive public transport system and are able to support a range of accessible services and amenities. This enables residents to use public transport, walk or cycle, rather than being reliant on a private vehicle (Giles-Corti, 2011; Waghorn, 2011). The resulting benefits are decreased infrastructure costs, reduced travelling distances, decreased reliance on fossil fuels, reduction in emissions from transportation and decreasing air pollution, as well as the benefits from increased exercise for resident health and well-being (Barton, et al., 2010; Giles-Corti, 2011; Zhao, et al., 2011). Intensification also increases the number of people in an area which, increases vitality and community, as well as increasing the surveillance of streets. This increased surveillance acts as a deterrent to crime, increasing safety and reducing crime in the area (Waghorn, 2011).

Yet, “there are many historical and contemporary examples of density done badly, so the potential harm is quite evident” (Giles-Corti, 2011: 16). Intensification theories are significantly different to traditional suburban development and current preferences for low density, stand-alone housing (Davey, 1987; Turner, et al., 2004). There is public distrust and fear of higher density housing, with many residents believing this change will lead to issues of overcrowding and competition for parking, schools and transport, resulting in decreased quality of life (CABE, 2005). Residents are also fearful that key characteristics of suburban environments such as large back gardens and privacy will be removed (Haarhoff, et al., 2012).

Intensification is criticised for increasing traffic congestion, decreasing the quality of life for residents and increasing air pollution (Zhao, et al., 2011). Another criticism is that
intensification is too focused on the environmental benefits and fails to acknowledge the potential social outcomes of this change (Abrahamse and Witten, 2011). Community involvement in strategies of intensification is important to ensure the consequences of these policies result in positive outcomes for the local community (Abrahamse and Witten, 2011).

A well-known example of poor quality high-rise housing is Pruitt Igoe, St Louis, Missouri (Giles-Corti, 2011). Pruitt Igoe was a social housing project which opened in 1955 and consisted of 33 buildings which were each 11 stories tall and could house 1300 residents (Comerio, 1981). However, this development was plagued by high levels of crime and poor quality facilities (Giles-Corti, 2011). By 1972 the development had high vacancy rates and buildings were considered to be hazardous and were subsequently removed (Comerio, 1981). It is important to state that higher density living does not need to occur through high-rise apartment development like Pruitt Igoe. However, due to the potential negative consequences intensification can create, it is important that housing strategies are researched and guidelines implemented to ensure both environmentally and socially sustainable and acceptable results.

2.5 Theories of Intensification

There are a number of theories which aim to increase the density/intensification of cities and decrease the negative aspects of urban sprawl. These models include the Compact City, Smart Growth, Transit Oriented Development and New Urbanism. Table 1 shows these theories of intensification, which have very similar characteristics. They seek to achieve the same purpose, a more compact, higher density city, with a defined town centre, which has mixed-use development and a wide range of transportation options. The differences between the theories are the origin of development and key focus areas. For example, Transit Oriented Design focuses on transport, whereas New Urbanism focuses on urban design. Each of these theories will now be discussed.
Table 1. Common characteristics of intensification theories.  
(Source: Adapted from Ewing, et al., 2011).

<table>
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<th>Characteristics</th>
<th>Compact City</th>
<th>Smart Growth</th>
<th>Transit Oriented Development</th>
<th>New Urbanism</th>
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<td>Jobs-housing balance</td>
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<td>Walkable streets</td>
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The Compact City

The theory of the Compact City was developed from the recognition that cities need to become more sustainable and urban form can achieve this change (Breheny, 1995; Jenks, et al., 1996a). The sustainability debate has been stimulated by international reports regarding environmental degradation such as the Bruntland report ‘Our Common Future’ in 1987 and the signing of the Rio Declaration in 1992. The Compact City is a highly debated concept and is based on densely developed European Cities, which are considered to be desirable places to live and experience the diversity which cities have to offer (Jenks, et al., 1996a; Ancell and Thompson-Fawcett, 2011).

Key features of the theory include; urban containment, mixed-uses, increased walkability and cyclability, increased use of public transport, traffic calming and reduced travelling distances (Jenks, et al., 1996a; Giles-Corti, 2011). These aspects result in reduced vehicle emissions, increased efficiency of land use and increased provision of amenities and services (Jenks, et al., 1996a). They also increase accessibility to shops and services, lower car dependence, and increase community vitality (Barton, et al., 2010). In contrast, opponents to the Compact City theory cite them as unsustainable and unacceptable to residents who desire low density suburban development (Jenks, et al., 1996b).
The compact city concept is argued to “perform better than other more expansive or sprawling development patterns” as it ensures better accessibility to services and amenities, uses infrastructure more effectively and has a smaller impact on the environment (Waghorn, 2011: 47). The implementation of the Compact City concept results in a range of higher density housing forms, including high-density apartments and medium density housing developments.

Smart Growth

The concept of Smart Growth developed from the identification that the way cities have been built in the 20th Century, in the form of low density, car oriented, sprawling suburbs, has created a wide range of negative social and environmental outcomes. These include high cost of travel and reliance on the automobile as well as the destruction of farmland and biodiversity (Duany, et al., 2010). Like the Compact City concept there is no single definition of Smart Growth, it is characterised by a number of key features (Benfield, et al., 2001).

A key aspect of Smart Growth is the recognition of the effect transportation has on the development of communities. Smart Growth advocates for the development of mixed-use neighbourhoods which locate services and amenities, such as schools, parks, shops and offices close to, or within residential areas, which reduces travelling distances for residents (Benfield, et al., 2001). It enables residents choose between a wide range of transportation options such as public transport, cycling and walking, rather than being solely reliant on the automobile (Benfield, et al., 2001; Environmental Literacy Council, 2008; Ewing, et al., 2011).

Other objectives of Smart Growth include the re-use of previously developed land and the protection of surrounding landscape, air and water quality (Environmental Literacy Council, 2008; Ewing, et al., 2011). Smart Growth aims to promote affordable housing, a range of housing types and the inclusion of a range of green spaces (Abrahamse and Witten, 2011). It also aims to create communities which have a strong identity (Ewing, et al., 2011). A key characteristic required to support mixed-use neighbourhoods and an efficient public transportation system is higher residential densities, including medium density housing (Duany, et al., 2010).

Nevertheless, there are criticisms of Smart Growth policies. These include the assertion that Smart Growth requires tax subsidies, regulations and barriers to car usage (such as charges or giving priority to public transport at intersections) (O’Toole, 2007). Restricting growth in the periphery is also argued to increase housing prices and forced increases in density will not ensure people who want to use their automobile will reduce their driving time and increase their use of public transport (O’Toole, 2007).
An example of a city which has implemented Smart Growth policies is Portland, Oregon. Since the 1970s Portland has aimed to reduce sprawl through concentrating activities within the city centre, implementing barriers to car use and increasing investment in its public transport network (Melia, et al., 2011). These policies have resulted in an increase in public transport usage and a decrease in vehicle miles per capita (Melia, et al., 2011). However, despite changes in transportation patterns overall congestion in Portland has increased, although vehicle miles per capita have reduced, the number of people in the city has continued to increase, resulting in increased levels of congestion (Abrahamse and Witten, 2011).

Transit Oriented Development

Transit Oriented Development is a strategy which aims to reduce dependence on automobiles through increasing the provision, accessibility and use of public transport (bus, train, tram) and active transport (cycling and walking) (Wilkinson and Marks, 2007; Cervero and Sullivan, 2012). It aims to ensure housing is located near public transport routes and provides the required infrastructure to encourage cycling and walking (Wilkinson and Marks, 2007; Bertolini, et al., 2009). The emergence of Transit Oriented Development as a planning strategy resulted from the recognition that dependence on the automobile as the sole means of transport for many is creating negative environmental, economic and social outcomes, such as the poor having to spend a significant portion of their wages on transportation and increasing carbon dioxide emissions (Belzer and Autler, 2002). Cervero and Sullivan (2012) argue that Transit Oriented Development is a tool which has enormous potential to decrease sprawl and the current dependence on private transport.

Effective Transit Oriented Development policies aim to ensure the sustainable use of land, and the provision of a wide range of transportation choices (Belzer and Autler, 2002). Key aspects of this type of development include mixed-use environments, where residents are able to reach facilities such as shops, schools and other businesses without the need for an automobile (Wilkinson and Marks, 2007; Ewing, et al., 2011; Cervero and Sullivan, 2012). Increasing density is a key aspect to ensure a large enough population to support public transport networks and services in the area (Wilkinson and Marks, 2007; Ewing, et al., 2011). A resulting feature of increased density is the creation of medium density housing developments.

Nevertheless, critics of Transit Oriented Development argue the concept neglects social, economic and behavioural factors which influence transportation choices (Quinn, 2006). Cities which are currently formed by low density development are unlikely or unable to be able to successfully incorporate a significant increase in public transportation (Quinn, 2006). Social
preferences towards the automobile are also an important factor which decreases the viability or the likely success of Transit Oriented Developments. Many people value their automobile as it allows them flexibility, the ability to leave and return at any time, make trips to multiple destinations, without the need to walk to public transport stops and wait for a bus or train (Quinn, 2006).

**New Urbanism**

New Urbanism is a movement which began in the late 1980s in response to the negative consequences associated with urban sprawl (Fulton, 1996). It aims to incorporate traditional development principles which were widespread before rapid suburbanisation and the dominance of the automobile in the 20th century (Fulton, 1996; Ewing, et al., 2011). New Urbanism uses design to affect the form and function of communities; it aims to increase the diversity of uses, residents and services (Talen, 2010). Key features of new urbanism include; a compact urban form, a focus on the scale of the neighbourhood, mixed-uses, walkability, street networks designed in a grid layout and increased provision and use of public transport (Fulton, 1996; Dixon and Dupuis, 2003; Ewing, et al., 2011). Other key aspects of New Urbanism are increasing citizen participation and housing affordability (Fulton, 1996).

Talen (2010), however, questions whether these New Urbanist principles work in practice as they are depicted in theory. They argue that the creation of mixed, walkable, desirable neighbourhoods are not able to provide for all segments of society as suggested in theory, because, in reality these desirable neighbourhoods do not provide affordable housing options. New Urbanism is also critiqued for being unable to deal with contemporary consumer behaviours and issues (Fulton, 1996). For example Fulton (1996) argues that the small scale shops desired by New Urbanism may not be able to compete with the large ‘big box’ retail services which are currently dominant in many cities.

These theories of intensification have numerous objectives and effects. One particular consequence of intensification and increased housing density is the development of medium density housing. The development of medium density housing in the suburbs is a significant change in form and it is, therefore, important that the effects of this recent change are explored.
2.6 Medium Density Housing

The type of housing provided is an important factor when considering implementing strategies of intensification. A key factor in intensification and the theories mentioned above is the development of medium density housing (Thompson-Fawcett, 2011). It is important to differentiate medium density from high density and high rise development. The definition employed for medium density housing in this research is the one commonly used in New Zealand; “housing at densities of more than 150m²/unit and less than 350m²/unit” (Turner, et al., 2004: 22). High density housing is at higher density than 150m²/unit and may, but does not always, include high-rise development. High-rise development is very tall apartment blocks, usually located in central city locations.

Medium density housing can take a variety of forms, it can include stand-alone, semi-detached, terraced housing or apartments of four storeys or less (Ministry for the Environment, 2013). This variety leads to a range of housing choices within the medium density context. Stand-alone houses are not attached, but have a smaller lot size than low density housing, resulting in houses which are positioned close together (Boffa Miskell Ltd, 2012). Semi-detached housing is characterised by two houses which are joined by a common wall, are often a mirror image of each other and can be up to three storeys tall. Terraced housing is housing in a row, joined on both sides and is usually of the same or very similar design. Apartments of four storeys or less usually contain a number of small units within a larger building and often have shared access and services (Boffa Miskell Ltd, 2012).

Good quality medium density housing developments have the ability to provide benefits socially, economically, environmentally and aesthetically (Davey, 1978). They can offer security, privacy and private outdoor space for residents (Turner, et al., 2004). Key factors which can increase the benefits of higher density housing include; location near public open space, schools, childcare facilities, shops and other services; good design of housing to ensure privacy and minimal noise; opportunities for interaction with neighbours; and adequate recreational facilities (Giles-Corti, 2011). Well-designed medium density housing is also able to offer much wider housing diversity, in terms of size, cost and type, compared with stand-alone, low density housing (Haarhoff, et al., 2012).

Although this type of housing arrangement has developed only recently in New Zealand, “for many urban dwellers the world over, medium and high density housing is the norm” (Dupuis and Dixon, 2002: 423) and is able to provide residents with a high quality of life (Waghorn, 2011). A study by Dunbar and McDermott (2011) showed that residents of a medium density housing development, comprised of apartments, terraced and stand-alone housing, stated they
were happy living in this housing type. In Christchurch the diversity of housing types available has increased due to the emergence of medium density housing (Ancell and Thompson-Fawcett, 2011). This change has provided a number of desirable options for residents who desire a low maintenance home (Ancell and Thompson-Fawcett, 2011). A study by Haarhoff, et al. (2012) also showed residents were satisfied with their experiences of living in medium density housing and this housing form was able to meet the needs of a range of demographics, including families with children and the elderly.

However, medium density housing developments if designed poorly can have negative effects for residents. Critics assert that this style of housing is characterless, leaky, monotonous, cramped, lacks privacy, outdoor space and is noisy (Dunbar and McDermott, 2011; Waghorn, 2011). A common argument refers to medium density housing developments as the ‘slums of the future’ (Dupuis and Dixon, 2002). Criticisms of a housing development studied by Dupuis and Dixon (2002) included; lack of privacy, poor design of outdoor space and insufficient provision of green space and parking.

Other critics argue the development of intensified housing has decreased the opportunities available for children to play outside due to fewer open spaces which cater for children, a smaller backyard, increased traffic and safety concerns (Carroll, et al., 2011). A further issue is the stress this type of development may cause on existing infrastructure, such as sewage, storm water and roads (Dupuis and Dixon, 2002). Increased numbers of residents in an area may require the upgrading of water, sewage and roading systems. Nevertheless, it can be argued that many European cities have medium density housing development which do provide for the needs of residents.

### 2.7 Housing Preferences

A key barrier to the implementation of medium density housing is residents’ housing preferences for a stand-alone house in a low density suburban environment. Increasing wealth is also a key cause driving the preference of low density development (Coolen and Meesters, 2012). Residents may prefer to live in low density suburban environments and demand more space to provide them with green spaces and peace and quiet (Coolen and Meesters, 2012). Hur and Morrow-Jones (2008) agree that residents prefer low density suburban developments compared to higher density alternatives and Howley (2009) demonstrates that residents living in high density environments in Dublin have the goal of ultimately living in a low density area. Evans and Unsworth (2002) also illustrate this preference for low density living, over 50 percent of respondents from their study stated they wanted to live in a low density, stand-alone
Myers and Gearin (2001) also argue that residents prefer stand-alone, low density housing, and are often willing to increase commuting distances to gain this type of housing. They do, nevertheless, acknowledge the small portion of residents who do not seek this housing type, but desire higher density alternatives.

Housing preferences can also be associated with stages of life and demographics (Myers and Gearin, 2001). Families with young children are more likely to desire a traditional suburban design, compared with professionals who may be more likely to desire a small lot due to maintenance concerns, provided the smaller space still affords privacy and peace and quiet (Myers and Gearin, 2001). Households under 50 years are more likely to prefer larger lots and lower density, compared with older households who may prefer a smaller private outdoor space (Myers and Gearin, 2001).

Another key factor influencing housing preferences is affordability. Residents may desire a stand-alone house, but may not be able to afford it. Referring to housing in England, Evans and Unsworth (2002: 1164) argue “people are buying these flats because they cannot afford anything else”, that residents preference was for a stand-alone home, but they could not afford one. Haarhoff, et al. (2012) agree that housing affordability issues are a factor which can influence the demand for medium density housing. Affordability issues may also decrease resident expectations of what space they are realistically able to occupy (Evans and Unsworth, 2012).

Housing preferences are important as neighbourhood satisfaction is a key factor influencing overall life satisfaction (Kearney, 2006). Hur and Morrow-Jones (2008) argue that physical appearance is the most important factor for residential satisfaction for residents who are new to an area. However, other factors such as tension and communication with neighbours, neighbourhood affluence and crime are more important factors for long term residents. Green spaces also positively contribute to resident satisfaction and are key features of suburban environments (Sullivan, 1994).

There is an observable tension between political and sustainability agendas for intensification and more compact urban environments, compared with residents preferences for low density suburban development. This tension shows a significant gap between policy and housing preferences (Coolen and Meesters, 2012). However, education and a greater understanding of the benefits medium density housing can offer, is able to reduce opposition to this housing form (Lilley 2006). The negative consequences of low density housing, such as traffic congestion and long commuting time may also result in changing preferences towards denser living (Myers and Gearin, 2001). Higher density housing may also be more acceptable when views of green space
are provided (Kearney, 2006). There is international research which suggests that some residents will consider compromising low density living for the amenity benefits which more compact development can offer (Haarhoff, et al., 2012). Medium density housing could potentially be a suitable trade-off, as residents are still able to enjoy privacy and outdoor space associated with low density living, while increasing their proximity to services and amenities.

2.8 Outdoor Space

One concern which has been highlighted regarding medium density housing is the potential reduction of private outdoor spaces. Green spaces and natural features are often key characteristics of low density developments (Sullivan, 1994). They provide a range of benefits for individuals; stress relief, relaxation, connecting with nature and places of recreation (Sullivan, 1994). This positive impact green space has on resident health and well-being shows the importance of these spaces. Different people seek different things from these spaces, with their needs changing over time (Hobrook, 2009). The following sections will describe the use and importance of these spaces by type; private, communal and public outdoor spaces.

Private Outdoor Space

For the purposes of this research private outdoor space is defined as the space around a dwelling which is “for the exclusive use of the occupants” and includes the backyard, side yard, balcony, roof garden and courtyard (Hall, 1987: 184). In countries such as Scotland or Europe private outdoor space is not a key housing feature (Hall, 1987). Conversely, in countries such as the United States, England, Australia and New Zealand the provision of private outdoor space, especially the backyard, has been established as the norm and ideal for many years. Private outdoor space is entrenched in the image of the suburb and the ideal family home (Ferguson, 1994; Hall, 2010a). There are numerous values and uses attached to private outdoor spaces which contribute to the strong desire by residents all over the world for this type of space.

In many studies related to housing preferences the most desired housing type is a stand-alone house with a private backyard (Cooper-Marcus and Sarkissian, 1986). In the Netherlands private outdoor space is an essential feature of a house, with 80 percent of participants stating they prefer to have a garden (Coolen and Meesters, 2012). In Australia the majority of people currently live in a stand-alone house with a backyard and most families with children desire this type of house where their children can play (Hall, 2010a). A study of apartment dwellers in Auckland found that participants living in apartments still deem private outdoor space as an
essential part of a family home and the desire for a backyard was the reason they would eventually move out of their apartment (Carroll, et al., 2011). For many residents private outdoor space is a non-compensatory preference, it is an important aspect of the quality of the dwelling and residential environment (Coolen and Meesters, 2012).

Interestingly, private outdoor spaces are changing and are becoming increasingly low maintenance. The number of hard surfaces, such as patios, is rising, as are grassed areas which are easy to maintain. Higher maintenance areas with plants and shrubs are, consequently, decreasing (Bhatti and Church, 2000). Private outdoor space has become an area which people use and enjoy, rather than actively undertaking gardening activities (Bhatti and Church, 2000). Private outdoor spaces are now considered by many residents to be ‘outdoor rooms’ and are designed to be integrated with internal living areas. The main living area of the dwelling is designed to flow directly onto the private outdoor space, whilst, glass and sliding doors are used to further connect the areas (Head and Muir, 2006). These design aspects are blurring the lines between inside and outside, creating connections between the two areas and increasing the usability of private outdoor spaces.

The strong preference by residents to have a private outdoor space as part of their housing environment shows its importance. Koptis, et al. (2008) agree that many residents consider their private outdoor space to be important. For half of the participants in a study by Freeman, et al. (2012) private outdoor space was considered to be a key factor when deciding where to live, and all residents stated their private outdoor space was extremely important housing feature. Hall (1987) also found that the provision of outdoor space was essential or very important for many residents when they were deciding where to live. Bhatti and Church (2004) established that residents consider their private outdoor space to be an important part of their living environment.

Private outdoor space is also important as it is the most easily accessible area of green space available for residents (Holbrook, 2009). This is especially important in the 21st Century, where there are increasing pressures on the natural environment (Holbrook, 2009). Freeman, et al. (2012) agree that nature in urban environments is important for resident well-being. This green space contributes to residents’ neighbourhood satisfaction and connection with the natural environment (Holbrook, 2009). The link between neighbourhood satisfaction and private outdoor space is highlighted by Hall (2010a) who argues that decreasing or disappearing private outdoor spaces in Australia has resulted in decreasing neighbourhood satisfaction.

The importance and significance of private outdoor spaces is much broader than just for the individual. They provide important ecological, climatic and aesthetics benefits to the whole
community (Hall, 2010a). Within the urban environment private outdoor spaces contribute to a significant portion of green space within the city (Mathieu, et al., 2007). They provide wildlife with food, shelter and linkages to other green areas (Mathieu, et al., 2007). They also provide for natural drainage, carbon sequestration and pollution removal (Hall, 2010b).

The importance of private outdoor space is also shown through the numerous uses and meanings people attach to these spaces (Coolen and Meesters, 2012). Private outdoor spaces can be used for gardening, growing fruit, flowers and vegetables and drying washing (Cooper-Marcus and Sarkissian, 1986; Hall, 2010a). They can also be used as a place to sit and relax, enjoy family activities, social events and engage in DIY (Bhatti and Church, 2000; Hall, 2008). Private outdoor spaces provide an area where residents are able to have a swimming pool, bbq’s and dine outdoors (Hall, 2008). It provides a secure area where children are able to play and be supervised by adults from within the dwelling (Hall, 2008). Private outdoor spaces provide a buffer between neighbouring houses and a space to keep pets (Cooper-Marcus and Sarkissian, 1986). They are also seen as a place for expressing creativity, are a status symbol and reflect a person’s identity (Bhatti and Church, 2000). In addition, private outdoor spaces can represent ideals of freedom, connect residents with nature and provide a place where residents are undisturbed (Bhatti and Church, 2004; Coolen and Meesters, 2012).

Private outdoor spaces provide residents with privacy, security, peace and quiet and are “often seen as a haven from the public world of work and politics” (Bhatti and Church, 2000: 184). Residents value their private outdoor space so that they can be outside in private (Coolen and Meesters, 2012). Private outdoor space is also important for residents so that they can “escape the stresses and intrusions of work, city life and even family”; it provides an environment where resident can relax (Freeman, et al., 2012: 139). It can contribute to peace and restoration of the body and mind (Holbrook, 2009). Through providing residents with a place to sit and relax and remain undisturbed, private outdoor space can also contribute to the health and well-being of residents (Hall, 2010b). It can reduce stress levels and even speed up recovery times from illness or surgery (Cooper-Marcus and Sarkissian, 1986; Frumkin and Fox, 2012).

Private outdoor spaces also provide different functions dependent on life stages (Bhatti, 2006). Children use the space to play near the dwelling and as a place for family leisure activities. Often through middle ages private outdoor spaces are important for residents to undertake in gardening activities, whereas in later life, as the body reaches its physical limitations large private outdoor space may become a burden (Bhatti, 2006). However, with the increase in medium density housing the provision of outdoor space is changing. There has been an increase
in the provision of communal outdoor spaces in some housing developments, which provide green spaces and other facilities for residents.

**Communal Outdoor Space**

An issue in the development of medium density housing is whether outside space should be divided into private spaces, or left as a communal space which is able to be shared by all dwellings in the area (Hall, 1987). Communal spaces for this research are spaces which are shared by residents of a housing development and are not a public space. A key benefit of medium density housing developments, both socially and aesthetically, is if housing is clustered onto a portion of the site, a significant communal outdoor space is able to be provided for residents (Cooper-Marcus and Sarkissian, 1986; Abraham, et al., 2010). Clustering houses onto smaller sites, with a larger communal space supplies residents with views onto open areas, promotes social interaction and creates a sense of community (McLeister, 1997; Morris, 2009; Sugiyama, et al., 2009). Clustering also preserves open space and natural vegetation and drainage (Morris, 2009; Abraham, et al., 2010).

This type of design is remarkably different from the traditional low density stand-alone housing of the past, where land is divided into individually owned sections (Cooper-Marcus and Sarkissian, 1986). Nevertheless, communal areas can fulfil the needs of residents which cannot be met by either private or public outdoor spaces (Cooper-Marcus, 2012). North Shore City Council (2007) argues that communal outdoor spaces should be provided either if there is restricted access to public outdoor spaces or private outdoor space. Cooper-Marcus (2012) suggests that residential developments which are designed for families should cluster dwellings around a communal outdoor area where children can play in a safe environment, near the home and free from vehicles. Communal outdoor spaces can form an important element of the outdoor space available to residents.

Kearney (2006) shows that residents whose dwellings are located near green space have greater neighbourhood satisfaction and the presence of these green spaces helps to reduce some of the negative perceptions associated with density. Shared green spaces are able to increase neighbourhood satisfaction by increasing social connections and the sense of community. Kaplan and Austin (2004) agree that views of green spaces positively contribute to residents’ well-being and neighbourhood satisfaction.

However, cluster housing development has the potential to create negative effects due to the required increase in residential density, compared with traditional residential developments.
It is not yet known whether the benefits from the increased green space are able to compensate for smaller private outdoor spaces and higher density housing (Koptis, et al., 2008). Increased density may create a sense of crowding, decreasing neighbourhood satisfaction (Kearney, 2006). A further factor influencing the development of cluster housing is resident preferences, Koptis, et al. (2008) found that residents did not want to trade the size of their private outdoor space for access to communal spaces.

Cluster housing was initially implemented in the 1920's through the development of Radburn, New Jersey by Clarence Stein and Henry Right (Abraham, et al., 2010). The Radburn development provided both a small private outdoor area, as well as, a larger shared communal outdoor space. The design of Radburn provided homes which faced directly onto the open space, rather than onto the road. This design sought to increase the safety, use and accessibility of the communal area. Research produced on Radburn suggests high levels of resident satisfaction with the development (Cooper-Marcus and Sarkissian, 1986). Although it was considered successful at the time, this form of housing development has not been widely implemented.

Public Outdoor Space

Planners have long known that communities could not function without public outdoor spaces where they can interact. They are "one of the most important elements of a city's liveability and sustainability" (Kriken, 2012: 259) and are a key feature of low density suburban developments (Grose, 2009). Public outdoor spaces are defined in this research as spaces which are open to the public and include, but are not limited to; parks, school fields, bush walks and reserves. Public outdoor spaces have evolved in their use and function over time, from being a destination for Sunday outings, to a tool used to improve living conditions, to a location for recreation activities (Cooper-Marcus, et al., 1998). It is likely that as housing typologies continue to change that the use of public outdoor spaces will also evolve.

Public outdoor spaces provide opportunities for leisure and recreation activities such as barbeques, sports, picnics and reading, and contribute to health benefits through a reduction in stress and increased physical activity (Barton, et al., 2010; Frumkin and Fox, 2011). They also allow for organised sport, walking and cycling, children’s play and casual sporting activities (Barton, et al., 2010). People value parks for a range of reasons including; for the clean air, natural landscapes, as a place to walk and sit and as a place which makes them feel better (Cooper-Marcus, et al., 1998). Parks have the ability to provide "an oasis of greenery in a concrete desert" and are a key link for people with the natural world (Cooper-Marcus, et al.,
These spaces provide an area where residents can relax in a natural environment away from the activities of the city (Holbrook, 2009). The quality of public spaces can affect residents’ satisfaction of their neighbourhood (Sugiyama, et al., 2009). Increases in density enhance the importance of providing residents with good access and provision of public outdoor spaces (Lilley, 2006).

Proximity to a park is an important factor in residents’ use of the space and neighbourhood satisfaction. Residents with good access to public outdoor spaces have increased quality of life (Lilley, 2006; Sugiyama, et al., 2009). People who live near a park are likely to engage in more physical activity than people who live far from a park (Frumkin and Fox, 2011). Public outdoor spaces close to a resident’s home can contribute to a sense of nature, the liveability of the neighbourhood and a pleasant environment (Coolen and Meesters, 2012). Like private and communal outdoor spaces, they also provide ecological benefits as they support biodiversity, reduce air pollution and increase surface permeability (Frumkin and Fox, 2011).

The use of public outdoor spaces is dependent on a number of factors other than proximity. The amount of greenery, adequate maintenance, recreational facilities, such as a barbeque area, playground, picnic tables and public toilets, all affect the use of the area (Frumkin and Fox, 2011). If these aspects are provided then it is more likely the outdoor space will be used. A number of qualities are also identified by Barton, et al. (2010) as factors which impact on the attractiveness of the space. These qualities include serenity, diversity of vegetation and wildlife, open space, private spaces, meeting places, wild nature and culture.

People who do not have access to a private outdoor space may rely and value nearby public outdoor spaces in order to meet their social needs and provide them with contact with nature (Coolen and Meesters, 2012). Due to increased time pressures from longer work hours and travelling distances, public outdoor spaces which are close to residents’ neighbourhoods will become increasingly important and utilised, as people may no longer have the time to spend travelling to larger, regionally significant parks (Grose, 2011).

**Changing Outdoor Space Provision**

The preference and importance of private outdoor space by residents has resulted in concerns about the provision of quality outdoor spaces as housing intensification increases (Coolen and Meesters, 2012). With increased intensification a potential option is to replace private outdoor spaces with larger communal or public outdoor spaces (Coolen and Meesters, 2012). However, Coolen and Meesters (2012: 49) argue this substitution does not produce socially acceptable or
desirable developments, as private outdoor spaces have different meanings and uses compared with communal and public outdoor spaces; “public and private green spaces are not just simple substitutes for each other”.

Hall (1987) also argues that communal outdoor spaces are often provided for small dwellings, but this substitution does not provide for the same needs as private space. Lilley (2006) agrees that the provision of green space must be of sufficient scale to compensate for any loss of private outdoor space. Private outdoor space provides residents with security and privacy which communal or public outdoor spaces are not able to provide (Hall, 2010). Whilst, public spaces are important neighbourhood features, they are not able to provide ventilation or a green outlook for all houses which private outdoor spaces are able to provide (Hall, 2010). People equally desire private outdoor space, as well as public outdoor spaces within their living environment (Coolen and Meesters, 2012).

2.9 Auckland

Auckland has developed through the process of suburbanisation, with sprawling suburbs of low density, stand-alone housing (Dixon and Dupuis, 2003; Buckenberger, 2012). This type of development was aided by the construction of motorways and highways which encouraged dependence on private vehicles, while public transport remained underdeveloped (Dixon and Dupuis, 2003). However, this model is now seen as problematic and unsustainable, causing traffic congestion, long commuting times and the destruction of productive farmlands.

Auckland’s population is predicted to soar over the next 30 years and it was recognised in 1999 by the Auckland Regional Growth Forum, in the creation of the Auckland Council Regional Growth Strategy (1999) that there was a need to “ensure growth is accommodated in a way that meets the best interests of the inhabitants of the Auckland region” (Auckland Regional Council, 1999: 2). The Regional Growth Strategy set the vision for future growth and promoted urban intensification, based on the principles of the Compact City. It aimed to contain 70 percent of new development occurring within the current metropolitan area, with 25-30 percent of Aucklanders residing in multi-unit housing (Dupuis and Dixon, 2002). The Strategy had a vision for a more compact, mixed use, walkable, public transport orientated city which is able to meet the needs of all residents (Waghorn, 2011).

Since the implementation of the Regional Growth Strategy 1999, subsequent policy documents have also included the vision for increased intensification and a reduction in urban sprawl. In conjunction with the policy direction towards intensification, lifestyle, employment and
demographic changes have also driven the increased intensification in Auckland (Williamson, et al., 2007). Intensification is vital to the development of Auckland to ensure the City grows as a vibrant, sustainable and accessible city into the future.

Intensification has facilitated the development of medium density housing. An increasing number of New Zealanders will live in medium density housing in the future (Turner, et al., 2004). The development of medium density housing in Auckland has resulted from the implementation of policies aimed at increasing sustainability, containing future growth and increasing the density of cities (Turner, et al., 2004). Other issues such as housing affordability and lifestyle changes have also played a role (Dixon and Dupuis, 2003). Since the 1990s, section sizes have reduced and a range of alternative housing typologies have been developed which has significantly altered the form of many of Auckland's suburbs (Auckland Regional Growth Forum, 2003).

Despite this change, the dominant housing form is still a stand-alone house on a private section. Currently, the quality of medium density housing development is varied, but is improving with the implementation of a greater urban design focus (Turner, et al., 2004; Waghorn, 2011). If medium density housing development continues to progress at the rate desired by the policy documents it could "represent the most significant form of urban change since the large scale suburbanisation of the immediate post war period" (Dupuis and Dixon, 2002: 425).

The public acceptance of medium density housing in Auckland is a key factor which will affect the extent to which this housing form is implemented. In New Zealand the ideological view of the traditional stand-alone house on a large private section is at odds with the concept of medium density housing and consequently many residents have reservations about this relatively new and unfamiliar housing type (Dupuis and Dixon, 2002; Turner, et al., 2004). This "resistance to medium density housing is consistent with overseas experience" (Dunbar and McDermott, 2011: i). Haarhoff, et al. (2012) show in their study of medium density housing in Auckland that almost three-quarters of participants wanted to live in a stand-alone house in the future. Interestingly, Dunbar and McDermott (2011) note that the features residents desire in a medium density house are usually the same as those they desire in a low density house; safety, privacy, space, light, ventilation, indoor-outdoor flow and modern design. The conflict between the benefit of intensification and residents' ideology of low density suburban development is likely to lead to major challenges in the implementation of these strategies.

A further barrier to public acceptance of medium density housing was the 'leaky homes crisis' in the 1990s–2000s, where housing developments in Auckland experienced weather-tightness issues, attributed to the use of poor quality materials, poor design and poor workmanship.
These issues were not limited to medium density housing, traditional low density housing was also affected, however, due to the rapid construction of medium density housing during this time and the fact that it was an unfamiliar housing type, this issue is more commonly associated with medium density (attached) housing developments. In conjunction with this issue is the perception that medium density housing is inferior and prone to increased levels of crime and poverty (Dunbar and McDermott, 2011).

Housing affordability is a factor which may hinder residents from gaining their desired home. Haarhoff, et al. (2012) argue that high housing prices in Auckland, combined with a low median income may result in the suburban dream being ‘unrealistic and unaffordable’. Although many residents may want to live in a stand-alone house, this is not a realistic option for many residents in Auckland. A further influence on Auckland’s housing market is the current method of school zoning. Admission to public schools based on geographical zoning techniques is a controversial topic within New Zealand, and has been implemented, abolished and re-introduced in the past 20 years (Rhem and Filipova, 2008). For students to have guaranteed access to a school they must live within the specified geographical zone (Ministry of Education, 2013). If not, students may be admitted based on a number of specific criteria through a ballot process, but acceptance is not guaranteed. This method of geographical zoning is a factor which influences housing prices. Suburbs which are in a desirable school zone may have higher property values than a nearby area which is not in the same school zone (Rhem and Filipova, 2008). Residents may choose to live in a particular area based on the school zones it is eligible for. This is reflective through advertising of rental properties and dwellings for sale which often state the schools which the property is in zone for.

An issue which may hinder the implementation of a range of medium density housing forms is the Body Corporate structure under which many terraced housing developments and developments with communal spaces operate under. Bodies Corporate are legislated for under the Unit Titles Act 1972 with the role to manage common property. They set financial contributions, obtain insurance, prepare annual accounts, arrange the maintenance of common property and conduct annual meetings (Blandy, et al., 2006). The rapid growth in medium density housing in Auckland has highlighted issues with this process, which is significantly different to previous stand-alone housing development which operated through individually owned lots under a fee simple title (Auckland Regional Growth Forum, 2003).

Issues arise over communication problems between owners and the body corporate, communication for residents who do not speak much English, lack of power by owners to change body corporate rules and tenants not being informed of the body corporate rules by
owners (Blandy, et al., 2006). Other issues include residents feeling powerless; lacking control despite their ownership rights. Bodies corporate have a significant effect on the quality of life of residents and their residential satisfaction (Auckland Regional Growth Forum, 2003). Blandy et al. (2006) argue that the negative perceptions and experiences regarding bodies corporate shows that the benefits of multi-ownership, such as shared facilities and outdoor spaces, are overshadowed by problems with the body corporate.

Despite this resistance there are a range of people who acknowledge the benefits of this form of housing including; single people, couples without children, people who move frequently, young professionals, (Dunbar and McDermott, 2011) people who want to live close to their work place (Morrison and McMurray, 1999), students, immigrants and the elderly (Waghorn, 2011). Medium density housing can provide for the needs of a range of residents at various life stages and offers residents with much greater flexibility than the low density, stand-alone equivalents (Haarhoff, et al., 2012). The increased number of medium density housing developments in Auckland has already provided residents with increased housing options and will continue to do so into the future (Williamson, et al., 2007). The continued increase in public acceptance is dependent on good quality design (Turner, et al., 2004; Ministry for the Environment, 2013). The development and implementation of new urban design guidelines is a key factor that will ensure high quality residential environments, which provide residents with a high quality of life and satisfaction with their dwelling.

As housing contributes to residents’ well-being and quality of life it is important that medium density housing developments are researched to ensure lessons are learned from the failings and successes of current developments to provide a high quality of life for future residents (Buckenberger, 2012). A key aspect of medium density housing development which is often criticised as being inadequate is the provision of outdoor space, including; private outdoor space, communal outdoor areas and local parks. As Auckland transitions from a low density form and incorporates more and more medium density housing developments it will become even more important to ensure that high quality public outdoor spaces are provided which are acceptable for residents and provide them with recreational, social, cultural and health related opportunities.

Case Study: Stonefields

An excellent example of a large scale medium density housing development in Auckland is Stonefields, Mt Wellington, located only a ten minute drive from Auckland’s Central Business District. Construction began at Stonefields in 2008 and is expected to be completed by 2014.
Stonefields is a master planned community developed on a 110ha site. There will be between 2500-2900 dwellings once construction is completed with a variety of housing types including; apartments, terraced and stand-alone housing (Figure 1). The density of the development has an average of 250m²/unit.

Mein (2012) assessed a small portion of Stonefields against 20 urban design criteria, with the development gaining a score of 79 percent. This shows the success of the development in incorporating key urban design principles. Private outdoor space was rated highly, as was accessibility to public outdoor spaces. Most of the dwellings in the studied area overlook the park, providing surveillance, and a playground is provided for children between the ages of 4-12 years. Private outdoor spaces are oriented to gain maximum sunlight and are easily accessible from the main living area inside the dwelling (Mein, 2012).
Results of a resident survey showed residents were highly satisfied with their neighbourhood as they were close to amenities, had friendly neighbours and the sense of community in the area was developing. This high level of satisfaction is also demonstrated by high sales, with a terraced house on a 200m$^2$ section selling for an average of $660,000 (Mein, 2012). This example shows a successful medium density housing development, which provides an appealing environment for residents.

### 2.10 Design Guidelines

There are numerous publications which present design guidelines for medium density housing developments, neighbourhood design and form. It is important that guidelines are developed so the design quality of medium density housing improves and is able to become an integral and accepted part of Auckland’s future development. In this section the guidelines are discussed. The key aspects of the guidelines mentioned will be synthesised along with the previous discussion of medium density housing and outdoor spaces to create a research checklist of the key aspects in the provision of outdoor space in medium density housing developments.

### Housing as if People Mattered

Cooper-Marcus and Sarkissian (1986) in their book, ‘Housing as if People Mattered’ provide guidelines for the development of medium density family housing. Although this book is over twenty years old, it is still able to provide valuable information about key features which can make medium density housing developments successful. A key idea put forward is that due to the ideological view of a detached house being the preferred housing typology, to ensure resident satisfaction, the design of medium density housing developments should incorporate as many features of low density housing as possible. A key aspect of this is the provision of private outdoor space in the form of a garden, balcony or patio.

In relation to the provision of outdoor space, Cooper-Marcus and Sarkissian (1986) argue that some form of private outdoor space should be provided for every unit, with furnishings included to enable its use and be easily accessible from inside the dwelling. They also suggest that private outdoor spaces should be linked to communal outdoor spaces, enabling direct access for children to play. They also suggest that private outdoor spaces should be adequately defined from communal or public spaces and should not be overlooked by neighbours. A final recommendation is that private outdoor spaces are designed in a square shape and are also orientated to gain maximum sunlight.
Medium Density Housing Case Study Methodology

The Ministry for the Environment has published an assessment methodology for analysing the design quality of medium density housing developments which was prepared by Boffa Miskell Ltd (2012). It was created due to concern about the quality of medium density housing development in relation to public space, privacy, parking, private outdoor space and the provision of storage and clothes drying areas (Boffa Miskell Ltd, 2012). The assessment methodology includes an urban design rating system which can be used for a range of medium density housing types.

With regard to this research, the most relevant aspect of the Boffa Miskell Ltd (2012) methodology was a small portion of the assessment criteria, which relates to the provision of outdoor living space. The rest of the criteria in the methodology related to other design aspects of medium density housing. Outdoor space is rated on a scale of 1-5 (1 = poor and 5 = good) and provides a definition of what constitutes each level on the scale (see Table 2). This assessment criteria shows the key features which constitute successful outdoor spaces include; significant private outdoor space, gardens, balconies or roof gardens and high quality communal spaces, all of which receive high levels of sunlight.

Table 2. Assessment criteria for outdoor space.
(Source: Boffa Miskell Ltd, 2012)

<table>
<thead>
<tr>
<th>Outdoor living space: The provision, location, size and quality of communal and private space.</th>
<th>1 (poor)</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5 (Good)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (poor)</td>
<td>No private ground level spaces or no adequately sized upper storey balconies (e.g., only ‘Juliette’ balconies that cannot accommodate table and chairs).</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Small private ground level spaces or upper storey balconies/roof gardens. Majority of spaces have significant shading and/or exposure of spaces to adverse winds.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Adequately sized private ground level spaces or upper storey balconies/roof gardens. Majority of spaces receive sunlight at least part of the day for most of the year and are sheltered from adverse winds.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Adequately sized private ground level spaces and/or upper storey balconies/roof gardens. Provision of usable communal open space and front gardens for ground level units. Majority of spaces receive sunlight at least half of the day for most of the year and are sheltered from adverse winds.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 (Good)</td>
<td>Generously sized private ground level spaces and/or balconies/roof gardens. Provision of usable communal open space with high quality facilities and front gardens for ground level units. Spaces will receive sunlight for most of the day and throughout the year.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Good Solutions Guide to Medium Density Housing

The ‘Good Solutions Guide to Medium Density Housing’ was prepared by the North Shore City Council (2007) and aims to provide developers, architects, planners and builders with guidelines for good quality medium density housing design. The Guide suggests numerous features which are essential in relation to outdoor space. A key aspect is the need to provide outdoor spaces which receive a significant amount of sun and are easily accessible by residents.

Easy access to high quality private outdoor spaces is a key component of good quality medium density housing design, “successful houses have sunny and private outdoor space with good access between indoor and outdoor living areas” (North Shore City Council, 2007: 6). Each house should include a private outdoor space in the form of a garden or courtyard. If this is not a feasible option a well-designed balcony is deemed an acceptable substitute, as long as it is north facing (to gain maximum sunlight) and is big enough to enable residents to entertain guests and there is other communal or public outdoor space nearby. Private outdoor spaces should be positioned so they receive significant sunlight and should be low maintenance. Private outdoor spaces which are damp, dark and surrounded by high fences should be avoided.

It is important to provide communal outdoor spaces especially if there is insufficient space to provide a private outdoor space or if there are no public outdoor spaces in the area. Communal outdoor spaces should be designed so houses overlook them; they are easily accessible to residents, are located on flat land and provide seating, shade and plantings. Communal outdoor spaces should also include a play area for young children and should avoid being used for parking. The Guide also argues that medium density housing developments should ideally be located near public outdoor spaces such as parks and reserves. If providing a public outdoor space, developers should ensure it is visible from surrounding streets and houses and provides benches, mature trees and a play area for young children.

People Places – Design Guidelines for Urban Open Spaces

‘People Places’ is a book which aims to provide guidelines for the design and development of public outdoor spaces. In Chapter 2 ‘Neighbourhood Parks’, Cooper-Marcus et al. (1998) provide guidelines for the design of public outdoor spaces. Key aspects of these guidelines include; creating a diverse environment which provides a varied range of plants, and signs to identify plants, provides a description of the history of the park and also identifies other key features of the park, such as toilets, cafe or walks. Other key features include the provision of a range of paths which weave through different landscapes and seating which can provide for the
needs of individuals or groups. A further guideline is to ensure seating is facing pleasant views and is located near the edge of the park. A key consideration is to cater the space to the type of people who are likely to use the park. For example, if there are a number of elderly people in the area, ensure the park is easily accessible, there are adequate handrails and seating, and walkways are smooth, but not slippery.

**Shaping Neighbourhoods for Local Heath and Global Sustainability**

Barton, et al. (2010) in their book ‘Shaping Neighbourhoods for Local Health and Global Sustainability’ provide checklists for the design and building of neighbourhoods. They provide specific guidelines for the provision of outdoor spaces. Barton, et al. (2010) argue that intensification requires the provision of more outdoor spaces, rather than the removal of outdoor spaces, and argue that there should be facilities which enable walking and cycling. They suggest that the public outdoor spaces provided need to be maintained, allow a range of differing activities, provide a safe environment and are connected to the neighbourhood. They argue that the provision of public open space needs to accommodate specific contexts and the needs of the local community, to ensure the use of these spaces and that they have a positive contribution to the well-being of the community.

**Placecheck**

Placecheck is method of deciding which features of a particular area need to be improved (Placecheck, 2012a). It is designed as an approach which can initiate change or the redevelopment of an area. Undertaking a Placecheck is a tool which can be used by councils, developers and the public. It can be used by the public to try to increase their influence in the development of the area. Completing a Placecheck is simple and involves walking around an area, discussions about the area and about what steps need to be taken in the future to ensure the success of the location (Placecheck, 2012a). The philosophy behind this method is the belief that “much of what needs to be known about a place can be seen and understood by looking at it, or is in the heads of the people who live, work or play there” (Placecheck, 2012a: 1). Placechecks can include a range of people from different backgrounds (local residents, professionals, planners, business people, local organisations) and it is those people involved in the Placecheck who decide what is important (Placecheck, 2012b).
Key questions from the placecheck methodology include:

- What makes this place special or unique?
- Why do we like this place?
- What potential is there to enhance the place?
- How accessible is the place?
- How welcoming is the place?
- How can this place be made more accessible/welcoming?
- What makes this place safe and pleasant?
- How can the place be made safer and more pleasant?

2.11 Conclusion

This literature review has shown the changing emphasis by academics, planners and councils to move from a low density, car based pattern of urban expansion to an increasingly intensified, compact and public transport oriented development form. It is important that the effects of these changes are documented in order to ensure the consequences of these changes socially, environmentally and economically are creating positive outcomes. Medium density housing is a key product of these theories of intensification. In order to ensure public acceptance and resident well-being in these developments it is important that the provision of outdoor space is adequate. This research aims to further the knowledge in this field and attempts to understand whether the current provision of outdoor space in medium density housing in Auckland is creating positive social outcomes.
3 METHODOLOGY

3.1 Introduction

In order to carry out research with academic value, it is important to make informed decisions regarding the research design, data collection and data analysis. This chapter describes and justifies the research methods chosen. The first section discusses the research design, the reasons for the adoption of a mixed methods approach and the use of both qualitative and quantitative data gathering techniques. The second section discusses the methods of data collection, which include the use of both primary and secondary data. The third section examines the methods through which the data is analysed including; transcription of interviews, collation of data into tables, coding, statistical analysis and data interpretation. The final section discusses the ethical considerations taken to ensure this research is completed in an ethical manner and reflects on the limitations taken to the research.

3.2 Research Design

The research design is important as it provides the framework of methods from which data is collected and analysed. This research uses a mixed methods approach, using both qualitative and quantitative methods of data collection (Creswell, 2009). This approach is chosen as the benefits of both methods are gained and therefore the "overall strength of the study is greater" (Creswell, 2009: 4). The information collected from the different methods is integrated to provide a comprehensive understanding of the issue.

Qualitative research allows for a flexible research process and enables in-depth information to be gathered from participants (Walliman, 2011). Qualitative research is useful as it “allows researchers to share in the understandings and perceptions of others” through the use of words, images and descriptions (Berg, 2009: 8). Qualitative methodologies are flexible and allow the researcher to adapt when new information is presented, for example, the researcher is able to add or change interview questions as required.

A quantitative research method produces data which is expressed in numbers (Walliman, 2011). This is useful as the data can be statistically analysed to generate information which is easily represented in tables and graphs. This information is useful as it shows trends, ratings, frequencies and averages. Quantitative research methods are employed in this research through the use of closed questions, whereby participants are required to choose an answer from a list.
of possible options, as well as, questions which ask residents to rank their satisfaction or the importance of outdoor spaces on a scale of 1 - 10.

This research also applies a case study approach. Case studies are a useful research technique as they enable the researcher to explore particular locations in depth (Creswell, 2009; Guthrie, 2010). Four case study locations are chosen for this research; Point Ridge, The Avenue, Fields Parade and Pannill Place. Specific criteria were used to determine appropriate case study locations and these are given below.

Criteria for selection of case study locations:

- Medium density – between 150m² - 350m² per unit
- Located in Albany
- Range of access and provision of outdoor spaces (between case study locations)
- Different housing forms – detached, semi-detached, terraced, apartments
- Similar price bracket ($400,000 - $700,000)
- At least 40 dwellings in the development
- A new or recent development

Each location was chosen as it represents a medium density housing development with a different provision of outdoor space. Point Ridge is a gated community where residents have a private outdoor space, but also have access to communal facilities including; a swimming pool, spa pool, bbq area, gym, grassed area and entertaining area. Dwellings are terraced in rows of three or four, or are small scale apartments of three stories. Residents at The Avenue also have access to a private outdoor space and communal facilities. The communal facilities include; a swimming pool, grassed area and tennis courts. Dwellings at The Avenue are terraced in rows of four to eight dwellings. Alternatively, Fields Parade is a medium density area which most closely represents the traditional subdivision, residents have access to a private outdoor space, but there are no communal facilities. Dwellings are either stand-alone or semi-detached. Pannill Place is a street with a number of terraced houses built by a number of developers. Residents have access to private outdoor space, but not to communal spaces. These locations represent a range of developments with differing provision of outdoor space. These different developments are able to be examined and contrasted to determine whether any particular form of outdoor space provision contributes to increased resident satisfaction.
3.3 Data Collection

Data is collected through both primary and secondary methods. These methods include a literature review, policy analysis, key informant interviews, postal questionnaire and a best practice checklist. As a number of data collection techniques are employed, the process of triangulation is able to be implemented. Triangulation analyses information collected from a range of methods to obtain data on a topic from a variety of angles (Creswell, 2009). Triangulation is important because “if similar findings come from different sources, the findings have greater credibility” (Guthrie, 2010: 46). For this research triangulation was used to ensure that the data acquired was reliable, credible and so comparisons could be undertaken. Data from key informant interviews, the postal questionnaire, best practice checklist and the literature review are used in the process of triangulation to verify the credibility of the findings.

Secondary Research

Secondary research examines existing information gathered by other researchers (Curtis and Curtis, 2011). “Written sources, which interpret or record primary data are called secondary sources” (Walliman, 2011: 71). Secondary data provides a wide range of information on the topics of suburban development, medium density housing and outdoor space. For this research secondary data is sourced from books, academic journals, policy documents and technical reports and is presented in the form of a literature review and policy analysis.

Literature Review

A literature review is important as it informs the reader of the current knowledge about the topic and provides the basis for demonstrating the importance and worth of the current research (Creswell, 2009; Walliman, 2011). The literature review is also essential as it provides a framework from which this research's findings are able to be compared (Creswell, 2009). The literature review analyses the relevant literature and provides the framework for the research. Prior to undertaking the field research in Auckland a literature review was undertaken. The information analysed in the literature review was used as the basis to inform the questions asked in the key informant interviews and in the resident questionnaire.

Policy Analysis

An analysis of the legislative documents and reports is undertaken to gain an understanding of the research context. The documents consulted included the Resource Management Act (1991),
Local Government Act (2002), Auckland Regional Policy Statement (1999), Auckland Regional Growth Strategy (1999), North Shore District Plan (2002), Upper Harbour Local Board Plan (2011), Auckland Plan (2012) and the draft Auckland Unitary Plan (2013). These policy documents are chosen as they have either had in the past, or are likely in the future, to have the greatest impact on the development of outdoor space and medium density housing in Auckland. It is these documents which guide the vision for intensification and the development of medium density housing in Auckland and also contain the rules for housing and outdoor space development. The information gained from these sources is used to provide policy context to the research topic of outdoor spaces in medium density housing development and to inform key informant interview questions.

**Primary Research**

Primary data is obtained from original sources that has been “observed, experienced or recorded” and is gathered first-hand by the researchers (Walliman, 2011: 71). The collection of primary data for this research was undertaken from 15–28 June 2013 in Albany, Auckland. Primary research is collected through; key informant interviews, a postal questionnaire and a best practice checklist.

**Key Informant Interviews**

Key informant interviews are used as a research method as they enable the researcher to gain in-depth information from participants. Interviews are “often used to find out attitudes and perceptions” from participants and provide flexibility for the researcher (Guthrie, 2010: 188). The interviews are undertaken in a semi-structured manner and follow a standard set of open-ended questions (Appendix A). The semi-structured nature of the interviews allows the researcher to ask further questions and change the order they are asked in, which enables the interview to flow while remaining relevant to the purpose of the study (Berg, 2009). Some of the interviews differ slightly in content dependent on the knowledge base of key informants, however, as there is a standard set of questions the information gained from the interviews is able to be compared (Guthrie, 2010). A total of 14 interviews were conducted with a range of informants including; residents, real estate agent, property developers and the Parks and Recreation department of the Auckland Council (see Appendix B).

In order to select relevant key informants for this research, purposive sampling is applied. This method is selected to ensure key informants chosen have a wide range of knowledge on the topic of medium density housing and outdoor space in Auckland. The technique of snowballing
is also employed to obtain key informant interviews. This method enables the researcher to locate participants who are useful to the research, but otherwise may not be known to the researcher. In the process of snowballing the researcher asks participants to identify other people who may be helpful or hold knowledge relevant to the research (Chambliss and Schutt, 2003; Berg, 2009).

Postal Questionnaire

The use of a postal questionnaire enables the researcher to administer large numbers of questionnaires quickly and easily, without the need to contact each respondent personally (Walliman, 2011). However, a common problem with the use of postal questionnaires is ensuring a high response rate (Chambliss and Schutt, 2003). Walliman (2011: 94) argues “the response rate of a postal questionnaire is difficult to predict or control”, whilst Guthrie (2010: 81) suggests that “non-response rates are likely to be high”, resulting in data which is not representative of the population. In order to ensure a high response rate the survey is designed to be short, easy to read and fill out and is able to be completed through two different methods. Participants are able to respond by filling out the questionnaire provided and posting it back to the researcher in the self-addressed envelope provided. Alternatively, participants are able to complete the exact same questionnaire online via ‘Survey Planet’. The participants are given the url from which they are able to find and complete the survey online.

The postal questionnaire is designed as a structured form of data collection. The researcher uses a combination of closed format questions, whereby the respondent has to choose from a set of answers, as well as open format questions which enable the respondent to write an answer in their own words. This ensures the collection of both quantitative data, which is statistically analysed, in addition to qualitative data which gives a deeper insight into the thoughts, perceptions and ideas of participants. Participants are able to fill out the survey privately, without the influence of the interviewer, which allows participants to answer the questions in a confidential manner. This may make them feel more comfortable and increases the likelihood that they provide honest answers (Walliman, 2011).

The research method of purposive sampling is employed to determine participants for the questionnaire. The postal questionnaire was delivered to the mailboxes of every residence in each of the case study locations. In total 250 questionnaires were delivered. The postal questionnaire included the questionnaire, a cover letter, information sheet and a pre-paid, self-addressed envelope (Appendix C, D and E). A total of 38 questionnaires were returned. Thirty four were returned via post and four via the online survey.
A pilot study was conducted prior to the delivery of the questionnaire, which enables the researcher to pre-test it (Walliman, 2011). The pilot test is administered on a small group of student colleagues which enables the examination of the clarity of the questions and the length of time taken to complete the questionnaire. After the pilot study the questionnaire is altered to ensure a clear structure and clearly written questions.

Best Practice Checklist

Observation is a useful method which involves the collection of data, without participating or asking people questions (Walliman, 2011). Observation can be used to “supplement” information gathered from other sources, such as interviews or questionnaires (Chambliss and Schutt, 2003: 59). For this research field observations are conducted in conjunction with a checklist of best practice guidelines. The checklist is created based on what is considered to be best practice for outdoor spaces in the academic literature. The checklist is used to determine whether the chosen case study locations represent good design with regard to the provision of outdoor space (Table 3). This information is then compared to the interview and questionnaire data to examine whether the case study location which has the best outdoor space provision also has the most satisfied residents. The researcher walked around each of the case study locations on the 15 and 16 June for approximately 30 minutes in order to complete this checklist.

Table 3. Research checklist for the provision of outdoor space.

<table>
<thead>
<tr>
<th>Private Outdoor Space</th>
<th>Yes/No</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is some form of private outdoor space provided for each dwelling? (courtyard, garden, balcony)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are private outdoor spaces oriented to gain maximum sunlight?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are private outdoor spaces usable? (square in shape, big enough to entertain)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are private outdoor spaces easily accessed from the dwelling?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are private spaces screened from neighbours?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are private outdoor spaces well defined from communal and public spaces?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is the private outdoor space connected to communal outdoor space?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rating based on the assessment criteria for outdoor space (1 poor – 5 good) (Boffia Miskell Ltd, 2012)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Communal Outdoor Space

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is a communal outdoor space provided?</td>
<td></td>
</tr>
<tr>
<td>Does the communal space have any facilities? (Playground, pool, bbq area, seating, shade, planting)</td>
<td></td>
</tr>
<tr>
<td>Is the communal space easily accessible from resident dwellings?</td>
<td></td>
</tr>
<tr>
<td>Do dwellings overlook this space?</td>
<td></td>
</tr>
<tr>
<td>Does this space receive maximum sunlight?</td>
<td></td>
</tr>
<tr>
<td>Is it located on flat land?</td>
<td></td>
</tr>
</tbody>
</table>

### Public Outdoor Space

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is there a local park within a ten minute walk of the development?</td>
<td></td>
</tr>
<tr>
<td>Is the public outdoor space easily accessible?</td>
<td></td>
</tr>
<tr>
<td>Does the public outdoor space provide facilities? (benches, mature trees, playground)</td>
<td></td>
</tr>
<tr>
<td>Are the facilities provided suitable for the type of people who are likely to use the park?</td>
<td></td>
</tr>
<tr>
<td>What potential is there to enhance this space?</td>
<td></td>
</tr>
<tr>
<td>Are there a range of different landscapes where a range of activities can occur?</td>
<td></td>
</tr>
</tbody>
</table>

### 3.4 Data Analysis

Data analysis is the continual process whereby data is interpreted, understood and meaning is created (Creswell, 2009). In the process of analysis, data is transformed, classified and interpreted. It is an important process as it converts raw data into forms which allow the researcher to identify trends and understand issues.

### Data Transformation

The first step of data analysis is data transformation. Data transformation is important because it makes the raw data more “accessible” and “understandable” (Berg, 2009: 54). It processes data into a form from which themes, ideas and meanings can be understood and used (Walliman, 2011). Key informant interviews are transcribed from audio recordings, data from the questionnaire is collated into a spreadsheet and observations from the checklist are typed onto the computer. The transformation of this data into a more manageable form enables the data to be easily organised and interpreted.
Data Organisation

The next step of data analysis is to organise transcriptions and collated information from the questionnaire and checklist. For this research data is organised through the process of coding. Coding for the interview transcriptions and postal questionnaire is completed based on the research questions (Section 1.4). Coding enables the researcher to organise data into segments based on different themes or ideas (Creswell, 2009). “The process of coding is analytical, and requires you to review, select, interpret and summarise the information” (Walliman, 2011: 118). Once the information is coded based on the research question, the information is coded further into smaller sub-themes, which the researcher identifies.

Data Interpretation

Data interpretation is the final stage of data analysis. Once the information is organised through the use of coding, the themes and ideas from the research are interpreted. Data interpretation enables the researcher to produce findings and draw conclusions from the primary data (Walliman, 2011). Both primary and secondary data is used in this process, academic literature discussed in the literature review is used to support or contrast the themes and conclusions from the primary data collected through this research.

3.5 Ethical Considerations

It is important that research is conducted in an ethical manner. “Working with human participants always raises ethical issues about how you treat them” and it is essential that participants are treated with respect at all times (Walliman, 2011: 47). The key principle of ethical research is to ensure that you “cause no harm” to participants and if possible they benefit in some way (Walliman, 2011: 52). The main ethical issue is to ensure that participants are willing and give their informed consent to participate (Guthrie, 2010; Curtis and Curtis, 2011). It is essential that researchers are honest with participants and ensure confidentiality of participants is maintained (Chambliss and Schutt, 2003). Potential ethical issues must be considered and dealt with prior to engaging with participants (Creswell, 2009).

Prior to the collection of primary data in Auckland, ethical approval is gained from the University of Otago Human Ethics Committee. Key informants are given an information sheet with a description of the project an asked to sign a consent form before the interview is able to begin (Appendix F and G). Participants are informed of their right to not answer any questions which make them feel uncomfortable or they do not wish to answer. They are also asked how
they would like to be referred to in the report and whether they wish to stay anonymous. Participants are asked for permission to audio record the interview and are informed of their right to withdraw from the project at any time. Participants who are delivered a postal questionnaire are also delivered a covering letter which explains the project and informs them of their right to not answer any questions. They are also reassured that their responses will remain anonymous. The implementation of these methods ensures that all participants in this research participate voluntarily, are aware of the purpose of the research and are not harmed in any way.

3.6 Reflections

Despite attempts to design a research project which produces data which is accurate, it is necessary to highlight some of the methodological limitations which exist for this research. A key factor which may have affected the results of this study is that it was conducted during winter, a time of the year when it is often too cold to use outdoor spaces. It is possible that residents may have felt more positively or negatively towards their outdoor space because they were not actively using it at that point of time. There is the potential that if the same study was conducted during the summer, some of the responses may have been different.

A further factor which hindered data collection was the weather. During the field research week rain resulted in the researcher being unable to undertake observations of residents use of public and communal outdoor spaces. A small number of observations were made, however, due to rain a consistent series of observations between the case study locations did not occur.

A final issue which may have affected the results was the low response rate of the postal questionnaire from two of the case study locations, Fields Parade and The Avenue. Only six responses were received from each of these locations which may not have been representative of the whole location. Both Point Ridge and Pannill Place received a larger number of responses (14/12).

3.7 Conclusion

This section has described the methodological approach taken for this research. A mixed methods approach is undertaken to gain the benefits of both qualitative and quantitative research. The range of methods includes the analysis of both primary and secondary data; an academic literature review, policy analysis, key informant interviews, a best practice checklist and postal questionnaire. The data is then reduced, organised and interpreted through the
transcription, collation, coding and analysis of information. As this methodology employed a range of techniques triangulation is able to be used to ensure data is reliable and valid. The methodology is robust and gives due consideration to ethical issues, and ensures participant consent and well-being. Although there are noted limitations to this research, overall, the research methodology ensured high quality research was conducted.
4 CONTEXT

4.1 Introduction

This chapter presents an overview of the contextual background of this research. It is important to understand the context of the study area as this affects the way in which the location functions, has developed over time and is likely to change into the future. First, the development of Auckland is discussed, followed by the development of the North Shore and Albany. The development of housing throughout these areas is then examined. Finally, the four case study locations are presented; Point Ridge, The Avenue, Fields Parade and Pannill Place.

4.2 Auckland

Auckland is located in the North Island of New Zealand and has a land area of 1,086 km² (Figure 2). It is sited on and around an isthmus which is less than two kilometres at its narrowest point. It has two harbours; Waitemata Harbour which opens into the Hauraki Gulf and Manukau Harbour which opens to the Tasman Sea. Auckland is also a very volcanic area, surrounded by a significant number of volcanoes.

Figure 2. Location map of Auckland, New Zealand. (Source: Google Maps, 2013)
Auckland has an approximate population of 1.5 million and is the most populous city in New Zealand, with approximately 30% of the population of the whole country (Statistics New Zealand, 2006a). This figure is projected to grow to between 2.2 million and 2.5 million over the next 30 years (Auckland Council, 2012). Auckland is considered to be a highly liveable city by international standards; in both 2011 and 2012 the Mercer Worldwide Quality of Living Survey ranked Auckland 3rd, the highest of any city in the Asia-Pacific region (Mercer, 2012). Whilst, The Economist’s Liveability Ranking 2012 placed Auckland as the 10th most liveable city in the world (The Economist, 2012). The high standards of liveability, combined with high levels of economic growth occurring in Auckland are key factors which contribute to the high rate of population growth and place Auckland as the economic powerhouse of New Zealand (Hart, 2007).

Auckland’s population is growing rapidly due to a combination of migration (internal and international), as well as natural population increase (Austin and Whitehead, 1998). Auckland contains a diverse range of cultures, with the largest Polynesian population of any city in the world (Cumberland, 1977) and a large portion of other cultures such as Maori and Asian (See Table 4). Asian migration to Auckland has been a key feature since the 1990's (Austin and Whitehead, 1998).

<table>
<thead>
<tr>
<th></th>
<th>New Zealand European</th>
<th>Māori</th>
<th>Pacific Peoples</th>
<th>Asian</th>
<th>Middle Eastern/Latin American/African</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auckland Region</td>
<td>797,880</td>
<td>137,133</td>
<td>177,936</td>
<td>234,222</td>
<td>18,555</td>
</tr>
<tr>
<td>%</td>
<td>64%</td>
<td>11%</td>
<td>14%</td>
<td>19%</td>
<td>1.5%</td>
</tr>
<tr>
<td>North Shore</td>
<td>154,614</td>
<td>12,519</td>
<td>6,357</td>
<td>37,200</td>
<td>3,594</td>
</tr>
<tr>
<td>%</td>
<td>77%</td>
<td>6%</td>
<td>3%</td>
<td>19%</td>
<td>2%</td>
</tr>
</tbody>
</table>

Table 4. Population in the Auckland Region by ethnicity.
(Source: Statistics New Zealand, 2006b)

Auckland has a number of key features which make it a desirable place to live. Hart (2007: 24) argues “Auckland’s subtropical climate, its attractive clean harbours, the number and variety of its beaches and native bush areas, its ethnic diversity, nightlife, cafes, universities, sporting
facilities, and large job market all make it a great place to live”. Auckland is home to a number of beautiful islands including; Waiheke Island, Great Barrier Island and Rangitoto Island which attract a large number of tourists each year. There are a number of beaches within Auckland which are especially popular for recreation in summer. Other key attractions include the Sky Tower, Auckland Zoo, Kelly Tarlton’s Aquarium and numerous shopping destinations. The Viaduct Harbour is also a key feature of Auckland since its redevelopment in late 1990s it has become a hub for residential, commercial, recreation and entertainment.

4.3 North Shore

Historically, the North Shore was a holiday destination known for its beaches and relaxed lifestyle, and was home to a number of holiday homes of wealthy Aucklanders (Verran, 2010). Both tourism and agriculture were important features of the North Shore economy throughout the 19th century (Verran, 2010). Key early industries included brick making, boat building and the Chelsea Sugar refinery (Verran, 2010). Ferries were integral for linking residents from the North Shore to Auckland City.

However, the North Shore has been rapidly urbanising since the Harbour Bridge opened in 1959, a development which can be considered as the key catalyst for change in the area (Hart, 2007). It also underwent a period of significant greenfield development from 1991 - 1996 (Austin and Whitehead, 1998). The North Shore at present is considered to be a “modern, densely populated urban area” (Verran, 2010: 283), with an excellent network of parks and reserves spread across the area and provide a variety of recreation options for residents (Hart, 2007).

The North Shore has a population of approximately 230,000 people with an estimated population by 2031 of 291,000 residents (Statistics New Zealand, 2006a). It is the 4th most populated political jurisdiction in New Zealand and has high density levels (Hart, 2007). Like Auckland as a whole, the North Shore has a culturally diverse population, with a high population of Asian residents, approximately 18% of the population, which is similar to the Auckland Region (19%) (Table 4).

There is a high level of economic growth which has occurred in the North Shore over the past 15 years. There are over 22,000 businesses located in this area and there was a growth rate of businesses of 29.3% from 1998 – 2002 which was the highest growth rate in New Zealand. The North Shore alone contributes to 6% of New Zealand’s GDP (Quality of Life, 2003).
4.4 Albany

One particular area which has experienced significant growth on the North shore is the Albany area. Albany is listed as a metropolitan centre in the Auckland Plan and is designated as an area which is likely to experience change (Auckland Council, 2012). It is also designated in the draft Unitary Plan as a future growth area within Auckland.

Historically, Albany was a rural, farming based area with a reputation of a “blink and you’ll miss it small township which no one took seriously” (Harris and Stevenson, 2002: 113). However, since the 1990s the Albany landscape has changed significantly, "the suburb has moved far from its quiet rural background, to become a popular place to live and work, with retail, education and leisure facilities that would be the envy of many other areas of Auckland" (Harris and Stevenson, 2002: 116). This change has been aided by the development of the Northern Motorway, allowing easy and fast access to this area of Auckland (Verran, 2010).

Albany now has a large retail shopping complex, with a Westfield Mall containing a range of retail services. Albany is home to a Massey University campus and North Harbour Stadium. There is an express bus route into the Auckland city centre from a park and ride facility which provides frequent buses and a dedicated bus lane along a significant portion of the motorway. Albany Village is a boutique part of Albany, with craft shops, cafes, health and beauty clinics and ethnic restaurants. Into the future Verran (2010) argues that Albany will take over Takapuna’s status as the retail and commercial hub of the North Shore. It is due to this rapid growth and the development of medium density housing typologies that Albany was chosen as the focus for this study.

4.5 Housing

Early in the development of Auckland, residential areas were located near to employment and key transportation networks (Chalmers and Hall, 1989). However, since WWII and throughout the 20th century growth has occurred in Auckland through the development of low-density sprawling suburbs, which has been facilitated through the private car and investment in roading, especially motorways (Chalmers and Hall, 1989).

Housing is a significant issue facing Auckland as a whole. High population growth is currently and will continue to place pressure on the Auckland housing market. The Auckland Plan predicts that there will be an additional 400,000 new dwellings required in the Auckland area by 2040, which equates to an extra 13,000 new homes to be built each year (Auckland Council,
Yet, only 5,000 consents for new homes are currently being issued per year. This issue creates increasing concern for future housing affordability, a key issue for the future development of Auckland.

Table 5 shows the average housing prices in New Zealand, Auckland, North Shore and North Harbour (the North Harbour area includes Albany). This table shows average housing prices continually increasing since 2009, with average prices in Auckland consistently higher than New Zealand as a whole. Auckland's average house price since 2009 increased by 29.7%, which is much higher when compared with New Zealand which only increased 17.4% (Quotable Value, 2013). Rent prices in Auckland are also high, with the average rent of a 3 bedroom house in Albany at $498 compared with $364 for New Zealand as a whole (Ministry of Business, Innovation and Employment, 2013a).

Table 5. Average housing prices in New Zealand and Auckland July 2009 – July 2013.
(Source: Quotable Value, 2013)

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>Percent Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Zealand</td>
<td>$379,283</td>
<td>$396,555</td>
<td>$396,303</td>
<td>$412,033</td>
<td>$445,247</td>
<td>17.4%</td>
</tr>
<tr>
<td>Auckland</td>
<td>$497,111</td>
<td>$531,015</td>
<td>$540,482</td>
<td>$571,995</td>
<td>$644,973</td>
<td>29.7%</td>
</tr>
<tr>
<td>North Shore City</td>
<td>$582,763</td>
<td>$618,118</td>
<td>$632,355</td>
<td>$670,306</td>
<td>$760,903</td>
<td>30.6%</td>
</tr>
<tr>
<td>North Harbour</td>
<td>$573,371</td>
<td>$601,766</td>
<td>$611,442</td>
<td>$652,283</td>
<td>$734,565</td>
<td>28.1%</td>
</tr>
</tbody>
</table>

Auckland’s population is incredibly diverse and therefore requires a range of different housing types, based on age, ethnicity and household structure (Lindsey and Jacob, 2001). There is a need for both larger and smaller homes. Larger homes are required for adults flatting together, Maori and Pacific people who have large families and Asians who tend to live in larger houses (Lindsey and Jacob, 2001). Smaller homes are required for couples without children, single person households and an aging population (Centre for Housing Research, 2010).

More intense development in the form of townhouses, terraces and apartments is now common place in Auckland (Austin and Whitehead, 1998). However, some examples of medium density housing have been of poor quality and the perception of higher density housing has, therefore,
been negatively affected (Auckland Council, 2012). Nevertheless, it is predicted that the overall proportion of stand-alone houses will decrease into the future, with 60 percent of all new dwellings predicted to be attached (Auckland Council, 2012).

As the North Shore has developed recently, the resulting urban form consists of housing which is denser than many traditional areas of Auckland (Hart, 2007). Housing development in Albany is varied in style and contains a large number of terraced housing in areas such as The Avenue and Oteha Valley Road (Harris and Stevenson, 2002). When this type of housing first appeared in Albany there was significant criticism from outsiders who argued that these housing developments would turn into future ghettos, nevertheless, residents who lived in the developments argued in favour of them, based on the community spirit and friendliness they created (Harris and Stevenson, 2002). Terraced housing and other forms of attached and semi-attached housing, nevertheless, have become increasingly popular throughout Albany, which is now home to a diverse range of medium density housing types.

4.6 Case Study Locations

In order to gain an in depth look at the issues occurring four case study locations were chosen; Point Ridge, The Avenue, Pannill Place and Fields Parade. Point Ridge and The Avenue are to the west of Albany centre and Pannill Place and Fields Parade to the east (Figure 3 and 4).
The key statistics for the case study locations are found in Table 6. Point Ridge and The Avenue are both located in the Albany census area, which had an estimated population of 3,000 residents in 2010, with a population projection of 12,500 in 2031. This is an increase of 9,500 residents in 11 years, which is a phenomenally high growth rate. In comparison, Pannill Place and Fields Parade case study locations are in the Northcross census area, with an estimated population of 3,700 residents in 2010 and a population predicted to increase to 5,410 residents by 2031, which is an increase of only 1,700 residents. These differences may be due to the Northcross census area being a more established area, whereas, the Albany census area is a newly developing area.

The median age of residents is slightly higher in the Pannill Place/Fields Parade case study locations with an average of 33 years, compared with Point Ridge/The Avenue which have an average age of 30 years. All four case study locations are on average younger than the North Shore as a whole which has an average age of 35 years. Median incomes are similar between the four case study locations, with Pannill Place and Fields Parade slightly lower $26,000 than Point Ridge and The Avenue $29,200 and the North Shore average of $29,100.
Each of the case study locations are classified medium density. The densities of the case study locations are given in Table 7. These statistics show The Avenue as the densest location, with an average density per site of 175m² (excluding communal areas). The Avenue is followed by Pannill Place, which has an average density of 184m² per site and then Point Ridge 226m² (excluding communal areas). The least densely populated area is Fields Parade which has an average density of 250m² per unit. It is important to note that both The Avenue and Point Ridge have communal areas which residents have access to which decreases the overall density of the housing development. If these communal areas are taken into account, then these two locations are the least dense.

Table 6. Statistics for the case study locations.  
(Source: Statistics New Zealand, 2006a)

<table>
<thead>
<tr>
<th>Case study location</th>
<th>Census area</th>
<th>Estimated population 2010</th>
<th>Population projection 2031</th>
<th>Median Age</th>
<th>Median personal income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Point Ridge/The Avenue</td>
<td>Albany</td>
<td>3,000</td>
<td>12,500</td>
<td>30</td>
<td>$29,200</td>
</tr>
<tr>
<td>Pannill Place/Fields Parade</td>
<td>Northcross</td>
<td>3,700</td>
<td>5,410</td>
<td>33</td>
<td>$26,000</td>
</tr>
<tr>
<td>North Shore Average</td>
<td>North Shore</td>
<td>230,000</td>
<td>291,000</td>
<td>35</td>
<td>$29,100</td>
</tr>
</tbody>
</table>

Table 7. Approximate density of the case study locations.  
(Source: Auckland Council, 2013a)

<table>
<thead>
<tr>
<th>Case study location</th>
<th>Density excluding communal areas (m²)</th>
<th>Density including communal area (m²)</th>
<th>Size of communal area (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Point Ridge</td>
<td>226m²</td>
<td>320m²</td>
<td>2,400m²</td>
</tr>
<tr>
<td>The Avenue</td>
<td>175m²</td>
<td>350m²</td>
<td>2,800m²</td>
</tr>
<tr>
<td>Fields Parade</td>
<td>250m²</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Pannill Place</td>
<td>184m²</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>
Point Ridge

Point Ridge is a gated community which is home to over 100 townhouses and apartments which were constructed in three stages, with stage three of the development currently under construction. Not all residents of the development were surveyed due to the size of the development; the residents who were surveyed are shown inside the red outline in Figure 5.

Figure 5. Aerial view of Point Ridge.
Outlined in red are the dwellings which were delivered the postal questionnaire.
(Source: Google Maps, 2013)

Point Ridge has an average density of 320m² per dwelling; however this measurement includes communal areas and roads. When measuring the density of the houses alone Point Ridge has an average density of 226m² per section. The communal area is approximately 2,400m² (Auckland Council, 2013a). Townhouses are two to three storeys tall and are connected in rows of approximately four houses, whilst the apartments are two to four stories tall. The development is built in an Italian style, with masonry construction and a colour pallet of earthy yellows and reds (Figure 6). Residents at Point Ridge who live in the townhouses have access to a private outdoor space, while residents in the apartments have access to a small balcony. All residents have access to communal facilities, including; swimming pool, spa, grassed area, gym, patio and entertaining area (Figure 6).
Point Ridge is close to a number of reserves, most of which are comprised of bush and have walking tracks. These reserves include Gills Reserve, Scenic Reserve and Albany Scenic Reserve. Kell Park and Hooten Park are also near Point Ridge, however, not within walking distance. Point Ridge is not well serviced by bus or public transport, nevertheless is located within a short drive to shops in the Albany Village, North Harbour Stadium, Albany Shopping Centre, Massey University and the park and ride services in Albany.

The Avenue

The Avenue is a medium density housing development of approximately 50 dwellings. Houses are terraced in row of 4 - 8 houses and are two stories tall. Houses are a weatherboard look construction, with a neutral colour scheme (Figure 7). All of the dwellings in this case study location were delivered a postal questionnaire.
Access to the properties is via a private road, although there are no gates to restrict public access. The Avenue provides residents with communal facilities including; grassed area, swimming pool and tennis court. The houses form a rectangle shape around the communal facilities which are located in the centre of the development (Figure 8). The Avenue has an approximate density of 350m², including communal areas, and only 175m² once communal areas are not taken into account. The communal area is approximately 2,800m².

The Avenue is close to outdoor spaces such as Kell Park, Gills Reserve and Lucas Creek. It is also within a short distance of Albany Village, North Shore Stadium and Massey University. There is a regular bus service which runs past this location.
Fields Parade

Fields Parade is the case study location which most closely resembles a traditional suburban low density housing development. Houses are either detached or semi-detached and have access to a private outdoor space. There are no communal spaces for residents in this case study location. Houses are predominantly two stories tall and follow a neutral colour scheme of browns, yellows and blue highlights (Figure 9). They are constructed of a combination of a weatherboard look and plaster.

An aerial view of the case study location and houses where the postal questionnaire was delivered is shown in Figure 10. This case study location has an average density of 250m² per dwelling. Fields parade has a number of small local parks in the vicinity as well as larger areas
such as Oteha Valley School, which has sports fields, a playground and tennis courts, and Bay City Park. There is a regular bus service and easy access to the park and ride facilities.

Figure 9. An example of the housing type and colour scheme at Fields Parade case study location. (Source: Personal collection, 2013)

Figure 10. Aerial view of the Fields Parade case study location- outlined in red. (Source: Google Maps, 2013)
Pannill Place

Pannill Place is a case study location which is comprised of a number of terraced housing developments constructed in different styles by a range of developers. Houses which were delivered the postal questionnaire are shown in Figure 11. The case study location has an approximate density of 184m$^2$ per dwelling (Auckland Council, 2013a). Houses are usually two to three stories tall and are of neutral brown and yellow colour schemes (Figure 12). Residents have access to a private outdoor space, however, do not have access to any communal spaces.

![Aerial view of Pannill Place case study location.](Source: Google Maps, 2013)

A number of local parks are within walking distance as well as Bay City Park, Oteha Valley School and Pinehill School. Pannill Place is also close to City Impact Church, the motorway and Albany Mega Centre. There are frequent bus services in the area and residents also have easy access to the park and ride facilities.

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4.7 Conclusion

This chapter has given an overview into the context of the current research. Auckland and its housing issues were discussed, followed by an overview of the North Shore and Albany. Finally the specific case study locations were described. This chapter has shown that Auckland is a rapidly growing city which is highly desirable and liveable due to the wide range of commercial, residential, recreational and entertainment options. Albany, a future growth area of the rapidly developing North Shore has developed a large number and range of medium density housing developments. A selection of the range of medium density housing types was chosen as case study locations. It is these locations which will be explored in depth throughout this research.
5 POLICY ANALYSIS

5.1 Introduction

The plans and policies in a region are important because they guide the location, pace and scale of development in the area. This chapter discusses the plans and policies which have an impact on the medium density housing development and outdoor space in Albany. Due to the recent amalgamation of the Auckland Council both the policy which was developed under the North Shore City Council, as well as, the newly founded Auckland Council will be examined. All of the documents have similar key themes and this is representative of the fact that the RMA requires consistency with higher order documents (Table 8). The plans discussed include the Resource Management Act 1991, Local Government Act 2002, Auckland Regional Growth Strategy 1999, Auckland Council Regional Policy Statement 1999, North Shore District Plan 2002, Upper Harbour Local Board Plan 2011, Auckland Plan 2012, draft Auckland Unitary Plan 2013.

5.2 Housing Development

Housing development in New Zealand is predominantly undertaken by private developers, rather than the state. In order to influence and control this housing development policies are implemented. Policy is important in all stages of housing development and is largely managed through the Resource Management Act (1991), Local Government Act (2002) and the Building Act (2004).

Resource Management Act 1991

The Resource Management Act (RMA) provides the framework from which district and city plans are developed with the main purpose of ‘sustainable management’ (Figure 13). It is the rules contained in the plans which have a significant influence on housing development. Commonly plans use the method of zoning to identify areas where local governments consider particular forms of housing development are most suitable and the rules attached to the zones reflect this desire.

Rules can control a large number of factors including, but not limited to; height, density, outdoor space provision, set back and lot coverage. These rules guide the type of housing development in any particular area. Subdivision of land is also governed by rules in district or city plans. The
rules may restrict subdivision itself, lot sizes and other aspects of infrastructure and service provision. If a proposal does not meet the requirements of the plans developers must gain resource consent, which will assess the application against the objectives of the plan and the purpose of the RMA ‘sustainable management’. For this research these rules are located in the North Shore District Plan and the draft Auckland Unitary Plan.

However, the effectiveness of providing for the social and economic well-being of communities is stifled in the RMA through the use of the term ‘sustainable management’, compared with ‘sustainable development’. Unlike sustainable development which encompasses environmental, social and economic aspects of development, sustainable management has a much narrower focus on ‘natural and physical resources’ (Freeman, 2007). The RMA does not explicitly consider the urban environment and provides no guide regarding urban growth (Lilley, 2006). This lack of focus on urban environments and urban design reduces the potential effectiveness of the RMA as a tool which is able to guide high quality housing development.

Figure 13. Environmental policy framework.
(Source: Ministry for the Environment, 2013)
Local Government Act 2002

The Local Government Act 2002 (LGA) is influential for housing development as it provides the rules and responsibilities of local government. The LGA requires the implementation of a Long Term Plan. Long term plans are strategic planning documents which describe desired community outcomes and visions for an area over a ten year period. The LGA is connected with the RMA as the objectives contained in the LGA may be implemented through RMA documents, such as district, city or regional plans (Quality Planning, 2012). Long term plans may include goals or visions for housing development and outdoor space. These goals may be implemented through RMA policy documents.

Unlike the RMA, the LGA encompasses a much broader role of ‘sustainable development’, which incorporates social, environmental, cultural and economic issues, with regard to public service provision, “this allows a balanced approach to be undertaken on all decisions made by local authorities” (Quality Planning, 2012: 2). It is under the guidance of the RMA and LGA that a number of policy documents are created which strongly influence housing development and outdoor space provision in Albany, Auckland.

Building Act 2004

The Building Act (2004) is also important in the housing development process. A building consent is required for construction of new dwellings and major alterations to existing dwellings and must be gained before construction begins. Consent is granted if the building plans meet the terms of the Building Code. The Building Code sets the minimum standards buildings must comply with and includes a range of assessment matters, for example, how much natural light there must be in a bedroom (Ministry of Business, Innovation and Employment, 2013b). Although the Building Act (2004) is important for housing development, it will not be specifically discussed as its regulations are universal and not likely to affect the diversity of housing provision for this research.

5.4 Policy Documents

There are a number of policy documents which have shaped the development of medium density housing in Auckland and specifically Albany. A brief overview of these documents which provide background to medium density housing development in Albany will now be presented. The connections between these documents are shown below in Figure 14.
Figure 14. Relationship between key policy documents.
A key document which has been helping to guide and shape Auckland in the past 10 years is the Auckland Regional Growth Strategy 1999, which was implemented by the Regional Growth Forum. It provides the vision for managing future growth in Auckland. The Auckland Regional Growth Strategy was implemented under the jurisdiction of the Local Government Act 1974, however, its aims and objectives were to be achieved through the RMA, by inclusion of key ideas into the rulebook of regional, city and district plans. Due to the implementation of the Local Government (Auckland Council) Act 2009, and consequent amalgamation of the Auckland Council, this strategy has since been overridden by the Auckland Plan, a 30 year spatial plan, and is no longer operative. Nevertheless, it is still an important document as it set the vision of Auckland under which many medium density housing developments were constructed and many of the key themes and ideals in the Auckland Regional Growth Strategy have been incorporated into the Auckland Plan.

The Auckland Council Regional Policy Statement 1999 was implemented under the RMA and has the aim to “maintain a quality environment for the Auckland Region” while maintaining and enhancing “opportunities for the region’s future growth” in an integrated, consistent and coordinated manner (Auckland Regional Council, 1999: 5). It provides an “overview of the resource management issues of the region” and provides the policies which the lower level plans must be consistent with (RMA, 1991: 162). It will be overridden once the draft Auckland Unitary Plan is implemented.

The North Shore District Plan 2002, now the North Shore Section of the Auckland Council Plan, is the policy document which specifies how the Council seeks to achieve the sustainable and integrated management of resources within the District. The North Shore District Plan was prepared as specified by the RMA and became partly operative in 2002 and fully operative in 2009. The NSDP is important because it is the legislation under which the case study locations discussed in this research have been developed. Like the Regional Policy Statement, the North Shore District Plan will be overridden by the draft Unitary Plan once it is implemented.

Key central government policy changes implemented 1 November 2010 significantly altered planning in the region. The seven city and district councils, as well as, the Auckland Regional Council were amalgamated to form a new Unitary Authority, the Auckland Council. These changes were facilitated through the Local Government (Tamaki Makaurau Reorganisation) Act 2009, the Local Government (Auckland Council) Act 2009 and the Local Government (Auckland Transitional Provisions) Act 2010.
The Auckland Plan 2012 is a spatial plan which sets the long term strategic vision for the development of Auckland into 2040. It was created and adopted in 2012 as required by the Local Government (Auckland Council Act) 2009. It aims to plan for growth in a more integrated and co-ordinated manner than was previously possible. The Auckland Plan has the overriding vision of Auckland being the world’s most liveable city, a place where people enjoy a high quality of life and want to live.

The draft Auckland Unitary Plan 2013 has been created under the RMA to implement the vision of the Auckland Plan. It will be the ‘rulebook’ which determines how Auckland will develop into the future. It will replace the former regional, district and city plans and seeks to achieve a more integrated, consistent and co-ordinated approach to the management of Auckland’s resources. It is important to specify that the Unitary Plan is in draft format and is currently under public consultation. Once this consultation has taken place it is likely that the Plan will be altered. Despite this it provides a good guide to assess how development may potentially be accommodated into the future.

The Upper Harbour Local Board Plan 2011 is the local level plan which sets the vision for the Upper Harbour area (including Albany). The Plan seeks to provide a good lifestyle for residents where they have access to high quality recreation facilities, the environment is protected and businesses are able to thrive. The Upper Harbour Local Board Plan provides the local level vision and priorities for the area.

These documents contain a wide range of policies and strategies for all types of environmental issues. However, as this research focuses on medium density housing and outdoor space, it is these issues which will be discussed in relation to the policy documents. Table 8 compares these policy documents across five key criteria; population growth, housing diversity, intensification, urban design and green space. These criteria were chosen as they are relevant to the research topic of medium density housing in Albany.

**Population Growth**

All the policy documents address the issue of population growth. As early as 1999 the Auckland Regional Growth Strategy recognised that Auckland was experiencing high population growth which was an issue that needs to be managed. The Auckland Council Regional Policy Statement also recognises that population growth is likely to cause high housing demand. The Auckland Council Regional Policy Statement argues there is a need to “accommodate new development
while protecting the social and natural values which make Auckland an interesting, efficient and diverse Region in which to live” (Auckland Regional Council, 1999: 7).

These issues are mirrored 12 years later in the Auckland Plan 2012 which recognises a need to construct 13,000 new homes per year to cope with the housing requirements of its rapidly increasing population. The North Shore District Plan also recognised population growth as a key issue facing the area and the Upper Harbour Local Board Plan states that there will be 40,000 new residents in the Upper Harbour area in the next 20 years. The draft Unitary Plan also sees population growth as a key issue which will put increasing pressure on resources such as housing, employment, business, infrastructure and services. The issues of high population growth has placed pressure on resources and has been the main issue from which policy has developed regarding housing diversity, intensification, urban design and green space.

**Housing Diversity**

The need to ensure housing diversity is maintained and created to meet the needs of an incredibly diverse population is a key theme which spans all five policy documents. The Auckland Plan specifically identifies a desire for a wider range of housing types and choices for residents with a range of densities and styles and is a key vision for the future of housing development in the region. Whilst, the North Shore District Plan states there is market demand for diversity, housing diversity needs to be affordable and suit the requirements of an ageing population. The Auckland Council Regional Policy Statement also suggests that it would be a future challenge to provide the diversity of housing required by the population. Medium density housing is a form which is able to provide this housing diversity. Unlike the homogenous low density suburban development of the past, medium density housing is rapidly developing in a range forms which can provide opportunities for a much wider range of residents.

**Intensification**

Intensification, as a strategy to cope with high population growth is a key theme which has developed and become more important throughout the evolution of policy documents in Auckland. This focus has developed in conjunction with international responses to the negative consequences of urban sprawl and traditional forms of suburban development. The Auckland Regional Growth Strategy 1999 was the beginning of urban intensification in Auckland, aiming to create “quality, compact urban environments” (Auckland Regional Council, 1999: 2). Previous to the implementation of this Strategy, growth in Auckland had been occurring through low
density sprawling development, creating a number of issues, such as reliance on private vehicles, congestion, long commuting distances and increased infrastructure requirements. The Auckland Regional Growth Strategy sought to contain the majority of growth within the existing metropolitan area, with 20 percent of the population living in higher density residential areas by 2050.

The vision of the Auckland Regional Growth Strategy is mirrored by the newly developed Auckland Plan which has overridden the Auckland Regional Growth Strategy. The Auckland Plan also seeks to create a 'quality, compact Auckland', increasing intensification of urban areas, with 70 percent of future growth contained within the current urban area. The Auckland Council Regional Policy Statement 1999 also recognises that intensification has been occurring within Auckland for a number of years through infill development of older suburbs. The North Shore District Plan and Upper Harbour Local Board Plan also seek to contain development within the current urban area, and the draft Unitary Plan plans for growth and intensification to occur based on the Compact City model. Although all documents advocate for increased intensification, it is the draft Auckland Unitary Plan which has received the most negative reception. This document sets out how intensification will be implemented through zoning, height restrictions and density provisions, rather than merely a strategic vision as is in the Auckland Plan. The potential for increased building heights in some areas has led to community concern of what intensification could mean for the form of their neighbourhood.

**Urban Design**

Urban design has been considered throughout all of the mentioned policy documents. It has, however, become a more prominent feature of the most recent policy documents. The Auckland Regional Growth Strategy in 1999 considered urban design to be important for the creation of high amenity living environments, but was not a strong theme throughout the document. The North Shore District Plan aimed to incorporate urban design as a key feature for achieving high quality housing development. However, it has had a limited influence on achieving quality housing development due to poor drafting of the document (Haarhoff, et al., 2012). This has decreased the effectiveness of this document and the ability to provide high quality, design-led developments (Haarhoff, et al., 2012).

The Auckland Plan not only acknowledges the importance of urban design, but places high quality urban design as a key priority area for Auckland to achieve. It demands high quality urban design from all new developments, which is to be achieved through a 'design-led' approach to development. The draft Unitary Plan also follows this urban design emphasis
through the inclusion of design based objectives, policies, rules and criteria which developments will be assessed against. The increase in importance of urban design has the potential to provide flexibility for medium density housing development, ensuring high quality suburban environments. This may lead to increased housing diversity which can provide opportunities for a wider range of residents.

**Public Green Space**

The importance of public green space to ensure resident well-being and provide for recreation is a feature throughout all of the policy documents. The policy documents all cite that high quality green spaces improve urban amenity. The Auckland Regional Growth Strategy states that there is a need for an increase in the diversity of open spaces provided and this is supported by the North Shore District Plan which recognises that public spaces should support a variety of needs. The Auckland Council Regional Policy Statement explains the importance of public green spaces for areas which are intensified and the North Shore District Plan argues that increased population growth results in the need for more outdoor spaces. The Upper Harbour Local Board Plan emphasises the importance of public outdoor spaces more than any other plan and places the provision of quality sport and recreation facilities as a key priority for the area. It also recognises the importance of ensuring all residents have easy access to green spaces. Overall, public green spaces are considered to be an important feature of urban environments, especially as levels of intensification increase.

**Table 8. Overview of key themes from the policy documents.**

<table>
<thead>
<tr>
<th>Regional Growth Forum Auckland Regional Growth Strategy 1999</th>
<th>Population growth</th>
<th>Housing diversity</th>
<th>Intensification</th>
<th>Urban Design</th>
<th>Importance of public green space (recreational)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategy to deal with population growth to 2050</td>
<td>Housing diversity a key issue discussed in the strategy</td>
<td>Promote quality, compact urban environments Majority of growth to occur inside the existing urban area</td>
<td>Urban design is important to create living environments with high amenity</td>
<td>Higher quality green spaces to improve urban amenity A greater diversity of open spaces is desired</td>
<td></td>
</tr>
</tbody>
</table>
| Auckland Council Regional Policy Statement 1999 | Population growth is increasing demand for housing | Challenge of providing a wider range of housing choices to accommodate a diverse population | By 2050, more than a quarter of the population could be living in higher density, multi-unit accommodation | Good urban form and building design is critical to ensuring that developments provide a high quality urban living experience | Provision of open space important for intensified areas  
Open space important for a quality urban environment |
|---|---|---|---|---|---|
| North Shore District Plan 2002 | The rate of population growth is a key issue facing the North Shore | Demand for housing diversity  
Aim to provide a wide variety of housing forms which suit the needs of an ageing population and are affordable | Higher density housing is an issue which needs to be managed  
Growth within existing urban area | Need to ensure a high standard of urban design to maintain amenity for residents  
Urban design code - to achieve a high quality built environment. | Increased growth requires increased green spaces  
Outdoor space is an important factor which affects residential amenity |
| Upper Harbour Local Board Plan 2011 | Population to double in the next 20 years  
40,000 new residents | Diverse population with different needs | Establish intensification in areas where infrastructure is able to cope | High quality design of communities and housing important | Provide high quality sporting and recreation facilities  
Ensure residents have easy access to green spaces |
| Auckland Plan 2012 | An extra 13000 new homes required each year to meet housing demand | Needs to be a range of housing choices to cater for different cultures, life stages and families of different sizes. | Quality, compact Auckland  
Increasing intensification of new and existing areas  
70% of future growth contained within the current urban area | Demand good design in all development  
High-quality design is a key priority for future growth  
Design led approach | Public recreational spaces will become more important as the population grows  
Public spaces should accommodate a variety of needs |
5.5 Private Outdoor Space

The North Shore District Plan and the draft Unitary Plan are the documents which set the rules for development in Albany. These documents specifically state the outdoor space rules for specified areas. As a key part of this research is focused on private outdoor space it is important the requirements of these plans are discussed and understood. Information for the four case study locations about private outdoor space requirements is given in Table 9. Note that Pannill Place and Fields Parade are listed together as they are in the same zone for both the North Shore District Plan and the draft Unitary Plan.

Table 9 shows that for the case study areas concerned the differences between the North Shore District Plan 2002 and the draft Unitary Plan 2013 are fairly minor. The wording of the sections has changed, with the draft Unitary Plan slightly clearer with the outdoor space rules. The minimum private outdoor space requirements have remained fairly similar, other than in the Point Ridge zone where outdoor space requirements have increased from either 40m$^2$ or 60m$^2$ (dependent on lot size) to 80m$^2$. All private outdoor spaces in the draft Unitary Plan across the zones in question must be able to contain a square measuring 4.5mX4.5m in order to ensure the private outdoor spaces provided are usable for residents. Balcony requirements across the four case study locations have decreased in the draft Unitary Plan from a minimum of 10m$^2$ to a minimum of 8m$^2$, however, the draft Unitary Plan requires a minimum depth of 2.4m to ensure the balcony is a usable space for residents.

These requirements show that some form of private outdoor space is considered to be important and must be provided. The usability of the space is also a concern, a circle or square of a certain size must be provided, in order to stop developments where the outdoor space provided is a thin strip around the dwelling. Interestingly, there are not many changes to the provision of outdoor space between the two policy documents; this could be reflective of the North Shore District Plan already promoting intensification of the areas concerned.

<table>
<thead>
<tr>
<th>Draft Unitary Plan 2013</th>
<th>High rate of population growth placing pressure on resources</th>
<th>Diversity of housing types is important for a diverse population</th>
<th>Growth based on the compact city model</th>
<th>Achieve quality developments through design-related objectives, policies, rules and criteria</th>
<th>Public outdoor space, a key factor in ensuring quality urban growth</th>
</tr>
</thead>
</table>
Table 9. Private outdoor space rules for the case study locations.
(Source: North Shore District Plan (2002) and draft Auckland Unitary Plan (2013)).

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Zone</td>
<td>Structure Plan Zone D – Standard Residential</td>
<td>Single house Zone</td>
<td>Residential Zone 5</td>
<td>Mixed housing Zone</td>
<td>Structure Plan Zone D – Standard Residential</td>
<td>Mixed housing Zone</td>
</tr>
<tr>
<td>Purpose of the zone</td>
<td>Residential development to occur in relation to environmental constraints.</td>
<td>Detached, low density development. Minimal multi-unit development</td>
<td>New Development – Un-subdivided area - one house per site should be maintained.</td>
<td>Range of housing types provided for</td>
<td>Residential development to occur in relation to environmental constraints</td>
<td>Range of housing types provided for</td>
</tr>
<tr>
<td>Minimum backyard size</td>
<td>Lots of 499m² or less</td>
<td>Size: 80m² Dimensions: Not less than 4m Balcony: 10m² Where living room is not on ground level.</td>
<td>Lots of 500m² or more</td>
<td>Size: 60m² Must contain a circle with a diameter of 6m Balcony 10m²</td>
<td>Lots of 499m² or less</td>
<td>Size: 40m² Dimensions: Not less than 4m Balcony: 10m² Where living area is not on ground level.</td>
</tr>
<tr>
<td></td>
<td>Lots of 500m² or more</td>
<td>Size: 60m² Must contain a circle with a diameter of 6m Balcony 10m²</td>
<td></td>
<td></td>
<td>Lots of 500m² or more</td>
<td>Size: 60m² Must contain a circle with a diameter of 6m Balcony 10m²</td>
</tr>
</tbody>
</table>

5.6 Communal Outdoor Space

The provision for communal spaces is quite different between the North Shore District Plan and the draft Unitary Plan. The North Shore District Plan provides specific rules for the size of communal spaces (Table 10), whereas the draft Auckland Unitary Plan provides design guidelines rather than specific rules. This is reflective of the increased emphasis in the Auckland Plan on urban design-led outcomes. For the case study areas of Point Ridge, Fields Parade and Pannill Place, the North Shore District Plan states that communal space of at least 100m² per unit must be provided in conjunction with a private outdoor space or balcony for each dwelling of at least 15m². The rules in the North Shore District Plan for The Avenue case study location are slightly different. They require 40m² of communal space for each unit (minus the area provided for private outdoor space). Private outdoor spaces must be at least 15m² and balconies 10m².
This means the provision for communal space in The Avenue case study location is much smaller.

Interestingly, under the North Shore District Plan if developers choose to provide a communal space for residents, the size of private outdoor space which is required to be provided is able to decrease. This is not the case in the draft Unitary Plan, where the rules for private outdoor space are set, whether communal spaces are provided or not. This approach does not encourage the development of communal areas, as developers have to provide the same size private outdoor space regardless.

Table 10. Provision for communal space in the North Shore District Plan.
(Source: North Shore District Plan, 2002)

<table>
<thead>
<tr>
<th>Point Ridge/Fields Parade/Pannill Place</th>
<th>The Avenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Communal space of at least 100m² per unit</td>
<td>• Communal space of 40m² for each residential unit (minus the area provided for private outdoor space)</td>
</tr>
<tr>
<td>• Private outdoor area or balcony of at least 15m².</td>
<td>• Private outdoor space of 15m² or balcony of 10m²</td>
</tr>
</tbody>
</table>

The guidelines for the development of communal areas in the draft Unitary Plan are listed below:

Any communal open spaces should be designed to;

- Provide attractive, functional and high quality outdoor environment;
- Be conveniently accessible to all residents;
- Maximise winter sunlight access;
- Be overlooked by the principal living rooms and balconies of dwellings to enhance safety;
- Locate within the site as the focus of the development;
- Be of a size which is adequate for the number of people the development is to accommodate.

The draft Unitary Plan provisions regarding communal space highlight the emphasis placed on urban design in the newest policy documents in Auckland. However, as there are no set rules for specific sizes it will be up to the implementation of specific design guidelines and the
subjectivity of the assessor to determine what communal spaces are deemed adequate and representative of good quality urban design.

5.7 Conclusion

This chapter has given an insight into the policy context for this research. It has shown the consistent theme and aim for intensification and housing diversity throughout the policy documents in the Auckland. It is these policy documents which have guided and will guide the development of medium density in Auckland. As housing is important for resident well-being it is important as housing types change and more medium density housing occurs, residents are satisfied with these changes.
6 RESULTS

6.1 Introduction

This chapter describes the data and findings gathered for this research. The data is presented by each research question and integrates data which was gathered through a postal questionnaire delivered to residents of Point Ridge, The Avenue, Fields Parade and Pannill Place; interviews with residents, real estate agents, developers and representatives from the Parks and Recreation department of the Auckland Council; and observations from the best practice checklist.

First, the demographics of the postal survey are described, including ethnicities, age and household composition. Second, the demand for medium density housing is explored in relation to key themes of affordability, schooling and ethnic factors. Third, the importance of outdoor space is discussed in relation to private, communal and public outdoor spaces. The themes of compensation and compromise of private outdoor space are also examined in this section. Fourth, developer and Auckland Council perceptions of the importance of outdoor space are presented. Fifth, the use of outdoor space by residents is described for private, communal and public outdoor space. Sixth, resident satisfaction with their outdoor space is explored for each outdoor space type. Lastly, the results of the best practice checklist developed for this research are presented for each case study location.

6.2 Questionnaire Demographics

It is important to acknowledge the demographics and characteristics of the respondents as this can have an effect on their views, beliefs, values and goals. The postal questionnaire (see Appendix C) was completed by a total of 38 residents across the four case study locations. The responses received were; Point Ridge (14), Pannill Place (12), The Avenue (6) and Fields Parade (6). This section will give an overview of the characteristics of the residents who were surveyed.

The majority of respondents, 74% were female and owner-occupiers 68%. However these statistics did vary among the case study locations (see Table 11). Point Ridge had the highest rate of owner-occupiers at 86%, with The Avenue with the smallest rate of only 14% owner-occupiers. The Avenue was the only case study location to have more responses by renters than owners. Pannill Place had an average of 75% owner-occupiers and Fields Parade 67%. The average length of time at their residence varied significantly across the four case study locations.
from 3 weeks to 9 years. Pannill Place had an average length of time at the residence (4 years), Point Ridge (3 years), The Avenue (2 years) and Fields Parade (1 year).

Table 11. Statistics from each case study location.
(Source: Postal questionnaire)

<table>
<thead>
<tr>
<th></th>
<th>Point Ridge</th>
<th>The Avenue</th>
<th>Pannill Place</th>
<th>Fields Parade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of responses</td>
<td>14</td>
<td>12</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Owner occupiers</td>
<td>86%</td>
<td>14%</td>
<td>75%</td>
<td>67%</td>
</tr>
<tr>
<td>Average length of time at residence</td>
<td>3 years</td>
<td>2 years</td>
<td>4 years</td>
<td>1 year</td>
</tr>
</tbody>
</table>

Ethnicity

In the questionnaire participants were asked to state their ethnicity. Figure 15 shows the largest group of respondents identified themselves as New Zealand European 45%, followed by New Zealander 18% and European 18%. Asian represented 11% of respondents, Maori 5% and Australian 3%. When compared with the ethnic breakdown of the Auckland region these results are similar, there is a dominance of NZ European and the proportion of Asian respondents is similar to the Auckland average of 19%. However, there was a much smaller percentage of Maori and Pacific Peoples who constitute 11% and 19% of the Auckland average.

Figure 15. Ethnic breakdown of questionnaire participants.
(Source: Postal questionnaire)

![Ethnicities of questionnaire participants - average across case study locations](image)
Age

The data regarding the age of participants is shown in Figure 16. This Figure shows the main age group of questionnaire participants is 41-50 years old (32%), followed by 51-60 (26%) and 31-40 (24%). This puts a very large majority of participants between the ages of 30-60 years old.

![Age Distribution Graph](image)

*Figure 16. Age breakdown of the questionnaire participants.*
*Source: Postal questionnaire*

Household Composition

There are two main household compositions present in the case study locations; families (50%) and professionals (34%) (Figure 17). These two categories constitute the vast majority of family types, with students and retirees only making up 3% and 13% of respondents respectively. The category professionals includes residents who do not have children, professionals who do have children are classified as a family.

There are interesting differences when comparing the household composition between the case study locations (Figure 18). Pannill Place, The Avenue and Fields Parade all have the majority of respondents as families (67%, 83% and 67%). Point Ridge has a small portion of respondents who are families, 13%, however, it has a higher number of professionals and retirees than the other case study locations and is the only location which had responses from retirees. Fields
Parade is the only case study location with responses from students, however, this is still a small portion (17%).

Figure 17. Household composition for the resident questionnaire.
(Source: Postal questionnaire)

Figure 18. Household composition of resident questionnaire by case study location.
(Source: Postal questionnaire)
6.3 Demand for Medium Density Housing

As housing forms in Auckland are changing and an increase in the supply of medium density housing is occurring, it is important to understand the demand for this type of housing. It is also important to understand why demand is occurring and what factors are influencing it. This section presents the research results related to trends regarding demand for medium density housing and the factors which are most strongly influencing it. The key factors include: affordability, schooling and ethnicity.

Demand

This research has found that, overall, the demand for medium density housing in Albany is increasing, "there is a lot more development in this area which is that type of housing [medium density]... it [demand] is coming on more and more" (Key Informant 6, real estate agent). Key Informant 13, a local property developer, argues that there has been an increase in the development of medium density housing in the last 10 years and that there is more acceptance of medium density housing in today's market, "there is a lot more acceptance of living in a terraced house and an apartment than where there was 15-20 years ago".

In addition to this Key Informant 8 (property manager) suggests that "there has been quite a number of really nice either small apartment complexes that have got swimming pools and nice grounds and the demand for them has stayed high and is still high and it will increase. It is the same for townhouses". The increase in demand is occurring for a number of reasons, most predominantly due to affordability of higher density housing, changes in ethnicity and schooling.

Affordability

Affordability is a key factor influencing the demand for medium density housing in Albany. This factor is acknowledged both by the residents themselves and the local real estate agents. Given the current housing market, with high land and housing prices, many residents are buying based on what they are able to afford, "what their pockets allow, rather than what they actually want" (Key Informant 6, real estate agent).

When asked why they chose to buy their house Key Informant 4, a resident from the Fields Parade case study location replies "it was affordable... what we were hoping for was not affordable, even in an area which we thought were affordable". A local real estate agent
supports this comment, stating “a lot of people would still like a house, freestanding on their own section. However, I think the cost of that is hitting people in their pocket and they realise that if they can get something cheaper, but still has the space they want they might go for that”; referring to the reality that a townhouse or other medium density housing options are cheaper than low density housing (Key Informant 6).

This is supported by Key Informant 13, a local property developer, who states the increasing acceptance and demand of medium density housing is “price driven”, going on to say “people like a certain suburb and if they want to live in a suburb they need to buy the type of house, the typology that suits their budget and that’s where something like an apartment or a terraced house could potentially provide a bit more range for people”. Cost was also a key factor cited in the questionnaires when residents were asked what factors they considered when deciding where to live.

Terraced Housing

It is important to recognise that a lot of the discussion regarding affordability of medium density housing by participants of this research concerns the issue of attached housing; ”There is the demand to buy them [attached houses] because they are more affordable” (Key Informant 5, real estate agent). This is supported by Key Informant 7, a local property developer who stated “they [terraced houses] are an affordable form of housing”. “People do prefer their own land... they prefer not to be attached... but it comes down to price”, attached housing is cheaper than a similar house which is detached (Key Informant 5, real estate agent). This is due to the fact that “a lot of people do not like attached houses... they want separation, even if it’s by centimetres, it doesn’t matter as long as there is separation” (Key Informant 6, real estate agent). Key Informant 5 (real estate agent) agrees that “people would rather go separate”. This argument is supported by a resident from Fields Parade who states “my only dislike [about this house] is the fact it is attached to the house next door” (Key Informant 4). Opposed to this view however, Key Informant 1, a resident from Pannill Place asserts that being attached is not an issue for them and they are happy living in an attached home. Key Informants 2 and 3, residents of Point Ridge, also have no issues living in an attached home, “I knew what it was like living in a place like this, so I didn't have any concerns” (Key Informant 3). What Key Informant 2 deemed was more important that being attached was ensuring they had access to private outdoor space, “what was more important was to have a private garden, so even though it is attached housing, everyone has their own back and front garden”. Looking into the future Key
Informant 6 (real estate agent) states “I think people will become more accepting of them [attached houses]” and that there “has to be a range of properties” to suit the diversity of needs.

**Schooling**

Another important factor mentioned for the demand of medium density housing is schooling. Key Informant 5 (real estate agent) states that “schooling is a big part [of the demand for medium density housing] too”. Key Informant 6 and 7 (real estate agent, developer) both agree that schooling is a key factor many families consider when they are choosing where to live and that residents may sacrifice living in a stand-alone home to ensure they are in a particular school zone. Key Informant 1, a resident from Pannill Place agrees that being in a particular school zone was the key reason for choosing where to live, “we had to be close to the school”. They also stated that in order to be in the school zone they wanted to be, the attached house they are living in was the most affordable option. Questionnaire participants also cited the importance of being in a desired school zone as a key factor in deciding where to live.

**Ethnicity**

Ethnicity was also a key theme when considering the demand for medium density housing forms. Several key informants identified that European and Asian residents were more likely, and more willing to live in medium density housing developments than New Zealanders. When asked whether there is increasing demand for medium density housing on the North Shore Key Informant 8, a local real estate agent replies "yes, and that would be partly linked to immigrants coming from countries such as Korea and China, who like the Kiwi lifestyle, but they are used to living in apartments. So the townhouses suit them, because they get what they are familiar with but the kiwi style of it".

Key Informant 6 (real estate agent) agreed that there were particular ethnicities which are more likely to live in medium density housing developments, “in the townhouses, we have Asians, South Africans, a lot of people from Europe who are coming over, who have already experienced terraced or townhouse planning. Kiwis are still a little bit less prone to moving into those [townhouses]”. This is a view supported by Key Informant 5 (real estate agent) who states “the Asian community do not care about land area as much... from my experience they are generally not too concerned about outdoor living... the kiwis want the outdoor barbeque area, they are wanting land".
Summary

Overall, the demand for medium density housing is increasing. The main reason for this trend is that medium density housing is more affordable than a traditional low density option. As housing prices continue to increase in Auckland, medium density houses are considered to be an affordable substitute. A further factor influencing the increase in demand for medium density housing is schooling. Many residents purchase or rent a medium density dwelling because they wish to be in a particular school zone and cannot afford to live in the low density equivalent. The final factor is ethnicity. Real estate agents argue that there is increasing demand from Asian or European immigrants who generally do not desire a low density home or large private outdoor space.

6.4 The Importance of Outdoor Space

The backyard and the quarter-acre dream have traditionally been of upmost importance to many New Zealanders. However, lifestyles are changing and many New Zealanders are getting busier and busier and may have different housing needs than in the past. It is, therefore, important to examine whether private, as well as, other outdoor spaces are still important housing features for residents. First, this section presents results regarding the importance of outdoor space generally, followed by the importance of private, communal and public outdoor spaces individually.

Importance of Outdoor Space

Overall this research has shown that outdoor space is an important neighbourhood and housing feature for many, but not all residents. The postal questionnaire asked residents to rate on a scale of 1 - 10 how important outdoor space was when they were deciding where to live (Figure 19).

Figure 19 shows that overall, outdoor space was considered to be important when residents were deciding where to live. The most common response with almost 25% of responses, rated the importance of outdoor space 7 out of 10, followed closely by 8 out of 10, 18% of respondents. Sixty-nine percent of respondents rated the importance of outdoor space as a 6 or greater. This shows that residents consider outdoor space as an important feature when deciding where to live.
Interestingly, when participants were asked to indicate what the key factors were when they were deciding where to live, outdoor space did not appear as important. Respondents had the choice between a number of options, for example; cost and location, as well as, outdoor spaces and were also able to specify other features they deemed to be important (see Appendix C). The percentage of residents who chose private, communal and public space as important housing features are shown in Figure 20.

Figure 20 shows that on average only 39% of respondents considered private outdoor space as a key factor when deciding where to live. It also shows that proximity to public space was not an important factor when residents were deciding where to live, with on average only 13% of participants citing it as important. It shows that none of the participants from The Avenue and Fields Parade considered proximity to public outdoor space as a key factor when they were deciding where to live. The reasons given for these preferences are discussed later in this chapter.
The most prominent aspect of this chart is that residents from Point Ridge considered all aspects of public space as more important than the other three case study locations. Over 50% of respondents from Point Ridge considered both private outdoor space and communal space as a key feature when they were deciding to live and almost 30% considered proximity to public outdoor space as a key feature. These figures are significantly higher than the other three case study locations.

It is interesting to compare the data solely for outdoor space types to the data for the question as whole, including all of the other features residents considered to be important. The average across the case study locations are shown in Figure 21 and the specific case study locations in Figure 22. The averages across the case study locations are shown in a separate chart for clarity.
Figure 21. What factors were the most important when they were deciding where to live. (Source: Postal questionnaire)

Figure 21 shows the averages across the four case study locations and illustrates that the greatest number of respondents, 58% specified location (being in a desirable suburb) as a key factor considered when deciding where to live. This is closely followed by the cost, which 55% of respondents specified as a key factor. The size of the house was considered by 47% of respondents as a key feature, while private outdoor space and the design of the building were considered important by 39%. Other key features include proximity to workplace 37%, proximity to shops and services 32%, communal facilities 26%, proximity to public transport 21% and schooling 18%.
The average for communal facilities is slightly misrepresented as two of the case study locations do not have access to communal facilities and, therefore, it can be assumed this was not a key factor in their decision. This does however bring down the average. If the importance of communal facilities is averaged across the two case study locations which have access to them (Point Ridge and The Avenue) then the average importance increases to 45%.

When analysing the data from the specific case study locations the results are varied. Being in a desirable suburb was important across most case study locations, although was the most important feature for residents at Point Ridge (71%) compared with Pannill Place (58%), The Avenue (50%) and Fields Parade (33%). Cost was the most commonly cited factor at Fields Parade 83%, followed by Pannill Place 75%, The Avenue 67%, with only 21% of residents from Point Ridge citing cost as a key factor when they were deciding where to live. Interestingly, Fields Parade which had the lowest importance for being in a desirable suburb had the highest importance for cost, and this role was reversed for Point Ridge, which had the least importance.
for cost across the case study location but the highest importance placed on being in a desirable suburb.

The size of the house was especially important for residents at The Avenue (67%) and was still important, with 50% of respondents from both Pannill Place and Fields Parade. Residents at Point Ridge were not as concerned with size when they were deciding where to live with only 36% of respondents stating it was a key factor. Conversely, the design of the building was the most important for residents of Point Ridge (57%) compared to the other case study locations (The Avenue 50%, Fields Parade 33% and Pannill Place 17%).

It is important to note that being in a particular school zone did feature, even though it was not given to participants as an option. Residents therefore had to particularly specify it was important and for that reason this feature might have been more prominent in the results if it was included in the list participants could choose from. The issue of being in a school zone might have also been a factor considered when residents specified that being in a desirable suburb was important.

These results show there are a number of factors residents weigh up when deciding where to live. Private outdoor space is the most important type of outdoor space, but is not considered to be as important to as many respondents as being located in a desirable suburb or the cost of a property.

**Importance of Private Outdoor Space**

The importance of private outdoor space was highlighted in the postal questionnaire when residents were asked to choose their ideal form of outdoor space out of three options;

1. Private outdoor space only
2. Communal space only
3. Both a private outdoor space and a communal space (a smaller private outdoor space and a communal space)

The results showed no respondents choosing option two (communal space only), all respondents chose either option one (private outdoor space only) or three (both private and communal outdoor space). These results from this question are shown in Figure 23 below.
Figure 23. What type of outdoor space would you rather have access to?  
(Source: Postal questionnaire)

This graph shows that overall an average of 63% of respondents would rather have a private outdoor space, than both private and communal outdoor spaces (note that private outdoor spaces for the second option were smaller than if residents chose only a private space). Residents from Pannill Place had the greatest desire for a private outdoor space only (83%) and Point Ridge was the only case study location which the majority of participants state they would rather have both a private and communal outdoor space (64%). These results show the strong desire for residents to have access to their own private outdoor space.

Participants were also asked why they chose this particular option. A key reason for people choosing private outdoor space (whether they wanted a communal space as well or not) was for privacy. Residents stated that they enjoy their privacy and like their own space so that they can relax in a safe environment. One respondent states “you feel more comfortable being in your own environment. You can make your own rules around the use of our own area”, another respondent agrees and states that a “private area allows you peace and quiet to enjoy the outdoors”.

The importance of private outdoor space is also supported throughout the key informant interviews. Key Informants 2 and 3, residents from Point Ridge state that private outdoor space was a key factor when they were deciding where to live. When asked how significantly outdoor space featured when they were deciding where to live, Key Informant 3 replied “the garden did,
the private part of it did, it was one of the things that I really liked about it”, Key Informant 2 also states that having a private garden was an essential part of their home, “I really enjoy the private space”. Both residents were happy with the size of their space.

Key Informant 4, a resident from Fields Parade, however, who had access to a private outdoor space of relatively the same size as Key Informant 2 and 3 mentioned above, was not happy at all with their space. They discuss their disappointment in the size of their backyard and how it was an important aspect when they were deciding where to live, however, a large private outdoor space was not affordable; “we are really disappointed, we would have really liked a garden”. When asked what their ideal private outdoor space would be Key Informant 4 replied “a really big garden”. Key Informant 1 by contrast, a resident from Pannill Place, did not consider private outdoor space to be an important housing feature. Private outdoor space did not feature at all when they were deciding where to live and they also suggested they would be happy with no outdoor space, “we are a busy couple with one child, outdoor space and a big garden never appealed, we wouldn’t have the time”.

Compensation of Private Outdoor Space

A further issue explored is whether private outdoor spaces could be compensated for by communal or public outdoor open space. Overall, results reveal that total compensation of private outdoor space is not possible, but compensation for a smaller private outdoor space is possible. Most residents still desire some form of private outdoor space, even if it is not as large as in the past. Key Informant 1, a resident from Pannill Place, already compensates their small private outdoor space with the use of public space “there is a big park around the corner for my daughter. Because there is that big park with all of the play equipment and that, she just goes down there, we don't need our own” (Figure 24).

Public outdoor space is also compensating for small private outdoor space for Key Informant 4 (resident Fields Parade). They state that the school nearby “makes a difference that it is almost our backyard, not during school hours, but we can go afterwards or in the evenings or... and there’s a jungle gym and space to run around. So I think the fact that we have the school there really makes up for the fact that we don’t have anything in the back garden”. Key Informant 5 (real estate agent) agrees that a smaller private outdoor space is often accepted by residents if a larger communal area is provided or there is a local park nearby.
Compromise for Desired Housing Features

Findings from the questionnaire establishes that there are a range of key features residents considered when deciding where to live, often with outdoor space not as the key priority. The key informant interviews also support this finding. Two residents interviewed, one from Pannill Place and the other from Fields Parade stated that they compromised on the amount of private outdoor space to be in a particular school zone, in a house they could afford and with the desired number of bedrooms (Key Informant 1 and 4). Key informant 1, from Pannill Place is happy with this compromise as they did not want a large private outdoor space, "we would trade that [private outdoor space] straight away" for a property which was more affordable. However, Key Informant 4, from Fields Parade was not happy that they had to sacrifice the size of their private outdoor space.

Key Informant 6, a local real estate agent, also agrees that residents would often compromise the size of their backyard in order to secure a property which is in a desired school zone. When
asked what key features residents are looking for when buying a home. Key Informant 6 (real estate agent) suggests that "people are looking at public transport and amenities close by when buying" rather than the size of their outdoor spaces. They also go on to state that "young families with children are looking at schools close by and schools usually have playgrounds which often are used as a public space". This Key Informant also agrees that residents will often compromise the size of their backyard in order to buy a property in a desired school zone. Key Informant 5 (real estate agent) is of the same opinion that the size of private outdoor space is not the key feature residents are concerned with when choosing a property. This Key Informant argues that the cost and number of bedrooms are the two key issues residents consider most when deciding where to live and they will trade a traditional stand-alone property with a larger private outdoor space for a property which is affordable and has the internal space they require.

These results link to those mentioned above when the demand for medium density housing was discussed and affordability emerged a key theme for an increasing demand in medium density housing. These results support the issue of affordability, as cost is considered to be a key factor residents consider as well as being in a desirable suburb. As Key Informant 6 (real estate agent) stated, in order for residents to afford a house in a desirable suburb they may have to choose a medium density option.

**Importance of Communal Outdoor Space**

The importance of communal spaces for some residents is shown through the postal questionnaire. When participants were asked why they chose a particular type of outdoor space form, they stated that a communal area provides a space where residents can socialise with neighbours, space for children to play and an opportunity to share facilities which a household could not afford on their own. A number of the comments regarding socialising are presented in Figure 25.
The questionnaire also provides insight into the reasons why many participants do not desire a communal space. Not having to interact with neighbours is a key reason why respondents did not want a communal area. One resident states “I don’t want to share an outdoor area with people I don’t know because of safety, being comfortable and being able to relax without chatting to neighbours”, this statement was supported by another participant stating “I’d rather do my own thing in my own time without having to interact with other people” and a further participant arguing “what if your neighbours are wallies that you don’t want to ‘commune’ with?".

The results regarding communal spaces from interview participants are also interesting. Key Informants 2 and 3 who live at Point Ridge consider the communal space which is provided as important. What was really fascinating was that neither of these participants used the space often, however, they value the space for the environment and feel it creates. Key Informant 2 argues “the communal space at Point Ridge is beautiful and well maintained...I like coming home to it because I think it is very nicely landscaped and I enjoy it.. I am very glad that it’s there”. Key Informant 3 states that although they do not use the communal space all of the time, the outlook and environment it provides are an essential part of their living environment, stating “it’s pleasant to have it there”. Key informant 3 also believes “the great thing about having the communal space is that you don’t have to attend it, it’s somebody else’s problem and you can use it any time you want and it’s so much more social and so much better for the environment”. Photos of the communal space at Point Ridge are shown in Figure 26.
A further theme regarding communal spaces is not regarding the provision of outdoor space itself, but with issues regarding the body corporate structures which are usually present with them. A couple of key informants consider the body corporate structure as a positive, Key
Informant 1 (Pannill Place resident) likes “the idea that the body corp takes care of repairs”. Key Informant 8, a local property manager agrees stating “from the owner’s perspective, yes, they pay extra dollars for that, but all the external maintenance is done for them”. Key Informant 3 (Point Ridge resident) also thinks a body corporate is a desirable feature of their housing development as if they have any issues with their neighbours they can complain to the body corporate, “you feel less worried about it living in Point Ridge, because if people are making noise you can complain to the body corp before you have to complain to noise control”.

Conversely, many residents state that they do not like the body corporate structure due to the extra cost and restrictions they place on the owner. Key Informant 5 (real estate agent) summarises these concerns, “people don't like body corporate, often there are issues, there are arguments and it’s an extra cost”. Key Informant 4 (Fields Parade resident) agrees that “we don't like the body corporate and the whole sort of the political thing that goes with it. It just doesn’t feel like your own home, it feels like you are always being told what to do”. These views are reinforced by Key Informant 6 (real estate agent) who states that bodies corporate are not desirable for many people “because it’s another cost, they can’t do what they want. They have got to apply for permissions to do things and they would rather have something that they can do with as they want”.

**Importance of Public Outdoor Space**

The postal questionnaire shows that residents do not consider outdoor spaces as important housing features. Conversely, key informant interviews reveal considerable importance placed on public spaces as part of the suburban environment. Public outdoor spaces are considered by all key informants to be an important aspect of the suburban environment. Key Informant 8, a local property manager states that having a park close by was important for people with families when they are choosing where to live and this is reflected in the advertising of properties “when we are writing ads for properties we will put; within walking distance of such and such parks, as well as the schools and the local shopping centre, it's definitely a plus that we can advertise”. Three of the four residents interviewed all use public spaces and value the amenity they bring to their living environment. Key Informant 1 (Pannill Place resident) states they use the local park for their daughter to play in and use it “every day if the weather is good”. Key Informant 4, from the Fields Parade case study location also uses public spaces in their neighbourhood for their children to play and consider them to be an essential part of their living environment. They use
the local school, as well as, three other local parks which have play equipment and state they use these spaces "almost every day in summer". They also argue that due to the small size of their private outdoor space, being in close proximity to the school and other public outdoor spaces they can use is essential to their satisfaction. Photos of these spaces are shown in Figure 27.

![Figure 27. Photos of the public spaces Key Informant 4 (Fields Parade) uses regularly. (Source: Personal collection, 2013)](image)

Key Informant 3 from the Point Ridge case study location also values the public spaces in their area, although for different reasons than the informants mentioned above. Key Informant 3 does
not have children and, therefore, does not use the public spaces for children's play, but for walking. They state, referring to their partner, "we walk a lot around here" and that they really like the area because of the public spaces where they can go walking in the bush. It is important to point out that in the area surrounding Point Ridge there are a lot more large reserves with bush and walking tracks than in the vicinity of Pannill Place and Fields Parade, which have greater access to smaller neighbourhood parks with play equipment for children. This highlights the importance of having a diversity of spaces to meet the needs of a range of residents.

Summary

This section has shown that outdoor space is considered to be a key housing feature for residents. Although private outdoor space is important for privacy and relaxing, other housing features such as being in a desirable location, cost and school are also major factors which influence housing choice, and often the size of a private outdoor space will be compromised for these features. Communal spaces generate a diverse range of opinions from residents, from residents who think they are good as they provide facilities which residents would not have access to otherwise, to residents who do not like them as they do not want to have to interact with their neighbours. Public outdoor space is also considered to be an important aspect of the suburban environment and provides for recreation and children’s play. There is of course diversity of opinion, however, overall it can be concluded that outdoor spaces are very important to many residents.

6.5 Developer and Council Views on the Importance of Outdoor Spaces

This section presents developer and council views on the importance of outdoor space for medium density housing developments. These views are important as it is the Auckland Council which sets the rules for private outdoor space provision and undertakes the development and maintenance of public spaces. Developer perceptions are also important as they are the people creating these housing developments, and if they do not value outdoor space then housing developments may reflect this.
Developer Views

The developers and industry professionals interviewed have a range of experience, from residential developments of a few houses through to experience with large master planned residential areas. All of the key informants consider all outdoor spaces as important features of suburban environments and important for resident satisfaction. When asked how important outdoor spaces are in and around housing developments, Key Informant 14 states; “very important, very important. Its 'something that people are very conscious of when they are purchasing, whether that’s their own outdoor space... how private is their private outdoor space, and then obviously there is the public spaces as well”.

Key Informant 13 agrees and argues that this preference is based on the lifestyle that private outdoor space provides, “there’s a lifestyle of the bbq and people round in the backyard”. Key Informant 13 also argues that being suburban and creating medium density housing in a suburban environment means that everyone has access to private outdoor space, “being suburban that means every house has open space, as opposed to it being apartment which might have a deck... but the idea is that this is a form that we are actually quite comfortable in... it's just that that space is getting smaller”.

Key Informant 14 acknowledges that private outdoor spaces are reducing in size, “they have gotten smaller compared to your standard subdivision; you know your 500-600m² lots chopped up. Yes now we are down to 150-300m² lots, hence the outdoor space is more restricted”. However, argues that improved design has increased the efficiency of the space;

“I think there are a lot more efficiencies that go into the design of it as well and the house. So the house is situated better to make better use of the outdoor space. The outdoor space is more usable, you know you’re not talking about narrow pathways down the side of houses and those types of things, which aren’t really that useful”

Key Informant 7 agrees stating, "there is heaps of land around a normal house that no one ever uses. They use one little area which is the deck off the living space, which they collect family and friends around and a terraced house is like that, because it always discharges out onto that set living court which is generally a six metre circle or 60m² of living space”

The key informants also identify key features of private space which they believe create a positive space for residents. Key Informant 14 states sunlight is a key factor “making sure that you get as much sun into it, solar gain both in the house and in the outdoor space is vital”. They argue that this is important as “people like to sit in the sun”. Other key features include a flat space and privacy “everyone likes it as flat as they can get and something that gets the sun and
obviously that making sure you haven’t got 10 other houses looking down into your little spot”. Key Informant 13 agrees that these factors are important;

“the issues related to private open space is privacy and I think usability. Privacy is an interesting problem when you are doing this sort of stuff, getting that density down... there are things you can do around that, so you know fencing it, and second storey overlooking is an issue. Another one is usability of the space, i.e. can I get enough sunlight in it and the functionality of it, is it on the right grade... on some sites and steep sites, next moment your outdoor living space is technically on a deck, rather than on the ground... those are sort of critical elements”

Key Informant 14 also argues that communal spaces are increasing in demand as they allow access to green spaces but do not require maintenance, “the bigger the backyard... isn’t appealing for everyone. You know people see maintenance, they see lawn mowing, they see these types of things that they don’t want to spend their weekends doing these days. Communal space is something that someone else looks after but they get the use for it”.

Conversely, when developing residential areas Key Informant 7 argues that communal facilities are only provided as a marketing feature, “we did it on the basis of sale, not liveability because perception is everything when you are trying to sell a product and the thought of the pool and the tennis court and the gym is quite appealing, especially as they get chucked in, in the purchase price”. When asked what the key features which make communal spaces successful are, Key Informant 14 responds “it varies, depending on where you are. I mean the classic up in Point Ridge is that there is a lot of amenity up there. So up there you’ve got a pool, you’ve got a bbq area, you’ve got a gym”.

The issue of changes in outdoor space provision and the increase in communal spaces and the use of public spaces are summarised by Key Informant 14;

“An extra metre isn’t going to make that much difference, whereas when you’ve got a 3000m² space that you can kick a ball around, that you can fly a kite on, those sort of things, that seems a lot more appealing. It is a different mindset though. Living in that, where you realise that your house, you don’t have the space to kick a ball around, you’ve got that across the street or you’ve got that out the front yard, so its making sure that you’ve got the confidence and the security on those reserves or those open spaces that people will use it. Otherwise it doesn’t work. If people are too scared to use it or they don’t feel comfortable using it, or it doesn’t have good visibility from the street and other things, its struggles”. 

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Looking into the future Key Informant 14 suggests an increase in the importance of communal spaces;

“I think there will be a greater emphasis on these communal areas, especially in the higher density development... and I think there is a strong desire for purchases to have not only amenity close by with regards to transport and shops and everything else, but also amenity within the development, for communal facilities. So I think there is going to be a lot more emphasis on that, and hopefully that will flow through as a market driven incentive for people to include those sort of things, that they have good green spaces and places for people to sit”.

Public outdoor spaces are also identified by developers as important neighbourhood features. Key Informant 13 argues that public space in large scale residential developments is essential; “you can’t do a design of this scale without integrating it [public space], it's a building block, one of the building blocks”.

The issue of increasing density is identified as an issue for the use and provision of public spaces, Key Informant 13 argues, “I think as we increase density then we have to increase the amenity value of our parks, that we need them to be higher quality. You can’t have them as left over spaces”. Key Informant 14 agrees and states “you throw an extra million people within the existing urban boundary, does that mean they are using the same parks that everyone else is using, are they sufficiently sized, are they sufficiently spread to accommodate the additional demands? The Council has got a bit of work to do to ensure that if they are fitting extra people in certain suburbs that they have got the amenity to do that”.

Key Informant 14 argues that the most important consideration when designing public spaces is that residents are going to want to use them;

“What you want to make sure is that you’ve got something which the community are going to use. Now I think Stonefields is a great example of that where they’ve got these neighbourhood or pocket parks, but you know, you cluster them around the community and people that see it, so it’s got to be easily accessible, it’s got to be very visible, so that people will go there and they will look, they’ll use it and you’ve also got to make sure you’ve got stuff in there which people will use. Whether that will be a bbq or a playground type environment or something interesting to get people there”.

A further key feature is to ensure that the public spaces are able to be used by a range of residents; "the bigger the diversity the more attraction you are going to have to a wider group of people to use it... it is very important for people". They also argue that residents "want to know
that they have got somewhere to go to, especially in these higher density developments”. When asked what features of public spaces make them successful Key Informant 13 replied “the first thing is that they are developed, so they're not just green... it’s not about the green space , it's about the activity on the space”.

**Auckland Council**

The results of this section are based on the information gathered from team members of the Parks and Recreation section of the Auckland Council, as well as from an Upper Harbour Local Board Councillor. The information presented here largely reflects views on public outdoor spaces.

The key informants view outdoor space as important for resident satisfaction, especially as intensification increases. Key Informant 12, a councillor from the Upper Harbour Local Board argues that public outdoor spaces are “really, really important because people will be miserable if they have got a 30m² box [private outdoor space] and no access, no reasonable access to outdoors” they go on to argue that people will “say that it’s a crap place to live’. Key Informant 11 (Parks and Recreation) agrees and states;

“it’s recognised that it’s actually really important to have these areas and I think the community, the feedback that we get, the community really appreciate it... parks sort of cover everyone no matter where you're from and what you do. I think everyone likes to go to a park in the weekend and just get out”.

Key informant 11 (Parks and Recreation) then argues that residents “know that as especially as houses become smaller and backyards become smaller, people are going to need to be outside and socialise” and therefore they “work quite closely with developers to ensure that whoever is going to buy these houses has access to some green open spaces”.

The increase in use of public outdoor spaces as density increases in Albany and Auckland more generally is recognised as a key issue facing the provision of outdoor space into the future. Therefore the diversity of use of these public outdoor spaces is recognised as a key priority for parks in to the future “our public space is really precious, and we need to make sure it does as much as possible for as many people as possible” (Key Informant 12, Upper Harbour Local Baord Councillor). Key Informant 12 (Upper Harbour Local Board Councillor) argues that due to funding diversity of use for public spaces is becoming increasingly important;
"Because we can’t afford to say right this is the playground reserve, this is the wander around with your dog reserve, this is the skate park and this is where you can play football. Because we can’t afford it, we don’t have sufficient green spaces and the acquisition budgets looking forward are all allocated for the next three years... So we’ve got to be smart about how we enhance what we’ve got, because there is not a whole lot of new stuff coming on stream”.

Key Informant 12 also argues that public outdoor spaces provide different opportunities for a range of people;

“When you look at the different people using our outdoor space, they serve a different function for different people and we’ve got a lot more older people now... we’ve got a lot of older walking groups. So you know people might go and run around the stadium in their lunch hour, but you’ve also got older people who are walking their dogs who might just sit and try some of the resistance exercises... and also it means that if you have mums with little kids, they can actually exercise adjacent to where their kids are, where they can still see them but...it doesn’t take over and it’s not turning a park into a gym, its giving options”.

An example of a park in Albany which has recently been redeveloped to provide for a diversity of uses is Hooten Park. Key Informant 11 (Parks and Recreation) discusses the park as important as it will be near proposed intensive housing; “we’ve been working on it over the last year and a half, looking forward, because the area is going to be apartments and retail as part of the Unitary Plan... so that area is going to be high density housing... Hooten is going to become a really important recreation park”. As this park is considered to be important for future recreation the redevelopment of the area has taken place to include a variety of uses (see Figure 28); “we put a new skate park in there, the playground has been re-done, we’ve got fitness equipment, we’ve got a fitness trail which runs almost from the Albany village to the bus station, where people can walk and cycle, with that in mind” (Key Informant 11). Key Informant 12 agrees and states;

“Hooten reserve was just a little playground and now it’s got a skate park, and it’s got a walkway... but instead of just having a little short piece of park, the local board funded it so it’s actually a loop track and we put a couple of pieces of adult fitness equipment on it. So we are trying to enhance the open space we have because we recognise that there is going to be a lot more people accessing it”
Figure 28. Photos which show the diversity of uses at the recently redeveloped Hooten Park.
(Source: Personal collection, 2013)

The result of this redevelopment is a public space which a number of different age groups “can use that open space for different things” (Key Informant 12). Connected to the emphasis on diversity of uses for open spaces is the prominence of increasing the capacity of public spaces, “land is the most expensive commodity as far as any development goes and so there is a need to improve their [open space] capacity as a direct result of increased use” (Key Informant 10, Parks and Recreation). This is especially an issue related to funding and budgets, “we don’t really buy much parkland at the moment, because of budgets... we look into capacity increasing... looking into future years and the multi user parks to accommodate more users in the same parks”.

Access to local parks is also considered to be important by key informants. Key Informant 10 states “they [local parks] are definitely important”. Key informant 12 acknowledges the importance of both regional parks as well as local parks “I don’t see that because we are well served for big parks we don’t need little parks. I think the little parks serve a completely
different purpose and they are absolutely vital for community building”. Key Informant 11 agrees and states “the general playground plan which we work around is a playground within 1km, so there should be no further than 1km for anyone”. This is supported by Key Informant 12 who states, “it needs to be within walking distance”.

**Summary**

Overall, this research has shown that all forms of outdoor space are considered by developers to be integral in creating resident satisfaction and a successful community. Private outdoor spaces require sunlight, privacy and a usable area. Communal and public outdoor spaces must be able to serve the needs and provide activities for a diverse range of residents. Response from the key informants associated with the Auckland Council advocated for the importance of outdoor spaces, especially as intensification increases. They considered all forms of public spaces, from the local to regional parks as important and the need to provide outdoor spaces which provide for a diversity of uses and people.

**6.6 Use of Outdoor Space**

In order to provide outdoor spaces which suit residents needs it is important the manner in which residents use these spaces is understood. The data related to the use of outdoor space is gathered from the postal questionnaire and key informant interviews with residents. This section presents the findings about how residents across the case study locations use their private, communal and public outdoor spaces.

**Private Outdoor Space**

The postal questionnaire asked residents what they use their private outdoor space for. Residents were able to pick as many options as desired. The results are shown in Figure 29 and 30. These results show that the majority of residents use their private outdoor space for drying washing (80%), entertaining guests (70%), bbq’s (69%), and relaxing (68%). Other activities include keeping pets (48%), reading (42%) and gardening (40%). Children’s play was undertaken by 30% of respondents, connecting with nature 26% and DIY by 4%.
When comparing the case study locations as shown in Figure 30 data shows that drying washing is an activity undertaken in their private outdoor space by 100% of residents at The Avenue and Fields Parade, followed by Point Ridge (71%) and Pannill Place (50%). Relaxing in their private outdoor space is also the most common for residents at The Avenue (83%) and Point Ridge (79%). Entertaining guests was also important across all case study locations. DIY is not undertaken by any respondents from Point Ridge, The Avenue or Fields Parade and only by 17% of residents at Pannill Place. Although, Key Informant 4 (Fields Parade resident) state that they would like to undertake more DIY activities, but the size of their private outdoor space does not allow them to do this; “what I found useful in our previous property was having area to do projects, woodworking, building furniture, that kind of thing, I’ve got no space here”.

Figure 29. Average use of private outdoor space.
(Source: Postal questionnaires)
Communal Outdoor Space

Communal space is only provided for residents at Point Ridge and The Avenue, therefore, this section only represents the views from residents at these locations. The results for the use of outdoor space are shown in Figure 31.
Figure 31. Use of communal space.
(Source: Postal questionnaire)

Figure 31 shows that there are several different ways residents use communal spaces. An important use across both Point Ridge and The Avenue is socialising, 64% and 67% respectively. Residents at Point Ridge are more likely to use their communal space for relaxing (67%), than residents at The Avenue (33%). Conversely, resident at The Avenue are more likely to use their communal space for children’s play (83%) and playing sports (67%) than residents at Point Ridge (21% and 7%). Reading is undertaken by a similar percent of respondents of Point Ridge (21%) and The Avenue (17%). A small number of respondents use their communal space to connect with nature (14%) and drying washing (14%), compared with The Avenue where no respondents use their space for these activities.

Public Outdoor Space

The use of public outdoor spaces by residents is shown in Figure 32 and 33. Figure 32 shows the average across the four case study locations. This figure shows the most common use of public outdoor spaces is for exercise (66%), followed by children’s play (63%) and walking (51%). Connecting with nature is fairly common (42%), closely followed by walking pets (41%) and relaxing (38%). Activities which are far less common are socialising (22%) and reading (10%). These results are also shown by case study location in Figure 33.
Figure 32. Average use of public outdoor space.  
(Source: Postal questionnaire)

Figure 33. Use of public outdoor space by case study location.  
(Source: Postal questionnaire)

When comparing the use of public outdoor spaces across the case study locations a number of differences emerge. A large number of respondents from The Avenue and Fields Parade use public space for exercise (83%, 83%) followed by Point Ridge (71%). However, only 25% of
respondents from Pannill Place use public spaces for exercise. Children’s play was the most common for residents at The Avenue (83%) and Pannill Place (75%), while only 50% of respondents from Fields Parade and 43% from Point Ridge use their public space for children’s play. Interestingly 71% of respondents from Point Ridge use their public space for socialising, compared to Pannill Place and The Avenue in which no respondents state they use their public space for socialising, and Fields Parade where only 17% of respondents state they use their public space for socialising.

Summary

This section described how residents use their outdoor spaces. Private outdoor spaces are mainly used for drying washing, entertaining guests, bbq’s, and relaxing, while communal spaces are mainly used for socialising, children’s play and relaxing. Public spaces are commonly used for exercise and walking. This data has also shown differences in the use of these spaces by residents across the case study locations.

6.7 Satisfaction with Outdoor Space

Outdoor spaces for residents in Auckland are changing with the increase in medium density housing development, private outdoor spaces are becoming smaller and outdoor spaces are being provided in different ways. Therefore, it is important that resident satisfaction with their outdoor spaces is examined. This section provides the results from this research on resident satisfaction of the outdoor spaces. First general satisfaction with all outdoor spaces is presented, followed by satisfaction with specific outdoor areas (private, communal and public spaces).

As part of the postal questionnaire residents are asked to rate their level of satisfaction with their private, communal and public outdoor spaces. The results are shown below in Figure 34. Note that the average levels of satisfaction for communal spaces was averaged across Point Ridge and The Avenue only as these are the only two case study locations which have access to communal facilities.
The results of this question show that overall residents are mostly satisfied with their outdoor spaces. Respondents are the most satisfied with their private outdoor space with a rating of 7.4 out of 10 and least satisfied with their public outdoor space, 6.7. Some residents who are happy with all their outdoor spaces state; “we are satisfied in all areas”, “all three are easy to use” and “they all meet my needs and desires well”.

Questionnaire participants are also asked whether their outdoor spaces were meeting all of their needs. The results of this are shown in Figure 35. Overall the majority of residents across the case study locations sated that they thought their outdoor spaces were meeting their needs.
The most satisfied location is Point Ridge, with 93% of residents stating their needs were met, followed by The Avenue, 83%. Conversely, the most unsatisfied locations are Pannill Place and Fields Parade, with only 67% of residents stating their outdoor spaces were meeting their needs. Interestingly it is the case study locations with access to communal outdoor spaces which have the highest percent of respondents with their needs being met.

**Private Outdoor Space**

This research has shown that overall residents are satisfied with their private outdoor spaces. This is shown in Figure 36 which shows the response from the postal questionnaire when residents were asked to rate their level of satisfaction with their private outdoor space. The average across the case study locations was 7.4 out of 10, with the residents from the Point Ridge and Fields Parade case study locations the most satisfied with an average rating of 8 out of 10. These locations are followed by The Avenue (7.1) and Pannill Place (6.5).

![Satisfaction with private outdoor space - by case study location](image)

*Figure 36. Satisfaction with private outdoor space by case study location.*  
(Source: Postal questionnaire)

There are a number of reasons respondents stated for this level of satisfaction. The key theme for both resident satisfaction and dissatisfaction is the size of the private outdoor space. The comments, both positive and negative are shown in Table 12. Many residents state they were happy with the size of their private outdoor space; one resident stating it is “just the right size”. Conversely, a number of respondents also state they are unhappy with the size of their space,
“the private outdoor space is currently tiny and really isn’t big enough for our family”. The diversity of views regarding satisfaction of the size of private outdoor spaces is supported by the key informant interviews. There are several key informants who were happy with the size of their private outdoor space (Key Informants 1, 2 and 3). They made comments such as “outdoor space and a big garden never appealed”, “we didn’t want a big garden” and “it is large enough, because we are only two adults and one child, for us it is large enough”. However, Key Informant 4 is not satisfied at all with the size of their private outdoor space and they rated their satisfaction “very poorly”.

Table 12. Comments regarding the size of the private outdoor space.
(Source: Postal questionnaire).

<table>
<thead>
<tr>
<th>Comments regarding the size of private outdoor space</th>
<th>Positive</th>
<th>Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;We are happy with the space provided&quot;</td>
<td></td>
<td>&quot;Private area is now a bit small for our current situation&quot;</td>
</tr>
<tr>
<td>&quot;I am happy with our outdoor private space as we have a larger garden space [than neighbours]&quot;</td>
<td></td>
<td>&quot;Private space is too small&quot;</td>
</tr>
<tr>
<td>&quot;The private space is plenty and I would have scored it more if it wasn’t sloping&quot;</td>
<td></td>
<td>&quot;Private space is too small and has no lawn&quot;</td>
</tr>
<tr>
<td>&quot;Private space is sufficient&quot;</td>
<td></td>
<td>&quot;My own garden is a little too small&quot;</td>
</tr>
<tr>
<td>&quot;The private space is enough for us&quot; &quot;good size&quot;</td>
<td></td>
<td>&quot;Ease of maintenance for my private garden but the space is small and one can hear the noise of any neighbour outside&quot;</td>
</tr>
<tr>
<td>&quot;Private garden is larger than some neighbours and is appropriate for our small family&quot;</td>
<td></td>
<td>&quot;Too small, not enough space&quot;</td>
</tr>
<tr>
<td>&quot;Our private space size is good - not too big, not too small = perfect&quot;</td>
<td></td>
<td>&quot;Private outdoor space is a bit too small&quot;</td>
</tr>
<tr>
<td>&quot;Yes the private outdoor space is sufficient&quot;</td>
<td></td>
<td>&quot;No. It was okay when we came seven years ago, we were young and did not have children. Now with a toddler we are looking for a bigger private area for her to play&quot;</td>
</tr>
<tr>
<td>&quot;Yes, my section is bigger than others in my street&quot;</td>
<td></td>
<td>&quot;Too small&quot;</td>
</tr>
</tbody>
</table>

The size of private outdoor space is also a key theme when respondents were asked what they would change about their private outdoor space. A number of respondents state they would increase the size of their space, these comments are shown in Figure 37.
A further theme for why residents are satisfied with their private outdoor space is because it is low maintenance. One questionnaire respondent stated “I work full time so don't have a lot of time to manage anything bigger”, this is supported by a further respondent who states “I have long hours and it is nice to have a low maintenance garden area”. Another respondent appreciates the low maintenance environment due to age factors; “we are getting old so moved for a small house in a low maintenance environment”. These comments are also supported by Key Informant 3 (Point Ridge resident) who states their private outdoor space is “quite low maintenance... it’s great not having to do the lawn”. Key Informant 1 (Pannill Place resident) agreed stating “we are just so busy that I couldn’t do it; and I’m not a gardener. It would just be hassle and maintenance”.

Interestingly there are a number of themes which did not emerge when residents were asked why they were satisfied, but were important when they were asked what they would change. These themes are the desire for increased levels of privacy, a flat private outdoor space, rather than a sloping area and increased hours of sunlight. A number of respondents also stated that they are happy with their private outdoor space and would not change anything.

Figure 37. What would you change about your private outdoor space? – Size.
(Source: Postal questionnaire)
Communal Outdoor Space

As Point Ridge and The Avenue are the only two case study locations which have access to communal outdoor space facilities this section focuses on these locations. The results from the postal questionnaire regarding resident satisfaction of communal outdoor spaces are shown in Figure 38. This figure shows that residents at Point Ridge are more satisfied, with a rating of 7.8 out of 10, than residents at The Avenue whose average satisfaction rating is only 6 out of 10.

![Figure 38. Level of satisfaction with communal outdoor space at Point Ridge and The Avenue. (Source: Postal questionnaire)](image)

Overall comments about communal spaces are positive and often refer to the use of the space. Comments include; “we use all the facilities”, “my son loves to hang out at the pool with friends” and “the pool is great in summer”. Other positive views comment on the good maintenance of the area; “communal is great and well maintained”, “communal areas are great as they get looked after and are great to use after work”, “the communal areas are well maintained and the swimming pool is so well utilised in summer that it can be crowded” and “well kept, I use the swimming pool a lot in summer and due to the gates it is very private”.

A further theme from the positive responses is the opportunity the communal area provided for socialising; “communal space means shared interests, time and socialising”, “this is an area we can relax in and enjoy socialising in, especially in summer”, “communal space is large enough to accommodate the social interaction within the development” and “I enjoy meeting up with others in the gym, spa pool, BBQ area”.

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These views are summed up by Key Informant 3 (Point Ridge resident) who states "the great thing about having the communal space is that you don’t have to attend it, it’s somebody else’s problem and you can use it any time you want and it’s so much more social and so much better for the environment". Key Informant 2 (Point Ridge resident) also finds the communal area “aesthetically pleasant” and this is supported by Key Informant 3 (Point Ridge resident) who states "every time you look out the window it’s pleasant to have it there, so it’s definitely and important feature of the house”.

The negative comments about the communal outdoor spaces are varied and identified features of the area which they would add or change. These include the addition of a tennis court, more areas to relax and seating. Other issues relate to the use of the space; “pool would be used more if heated all year, spa is a bit small for the size of the complex and would be nicer if it was covered” and “issues with people inviting friends to use the communal area and there being no room for paying residents”.

When asked what they would change about their communal area the responses were varied. Some respondents wanted to “have greater vegetation and lawns” and others “more trees”. One respondent at Point Ridge wanted a tennis court, whilst another respondent from The Avenue wanted a “basketball hoop area for the kids”. However, compared to the number of changes identified by respondents for their private outdoor spaces, there were significantly less suggestions from residents about what they would change with their communal space.

Public Outdoor Space

This section has previously shown that out of the three outdoor spaces identified (private, communal and public), resident satisfaction was lowest for public outdoor spaces, with an average satisfaction rating of 6.7 out of 10. This rating, although lower than the rating of satisfaction for private and communal outdoor spaces shows that residents are still satisfied with the public outdoor spaces provided. The results across the case study locations are shown in Figure 39 and show the highest level of satisfaction with public outdoor spaces by residents from The Avenue (7.3), followed by Fields Parade (7), Point Ridge (6.6) and Pannill Place (6).

The comments related to resident satisfaction of their public outdoor spaces are diverse. Positive comments include; “there are quite a few lovely parks”, “I love living in green, beautiful, bushy Albany Heights”, “[public spaces are] close by, gardens tidy and look appealing” and “Kell Park is well maintained and easy to access and a great place to walk”. Other residents cite the playgrounds as a positive feature; “nice to have a playground nearby” and “nice to have a park
with a children's playground”. One respondent states “the Auckland Council does create lots of nice public areas in our neighbourhood. These are always well maintained and create a nice feel in the neighbourhood (neat/clean/fresh feeling)”.

There are, nevertheless, a number of negative comments about the public spaces. A couple of informants commented about the lack of public space in their area; “not much public space within walking distance”, “there is limited public space” and “there is no ‘good old kiwi park’ around our area”. Other respondents cite a lack of development and maintenance by the council; “Council has not developed the area” and “public paths could be better maintained”. Although, Key Informants argue that public spaces in their areas were well maintained; “its looked after, the gear is quite new... the lawns are mowed and there doesn’t seem to be much rubbish around”, “very good, awesome, they stay nice and clean a well maintained” and “we are pretty happy with those spaces, there are a lot of walking tracks and they are pretty well maintained” (Key Informants 1, 3, 4, residents).

A further issue is that the playgrounds are not appropriate for a range of age groups. A respondent from the questionnaire argued “children’s playground is not appropriate for older children (8-12)”, whilst Key Informant 4 (Fields Parade resident) suggests it would be great if there was “more equipment for younger children, from 1 year olds”.

![Figure 39. Level of satisfaction with public outdoor space across the case study locations. (Source: Postal questionnaire)](chart.png)
There are a number of suggestions for changes to the public spaces. A few respondents suggest the addition of seating and shade; “could do with other things in the park like more seating”, “public space could be bigger and picnic tables would be nice too and some shade” and “I would score it more if there was some shade”. The desire for increased shade was reiterated by Key Informant 1 (Pannill Place resident) “I would add some shade to it, in the summer on a hot day... there is no shade” and Key Informant 4 (Fields Parade resident) “they need more shade, all the equipment is out in the sun”. A further suggestion by a resident from Pannill Place is a “bigger, safe reserve closer to our home, with gym fitness equipment available for use, and more bicycle and walking tracks”. Key Informant 4, a resident from Fields Parade also agrees that “the size of the parks is a little disappointing, they are very small” and suggested they would like to have a bigger reserve closer to their home.

**Summary**

This section has shown that residents overall are satisfied with their outdoor spaces, nevertheless, there is significant diversity in opinion. Private outdoor space has emerged as the space that is most important and valued for residents. However, there is much variety in resident’s satisfaction of the size of this space. Residents with access to communal areas are generally satisfied with these spaces and enjoy the social aspect this space provides. Residents were also largely satisfied with their public outdoor spaces, however suggested they could be improved by adding extra shade, seating and the creation of larger reserves.

**6.8 Best Practice Checklist**

A best practice checklist for the design of private, communal and public outdoor spaces is designed by the researcher based on the literature which provides best practice for the design of outdoor spaces. The checklist is completed for each of the case study locations and shows whether the case study locations are meeting the requirements of best practice featured in academic literature. This section presents the checklists for each of the case study locations.

**Pannill Place**

Pannill Place fits the best practice guidelines adequately (see Table 13). Private outdoor spaces are mostly oriented to gain maximum sunlight, are usable and are easily accessed from the dwelling. However, some private outdoor spaces are sloping and consist of two levels, a deck
from the house, then stairs to a lower grassed area (Figure 41). Best practice guidelines suggest private outdoor spaces should be flat. But there are also issues with privacy for some properties (Figure 42). The provision of public space is good; there are a number of small parks and schools close to the location, which provide a diversity of spaces, playground, grassed area, sports fields and tennis courts (Figure 40). A key type of space which is missing is a bush reserve with walkways and mature vegetation. There are no communal spaces provided for the properties in this case study location, which are accessible to the residents, but not to the general public.

![Figure 40. Public outdoor spaces near the Pannill Place case study location. (Source: Adapted from Auckland Council, 2013a)](image)

<table>
<thead>
<tr>
<th>Private Outdoor Space</th>
<th>Yes/No</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is some form of private outdoor space provided for each dwelling?</td>
<td>Yes</td>
<td>Varied Deck and grassed area; Balconies Courtyard</td>
</tr>
<tr>
<td>Are private outdoor spaces oriented to gain maximum sunlight?</td>
<td>Yes</td>
<td>There are a variety of orientations for the outdoor spaces Half the street have north facing private outdoor spaces The other half of the street have south facing private outdoor spaces Some of the properties with south facing outdoor spaces have access to a north facing balcony</td>
</tr>
<tr>
<td>Question</td>
<td>Answer</td>
<td>Notes</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>----------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>Are private outdoor spaces usable?</td>
<td>Yes</td>
<td>Deck Rectangle Sloping (not flat)</td>
</tr>
<tr>
<td>Are private outdoor spaces easily accessed from the dwelling?</td>
<td>Yes</td>
<td>Access from primary living room – unsure about all, as there are a range of complexes</td>
</tr>
<tr>
<td>Are private spaces screened from neighbours?</td>
<td>Okay</td>
<td>Fences – but not 100% private for all properties</td>
</tr>
<tr>
<td>Are private outdoor spaces well defined from communal and public spaces?</td>
<td>Yes</td>
<td>It is clear what space is private and what is public.</td>
</tr>
<tr>
<td>Is the private outdoor space connected to communal outdoor space?</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Rating based on the assessment criteria for outdoor space (1 poor – 5 good) (Boffa Miskel Ltd, 2012)</td>
<td>3 – Adequate size private outdoor space. Majority of spaces receive sunlight at least part of the day for most of the year.</td>
<td></td>
</tr>
</tbody>
</table>

**Public Outdoor Space**

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is there a local park within a five minute walk of the development?</td>
<td>Yes</td>
<td>Ponderosa Drive Bay City Park Pinehill School Oteha Valley School Small reserve off Fernhill Way Small park off Medallion Drive</td>
</tr>
<tr>
<td>Is the public outdoor space easily accessible?</td>
<td>Yes</td>
<td>Easily visible from roads Parking nearby</td>
</tr>
<tr>
<td>Does the public outdoor space provide facilities?</td>
<td>Yes</td>
<td>Ponderosa Drive – Playground, seating, rubbish bin. Bay City Park – Sports fields Pinehill School – Sports field, playground, tennis courts Oteha Valley school – Playground, sports field, tennis courts Fernhill Way – trees, pond, grassed area Medallion drive, trees, pond, small grassed area, playground Missing – large bush reserve</td>
</tr>
<tr>
<td>Are the facilities provided suitable for the type of people who are likely to use the park?</td>
<td>Yes/No</td>
<td>Likely to be families in the area, these spaces are suited to them. There is no large bush reserve in the area for recreation for all users.</td>
</tr>
<tr>
<td>What potential is there to enhance this space?</td>
<td>Yes</td>
<td>Inclusion of a bush reserve.</td>
</tr>
<tr>
<td>Are there a range of different landscapes where a range of activities can occur?</td>
<td>Somewhat</td>
<td>Children’s play Sports No parks which are bush for walking</td>
</tr>
<tr>
<td>Do these spaces provide a range of facilities</td>
<td>Yes</td>
<td>A range of sports fields, tennis courts, playgrounds, grassed areas, ponds.</td>
</tr>
</tbody>
</table>

Figure 41. Deck and lower grassed area at Pannill Place.
(Source: Personal collection, 2013)
Point Ridge

Residents at Point Ridge have access to private outdoor spaces which mostly meet best practice design guidelines (Table 14). Private outdoor spaces are oriented to gain maximum sunlight, are a usable shape, are easily accessible from the dwelling, are flat and are well defined from communal spaces. However, some private spaces require fences or vegetation to increase privacy and private outdoor spaces do not link directly onto communal areas. Communal areas provide a variety of uses, are easily accessible and are overlooked by multiple dwellings. Communal areas also receive maximum sunlight and are located on flat land (Figure 44). Public outdoor spaces provide residents with a number of bush reserves with walking tracks, as well as a nearby park with a flat grassed area (Figure 43). There is a lack of parks with playgrounds suitable for children within walking distance from this location and entrances to some of the walking tracks are hard to find. Figure 43 shows a number of parks in the vicinity of Point Ridge, however, a number of these spaces are not within walking distance.

Figure 42. Privacy issues at Pannill Place.
(Source: Personal collection, 2013)
Figure 43. Public outdoor spaces near Point Ridge.  
(Source: Adapted from Auckland Council, 2013a)

Table 14. Outdoor space checklist for Point Ridge.

<table>
<thead>
<tr>
<th>Private Outdoor Space</th>
<th>Yes/No</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is some form of private outdoor space provided for each dwelling?</td>
<td>Yes</td>
<td>Terraced house: private outdoor space, grass and paved. Apartments: Balcony</td>
</tr>
<tr>
<td>Are private outdoor spaces oriented to gain maximum sunlight?</td>
<td>Yes</td>
<td>Most are north facing. None are south facing</td>
</tr>
<tr>
<td>Are private outdoor spaces usable?</td>
<td>Yes</td>
<td>Rectangle of various sizes Flat</td>
</tr>
<tr>
<td>Are private outdoor spaces easily accessed from the dwelling?</td>
<td>Yes</td>
<td>Accessed from main living area</td>
</tr>
<tr>
<td>Are private spaces screened from neighbours?</td>
<td>Mostly</td>
<td>Most private spaces are private from neighbours. Some private spaces back onto a road and need more vegetation to make them more private</td>
</tr>
<tr>
<td>Are private outdoor spaces well defined from communal and public spaces?</td>
<td>Yes</td>
<td>The communal areas are very well defined</td>
</tr>
<tr>
<td>Is the private outdoor space connected to communal outdoor space?</td>
<td>No</td>
<td>Private spaces are separate from communal space</td>
</tr>
<tr>
<td>Rating based on the assessment</td>
<td>4</td>
<td>Adequately sized private outdoor space.</td>
</tr>
</tbody>
</table>
### Communal Outdoor Space

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes/No</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is a communal outdoor space provided? What facilities are provided?</td>
<td>Yes</td>
<td>Grassed area, swimming pool, spa pool, bbq and patio area, communal kitchen, gym</td>
</tr>
<tr>
<td>Is the communal space easily accessible from resident dwellings?</td>
<td>Variable</td>
<td>Easy access from residents close to the area, other residents need to walk down the private roads. Two minute walk at most</td>
</tr>
<tr>
<td>Do dwellings overlook this space?</td>
<td>Yes</td>
<td>Apartments and terraced houses overlook this space.</td>
</tr>
<tr>
<td>Does this space receive maximum sunlight?</td>
<td>Yes</td>
<td>Likely to receive all day sunlight</td>
</tr>
<tr>
<td>Is it located on flat land?</td>
<td>Yes</td>
<td>Space is flat</td>
</tr>
</tbody>
</table>

### Public Outdoor Space

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes/No</th>
<th>Description</th>
</tr>
</thead>
</table>
| Is there a local park within a ten minute walk of the development?      | Yes                     | Park directly next to development  
Gills Reserve  
Scenic Reserve  
Albany scenic reserve                                                       |
| Is the public outdoor space easily accessible?                          | Yes/No                  | Entrances for walking tracks are not marked well.                                                                                           |
| Does the public outdoor space provide facilities?                      | Yes                     | Mature trees, walking tracks, benches, grassed area.                                                                                         |
| Are the facilities provided suitable for the type of people who are likely to use the park? | Yes/No                  | Yes suitable for young professionals who which to use walking tracks  
No playgrounds within a short walk for families  
Potentially not so suitable for retirees who would require greater seating and easier access |
| What potential is there to enhance this space?                         | Yes                     | Add a playground for families  
Sports fields                                                                                                                             |
| Are there a range of different landscapes where a range of activities can occur? | Somewhat                | Dominated by bush reserves, but a range of activities can occur in them.                                                                 |

Criteria for outdoor space (1 poor – 5 good) (Boffa Miskel Ltd, 2012) Provision of usable communal space and front gardens. Majority of units receive sunlight at least half of the day for most of the year.
The Avenue

The provision of private outdoor space at The Avenue is very good (Table 15). Private spaces are oriented to gain maximum sunlight, are located on flat land, are a usable shape and size, are easily accessible from the dwelling and are well defined from communal areas. Some private spaces are visible from the road and none of the private outdoor spaces in the development are directly linked to the communal space. The communal outdoor space provides a variety of uses, maximum sunlight, is located on flat land, is easily accessible and is overlooked by a number of dwellings (Figure 46). There are also a variety of public outdoor spaces in the vicinity, which
provide a diversity of uses, facilities and opportunities for recreation (Figure 45). Photos of Kell Park are shown in Figure 47.

![Map of The Avenue area](image)

**Figure 45. Public outdoor spaces near The Avenue.**
(Source: Adapted from Auckland Council, 2013a)

<table>
<thead>
<tr>
<th>Private Outdoor Space</th>
<th>Yes/No</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is some form of private outdoor space provided for each dwelling?</td>
<td>Yes</td>
<td>Grass and courtyard</td>
</tr>
<tr>
<td>Are private outdoor spaces oriented to gain maximum sunlight?</td>
<td>Yes</td>
<td>Private outdoor spaces are facing north/north-east.</td>
</tr>
<tr>
<td>Are private outdoor spaces usable?</td>
<td>Yes</td>
<td>Rectangle Flat</td>
</tr>
<tr>
<td>Are private outdoor spaces easily accessed from the dwelling?</td>
<td>Yes</td>
<td>Accessed from main living area</td>
</tr>
<tr>
<td>Are private spaces screened from neighbours?</td>
<td>Yes/No</td>
<td>Fences provide privacy</td>
</tr>
<tr>
<td>Are private outdoor spaces well defined from communal and public spaces?</td>
<td>Yes</td>
<td>Some outdoor spaces, although fenced can still be seen from the road</td>
</tr>
<tr>
<td>Is the private outdoor space connected to communal outdoor space?</td>
<td>No</td>
<td>Private space is separate from communal area</td>
</tr>
<tr>
<td>Rating based on the assessment criteria for</td>
<td>3-4</td>
<td>Adequately sized private outdoor space. Provision of usable communal open space.</td>
</tr>
<tr>
<td>Outdoor space (1 poor – 5 good) (Boffa Miskel Ltd, 2012)</td>
<td>Majority of spaces receive sunlight at least half the day for most of the year.</td>
<td></td>
</tr>
<tr>
<td>-------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>Communal Outdoor Space</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is a communal outdoor space provided? Does the communal space have any facilities?</td>
<td>Yes</td>
<td>Swimming pool, tennis court, grassed area.</td>
</tr>
<tr>
<td>Is the communal space easily accessible from resident dwellings?</td>
<td>Yes</td>
<td>Short walk to communal areas as houses surround it</td>
</tr>
<tr>
<td>Do dwellings overlook this space?</td>
<td>Yes</td>
<td>Many dwellings overlook the communal area as it is located in the middle of the development</td>
</tr>
<tr>
<td>Does this space receive maximum sunlight?</td>
<td>Yes</td>
<td>Will receive all day sunlight</td>
</tr>
<tr>
<td>Is it located on flat land?</td>
<td>Yes</td>
<td>Land is flat</td>
</tr>
<tr>
<td><strong>Public Outdoor Space</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is there a local park within a ten minute walk of the development?</td>
<td>Yes</td>
<td>Kell Park, Gills Reserve, Scenic Reserve, Lucas Creek</td>
</tr>
<tr>
<td>Is the public outdoor space easily accessible?</td>
<td>Somewhat</td>
<td>Have to cross a busy road to get to Gills Reserve and Scenic Reserve</td>
</tr>
<tr>
<td>Does the public outdoor space provide facilities?</td>
<td>Yes</td>
<td>Kell Park – Playground, grassed area, walkways, Gills reserve/scenic reserve – walking tracks, grassed area, mature trees, Lucas creek – walking tracks, mature trees</td>
</tr>
<tr>
<td>Are the facilities provided suitable for the type of people who are likely to use the park?</td>
<td>Yes</td>
<td>Range of facilities to suit a range of needs</td>
</tr>
<tr>
<td>What potential is there to enhance this space?</td>
<td>Yes</td>
<td>Sports fields</td>
</tr>
<tr>
<td>Are there a range of different landscapes where a range of activities can occur?</td>
<td>Yes</td>
<td>Bush, grass, playground.</td>
</tr>
</tbody>
</table>
Figure 46. Communal spaces at The Avenue, a flat grassed area, swimming pool and tennis courts. 
(Source: Personal collection, 2013)
Figure 47. Photos of Kell park.
(Source: Personal collection, 2013)
Fields Parade

The private outdoor space provided for residents in the Fields Parade case study location is good (Table 16). Private outdoor spaces are oriented to gain maximum sunlight, are rectangle in shape, usable and flat (Figure 49). They are easily accessed from the dwelling and are fenced for privacy. There are a number of public spaces in the vicinity including; two schools and a number of local parks with playgrounds and small reserves with ponds and planting (Figure 48 and 50). The location map given in Figure 48 below is zoomed closer as this case study location has more small local parks in the immediate area, but fewer larger parks. The case study location, however, lacks a bush reserve with walking tracks.

![Figure 48. Overview of the public outdoor spaces near the Fields Parade case study location. (Source: Adapted from Auckland Council, 2013a).]

Table 16. Best practice checklist for Fields Parade.

<table>
<thead>
<tr>
<th>Private Outdoor Space</th>
<th>Yes/No</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is some form of private outdoor space provided for each dwelling?</td>
<td>Yes</td>
<td>Grassed area</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Deck</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Courtyard</td>
</tr>
<tr>
<td>Are private outdoor spaces oriented to gain maximum sunlight?</td>
<td>Yes</td>
<td>Most are north/north-east/north-west facing</td>
</tr>
<tr>
<td>Are private outdoor spaces usable?</td>
<td>Yes</td>
<td>Rectangle</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Flat</td>
</tr>
<tr>
<td>Are private outdoor spaces easily accessed from the dwelling?</td>
<td>Yes</td>
<td>Accessed from main living area</td>
</tr>
<tr>
<td>Question</td>
<td>Yes/No</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>--------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Are private spaces screened from neighbours?</td>
<td>Yes</td>
<td>All are fenced, although some can still be seen from the road</td>
</tr>
<tr>
<td>Are private outdoor spaces well defined from public spaces?</td>
<td>Yes</td>
<td>Very well defined</td>
</tr>
<tr>
<td>Is the private outdoor space connected to communal outdoor space?</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Rating based on the assessment criteria for outdoor space (1 poor – 5 good) (Boffa Miskel Ltd, 2012)</td>
<td>3</td>
<td>Adequately sized private outdoor space. Majority of spaces receive sunlight at least part of the day for most of the year.</td>
</tr>
<tr>
<td><strong>Public Outdoor Space</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is there a local park within a ten minute walk of the development?</td>
<td>Yes</td>
<td>Ponderosa Drive</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bay City Park</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pinehill School</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Oteha Valley School</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Small reserve off Fernhill Way</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Small park off Medallion Drive</td>
</tr>
<tr>
<td>Is the public outdoor space easily accessible?</td>
<td>Yes</td>
<td>Easily visible from roads</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Parking nearby</td>
</tr>
<tr>
<td>Does the public outdoor space provide facilities?</td>
<td>Yes</td>
<td>Ponderosa Drive – Playground, seating.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bay City Park – Sports fields</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pinehill School – Sports field, playground, tennis courts</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Oteha Valley school – Playground, sports field, tennis courts</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fernhill Way – trees, pond, grassed area</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Medallion drive, trees, pond, small grassed area, playground</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Missing – large bush reserve</td>
</tr>
<tr>
<td>Are the facilities provided suitable for the type of people who are likely to use the park?</td>
<td>Yes/No</td>
<td>Likely to be families in the area, these spaces are suited to them.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Young professionals do not have a large bush reserve in the area.</td>
</tr>
<tr>
<td>What potential is there to enhance this space?</td>
<td>Yes</td>
<td>Inclusion of bush reserve</td>
</tr>
<tr>
<td>Are there a range of different landscapes where a range of activities can occur?</td>
<td>Yes</td>
<td>Children’s play</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sports</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No parks which are bush for walking</td>
</tr>
</tbody>
</table>
Figure 49. Private outdoor space at Fields Parade.  
(Source: Personal collection)

Figure 50. A selection of photos of the public outdoor spaces available near the Fields Parade case study location.  
Note the houses in the bottom left photo are part of the case study area, the rest of the houses in the photos are not.  
(Source: Personal collection, 2013)
Summary

This section has presented the results of the best practice checklist across the four case study locations. This checklist has shown there is variation between the case study locations and they do not meet all of the best practice features, but do meet most of them. These results will be discussed further in Chapter 7.

6.9 Conclusion

This chapter has presented the results of the current research. This section has shown that demand for medium density housing is increasing and outdoor space is an important housing feature. The importance of outdoor space is also recognised by developers and the Auckland Council. Residents use their outdoor spaces for a variety of activities and are generally satisfied with their outdoor spaces. All the case study locations have good access to outdoor spaces with regard to best practice guidelines. These results will be discussed in the following Chapter in relation to the academic literature and policy documents.
7 DISCUSSION

7.1 Introduction

This chapter analyses and discusses the results presented in Chapter 6 in conjunction with the findings from the academic literature review and policy documents. It provides an insight into the findings of this research and places the findings within the wider debate of outdoor space and medium density housing. These findings continue to develop on previous research regarding medium density housing in Auckland, from the unique perspective of outdoor space provision. The chapter begins by discussing the demand for medium density housing. Second, the use of outdoor spaces by residents is examined, followed by the importance of outdoor space. Next, resident satisfaction with their outdoor spaces is explored. Finally, the best practice checklist and how the case study locations compared to urban design standards is considered.

7.2 Demand for Medium Density Housing

Increasing land prices and the implementation of policies advocating for increased intensification in Auckland since the late 1990s, has led to the growth and development of medium density housing options in the suburbs. Medium density housing is associated with smaller private outdoor spaces and a variety of housing forms including; detached, semi-detached, terraced housing and small scale apartments. Various authors have suggested that there is resistance to this form of housing by many residents in Auckland (Dupuis and Dixon, 2002; Turner, et al., 2004). Recent backlash shown through the media to the density provisions in the draft Auckland Unitary Plan highlight this opposition. Yet, resistance to medium density housing is not unique; it is similar to international experience (Dunbar and McDermott, 2011).

Many residents in the United States, which has had similar suburban development to New Zealand, also have strong preferences for low density housing (Myers and Gearin, 2001). This is supported by Evans and Unsworth (2012) who argue that the ideal housing form for many residents is a low density suburb. In the Netherlands there is also a strong desire for standalone housing (Coolen and Meesters, 2012). CABE (2005) argue the reason for resistance is due to the belief that higher density housing will reduce residents’ quality of life.

This research has found that despite the documented resistance to medium density housing, there is, nonetheless, increasing demand for this housing form in Albany. Interestingly, many residents from this research state they are happy living in their medium density home. This
research builds on recent studies in Auckland which suggest that preferences for low density housing may be changing and resistance fading, with increasing numbers of residents satisfied living this housing form. Dunbar and McDermott’s (2011) study established that many residents in Auckland were happy living in medium density housing. These findings show the potential role for medium density housing as a significant proportion of future housing markets.

Nevertheless, real estate agents interviewed for this research argue that there is still resistance to medium density housing forms by many New Zealanders, and by examining only medium density housing developments for this research, there is likely to be a self-selection bias. The people living in these developments are likely to be the people who are more willing to live in medium density housing developments. If residents living in low density areas were involved in this research, the results would likely show a greater resistance to medium density housing.

Key factors influencing the demand for medium density housing established from this research are affordability, schooling and ethnicity (Figure 51). These factors may result in medium density housing options as the only realistic option for residents. These factors will be discussed in more detail in the following sections.

Figure 51. Diagram showing the key drivers of demand for medium density housing in Albany.

Affordability

Housing affordability is shown through this research as a key driver of increasing demand for medium density housing in Albany. Respondents suggest that many residents are not able to afford a traditional low density, stand-alone home, with many compromising outdoor space, or detached housing in order to secure a home which is affordable. This research finding is consistent with Dixon and Dupuis’s (2003) research on medium density housing in Auckland, which has also shown affordability as a key driver in the development of medium density housing. These results reflect pressures from the increasing housing prices throughout
Auckland. Housing prices in the North Harbour Area (which includes Albany) have risen by 28.1% since 2009, which is much higher than the New Zealand average, which only had an increase on 17.4% over the same period (Quotable Value, 2012).

The theme of increasing demand for medium density housing due to housing affordability issues is supported by Haarhoff, et al. (2012). They suggest that in Auckland, the suburban dream of low density, stand-alone housing for many residents is unrealistic and unaffordable due to low incomes and high housing prices; “there is a disjuncture between the desire and aspirations to live in a stand-alone home and affordability considerations” (Haarhoff, et al., 2012: 200). This issue is not limited to the Auckland context, Evans and Unsworth (2012: 1164) also argue that in England residents are also purchasing higher density housing “because they can’t afford anything else”. They go on to argue that people may want to live in a stand-alone, low-density house, but are unable to afford it. Affordability considerations lead to a decrease in resident expectations of what space they are able to realistically occupy (Evans and Unsworth, 2012).

The issue of housing affordability is likely to be one of the key drivers of medium density housing development in Auckland into the future. These findings have built on recent research within the Auckland context of this issue and confirmed that demand for medium density housing is increasing. As housing prices continue to increase the demand for medium density housing is also likely to increase. This demand is likely to significantly alter the housing landscape in Auckland, with this medium density housing as a significant feature of the suburbs.

**Schooling**

There is little to be found in the literature to suggest schooling plays a role in the demand for medium density housing. However, this research has shown that linked with issues of affordability, school zones play an important role in demand for medium density housing. Key informants, both real estate agents and residents argue that a key consideration when deciding where to live for families is schooling options. Some residents may choose to live in a medium density home, as they may not be able to afford the low density equivalent in the school zone they want to live in.

It is possible that schooling as a driver for the demand of medium density housing has not been explored in depth because it has not been widely acknowledged that medium density housing is a desirable or suitable housing option for families. The demographic groups who are argued to be likely to live in medium density housing include; single people, couples without children, students, the elderly, young professionals and people who move frequently (Morrison and
McMurray, 1999; Dunbar and McDermott, 2011; Waghorn, 2011). Families as a demographic group likely to want to live or benefit from living in medium density housing are not recognised by these authors. In this research 52% of questionnaire respondents identified themselves as a family. It is, therefore, important that future research into medium density housing acknowledges families as a group who are likely to live in medium density housing and benefit from it being a lower cost housing option.

### Ethnicity

An increase in the demand for medium density housing is partly linked to the increased immigration and demand from Asian and other European residents. Dixon and Dupuis (2003) also identify a large number of Asian residents in their research of medium density housing in Ambrico Place, although there is little other research on the relationship between ethnicity and medium density housing. Considering the strong influence the Asian community have in Auckland, this is somewhat surprising and a potential opportunity for future research. The needs and preferences of immigrants are likely to be different to those of New Zealanders’ and in order to ensure housing satisfaction it is important the needs of all residents in Auckland are understood. As immigration continues, the demand for medium density housing from new residents is likely to be high and a key driver in increasing medium density housing development.

In light of these findings it is somewhat surprising that from the resident questionnaires which were received, only 11% of participants identified themselves as Asian, although this percent is close to the proportion of Asian residents on the North Shore, 19%. There are a number of potential explanations for this response rate. There could be cultural barriers influencing the response rate from recent immigrants, residents living in the area could be predominantly New Zealand European, or the number of Asian residents living in medium density housing is proportionate to the number within the population as a whole. However, these ideas are only speculation and it is not known why the response rate from Asian residents was low, when key informants argued they were a key driver of medium density housing demand.

The large number of survey participants who identify as New Zealand European show there are a significant number of New Zealanders who have chosen to live in medium density housing, despite reports of resistance by New Zealanders to this housing form. Interviews with residents show they are largely happy living in medium density housing. This shows that although there may be resistance to medium density housing by some New Zealanders, there are also a number of New Zealanders who recognise the benefits.
Summary

This research has shown, counter to widespread acknowledgement of resistance to medium density housing in Auckland, there is increasing demand for this housing form. Demand for medium density housing in Albany is increasing due to a number of factors. First, housing affordability issues are considered to be the key driver for increasing demand. As housing prices continue to increase, the demand for medium density housing is also likely to increase. Schooling is also a key factor influencing demand for medium density housing. This theme is linked with issues of affordability, as residents choose a medium density housing option so that they can be located in the desired schooling zone. The final factor influencing the increasing demand in Albany is argued by respondents to be driven by demand from immigrants from European and Asian countries.

7.3 Use of Outdoor Space

This research explores residents’ use of private, communal and public outdoor spaces. The results of how residents use these spaces have been presented previously in Chapter 6. This section discusses the use of these spaces in relation to existing literature on the topic. It is important to explore how residents use their outdoor spaces so that these spaces are provided in ways which meet residents’ needs. This section discusses resident use of outdoor space under the following headings; private, communal and public outdoor space, a diagram showing the relationship between the uses of outdoor space is given below (Figure 52). This diagram shows that each different space provides for certain uses, although the uses of different spaces can overlap. For example residents use private, communal and public spaces for relaxing.
Figure 52. Diagram of the relationship between the uses of private, communal and public outdoor spaces.

**Use of Private Outdoor Space**

This research shows that residents use their private space for a variety of purposes with the majority of residents using this space for drying washing, entertaining guests, bbq’s and relaxing (Figure 53). These results are similar to the academic literature. Drying washing is considered by Cooper-Marcus and Sarkissian (1986) as a key use of private outdoor space. Social events, or entertaining guests and relaxing are suggested by Bhatti and Church 2000 as important and bbq’s are considered by Hall (2008) as an important use. Hall (2010) and Bhatti (2006) argue private space is often used for gardening and this is supported by this research, with 40% of residents stating they use their private outdoor space for this purpose.
Figure 53. Photo of a Point Ridge resident's private outdoor space – used for bbq's and outdoor dining. *(Source: Personal collection, 2013)*

Bhatti and Church (2000) argue private spaces are used for children's play and DIY; this research somewhat supports these arguments. Thirty percent of residents state they use their private space for children's play, however only 4% of respondents from the questionnaire state they use their private outdoor space for DIY. This is possibly explained by Key Informant 4, a resident from the Fields Parade case study location, who states that there was not enough room in their backyard to undertake DIY activities. Connecting with nature is also an important use of private outdoor space (Bhatti and Church, 2004; Freeman, et al., 2012). This research found that 26% of residents use their outdoor space for this purpose.

The results of this research are closely aligned with the uses of private outdoor space identified in the literature. The wide variety of uses of private outdoor space shows the importance of this space and the contribution it makes to resident satisfaction. Private outdoor spaces are used for similar purposes as in the past which shows the importance of these spaces. It is important that as medium density housing develops in Auckland, private outdoor spaces continue to be designed in a manner which provides the residents with the opportunity to undertake these key activities.
Use of Communal Outdoor Space

The key use of communal spaces across both case study locations with access to communal space (Point Ridge and The Avenue) in this research is socialising. There are significant differences between the two case study locations with regard to the other uses of their communal space. Although socialising is an important use of communal space across both case study locations, children’s play and playing sports are more common for residents at The Avenue compared with residents at Point Ridge. This could be due to The Avenue having a higher percent of families 83%, compared with Point Ridge, 29%.

These findings support Cooper-Marcus (2012) who argues communal areas provide an environment near the home where children can play. The Avenue also has tennis courts available for residents which are likely to be used for playing sport (Figure 54), whereas, residents at Point Ridge do not have access to a tennis courts or other sporting facilities. Residents at Point Ridge are also more likely to use their communal space for relaxing than residents at The Avenue (Point Ridge 67%/The Avenue 33%). Reasons for this could be that Point Ridge provides seating in a communal bbq area where residents are able to relax, compared with The Avenue, which does not have communal seating provided (Figure 55).

Figure 54. Tennis courts at The Avenue.
(Source: Personal collection, 2013)
This research supports the assertion by Cooper-Marcus (2012) that communal areas are able to fulfil the needs of residents which are not able to be fulfilled by either public or private outdoor spaces. These results show that communal spaces are mainly used for socialising with neighbours. This is a use that is not able to be provided as effectively with other types of outdoor space; private outdoor spaces are used for socialising with friends and family (not neighbours) and public spaces are not used by many residents for socialising. Therefore, communal spaces provide a unique opportunity to socialise with neighbours in a safe environment. This use that communal space offers may assist in creating a sense of community within the housing development (Morris, 2009).

There is little literature within the New Zealand context regarding resident use of communal spaces. This research shows that in the Auckland context resident use of outdoor spaces is similar to overseas experience. The use of communal areas is a research topic which should continually be explored to ensure these spaces are providing for the needs of residents. A potential area for future research would be to determine whether there are any uses of communal spaces which residents desire which are currently not being provided.
Use of Public Outdoor Space

This research has established that the most common uses of public spaces are exercise, children’s play and walking. Public outdoor spaces also provide for a wider variety of uses including; connecting with nature, walking pets, relaxing and reading. Interestingly, a significant number of residents from Point Ridge (71%) state they use public space for socialising, whereas, the other case study locations did not use public space for socialising at all. This could potentially be due to confusion over the distinction between communal and public outdoor spaces or different demographics. These findings support the literature which also suggests public spaces are used for a wide variety of activities (Barton, et al., 2010; Frumkin and Fox, 2011).

People who live near a park are argued to be more likely to engage in physical activity (Frumkin and Fox, 2011). The results from this study somewhat support this argument. Residents at Pannill Place use public spaces for exercise the least of the four case study locations, possibly because residents are close to small parks, with playground equipment and schools. Yet, it is the case study location which is furthest away from larger public spaces with walking and bush tracks where exercise is more likely to occur. Frumkin and Fox (2011) argue that the closer residents live to a park the more likely they are to engage in physical activity, however, I suggest that it is not only proximity to any park which is important, but facilities the park provides (e.g. walking tracks and fitness equipment).

Summary

The discussion regarding residents’ use of outdoor spaces shows that different spaces are used by residents for different purposes and are largely consistent with the current literature on the topic. Private spaces are most likely to be used for drying washing, entertaining guests, bbq’s and relaxing. Communal spaces are most used for socialising, children’s play, relaxing and playing sports (dependent on access to facilities and demographics). Public spaces are commonly used for exercise, children’s play and walks. Although there is some overlap to the use of these different types of spaces, the different uses each type of space provides, shows that all three spaces are important for residents. This research has confirmed the importance of all of these outdoor space types for residents within the New Zealand context. It is important these spaces continue to be provided in a manner which meets the needs of residents.
7.4 Importance of Outdoor Space

Outdoor space is considered in the literature as important due to the benefits it provides for resident health and well-being (Sullivan, 1994; Holbrook, 2009). This research captures a different perspective, examining the importance of outdoor space as part of the residential environment, from the perspective of residents, developers and the Parks and Recreation Department from the Auckland Council. This section discusses the research findings of the importance of outdoor space by space type (private, communal and public).

Importance of Private Outdoor Space

New Zealanders have always had a long standing preference for a stand-alone house with a private outdoor space (Cooper-Marcus and Sarkissian, 1986). Hall (2010a) agrees that private outdoor space is entrenched in the image of the suburb and the ideal home. Private outdoor space is an important aspect of housing quality and the residential environment (Coolen and Meesters, 2012). This research supports these ideas, it establishes that private outdoor space is still an important housing feature for many residents and is the most important type of outdoor space (more important than communal or public space). Like Hall (1987) and Bhatti and Church (2004), many residents in this study state that private outdoor space was an important housing feature when they were deciding where to live.

These results are also supported by Freeman, et al. (2012) whose research also showed that residents considered their private outdoor space to be important, and was a key factor when they were choosing where to live. Interestingly, there is limited research in the New Zealand context on the importance on outdoor space. This is surprising considering the long standing attachment by New Zealanders to this space. This research has furthered the development of this topic through the perspective of medium density housing. However, with changing outdoor space provision in Auckland future research examining resident preferences is essential to ensure outdoor space continues to be provided in a manner which is suitable for the diversity of residents.

As discussed in the previous section, private outdoor space is important for residents due to the uses it affords. It is also important as it provides residents with privacy and allows them to relax in a safe environment. Coolen and Meesters (2012) support these findings, arguing that private outdoor space is important so that residents are able to be outside in private. It is also important as it is the safest and accessible green space available for residents (Holbrook, 2009).
The importance of private outdoor space was highlighted through this research when residents were asked what type of outdoor space they would rather have access to. Residents are given three options; private only, communal only or private and communal. For the private space only option the private space is stated to be larger than if they also had access to a communal area. The majority of residents state they would rather have a private space only. The importance of private outdoor space is especially highlighted as no respondents chose the option of a communal space only (and not have access to a private space). This shows that all respondents consider private outdoor space as an important housing feature that they will not compromise for access to a larger communal area which is shared with others. These findings are supported by Carroll, et al. (2011) whose study found that the lack of a private outdoor space was the reason residents would eventually move out of the apartment block they were currently living in.

Even though this research has found that private outdoor space is an important housing feature, interestingly, it is not the number one priority for many residents. Cost, location and the size of the house are key aspects which many residents consider to be the most important housing features when deciding where to live. The size of the private outdoor space (not the presence of a private outdoor space) may be compromised for these other, more important, housing features. This is a key finding which is not acknowledged in the current literature, potentially due to the lack of research on this topic. This is a key issue which needs to be addressed in housing development into the future. Due to the high cost of land, it is important if outdoor spaces decrease (to ensure a more affordable dwelling) that the quality of this space is not compromised in terms of privacy and usability. This will ensure that even if residents are required to sacrifice the size of their private outdoor space due to affordability, location, or the required size of the property, that the outdoor space provided can still meet their needs, in turn create more satisfied residents.

**Importance of Communal Outdoor Space**

This research has found mixed responses towards the importance of communal outdoor spaces. Some residents consider them to be important as they provide residents with access to a range of facilities which residents otherwise would not have access to and could not afford (swimming pool, spa, gym, tennis courts) and provide an opportunity for socialising with neighbours. Conversely, a number of residents do not consider communal spaces as desirable as they do not want to be involved with the body corporate structure which often governs them and do not want to socialise with neighbours.
This research supports Cooper-Marcus (2012) who argues that communal spaces provide opportunities for residents that private and public spaces may not. Communal spaces provide an opportunity for residents to socialise with neighbours in a neutral and safe environment, which other outdoor spaces do not to the same extent. Communal spaces can increase social interactions with neighbours, leading to an increased sense of community within the housing development (Kearney, 2006). Communal spaces can be an important space for residents, especially if they have limited private outdoor space available (North Shore City Council, 2007).

As mentioned above, when asked what their ideal type of outdoor space would be, the majority of residents across the case study locations (excluding Point Ridge) would rather have a private outdoor space compared with both private and communal outdoor spaces. Residents at Pannill Place had the greatest desire for a private space only and Point Ridge residents had the greatest desire for both private and communal spaces. These results could be reflective of self-selection of housing. Residents at Point Ridge are likely to have specifically chosen this location for the communal facilities it provides and Pannill Place residents chosen their property as they did not want a communal space. Interestingly, the majority of residents at The Avenue, which has communal spaces, stated that they would prefer solely a private outdoor space. This is interesting especially as residents rated their satisfaction with their communal space highly. The majority of residents at Fields Parade also chose private space only. Key reasons for this response are the desire for privacy, which communal spaces are not able to offer.

Clustering housing is a development form where houses are clustered onto a portion of a site, resulting in a larger communal outdoor space available for residents (Cooper-Marcus and Sarkissian, 1986). Cluster housing is argued to create social cohesion and build a sense of community and provides residents with views into open areas (McLeister, 1997; Morris, 2009; Abrahamse, et al., 2010). Kearney (2006) also argues that cluster housing can provide greater opportunities for recreation. This research has shown the potential for this type of development, provided some form of private space is also provided. The Avenue and Point Ridge are locations with a design which is similar to cluster housing. Private outdoor space is somewhat reduced in size so that a significant communal area can be provided for residents. Residents at The Avenue and Point Ridge does have greater access to recreation opportunities and facilities than residents at Fields Parade and Pannill Place and this was one of the benefits cited by residents of their communal space. It is a form of outdoor space provision which has the potential to significantly change housing development in Auckland, provide residents with a wider range of facilities, recreation options, community building and contact with nature.
It is, however, acknowledged that not all residents desire communal spaces, some are strongly opposed as they do not want to socialise with neighbours and express concerns about the body corporate structures which govern them. The perception of the body corporate structure was varied. Some residents had no issues with the body corporate structure, stating it was a positive feature of their housing development. Other residents, however, state they would not live in a housing development if it was governed by a body corporate.

Resistance and lack of satisfaction with bodies corporate has been expressed in the literature. A report based in Auckland argues that rapid growth in medium and high density residential developments have created issues for residents (Auckland Regional Growth Forum, 2003). Blandy, et al. (2006) highlight key issues with the body corporate including; lack of control by owners, communication issues between owners and body corporate managers, difficulty changing body corporate rules, feelings of powerlessness by owners and lack of knowledge about the operation of body corporate. Issues of the body corporate may outweigh the benefits developments with communal facilities provide (Blandy, et al., 2006). This could be a significant barrier to medium density housing development into the future that needs to be addressed.

Nevertheless, the development of housing with access to communal facilities in Albany is likely to increase into the future and has the ability to provide socially acceptable and desirable housing developments. This is a key finding which can advance the development of this type of outdoor space provision with the knowledge that it is providing high quality outcomes for residents. Due to the varied responses of the importance and desirability of the provision of communal spaces there needs to be a variety of housing types, with a variety of outdoor space types available to residents to suit these differing demands. Therefore, a move towards the total provision of houses with communal areas is not required, but a share of new suburban housing would be desirable and benefit from this change.

**Importance of Public Outdoor Space**

Public outdoor spaces are key features of suburban environments (Grose, 2009). They are important for communities and are important for the liveability and sustainability of urban environments (Mathieu, et al., 2007; Kriken, 2012). Residents value public outdoor spaces and these spaces impact on residents’ quality of life (Lilley, 2006).

Public outdoor spaces are considered to be an important aspect of the suburban environment by key informants in this research, with the importance of these spaces considered likely to increase with increasing density. Yet, the postal questionnaire shows that public spaces are not
a key factor residents considered when deciding where to live. This inconsistency in these research findings could possibly be due to resident expectation of quality public spaces in every neighbourhood. Therefore, proximity to public open space was not considered a key issue when deciding where to live, as no matter which location was chosen, there would a range of public outdoor spaces in the vicinity.

The importance of public outdoor space for this research is shown to be due to the recreational activities and opportunities which these spaces provide. As discussed in Chapter 6, key informants and questionnaire participants use public spaces for children’s play, exercise, walking and walking pets. The importance of public outdoor space for recreation is supported by Barton, et al. (2010) and Frumkin and Fox (2011) who acknowledge the variety of recreation opportunities these spaces provide. Hall (2010a) and Grose (2009) also acknowledge that public outdoor spaces can provide residents with a range of recreational opportunities. It is important to understand that public outdoor spaces are important in different ways for different people and this importance may change over time (Holbrook, 2009). Therefore, it is important that these spaces provide a variety of uses and opportunities to meet the various demands on the space.

There is a lack of literature regarding the importance of outdoor spaces within the New Zealand context. Again, this is somewhat surprising considering the universal provision of some form of public green space in subdivision development. As land prices increase in Auckland, there is the potential pressure which may be placed onto the Auckland Council to develop these green spaces. This research shows that they are an integral part of the living environment and with increasing density need to be provided more frequently and ensure a diversity of uses.

**Changing Outdoor Space Provision**

An issue explored is whether private outdoor spaces could be compensated for by communal or public outdoor spaces. This research has found that due to the different uses each form of outdoor space affords, complete compensation of private outdoor space is not likely to contribute to positive social outcomes for residents. These finding are supported by Coolen and Meesters (2012) who argue that due to the various meanings and uses of different types of outdoor space, completely substituting private outdoor space for communal or public outdoor space may not produce socially acceptable or desirable outcomes. Hall (1987) states that communal spaces may be provided instead of private outdoor space for small dwellings, yet this substitution does not fulfil needs of the residents. Children may also be less active when they do
not have access to private outdoor space, and this inactivity is not able to be compensated for by public space (Hall, 2010a).

This research has shown that all forms of outdoor space are important for many residents (even if all spaces are not important for all residents). In order to ensure positive residential outcomes, private outdoor spaces must remain a usable size, where residents can undertake the activities which are important for their well-being. Privacy, an important feature of private outdoor space is not able to be provided by communal or public outdoor spaces. Coolen and Meesters (2012) agree and state that privacy is not able to be provided by communal or public spaces and this is a key aspect contributing to the enjoyment and desirability of private spaces. Hall (2010a) agrees and argues that public outdoor spaces do not offer the same privacy and private outdoor space.

With regard to ensuring private outdoor spaces remain large enough for residents so that they are usable, the requirements of the North Shore District Plan (2002) and the draft Unitary Plan (2012) provide for this. These policy documents require a certain minimum size of the private outdoor space and ensure it is usable by requiring minimum dimensions. For example, the North Shore District Plan requires private outdoor spaces to be able to fit a circle which has a 6m diameter. This size is reduced in the draft Unitary Plan with the space required to be able to contain a 4.5m square. As the researcher was not able to gain an interview with members of the policy team at Auckland Council the reasons behind how the particular size was chosen are unknown. It would be interesting to determine as a 4.5m square is a fairly small space for residents, although the area of private outdoor space which needs to be provided is larger than 20.25m².

Nevertheless, this research has found that although private space cannot be compensated for completely by other forms of outdoor space, the size of private outdoor spaces is likely to reduce in the future. This will result in increased use of communal and public outdoor spaces; as residents compensate for the small size of their private outdoor space with other outdoor spaces which are accessible to them. This compensation is occurring for some residents already.

There is also the potential for the development of more communal spaces (they are currently scarce) which could provide residents with increased opportunities for socialising with neighbours in a safe environment. Although, this research has shown that this is not desirable for all residents and therefore should not be applied universally. Public spaces are also important as they provide a larger area for a variety of recreation opportunities, especially exercise and children’s play. The theme of partial compensation has not been explored in the literature. Coolen and Meesters (2012) discuss the complete substitution and Hall (1987)
discusses compensation of private space with communal space, although partial substitution has not been discussed.

**Summary**

This study has shown that private, communal and public spaces are all important for residents. These spaces are valued for different reasons. Private outdoor space is considered to be the most important type of outdoor space. Communal outdoor space has mixed views, yet, has the opportunity to provide important spaces for some residents. Public spaces are important for the recreation opportunities they provide and will become increasingly important as intensification increases.

### 7.5 Satisfaction with Outdoor Space

The provision of outdoor space in Albany and the wider Auckland region is changing, therefore, it is important to understand what impact these changes are having on resident satisfaction. It is important that residents are satisfied with these changes. Residential satisfaction is important and has a significant impact of life satisfaction (Kearney, 2006). This research has sought to determine resident satisfaction of outdoor spaces across four case study locations. Interestingly, there is little literature on resident satisfaction with outdoor space. Much of the literature takes a wider view and examines neighbourhood satisfaction more generally. This research therefore adds to this body of literature and offers a new perspective on resident satisfaction with their living environment.

This research shows that on average residents are satisfied with their private outdoor space. A key issue related to satisfaction or dissatisfaction is the size of the space. There is a strong diversity of opinion on this issue, with some residents stating their private space is a good size, and others complaining it is too small. This diversity of opinion shows the importance of providing a wide range of sizes and options for private outdoor space.

A further theme for why residents are satisfied with their private outdoor space is because it is low maintenance. Residents stated they are busy with work and do not have the time to attend to a larger, higher maintenance private outdoor space. Bhatti and Church (2000) support this research arguing that private outdoor spaces are being designed to reduce maintenance, with an increase in easy to care for patios, decks and grassed areas. They argue that many residents now use and enjoy their private outdoor space. As lifestyles become increasingly busier, the
importance of a low maintenance private outdoor space is likely to increase. It is important developers are providing private outdoor spaces to meet this changing need.

The rationale for why residents were not as satisfied with their private outdoor space was often communicated through highlighting aspects of this space they would change. These desired changes are; increased privacy, a flatter space and increased sunlight. It is important to also note that a number of respondents stated they are satisfied and would not change anything. Interestingly, the features which residents desire in a medium density house are similar to a low density house; privacy and sunlight are the most important features of private outdoor space, no matter what the size (Dunbar and McDermott, 2011).

This research is comparable to the research by Hall (2010a) who examines decreasing backyard sizes in Australia. Hall (2010) argues that private outdoor spaces in new subdivisions in Australia have recently reduced in size, which has resulted in decreased resident satisfaction of their living environment. This research has had more mixed results, with some residents satisfied with the size of their private outdoor space and some dissatisfied.

Overall, the residents with access to communal spaces (Point Ridge and The Avenue) are satisfied with this space. The reasons stated for this satisfaction are related to the use of the facilities these spaces provide and the high quality of maintenance of the area. A further positive aspect is that it provides an area for socialising with neighbours. Negative comments about dissatisfaction of the communal spaces are varied and related to what residents would change about the space. Residents desire increased provision of facilities; a tennis court, more seating and more areas for relaxing. There is little literature regarding resident satisfaction of communal outdoor spaces, although Kearney (2006) argues that shared spaces have a positive impact on neighbourhood satisfaction through creating a sense of community. Green views from residents’ windows are also argued to increase satisfaction with their neighbourhood.

Out of the three types of outdoor space discussed in this research, resident satisfaction is the lowest for public outdoor space, however, on average residents are still satisfied with their public space. Satisfied residents are happy with access to playgrounds and the high level of maintenance of these spaces. These views are supported by Kaplan and Austin (2004) who state that having public outdoor spaces close by which are well maintained contributes to residents’ satisfaction with their neighbourhood. Negative comments argue that there is a lack of public spaces in the area and that playgrounds were not suitable for a wide range of age groups. Frumkin and Fox (2011) support this argument stating that proximity to public open spaces is important for resident’s use of the space. Sullivan (1994) also suggests that natural environments are a key factor of life satisfaction.
Overall, this research shows residents are satisfied with their outdoor spaces. This is supported by Haarhoff, et al. (2012) who found that residents in medium density housing developments in Auckland were satisfied with their experiences of living at medium densities. The high level of satisfaction demonstrated through this research shows that as long as medium density housing developments provide residents with access to private outdoor spaces which provide privacy and sunlight, communal spaces with a range of facilities and opportunities for socialising and public spaces which allow for a wide range of recreation types then many residents are likely to be satisfied with their environment. This research provides evidence for policy makers to be aware that medium density housing is not creating the 'slums of the future’ but is providing an affordable housing option with which residents are satisfied.

7.6 Best Practice Design

The four case study locations - The Avenue, Point Ridge, Pannill Place and Fields Parade - were examined by a best practice checklist, which was created for this research based on guidelines found in the literature. All of the guidelines referred to in the literature review were extremely useful, although the Placecheck methodology relied on subjective views, rather than specific guidelines, which was not as useful for the purpose of this research. The other guidelines provided specific mention of key design features of private, communal or public outdoor spaces. One of the design guidelines used was prepared by the North Shore District Council (2007), which shows the Council is trying to take a proactive approach to ensuring high quality design of medium density housing developments.

These guidelines in the literature suggest key features which outdoor spaces should include in order to be successful and desirable locations for residents. The results of this checklist show that all case study locations have most of the desirable features outdoor spaces should provide. These results will be discussed in relation to outdoor space type below (private, communal and public).

Private Outdoor Space

Overall the private outdoor spaces provided in the case study locations represent fairly good quality urban design. All locations have a private outdoor space which is easily accessible from the dwelling, which are key aspects of private outdoor spaces considered by Cooper-Marcus and Sarkissian (1986). All case study locations also have good sunlight, are low maintenance and a
usable shape, other aspects Cooper-Marcus and Sarkissian (1989), as well as, North Shore City Council (2007) view as important features.

Pannill Place had the least desirable spaces as they were sloping, although a flat deck area was provided for a number of units, and some dwellings did not have a north facing courtyard, although they did have a north facing balcony. Some dwellings at Pannill Place also had issues with being overlooked, a key aspect North Shore City Council (2007) suggests to avoid. Being overlooked decreases the privacy of the area, which is a key factor of resident satisfaction and the purpose of the space.

The best practice guidelines regarding outdoor space are consistent with the urban design recommendations from Key Informant 13 and 14 (developer/urban designer). They stated that the key aspects of private outdoor space design were to ensure sunlight, a flat area, privacy and usability. This is a positive sign that the developers and urban designers who are creating the medium density housing developments in Albany have the knowledge of best practice and aim to create housing developments which meet these requirements.

Communal Outdoor Space

The case study locations which have access to communal space, Point Ridge and The Avenue, have areas which provide a diverse range of activities for residents and represent mainly good urban design. Point Ridge has the best maintained and most aesthetically pleasant communal space (Figure 56), although it has a much larger number of dwellings using this space (100+), compared with The Avenue which has only 48 dwellings using the communal space. This could lead to a much larger number of residents using the communal spaces at Point Ridge, compared with The Avenue, decreasing the amenity of the area. The Avenue also has a larger grassed area, which would be suitable for a wider range of uses and also includes a tennis court (Figure 57).
Cooper-Marcus and Sarkissian (1986) argue that communal spaces should be linked to private spaces to allow easy access; this is not the case for either location. At both locations residents must cross a private road to reach the communal spaces. The Avenue also has parking directly in front of the grassed area (Figure 58 and 59). Dwellings to the west of the development do not have a road in between the dwelling and communal spaces, but due to the topography do not have direct access to the communal spaces. This design issue could be significantly improved to provide residents with greater accessibility and potentially greater use of these spaces. If the road and parking was on the opposite side of the dwellings for housing to the east, this would
enable communal spaces to be more accessible. Direct access to the communal space by residents to the west of the development would also improve accessibility.

Figure 58. Parking at The Avenue between dwellings and communal space.  
(Source: Personal collection, 2013)

Figure 59. The Avenue, showing the private road and parking in between the dwellings to the east of the communal space.  
(Source: Google Maps, 2013)
The Point Ridge design ensures the communal space is overlooked by some dwellings, however, a large number of dwellings are in rows and do not have views or immediate access to the communal areas (Figure 60). This design could also be improved through ensuring all dwellings have easy access directly onto the communal spaces, or were linked to communal space by green, pedestrian corridors.

The communal spaces at both case study locations are overlooked by dwellings, are located on flat land and are fairly accessible, all features considered by the North Shore City Council (2007) as important. However, The Avenue does not provide seating, shade or much planting, features the North Shore City Council (2007) also considers important. Point Ridge does however provide these features as part of their communal space.

Figure 60. The case study area of Point Ridge outlined in red. The dwellings to the North east do not have easy access to communal areas.
(Source: Google Maps, 2013)
Public Outdoor Space

The Avenue has access to the widest diversity uses within local public spaces, a trait considered important for successful public outdoor space by Barton, et al. (2010). Key Informant 14 also agreed that diversity of use is a key aspect of public outdoor space provision. However, this diversity of use is located at one particular park, Kell Park which is a short walk from this case study location. Kell Park provides walking tracks, a playground, benches and open grassed areas (Figure 61). This space provides for a wide variety of different uses and people. Kell Park embodies all of the key features successful outdoor spaces require as described by North Shore City Council (2007). The Avenue also has reasonable access to bush reserves with a number of walking tracks, although other than the playground at Kell Park, there are no other local parks with playgrounds in the immediate vicinity.

Conversely, Fields Parade has very good access to small neighbourhood parks with playgrounds as well as schools and sports fields, however, little access to bush reserves within walking distance.
distance. Spaces where residents can walk and cycle are considered by Barton, et al. (2010) as important features of public outdoor space. This case study location therefore would best suit a family with young children. Pannill Place has similar access to Fields Parade, but is slightly further away from the local parks. Point Ridge has access to a number of bush reserves, however, little access to neighbourhood parks with playground facilities. It is, therefore, a location suited to residents without children or with teenage children, based on the types of outdoor space available.

The different provision of outdoor space has an effect on the uses of these spaces as discussed earlier. It is, therefore, important when considering the provision and development of outdoor spaces that a variety of outdoor spaces are within walking distance and ensure a range of different uses can occur. This is especially important in newly developing areas of Albany, where there is the ability to ensure adequate public outdoor space provision.

**Comparison to Stonefields**

To compare these four case study locations to Stonefields, the case study mentioned in the literature review as a best practice example is difficult. The four case study locations are a much smaller scale compared with Stonefields which was completed as large master planned community. The benefits of master planning is that the whole area is planned to form a cohesive community, which has a similar design aesthetic, housing variety, linking roads and green spaces. The case study locations were chosen specifically as they were not this type of development; they are small scale medium density housing development which is occurring rapidly throughout Albany.

Point Ridge and The Avenue, with the provision of communal spaces have created housing developments which are not well connected with the rest of the neighbourhood, compared with traditional neighbourhood design. Point Ridge is gated, therefore, only residents of the development have access. The Avenue, although not gated is accessed via a private road, which is not likely to be used by anyone other than the residents of the area. These design features, combined with the communal spaces provided act to foster a sense of community within the development, however, increase segregation with the rest of the neighbourhood. Stonefields in comparison is much more open and part of a wider community.

With regards to private outdoor space, the four case study locations compare very favourably with Stonefields. Sizes are similar or even larger compared with many private outdoor spaces at Stonefields. However, some dwellings at Pannill Place and Fields Parade had issues with land
contours and resulting sloping or terraced private outdoor space, which is not as good as Stonefields. Public outdoor space provision is cohesive at Stonefields compared with the four case study locations. Stonefields provides a number of small parks throughout the development, as well as, a larger space to the south-west of the area. This is reflective of the master planned nature of the development, compared to other locations, where a range of developers have been involved in developing the neighbourhood. Stonefields does not provide residents with communal spaces.

**Overall Best Practice**

Overall, when taking into consideration the provision of outdoor space for the case study locations, the location with the best provision of outdoor space is The Avenue. This location provides private, communal and public outdoor spaces which best meet best practice guidelines and are suitable for a wide range of residents. Point Ridge also provides well landscaped and desirable private and communal spaces, however, the access to a variety of public spaces is average.

Fields Parade provides residents with good private spaces, although some of these spaces are elevated from the road due to land contours. This case study location provides no communal spaces, but good access to local neighbourhood parks which suit families. There is, however, limited access to larger bush reserves, which reduces the diversity of outdoor spaces residents have access to. Finally, Pannill Place represents the location which has the least desirable access to outdoor space. Some private spaces are sloping and have privacy issues, there are no communal facilities and access to public spaces is the poorest across all the case study locations. There is access to local neighbourhood parks and schools, but these are further away than for Fields Parade. There is also no access within walking distance to larger bush reserves.

Interestingly, when comparing the case study location to the results regarding satisfaction, the levels of satisfaction are consistent with the evaluation of the quality of the spaces. For example with regard to private outdoor space, residents at Pannill Place were the least satisfied, this was the location which had the least desirable outdoor space based on the guidelines. With regard to communal space residents at Point Ridge were more satisfied than residents at The Avenue. This could be due to the well landscaped and aesthetically pleasing outdoor spaces that Point Ridge provides. With regard to public outdoor space, residents at The Avenue were the most satisfied. This could be due to the fact they have a wider variety of outdoor space types than the other case study locations. Pannill Place which had the least public outdoor space had the lowest level of satisfaction. These results show that the guidelines which are available in the
literature are good indicators of what residents want in their outdoor space. If these guidelines are followed it is likely that many residents will continue to be satisfied with these spaces.

7.7 Conclusion

This chapter has examined the results of this research in relation to the existing body of literature on outdoor space. The demand for medium density housing is increasing, mainly due to affordability issues, schooling and ethnicity changes. Issues of affordability are supported by the literature, however, there is limited literature regarding medium density housing and schooling or ethnicity. Residents have been shown to use their outdoor spaces for a wide variety of activities and reasons. Each outdoor space type has different uses and therefore the complete compensation of private outdoor space with alternative outdoor space types is not desirable. The diversity of uses of these spaces shows their importance.

The importance of all types of outdoor space is acknowledged by this research and supported by the literature. Resident satisfaction of their outdoor spaces is high and the locations meet the best practice guidelines for outdoor spaces well. The Avenue is considered to have the best all around access to outdoor space, with Pannill Place with the least desirable access to outdoor spaces. These findings are consistent with residents' satisfaction ratings, The Avenue with high ratings and Pannill Place with the lowest ratings. Although key themes emerged there was a diversity of opinion, it is therefore important that a range of housing developments with different provision of outdoor spaces occur into the future to meet the wide range of needs.
8 CONCLUSION

Historically, Auckland experienced growth through low density, stand-alone suburban housing development. This sprawling development pattern was facilitated through significant investment in motorways and accessibility to automobiles. The resulting suburban expansion was recognised as creating a number of negative effects; long commuting distances, traffic congestion and reliance on private transportation. Therefore, since the late 1990s policies of intensification have been implemented which aim to increase housing density, increase accessibility to services and decrease the reliance on private vehicles.

The emphasis on intensification and increasing housing density has resulted in the growth in medium density housing developments. These developments can take a variety of forms including; stand-alone, semi-detached, terraced and small scale apartments. Consequently, as lot sizes decrease, so does the size of private outdoor space. In conjunction with decreasing private outdoor space, a number of medium density housing developments have provided residents with communal outdoor spaces which residents share and manage with neighbours, but are not available to the public.

Due to these changes in the provision of outdoor space and the historical importance placed on private outdoor space, it is important to investigate these changes. The main aim of this research is to examine outdoor spaces in and around medium density housing developments in Albany. Albany is chosen as the focus of this study as it is a newly developing area of Auckland and has a large number and wide variety of medium density housing developments. Four particular locations are chosen to focus on, Point Ridge, The Avenue, Fields Parade and Pannill Place. These locations are chosen to study as they represent medium density housing developments with different provision and access to outdoor spaces.

This research takes a mixed methods approach, gathering data through a postal questionnaire which was delivered to residents of the case study locations, and key informant interviews with residents, real estate agents, developers and the Parks and Recreation division of the Auckland Council. Field observations were also conducted by the researcher and examined through a best practice checklist of outdoor space provision developed from existing literature regarding best practice outdoor space design.

This research shows, counter to widespread acknowledgement of resistance to medium density housing in Auckland, that many residents from this research are happy living in this form of housing. Demand for medium density housing in Albany is increasing due to a number of
factors. First, housing affordability issues are considered to be the key driver for increasing demand. As housing prices continue to increase, consequently the demand for medium density housing is also likely to increase. These results are supported by the current literature regarding medium density housing in Auckland. Schooling is also a key factor influencing demand for medium density housing. Residents may choose to live in a medium density option as this may be the only type of dwelling they are able to afford in the school zone they want to live in. The final factor influencing the increasing demand in Albany is argued by respondents to be driven by demand from increasing immigration from Asian and European countries. These results are significant as they show the potential for medium density housing development into the future. Increasing demand for medium density housing in Auckland has the potential to re-shape traditional suburban development patterns from low density to medium density housing forms. The increase in medium density housing has the potential to provide affordable and diverse housing options which can meet the needs of a much wider range of residents than traditional low density development.

Resident use of outdoor spaces is also examined and reveals that residents’ use their outdoor spaces for a variety of purposes. Private outdoor spaces are most likely to be used for drying washing, entertaining guests, bbq’s and relaxing. Communal spaces are most used for socialising, children’s play relaxing and playing sports (dependent on access to facilities and demographics), and public spaces are commonly used for exercise, children’s play and walks. Although there is some overlap to the use of these different types of spaces, the different uses each type of space provides shows that all three spaces are important for residents. It is essential that all three spaces continue to be provided for residents in forms which meet the desired uses of residents.

A key theme examined was whether private outdoor space could be compensated for by other forms of outdoor space, such as communal space or public spaces. This research found that the size of private outdoor space could be compensated for, and is currently compensated for, by some residents with other forms of outdoor space. However, the complete removal or compensation of all private outdoor space with other outdoor space types is not possible due to the specific uses this space provides which other spaces cannot provide, the main factor being privacy. The importance of privacy is significant and it is essential that for resident satisfaction as density increases, privacy of outdoor spaces is maintained and issues of being overlooked do not become increasingly frequent. The implementation of a ‘design-led’ approach advocated for by the recent policy documents in Auckland are a positive method for ensuring housing design.
A key aspect of this study has been the findings regarding resident views on communal space. Previous to this research there was little acknowledgement in the New Zealand literature regarding this outdoor space form. This outdoor space type is providing residents with a range of recreational opportunities and is likely to continue to play a strong role in medium density housing into the future. There is significant opportunity within Auckland to further implement this non-traditional form of outdoor space provision. The provision of communal outdoor space is a recent phenomenon which a significant number of residents desire. This research has shown there is potential to increasingly develop communal spaces which provide outdoor space environments that may increase resident satisfaction, provide for a range of uses and help in building communities. The potential for this type of outdoor space provision has not been acknowledged in the New Zealand literature and further research needs to occur to ensure this type of outdoor space provision develop in a manner which meets the needs of residents.

The importance of outdoor spaces was also examined through this research. This study shows that private, communal and public spaces are important to residents, although private outdoor space is considered by residents to be the most important. These spaces are valued for different reasons; private outdoor space is valued as it allows residents to undertake a range of activities in private. Although private outdoor space was considered to be important, the size of this space was able to be reduced in order for residents to gain other, more important housing features. These important housing features include; desirable location, size of house and schooling. Communal outdoor space obtained a highly varied response, however, is an important and desirable outdoor space for many residents. Public spaces are also important for residents and will become increasingly important as intensification increases. This research shows that outdoor spaces are still important neighbourhood features for residents and as housing development changes, urban design of neighbourhoods must consider and include the development of a range of outdoor spaces.

Resident satisfaction with their outdoor spaces is also explored through this research. Overall, this research shows that residents are satisfied with their outdoor spaces. Although private outdoor spaces are smaller than they traditionally have been, they provide residents with a desirable outdoor area as they provide privacy and sunlight, which enables residents to relax, entertain guests and dry washing. Residents are largely satisfied with communal spaces which provide residents with a range of facilities and opportunities for socialising. Public spaces also allow for a wide range of recreation activities which also contribute to resident satisfaction. Overall, this research has shown that although the provision of outdoor space is changing, the majority of residents are satisfied with their outdoor spaces.
Interestingly, when comparing the case study location to the results regarding satisfaction, the levels of satisfaction are consistent with the evaluation of the quality of the spaces. For example, with regards to private outdoor space, residents at Pannill Place were the least satisfied, this was the location which had the least desirable outdoor space based on the best practice guidelines. Although residents at Pannill Place were the least satisfied of the locations, residents still expressed satisfaction with their outdoor spaces. All case study locations met the majority of criteria which represent good quality urban design.

This research has significantly built upon past research into medium density housing in Auckland. Past research regarding outdoor spaces and medium density housing was significantly lacking, despite the long standing attachment by New Zealanders to the outdoors. This research shows that the current provision of outdoor space in medium density housing developments in Albany is working well. There is significant potential for other researchers to build upon this research and ensure that outdoor spaces continue to be provided in manners which are suitable for a wide variety of residents.
Overall, the provision of outdoor space for medium density housing developments is working well and meeting the needs of many residents. This research has highlighted the importance of outdoor spaces in medium density housing environments. Nevertheless, a number of recommendations have been developed to ensure high-quality provision of outdoor spaces continues into the future.

**Recommendation 1:** Ensure each dwelling has access to a private outdoor space which follows principles of good urban design. It is important to ensure high resident satisfaction that outdoor spaces are provided which follow good quality urban design principles. Key aspects are privacy, sunlight and the ability for residents to use the space for a range of activities.

**Recommendation 2:** Ensure communal spaces provide residents with a range of facilities and follow principles of good urban design.

**Recommendation 3:** Ensure that public outdoor spaces provide residents with a diversity of facilities and uses and are within close proximity.

**Recommendation 4:** To ensure the provision of a diversity of outdoor spaces. Residents have a variety of desires and needs therefore there is no one model which outdoor space provision should follow. There needs to be a variety of sizes of spaces and a variety of dwellings with or without access to communal outdoor spaces.

**Recommendation 5:** To continue to develop and adapt design guidelines and encourage developers to create outdoor spaces based on them.
Recommendation 6: To continue research into the topic of outdoor space and medium density housing in New Zealand. There is a significant lack of literature regarding medium density housing development, which has the potential to be the future of suburban housing development in Auckland. It is essential the impacts, both positive and negative, of this changing housing typology are continually explored to ensure resident satisfaction and the creation of positive housing environments.
References


North Shore City Council (2002) online: *Auckland Council District Plan Operative North Shore Section.*


Appendices
Appendix A – Key Informant Question Lists

**Parks and recreation**

- Could you please tell me about your involvement with outdoor spaces, parks and communities in Auckland?
- What are the main facilities communities usually want? (e.g. Playgrounds, toilets)
- What kind of parks do communities usually want? (Sports facilities, reserves, playgrounds)
- How important are local parks/ regional parks for communities? Has this Importance changed over time?
- Do you find different communities want different facilities? Could you tell me about these differences?
- Do you plan for parks different in higher density areas rather than the traditional low density areas. What are the differences?
- Do you think that as density increases into the future there will be more demand for parks?
- Have community desires for their local parks changed over time? Do you see it changing into the future?
- What are the key features of parks which make them desirable to use?
- Who uses the parks? What do they used them for?
- Access
- Are there any financial constraints with regards to the provision of services and facilities in parks?
- Are there any issues or opportunities for the provision of parks?
- How involved are the community in dealing with their parks?
- How are you going to deal with the possibly of increased use of parks as density increases?
- Will the way you plan for parks change with the implementation of the unitary plan?
- How do you see parks being provided into the future?
- Are residents satisfied with their outdoor space?
- Are you concerned about a loss of backyard space?
- What is your opinion about the rise in communal facilities?

**Real estate agents/ Property Managers**

- Are you or have you been involved with any other medium density housing developments?
- How much demand is there for medium density housing?
- Is outdoor space a demanded feature?
- What do residents want an outdoor space to have (privacy, deck, paved, low maintenance?)
- Is there demand for the communal facilities?
- How much demand is there for terraced housing? Why/ why not?
- Have you seen a change in housing being built/provided in the past 10 years?
- What is the main factor affecting resident choice of housing?
- Is outdoor space an important consideration for residents?
- Are residents willing to trade outdoor space for other features? What are these other features?
- Do residents want to live in housing developments with communal facilities?
- Is there a price premium for developments with communal facilities?
- What is the demographic of people who choose to live in medium density housing developments?
- Do you think there are any issues related to outdoor spaces in higher density housing developments?
- Is a Low maintenance section an important factor for residents?
- What facilities do residents want in their outdoor spaces?
- Do you think the way outdoor space is being provided is changing? Is this good/bad?
- Do you think the way outdoor spaces being provided are working well for residents?
- What do you think is likely to happen into the future?
- How do you think higher density housing has impacted on demand for neighbourhood parks?
- How do you feel the council is doing with regards to open space and higher density housing/provision of parks etc

**Residents**

- Why did you choose to live in this area?
- Why did you choose a terraced house? Did you have any concerns about living in a terraced house?
- Would you consider living in a housing development which may have a slightly smaller private outdoor space but where you have access to a range of communal facilities such as a swimming pool or children’s playground? Why/why not?
- How important was access to outdoor space in choosing where to live?
- What features of this area do you like?
- What types of outdoor spaces are available? Do you think these spaces are large enough? Are they an important feature of your house? Why/why not?
- What facilities are provided in these spaces?
- What do you use them for?
- How often do you use the outdoor space?
- What do you like about your outdoor spaces? What do you not like?
- Are you aware of the nearest park? What is your opinion of this park? How could it be improved?
- Are you satisfied with the outdoor spaces provided?
- What would you change about your outdoor spaces?
- How could your outdoor spaces be improved?
- What type of outdoor space would your ideal house include?
- Do you have any comments with regards to the council’s management of nearby parks or new housing developments
Developers

- Explain what medium density housing developments you have been involved with.
- Has demand changed for medium density housing over time? Why?
- What kind of demographic demands medium density housing?
- How much of the residential development you're involved with is medium density?
- When developing a medium density housing project what importance do you place on outdoor space?
- What facilities do you usually provide in the outdoor spaces?
- Do you prefer to provide communal spaces or private outdoor spaces? Why, why not?
- What are the key aspects demanded by residents in relation to outdoor space?
- Does the provision of outdoor space affect the value of the house?
- Do you think the current required provisions for outdoor space are working well?
- Have you changed the way you provide outdoor space over time?
- Do you think there are adequate rules in relation to the provision of outdoor spaces?
- How do you think the council is doing?
- What do you think are the key opportunities/constraints for the provision of outdoor space in medium density housing?
- What do you think is likely to happen into the future?
# Appendix B – List of Key Informants

<table>
<thead>
<tr>
<th>Key Informant 1</th>
<th>Resident - Pannill Place</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key Informant 2</td>
<td>Resident – Point Ridge 1</td>
</tr>
<tr>
<td>Key Informant 3</td>
<td>Resident – Point Ridge 2</td>
</tr>
<tr>
<td>Key Informant 4</td>
<td>Resident – Fields Parade</td>
</tr>
<tr>
<td>Key Informant 5</td>
<td>Real Estate Agent/Property Manager</td>
</tr>
<tr>
<td>Key Informant 6</td>
<td>Real Estate Agent</td>
</tr>
<tr>
<td>Key Informant 7</td>
<td>Developer/Property Manager</td>
</tr>
<tr>
<td>Key Informant 8</td>
<td>Property Manager</td>
</tr>
<tr>
<td>Key Informant 9</td>
<td>Manager Point Ridge</td>
</tr>
<tr>
<td>Key Informant 10</td>
<td>Auckland Council – Parks and Recreation</td>
</tr>
<tr>
<td>Key Informant 11</td>
<td>Auckland Council – Parks and Recreation</td>
</tr>
<tr>
<td>Key Informant 12</td>
<td>Upper Harbour Local Board Councillor</td>
</tr>
<tr>
<td>Key Informant 13</td>
<td>Developer/urban designer</td>
</tr>
<tr>
<td>Key Informant 14</td>
<td>Developer</td>
</tr>
</tbody>
</table>
Appendix C – Postal Questionnaire

**Outdoor Space for Medium Density Housing - Resident Questionnaire**

- **Private outdoor space** refers to the space around your house which the public or other residents do not have access to (e.g. backyard, front garden, patio or balcony).

- **Communal outdoor space** refers to any spaces or facilities near your house which residents of your housing development have access to but the public does not (e.g. playground, grassed area or swimming pool).

- **Public outdoor space** refers to any outdoor spaces or facilities in your area that the public has access to (e.g. sports fields, parks, playground or reserves).

1. Which housing development do you live in or near? *(Please circle)*
   - a. Point Ridge
   - b. The Avenue
   - c. Pannill Place
   - d. Fields Parade

2. Are you the owner or renting? *(Please circle)*

3. Are you male/female? *(Please circle)*

4. What is your ethnicity? _________________

5. What is your age? *(Please circle)*

   0-20 21-30 31-40 41-50 51-60 61-70 71+

6. How would you classify the people living at your address? *(Please tick as many as apply)*

   Professionals □ Students □ Family □ Retired □

   Other: (Please specify) __________________________________________

7. How long have you lived at this residence? _________________

8. What are the main factors considered when choosing to live in this location? *(please tick all that apply)*

   Location – desirable suburb □ Design of building □ Communal facilities □ Private outdoor space (garden/patio)
   Location - within the development □ Size of house □ Proximity to public outdoor spaces □ Proximity to shops and services
   Cost □ Proximity to workplace □ Proximity to public transport □
9. Please indicate how important outdoor space was when you were deciding where to live. *(Please circle)*

1 2 3 4 5 6 7 8 9 10

Unimportant Very important

10. What features of private or communal outdoor space are the most important for you? *(Please tick all that apply)*

Privacy

Accessibility from inside your dwelling

Playground facilities

Sunlight

Vegetation

Mature trees

Size

Benches

Fences

Indoor – outdoor flow

Flat area

Space for socialising

Lawn

Usable shape

Vegetable garden

Other: (Please specify)

11. Do you have access to: *(Please circle all that apply)*

a. Private outdoor space

b. Communal outdoor space *(A space which is shared by residents of your development but is not open to the public)*

c. Public outdoor spaces within a 10 minute walk

12. What facilities are located in these outdoor spaces and how do you use them? *(Please tick all that apply)*

**Private outdoor space**

<table>
<thead>
<tr>
<th>Facilities/amenities</th>
<th>Uses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ground floor outdoor area</td>
<td>Paved/cobbled area</td>
</tr>
<tr>
<td>Balcony</td>
<td>Deck</td>
</tr>
<tr>
<td>Roof garden</td>
<td>Grassed area</td>
</tr>
</tbody>
</table>

Entertaining guests

BBQ

Keeping pets
13. How much time do you spend in these locations?

### Communal outdoor space

<table>
<thead>
<tr>
<th>Facilities</th>
<th>Uses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shared grassed area</td>
<td>Children's play</td>
</tr>
<tr>
<td>Car parking</td>
<td>Relaxing</td>
</tr>
<tr>
<td>Easy access from house</td>
<td>Socialising</td>
</tr>
<tr>
<td>Tennis courts</td>
<td>Swimming pool</td>
</tr>
<tr>
<td>Seating</td>
<td>Connect with nature</td>
</tr>
<tr>
<td>Other: (Please Specify)</td>
<td></td>
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</tbody>
</table>

### Public outdoor space (within a 10 minute walk)

<table>
<thead>
<tr>
<th>Facilities</th>
<th>Uses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tennis courts</td>
<td>Playground</td>
</tr>
<tr>
<td>Playing fields</td>
<td>Walkways</td>
</tr>
<tr>
<td>Reserve</td>
<td>Toilets</td>
</tr>
<tr>
<td>Swimming pool</td>
<td>Picnic facilities</td>
</tr>
<tr>
<td>Other: (Please specify)</td>
<td></td>
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<tr>
<td></td>
<td>A lot of time</td>
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<tr>
<td>----------------</td>
<td>--------------</td>
</tr>
<tr>
<td><strong>Private outdoor space</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Communal space</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Public outdoor space</strong></td>
<td></td>
</tr>
</tbody>
</table>

14. If you had the choice would you rather: *(please circle)*

i. Have a small private outdoor space (garden) or;

ii. Have a larger communal outdoor space (shared with residents in the same development).

iii. Have both a small private outdoor space and access to a communal outdoor area? *(The private outdoor space in this option would be smaller than if you chose the option of just having private outdoor space)*

a. Why would you choose this option?

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________

15. Do you feel the private or communal outdoor spaces provided at your current house are meeting all of your needs? Why/why not?

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________

16. Please indicate your level of satisfaction with the private outdoor space provided.

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<tr>
<th>1</th>
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</tbody>
</table>

Not satisfied  Very satisfied

17. Please indicate your level of satisfaction with the communal space provided?

<table>
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<tr>
<th>1</th>
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<th>4</th>
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</table>

Not satisfied  Very satisfied
18. Please indicate your level of satisfaction with the public outdoor spaces provided

<table>
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<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not satisfied</td>
<td>Very satisfied</td>
<td></td>
<td></td>
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19. Why are you satisfied/not satisfied with these spaces? (Private/communal/public)
______________________________________________________________________________________________________________
______________________________________________________________________________________________________________
______________________________________________________________________________________________________________
______________________________________________________________________________________________________________
______________________________________________________________________________________________________________

20. If you could change the private or communal outdoor spaces provided what would you change and why?
______________________________________________________________________________________________________________
______________________________________________________________________________________________________________
______________________________________________________________________________________________________________
______________________________________________________________________________________________________________

21. Are there any other comments you wish to make about the provision of outdoor space in your housing development or the surrounding area?
______________________________________________________________________________________________________________
______________________________________________________________________________________________________________
______________________________________________________________________________________________________________

Thank you for your participation in this survey, your participation has been greatly appreciated. Please post this survey in the self addressed, pre-paid envelope provided.
Appendix D – Cover letter for Postal Questionnaire

Dear Sir/Madam,

I am a Master of Planning student from the University of Otago and am currently completing my thesis on the topic of outdoor spaces in medium density housing developments. I have chosen to study your housing development because it is an excellent example of higher density housing. This research is essential as it aims to establish what changes need to made to ensure that as housing density increases, there are enough, suitable and desirable outdoor spaces for residents to use and enjoy.

As part of this research I am conducting a questionnaire of residents to gain an insight into the views of the residents living in these areas about their outdoor spaces. This perspective is important to gain a full understanding of the issue and to ensure recommendations made not only reflect the views of academics and developers but of the residents themselves. Your participation would be greatly appreciated. If you choose to participate you can either complete the survey on the questionnaire provided and return via the self addressed envelope supplied or complete the survey online via the url provided below.

Survey url: http://srvy.it/13yn2iY

I am also seeking residents to participate in an interview related to this topic. Gaining interviews with residents is crucial to my research to gain an in depth view of the issues and opportunities of the provision of outdoor spaces in residential areas. Interviews would last for between 30-60minutes and would involve myself asking questions about your views on the outdoor spaces provided in your housing development. The interview would occur in a location which is suitable for yourself. If you are interested in participating please contact me via phone or email.

Included in this envelope is an information sheet, the questionnaire and a self addressed, pre-paid envelope to return the survey.

If you have any questions please feel free to contact myself or my supervisor:

Katrina Gray
Department of Geography
Phone: 0277113201
Email: graka663@student.otago.ac.nz

Claire Freeman
Department of Geography
Phone: 03-479-8785
Email: cf@geography.otago.ac.nz

Kind regards,

Katrina Gray
Appendix E – Information Sheet for Questionnaire Participants

OUTDOOR SPACES IN MEDIUM DENSITY HOUSING DEVELOPMENTS

Information Sheet

Thank you for showing an interest in this project. Please read this information sheet carefully before deciding whether or not to participate. If you decide to participate we thank you. If you decide not to take part there will be no disadvantage to you and we thank you for considering our request.

What is the Aim of the Project?
The main aim of this research is to determine how the provision of outdoor space in medium density housing developments contributes to resident well being in Auckland.

What Type of Participants are being sought?
Residents who live in medium density housing developments on the North Shore of Auckland are being sought.

What will Participants be Asked to Do?
Should you agree to take part in this project, you will be asked to complete a questionnaire, either online or on the questionnaire provided and return it via the self addressed envelope provided. You will be asked questions about the outdoor spaces you have access to near your house, what you like about these spaces and how you use these spaces.

What Data or Information will be Collected and What Use will be Made of it?
Participants will complete and return the questionnaires to the researcher. The data collected will be securely stored in such a way that only those mentioned below will have access to it. Your anonymity will be maintained and no individuals will be identifiable in any publications arising from this research.

You may withdraw from participation in the project at any time and without any disadvantage to yourself of any kind.

If you have any questions about our project, either now or in the future, please feel free to contact either:-

Katrina Gray
Department of Geography
Phone: 0277113201
Email: graka663@student.otago.ac.nz

Associate Professor Claire Freeman
Department of Geography
Phone: 03-479-8785
Email: cf@geography.otago.ac.nz

This study has been approved by the Department of Geography. If you have any concerns about the ethical conduct of the research you may contact the Committee through the Human Ethics Committee Administrator (ph 03 479-8256). Any issues you raise will be treated in confidence and investigated and you will be informed of the outcome.
Thank you for showing an interest in this project. Please read this information sheet carefully before deciding whether or not to participate. If you decide to participate we thank you. If you decide not to take part there will be no disadvantage to you and we thank you for considering our request.

**What is the Aim of the Project?**

The main aim of this research is to determine how the provision of outdoor space in medium density housing developments contributes to resident satisfaction in Auckland.

**What Type of Participants are being sought?**

A range of participants are being sought and include; members of the Auckland Council, developers who have been involved with of medium density housing, landscape architects, real estate agents and residents who live in medium density housing developments in the chosen case study locations.

**What will Participants be Asked to Do?**

Should you agree to take part in this project, you will be asked to take part in a semi-structured interview of approximately one hour. It will involve the interviewer asking questions about outdoor spaces in medium density housing developments.

**What Data or Information will be Collected and What Use will be Made of it?**

The interview will be audio recorded and segments are likely to be used as part of the researchers Master of Planning thesis. All attempts will be made to preserve participants’ anonymity. While some identifying information may be collected at the time of the interview – including full name and job position – this will not be stated in the project report. Participants will be referred to as ‘Key Informant X’. Identifying information and full interview transcripts will only be made available to the researcher and their supervisor at the University of Otago.

Data will be securely stored on a password protected computer that only the researcher has access to. At the end of the project any personal information will be destroyed immediately, except as required by the University's research policy. Any raw data on which the results of the project depend will be retained in secure storage for five years, after which it will be destroyed. Reasonable precautions will be taken to protect and destroy data gathered by email. However, the security of electronically transmitted information cannot be guaranteed. Caution is advised in the electronic transmission of sensitive material.
The results of the project may be published and will be available in the University of Otago Library (Dunedin, New Zealand) but every attempt will be made to preserve your anonymity.

Participants will have the opportunity to withdraw any statements given during the interviews. Such omissions should be requested before July 31, 2013. Likewise, participants will be given the opportunity to view the data or information that relates to them. Again, this should be requested before July 31, 2013. Participants are also welcome to request a copy of the completed thesis. It is expected that the final thesis will be available by March 2014.

**Can Participants Change their Mind and Withdraw from the Project?**

You may withdraw from participation in the project at any time and without any disadvantage to yourself of any kind.

**What if Participants have any Questions?**

*If you have any questions about our project, either now or in the future, please feel free to contact either:*-

Katrina Gray and/or Associate Professor Claire Freeman
Department of Geography
Phone: 0277113201
Phone: 03-479-8785
Email: graka663@student.otago.ac.nz
Email: cf@geography.otago.ac.nz

This study has been approved by the Department of Geography. If you have any concerns about the ethical conduct of the research you may contact the Committee through the Human Ethics Committee Administrator (ph 03 479-8256). Any issues you raise will be treated in confidence and investigated and you will be informed of the outcome.
Appendix G – Consent form for participants

OUTDOOR SPACES IN MEDIUM DENSITY HOUSING DEVELOPMENTS

Consent Form for Participants

I have read the Information Sheet concerning this project and understand what it is about. All my questions have been answered to my satisfaction. I understand that I am free to request further information at any stage.

I know that:

1. My participation in the project is entirely voluntary;
2. I am free to withdraw from the project at any time without any disadvantage;
3. Personal identifying information from audio tapes will be destroyed at the conclusion of the project but any raw data on which the results of the project depend will be retained in secure storage for at least five years;
4. This project involves an open-questioning technique. The general line of questioning involves the provision and quality of outdoor space in medium density housing developments. The precise nature of the questions which will be asked have not been determined in advance, but will depend on the way in which the interview develops. In the event that the line of questioning develops in such a way that I feel hesitant or uncomfortable I may decline to answer any particular question(s) and/or may withdraw from the project without any disadvantage of any kind.
5. There are no known or anticipated risks to participating in this study;
6. There will not be any compensation for participation in the study;
7. The results of the project may be published and available in the University of Otago Library (Dunedin, New Zealand) but every attempt will be made to preserve my anonymity;
8. I grant/ do not grant * permission to allow the researchers to audio record my interview

*Please indicate by circling

I agree to take part in this project.

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(Signature of participant) (Date)