FUTURE INTENSIVE

INSIGHTS FOR AUCKLAND'S HOUSING

A RESEARCH REPORT PREPARED FOR THE AUCKLAND COUNCIL BY

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Transforming Cities: Innovations for Sustainable Futures

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EXECUTIVE SUMMARY

1. CONTEXT

Urban growth management strategies in many cities around the world have sought to mitigate the consequences of uncontrolled, low-density urban sprawl, by encouraging and facilitating urban consolidation and housing intensification. This strategy typically involves the concentration of development at higher density in, and around, existing urban centres, that provide necessary services and amenities, and good access to public transit. More recent iterations of growth management policies have sought to ensure that the resulting intensified developments also deliver high 'quality-of-life' outcomes with enhanced 'liveability' within more 'sustainable' communities and regenerated neighbourhoods (Gallent & Wang, 2009).

In Auckland, these policies have been promoted for well over two decades. Following the 2010 amalgamation of the Auckland region's existing seven local and one regional council into a new single unitary council (the Auckland Council), a similar policy approach towards urban growth management has been pursued. Thus the Auckland Plan (2012) aims to limit low-density urban sprawl and accommodate the larger part of the city's future population in higher density housing, focussed in, and around, town and neighbourhood centres.

2. AIMS

Within the Auckland context, the research project aimed to:

- examine how well intensive housing developments have been implemented and analyse house price dynamics in selected medium density case study developments;
- gather information on how well intensive housing developments met the expectations, aspirations and needs of residents;
- elucidate the interconnections and interdependence between urban planners, developers, investors and residents in creating a sustainable urban housing environment in Auckland;
- contribute to The University of Auckland's *Transforming Cities* initiative and to knowledge that would contribute to the development of the Auckland Council's long-term plan.

3. **SCOPE**

The project was broad in scope and included:

- a literature review of evaluative research on urban growth management and housing intensification largely from Australasian and North American cities (Chapter 2);
- an analysis of the efficacy of planning instruments in delivering the aims and visions of intensification plans and policies (Chapter 3);
- in-depth interviews with 84 residents living in medium density developments within three case study areas (Chapter 4);
- an analysis of housing price dynamics of medium density housing in these areas (Chapter 5); and
- a follow-up study in the case study area of New Lynn, where a decade earlier research had been undertaken by three of the research team: Jenny Dixon, Ann Dupuis and Penny Lysnar (Dixon, Dupuis, & Lysnar, 2001). The follow-up study provided the opportunity for a comparative analysis over time (Chapter 6).

4. **CASE STUDIES**

Three case study areas and developments were selected for the project:

New Lynn — Comprising 293 units in nine separate developments collectively referred to as 'Ambrico Place', with an average net density of 57 units per hectare, within walking distance of what is designated as a 'metropolitan centre' in the Auckland Plan.

Albany — Two developments (referred to as 'The Ridge' and 'Masons') totalling 169 units with an average net density of 67 units per hectare, within walking distance of what is designated as an 'emergent metropolitan centre' in the Auckland Plan.

Onehunga — A single development (known as 'The Atrium on Main') with 112 units with an average net density of 64 units per hectare, within walking distance of what is designated as a 'town centre' in the Auckland Plan.

5. **INTERNATIONAL LITERATURE**

The literature review provided an overview of international research aimed at evaluating urban growth management approaches to urban consolidation and housing intensification, largely drawing on research in Australasian and North American cities. In North America, for example in Maryland, Florida, New Jersey and Oregon, 'smart growth' urban policies have been in place since the 1970s. These policies have been subject to extensive evaluation to determine the extent to which they are delivering the desired outcome of urban consolidation rather than sprawl.

- The findings from this review confirm that smart growth policies have produced intended results, although the gains in some cases are relatively modest.

More recent iterations of urban growth management approaches have shifted the focus away from smart growth to more directly address urban consolidation strategies that deliver urban lifestyles and liveability. This evaluative research tends to focus on the obstacles to achieving these aims. Importantly, the review showed that:

- Compact development can have positive outcomes, although the studies also reveal contradictions.

For instance, there is a tension between the desire for amenities that urban consolidation offers, but not at the cost of overcrowding; recognition of the advantages of good public transport is tempered with a perception that car dependence will not readily change and therefore result in traffic congestion; and that valued suburban lifestyles such as large back gardens and relative privacy will come under threat. Nevertheless:

- There is sufficient overseas research to demonstrate that residents appear willing to consider some kind of trade-off between the low-density suburb, and the amenity that more compact development can offer.

This aspect is a crucial factor in promoting urban consolidation and housing intensification as viable housing and investments options. The review of the overseas literature highlighted two key issues for cities such as Auckland:

- Will intensive housing forms meet the aspirations and needs of future occupants when the traditional suburban family home is the norm for many; and

- Will the market be prepared to invest in the associated typologies and meet residents' and community needs for an urban life style?

6. **ANALYSIS OF URBAN PLANNING INSTRUMENTS**

Giving effect to urban growth management strategies requires the deployment of urban planning instruments and procedures that have legal force. At the heart of New Zealand's urban planning system, under the RMA, is a link between a district plan's policy intentions and the built outcomes achieved 'on the ground'. In this project, the assumption that the outcome to planning policies is usually achieved through the district plan's stated methods (i.e. rules and assessment criteria) was assessed using two of the three case study areas (Albany and Onehunga) where medium density housing has been developed under two of the Auckland Council's legacy district plans. The assessment was based on two primary sources of information: an urban design quality assessment of the case study developments, and interviews with the resource consent officials involved. While noting that each district plan enabled higher density development, as reflected in the case study areas, we concluded that:

- The district plans had limited impact on influencing and directing the development process, especially in terms of achieving high quality medium density housing.

- While both the Auckland and North Shore District Plans sought to provide for good quality medium density housing outcomes, they both had weak policy direction with respect to how these outcomes would be achieved, especially in the quality of the actual district plan drafting.

- In the case study area of Onehunga, the Auckland City District Plan's Business 2 Zone provided no policy direction for housing developments or any other land use activities apart from business activities.

- The objectives in the plans were typically too broad, loosely written, unquantifiable, and often the policies failed to sufficiently support them.

- There was a disconnection between the weak policy direction and the rules and assessment criteria in both district plans.

In terms of the latter point, the North Shore District Plan's failure to prioritise the relevant issues led towards rule-derived outcomes. This meant that in the Albany case study area, the car parking and density controls largely determined the housing developments, rather than a design-led, good quality outcome sought by the North Shore District Plan. In this instance our findings suggest developers prefer to minimise their risk and stick to district plan rules rather than enter into long discussions with councils about urban design issues. This highlights the fundamental weaknesses in the planning instruments and processes used to deliver the plans' visions and policies for quality intensification.

7. **RESIDENT INTERVIEWS**

The findings from the 84 in-depth interviews provided information on residents' perceptions and experiences of living in medium density housing. The findings afforded us the opportunity to assess how effectively the outcomes of smart growth policies have met the expectations, aspirations, and needs of this group of intensive housing residents.

- With regard to the practical needs that housing fulfils, the respondents generally spoke in positive terms about the location of their housing, and proximity to public transport, shops, schools, work and other facilities.

- Generally, respondents said that both their developments and units offered a sense of security and safety. In the case of the Onehunga and Albany case study areas, this sense of security was extended to include the wider neighbourhood. New Lynn residents, however, felt less safe in their neighbourhood at night.

- A high proportion of respondents expressed the view that their housing met their social needs. This view was strongest among Ambrico Place respondents, where the agglomeration of residents with Chinese origins appears to have created a supportive environment, with easy access to services and products that met their cultural needs.

- The interview data indicated that living in medium density housing can cater well for people at various stages of their life-cycle. For example, it met the needs of students, single people, working couples, small families, and families and individuals living

with elderly parents seeking affordable housing close to amenities. The case study developments offered these groups more flexibility and options compared to detached suburban houses.

- Each of the chosen case study developments demonstrated location specific characteristics. Ambrico Place, for example, was perceived to cater well for children and offer a safe environment, supportive of families. This is reflected in the facilities that residents had access to, including playgrounds, a tennis court, nearby parks, and a well-designed and safe pedestrian route to the transit station and town centre. Unfortunately developments in Ambrico Place had been identified as leaky buildings. This impacted on people's economic situation and sense of security and was discussed at some length in many of the interviews.

- By contrast, Albany residents perceived their development's amenities as not being user-friendly for families and children. Green outdoor spaces were dominated by parking, and indoors units were small, as were the size of bedrooms. The views expressed by the residents concur with our own assessment of the Albany developments as having significant design deficiencies. Nevertheless, the Albany developments met the needs of students and younger people.

- The development in Onehunga was perceived by residents to have more of a cosmopolitan feel, with easy and safe access to a rich array of facilities, public transport, and close to the airport.

- The findings on children living in our case study developments suggest that good design is imperative in order to provide facility-rich and safe neighbourhoods for families with children.

- The findings also underscore the fact that well designed intensive housing is able to offer a far larger range of housing types, sizes and costs to meet the needs of a much wider spectrum of household types, when compared to detached suburban houses.

- Intensive housing planning pays attention to ensuring easy access for residents to local open spaces, services and facilities. All three case study areas were close or relatively close to shops, services and other facilities. For Onehunga and New Lynn residents these facilities were within easy walking distance. Albany residents however, generally found it necessary to use their cars because facilities and services (apart from the school close by) were not easily accessible by foot.

- While public transport usage was reported, and in the case of Ambrico Place, has increased over the past decade, this does not translate into regular use. What stood out instead was the high level of car usage which, in turn, highlighted issues of car parking availability and security. This finding led us to ask the question of whether car parking was a more important amenity for intensive housing residents than the availability of public transport. The low frequency of public transport use suggests that it is regarded as an attractive added extra rather than a necessity.

- Despite recent legislative changes (Unit Titles Act (2010)) body corporate issues remain problematic. Our findings indicated that much complexity still surrounds the operation of bodies corporate and their functions were not well understood by a significant proportion

of residents. Of particular concern were the communication problems with body corporate management companies experienced by people for whom English was not their first language.

- With respect to housing preferences, the stand-alone housing option appears not to have lost any popularity. Nearly three-quarters of those interviewed saw themselves living in a standalone house in the future.

8. **HOUSE PRICE DYNAMICS**

Examining the price characteristics and price dynamics of housing units within the case study areas offered insights into market processes and assisted in interpreting the experiences of residents. Notions of affordability, value for money, and the potential for capital gains or losses shape owners' and investors' perceptions and understandings of the merit of this housing type, and these experiences are incorporated into the popular discourses that surround medium density housing development. Using several datasets, an analysis of key attributes and price dynamics was undertaken and revealed the following points:

- In line with the New Zealand market, sale prices in all the developments in the three case studies rose during the mid- 2000s but declined after 2008 only to increase once again in 2011.

- Ambrico Place (the largest of the case study developments with the longest sales history) had the lowest average prices.

- The Ridge development had the highest prices per sqm. within the case study developments.

In order to examine the relative performance of prices within the case study areas, a series of hedonic price models at different geographical scales was constructed. Arising from this analysis a set of price premiums and discounts were calculated for each of the developments and for the nine sub-developments that comprise Ambrico Place. The results showed that:

- The Ridge (Spencer) and associated Masons developments commanded substantial premiums within all of the models.

- The premiums that these developments commanded may have been 'frontloaded' and reflect the initial high average prices that they achieved.

- Despite the high average sale price of individual units (compared to the other developments in the study), the Atrium on Main in Onehunga sold at a discount. It is unclear whether the discount will be long lasting or is a reflection of the post-2008 property downturn and the financial problems encountered by the developer.

- There were significant variations in the relative price performance of different units in Ambrico Place.

- The smallest units, at 3 Ambrico Place, sold at the highest price premiums; whilst 1 Ambrico Place, with private access and tennis courts, recorded small premiums. In contrast, 6 Ambrico Place and 1c Rankin Avenue recorded discounts.

It is clear from the analysis that while the case study developments are representative of medium density housing located in proximity to town centres, and thus share broad amenity/ environmental contexts, there is no single price trajectory for this dwelling type. At a general level, the sales data analysis offers some important insights

- Medium density housing does not necessarily generate price premiums or discounts.

- The price performance of individual housing developments is contingent on highly localised and specific issues including the development history, and the on-going management, of developments.

- Smaller sized units (The Ridge (Spencer) and 3 Ambrico Place) commanded price premiums compared to other multi-unit dwellings.

Given the premiums commanded by smaller units in this study, future research on medium density housing could focus on the demand issues surrounding smaller sized units.

An analysis of ownership structures within the developments indicates that investors (rather than owners) are dominant in the Albany and Onehunga case studies. This presents a potential mismatch between what residents might prefer in their housing options, and what decisions developers and investors make with respect to multi-unit housing.

This concurs with studies of housing intensification in Australia, which show that multi-unit housing tends to be shaped by the requirements and strategies of investors, rather than the needs of owner-occupiers, and that investors have a preference for smaller units. In this respect:

- The dominant position of investors and their demand for smaller units could have very significant consequences for the future of medium density developments in Auckland, especially for family households.

- Investor demands might result in the creation of a housing stock that is less attractive to owner-occupiers and might promote residential environments that are characterised by more transient communities.

- The level of owner or tenant 'churn' within medium density developments could have significant implications for community development processes.

The analysis of the price dynamics of the case study developments reveals other significant factors with regard to investment in medium density housing. It shows, for example, that:

- The Albany developments obtained a price premium especially during the pre-2008 period, even though these developments have a number of poor design elements identified, and difficult pedestrian connections to the Albany centre and bus station.

- This contrasts with the other case study areas where the prices did not command a premium, but where the relation to town centres is much stronger.

- This suggests that amenities may not have been the key to success for the developer, but rather timing was the key in the release of the development to the market.

The analysis indicates that while developers, owners and investors are willing to invest in the initial creation of medium density housing, this does not necessarily translate into appropriate high quality living environments over the long term.

9. **AMBRICO PLACE: THEN AND NOW**

This research project offered a unique opportunity to compare the research findings of two separate studies of the same medium-density housing complex, Ambrico Place, carried out more than a decade apart. Since the 2000/2001 research was undertaken, a number of broader contextual changes occurred: political changes, with respect to Waitakere City Council being disestablished and the Unit Titles Act (1972) being reviewed and replaced by the Unit Titles Act (2010); infrastructural changes in terms of major rail and roading changes and attempts at beautifying and revitalising the New Lynn town centre; and various changes and developments within the Ambrico Place area itself including the Manawa Wetlands upgrade and a kindergarten opening on the Ambrico Place site.

In these developments:

- Home ownership rates have increased since 2001.

- On average households were larger in 2012, occupants older and an even higher percentage of interviewees were overseas born, mostly born in China.

- It appears that a relatively stable community has been established, with nearly three-quarters of interviewees having lived in Ambrico Place for three years or more, a pertinent finding in light of Waitakere City Council's previous concerns over the high level of transience and population churn in New Lynn, and the resultant difficulty of creating a stable community. A higher proportion of residents in 2012 thought that being part of a community was important and said they felt they were part of the local community.

- Although more people told us they use public transport, fewer were frequent users, despite the improvements made to public transport facilities and infrastructure in the area since 2001. The number of cars per household also increased since 2001, largely explained by the increase in the number of adults living in the households in the sample.

- The experiences of a number of the interviewees had been blighted because of the incidence of leaky building syndrome in their development.

- Respondents expressed general satisfaction with their accommodation, yet:

- Residents still regarded their medium density housing as a transition towards owning a suburban house.

10. **CONCLUSIONS**

Our research has examined medium density housing in Auckland from a number of perspectives: the extent to which the case study developments reflect the urban consolidation and quality housing aims of the relevant planning policies and district plans; residents' perceptions of how the case study developments met their needs and expectations; the price dynamics of the housing units in the case study developments; and changes that have occurred to the Ambrico Place developments since the earlier study of 2001. Drawing on a review of relevant literature, our research has also been informed by a critical appraisal of the outcomes of urban growth management strategies in contexts similar to Auckland.

Overall, the case study developments indicated a reasonable level of satisfaction with the experiences of living at medium densities, and meeting a range of household needs that included bringing up children and caring for the elderly. In part, this positively supports proposals to increase the supply of higher density housing promoted by the Auckland Plan. However, we also recognise from our research that complex interactions between urban planners, developers and potential buyers (owner-occupiers and investors) profoundly influenced the physical characteristics of medium density developments. These interactions produced a specific built form that may, or may not, exhibit good design elements and may, or may not, promote long term 'successful communities'.

This poses a problem for planners, developers and the Auckland Council in terms of implementing the Auckland Plan (through the yet to be released Unitary Plan). Embedded within the Plan, is an implicit view that the built form influences the development of a 'sense of community'. Yet if living in these newer developments is viewed by residents as little more than a transitory stage in their lives, then there are implications for developing the vibrant, liveable, community-oriented local environments promoted in the Plan. The above findings also demonstrate the disjuncture between the planning visions and policies for compact development and the views and practices of residents living in those areas. This suggests that good plans and planning mechanisms on their own are not sufficient to ensure the delivery of the policy aims and quality outcomes anticipated. Our research suggests that the following key issues need consideration in order to maximise the opportunities for the Auckland Plan to deliver the quality housing intensification and urban lifestyles anticipated. In part these factors represent a misalignment between what the Auckland Plan aims to achieve and key findings from our research.

- **Effective and more flexible planning instruments and tools**

Our research points in part to the planning instruments and tools used to deliver the outcomes envisaged in plans and policies being deficient. This suggests not only that the planning instruments need to be more effective, but also more flexible to respond to changing circumstances to achieve the aims of compact development.

- **Incentivisation of housing intensification**

International experience strongly suggests a linkage between more successful housing intensification outcomes and various incentives promoted by local and regional authorities. These measures include zoning incentives, better capturing of up-zoning value for

investment in the public realm, better targeted and active promotion of strategies such as transit-oriented development in partnership with the developers and investors, and more engagement with the range of stakeholders involved in the development process.

- **Aligning infrastructure investment with housing intensification**

Our research suggests that residents in the case study developments remain car-dependent for most transport needs, and that there is an underuse of the public transport facilities in the three town centres concerned. This suggests that far better value could be leveraged off the large investments made in key public transport infrastructure such as the electrification and upgrading of the train system, the Northern Busway and the proposal for an inner city rail loop.

- **Valuing the amenities of town centres in property prices**

Our research indicates that property prices in the case study areas are not overtly being influenced by the presence, or absence, of quality amenities and services in the associated town centres. Our review of literature indicates that in some cities such as Vancouver and Portland, the reverse prevails: that quality community amenities and services, and easy access to public transit is positively reflected in property values. Better understanding of the associated price dynamics to achieve a more positive outcome will enhance the promotion of housing intensification.

- **Aspirations for suburbia**

Despite the positive responses to living at higher densities, for whatever reason, the aspiration of living in a detached suburban housing remains strong for both New Zealand-born and 'new' New Zealanders. However, this aspiration needs to be understood in relation to the reasons given for living in their present accommodation: such as 'proximity/location' and 'affordability.' In this respect, the suburban 'dream' might simply be unrealistic and unaffordable. Thus, keeping in mind the low national median income of New Zealanders and Auckland's high house prices, it can be surmised there is a disjuncture between the desire and aspiration to live in a standalone home and affordability considerations. Nevertheless, the aspiration for suburbia (no matter how unrealistic) is a barrier to the promotion of visions for a compact city that needs to be better understood. We need to better understand what the necessary 'trade-offs' are between the suburban lifestyle (whether affordable or not) and the urban lifestyle envisaged for a majority of future Aucklanders.

1 INTRODUCTION

Over the last decade and a half, Auckland's urban landscape has been transformed by a proliferation of medium and higher density housing developments. These newer housing forms are in direct contrast to both the owner-occupied, detached, suburban dwellings built on relatively large sites in the post-War period and the infill housing built in Auckland in the decades after suburban expansion.

The city's housing transformation is a result, in part, of urban growth management policy responses developed by the previous Auckland Regional Authority/Auckland Regional Council and the seven local authorities. These included the Auckland Regional Growth Strategy (ARGS), a plan adopted in 1999, and Plan Change 6 to the Auckland Regional Policy Statement. These responses sought to counter the adverse impact of the urban sprawl through a process of urban consolidation around existing and emerging centres and along transit corridors.

Most recently, the new Auckland Council has built on these initiatives, and the recently published Auckland Plan (2012) is intended to accommodate an additional one million inhabitants in a more compact urban form. The Auckland Plan (Auckland Council, 2012 p. 268) sets four key priorities related to the future provision of housing to meet projected demand, compact development, and urban quality 'liveability' aims:

- Increase housing supply to meet demand;
- Increase housing choice to meet diverse preferences and needs;
- Improve the quality of existing and new housing;
- Improve housing affordability and the supply of affordable housing.

Auckland's approach to urban growth management is not unique, and has typically been applied in major cities in Australia, Canada and North America. Yet despite the widespread adoption of urban growth management strategies, delivering on the aims of intensification has often been difficult and controversial. As the literature review in Chapter 2 shows, the experience of other cities reveals problems of implementation that include occupants' resistance to higher-density living and market resistance to investment in the associated housing typologies. Implementation problems have also occurred in Auckland.

The overall aim of the Future Intensive research project was to assess the extent to which quality urban living conditions have been achieved and are experienced in three case study medium density housing developments in the Auckland region. It is intended that the outcomes from this research will be useful to the Auckland Council and contribute towards the development of long term plans.

The remainder of this Chapter outlines the intentions and aims of this research project, a description of the case study sites that were selected for this project, including the selection criteria, and an explanation of how the report has been structured.

THE RESEARCH

This project was originally submitted as a proposal to The University of Auckland's research initiative, Transforming Cities, hosted by the National Institute of Creative Arts and Industries. The proposal was also of interest to the Auckland Council, who co-funded the project. At that time, 2011, the Auckland Plan was in draft form, setting out an urban growth management plan to 2040 to cater for the estimated growth of Auckland's population from 1.5 million to 2.5 million. The Plan provides for 60-70 per cent of new dwellings required to be located inside the urban area in, or around, existing and emergent metropolitan, town, and neighbourhood centres, as well as the city centre and its fringe. This compact form of growth means greater density in the 103 centres identified in the Plan, using multi-storey, multi-unit housing forms.

Ten years ago when intensive housing was still a relatively new phenomenon in Auckland similar concerns over its success led a team of researchers from the University of Auckland and Massey University to undertake in-depth interviews with medium-density housing residents in the New Lynn development of Ambrico Place. At the time, Ambrico Place was a flagship development sited to promote sustainable, transit-oriented, compact development in the town centre of New Lynn, then part of Waitakere City. This work produced important information about residents' attitudes to the experiences of living in medium-density housing in Auckland (Dixon, Dupuis & Lysnar, 2001; Dixon & Dupuis, 2003).

Given the significant changes since the completion of the 2001 Ambrico Place research, our initial research plan was to carry out a follow-up piece of research in the same development. This would have afforded an opportunity to judge the impact of changes over the intervening decade and also show changes in the composition of residents and obtain their views of the subsequent development of New Lynn. We saw it as strategically significant to consider the extent to which key policies related to compact development and housing intensification were delivering on the vision. This constituted the initial single case study focus for the research project. However, Auckland Council's support of the project offered the opportunity to extend the project in a number of ways.

First, it allowed us to extend the study to include two more intensive housing developments in the Auckland region. Following discussion among the researchers and the Council Advisor, it was agreed that these additional case study developments be located in Albany and Onehunga. The selection criteria are discussed below, but all three case studies are located in suburbs where suburban re-generation has been problematic (Beattie & Haarhoff, 2012). The decision was to conduct in-depth interviews with a sample of residents from all three case study areas.

Second, the research was extended to include a critical literature review of urban growth management policies drawing on international research. This is also informed by a concurrent study being carried out by research team members (Beattie & Haarhoff, 2012).

Third, the project was extended to undertake an evaluation of the effectiveness of the district plan's ability to influence and deliver its medium density housing outcomes for the Albany and Onehunga case study developments. As part of this process, it was agreed that a physical survey of each case study development would be undertaken. This would consider the unit and site design, housing typologies deployed, and the urban setting of each site. It was also intended to use urban design criteria and design parameters to appraise the design of the developments and their contextual relationship to the areas in which they are located. Informing this analysis are interviews with the relevant council officers involved in the consenting process for the Albany and Onehunga case study developments.

Fourth, in order to fully round out the research project an analysis of house price dynamics in the three case study areas was undertaken. This component was considered vital to the project given that the financial performance of medium density housing is a key factor influencing owners' and investors' perceptions of the value of these types of developments.

In keeping with the breadth of coverage of these research tasks it was important for us to achieve the aim of cross-disciplinary study. Hence, in addition to the sociology and urban planning expertise in the initial study of Ambrico Place we assembled a team that extended this expertise to include housing and property economics, urban design and architecture. We believe the research has produced an in-depth assessment of housing intensification in the context of the associated town centres from a number of different perspectives, set in the context of international experience, and integrated around key conclusions. In addition, a unique aspect of this research is the revisiting Ambrico Place where residents were first interviewed in 2001. This has enabled us to reveal changing conditions and attitudes towards medium density housing over the intervening decade.

THE RESEARCH AIMS

The broad research aim addressed in this project is the extent to which housing intensification in Auckland will produce socially acceptable, good quality housing outcomes and at the same time be attractive to market investments. More specifically the project aims to:

- examine how well housing intensification strategies have been implemented and analyse house price dynamics in selected medium density developments;

- gather information on how well intensive housing developments meet the expectations, aspirations and needs of residents;

- elucidate the interconnections and interdependence between urban planners, developers, investors and residents in creating a sustainable urban housing environment in Auckland;

- contribute to The University of Auckland's Transforming Cities initiative and to knowledge that would feed into the development of the Auckland Council's long-term plan.

THE CASE STUDY SITES: **SELECTION CRITERIA**

The three case study sites selected for this research were Ambrico Place in New Lynn, the Spencer Road (The Ridge) and Mason Road (Masons) developments in Albany and the Atrium on Main in Onehunga. In selecting the case study sites we were mindful that the Auckland Plan focuses a significant part of future housing development in, and around, existing (and identified) metropolitan and town centres. Centres are described in the Auckland Plan as a '...concentrated mix of public and private activities in a defined area, including shopping, offices, public transport nodes and community facilities' (Auckland Council, 2012, p. 253), within ten minutes walking distance. Hence, although we had already planned to choose Ambrico Place in New Lynn as a case study site we also had to ensure that it and the two other sites conformed to the selection criteria we established. The criteria were:

1. Case study developments constitute medium-density housing typologies, as defined by the relevant District Plan;

2. Case study developments should be close to existing sub-regional/town centres, within 800 metres (approximately 10 minutes' walking distance);

3. Case study developments must be close to major public transit points, in order to consider the effectiveness of the relevant district plan's policy on Transit Orientated Developments, including passenger uptake;

4. The town centres considered should have received high levels of public investment (from the council and central government), seeking to encourage urban consolidation and increased transit usage;

5. The case study developments should have been completed and occupied under an operative District Plan, and have been completed by 2010, to enable the analysis of sales information and the collection of information on residents' experiences of medium-intensive housing.

6. The case study developments must contain more than 50 residential units to provide sufficient scale.

All three case study sites are classified in the Auckland Plan as located in Metropolitan Centres or Town Centres, as shown in Table 1.1 below.

Table 1.1: How the Auckland Plan classifies the case study areas

Case study site	Classification
Albany	Metropolitan Centre (emergent)
New Lynn	Metropolitan Centre
Onehunga	Town Centre

Tables 1.2 to 1.4 demonstrate that all three sites met the six case study selection criteria.

Table 1.2 New Lynn case study selection criteria

Site	C1	C2	C3	C4	C5	C6
Ambrico Place development area, New Lynn	Yes	Yes	Yes	Yes	Yes	Yes*

*Ambrico Place consists of nine developments. Individually only one of these meets the sixth criterion, a minimum of 50 units. However, taken as an overall development of 293 units, it meets the criterion.

Table 1.3: Albany case study selection criteria

Site	C1	C2	C3	C4	C5	C6
Spencer Road development (The Ridge)	Yes	Yes	Yes	Yes	Yes	Yes
Mason Road development (Masons)	Yes	Yes	Yes	Yes	Yes	Yes

Table 1.4: Onehunga selection criteria

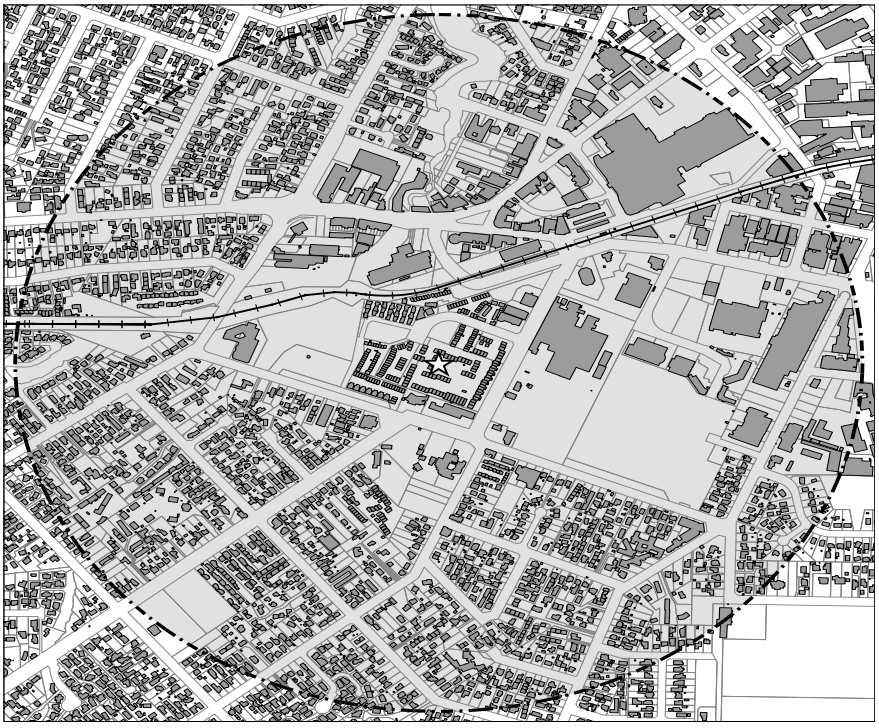
Site	C1	C2	C3	C4	C5	C6
287 Onehunga Mall (Atrium on Main)	Yes	Yes	Yes	Yes	Yes	Yes

THE CASE STUDY SITES: **A DESCRIPTION**

The New Lynn case study: The New Lynn case study is made up of the Ambrico Place, Melview Avenue, Margan Avenue and Briar Way developments (collectively referred to as the Ambrico Place developments) which comprise nine separate contiguous developments, ranging in size from 13 to 97 units. There is a total of 293 units overall on 5.6 hectares, with an average net density of 57 units per hectare. These are largely arranged as two- to three-storey terraced housing units fronting either public streets or internal driveways. The development area includes a communal park, with access to a landscaped wetland off Margan Avenue. Ambrico Place is the oldest of the three case study developments with units coming on to the market as early as 1996 (see Chapter 5). The site is fully occupied.

The location of the case study site in New Lynn is shown in Figure 1.1, with the 800-metre circle centred on Ambrico Place. The developments are well placed within easy walking distance of the New Lynn town centre. New Lynn has a wide range of retail and commercial activities, and offers good access to buses and to the western rail line via a newly redeveloped transport station.

Figure 1.1: New Lynn case study location

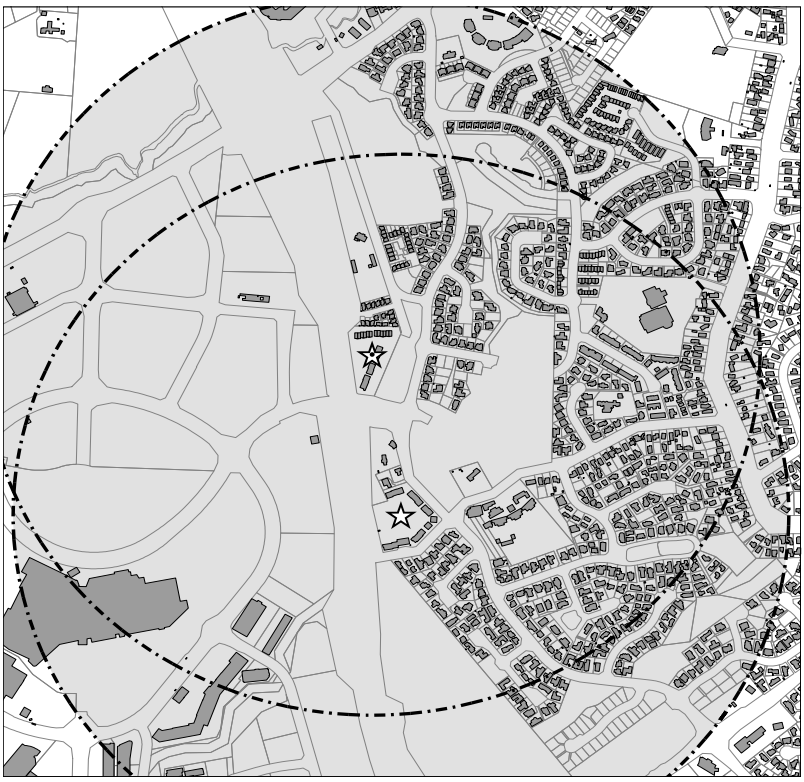


Whilst no district plan or urban design assessment has been undertaken for the Ambrico Place development (see Chapter 3 for further explanation), the inclusion of this site, ten years after the first detailed Ambrico Place study, gave us the opportunity to undertake a unique longitudinal study of this intensive housing development. In this regard, Chapter Six reviews Ambrico Place ten years on, comparing recent interview findings with the initial work undertaken by team members in 2000-2001 (Dixon et al., 2001).

The Albany case study: The North Shore district plan designated the Albany Centre as one of the city's two sub-regional centres. The Albany Centre has attracted considerable public investment from the previous North Shore City Council and Central Government. The Auckland Plan regards Albany as an emergent Metropolitan Centre that is required to provide a mix of public sector activities to address economic, social, and physical needs for the wider community.

The case study sites chosen were two medium density developments on two sites in close proximity to each other, in Spencer Road (The Ridge) and Mason Road (Masons) respectively. These sites were completed by November 2005 and together they comprise 169 units with a net density of 67 units per hectare. The developments are standardised two-or three-storey blocks with two-bedroom units of 49.5 square metres. The developments are within a 10 minute walk of the Albany sub-regional centre and the Northern Busway station that is part of the region's rapid transit network. There is also good access to the Northern Motorway (SH1). The locations of the Albany case study sites are shown in Figure 1.2, with an 800-metre circle drawn from the two sites. Albany Mall is shown in dark grey, in the bottom left-hand corner.

Figure 1.2: Albany case study location



The Onehunga case study: The Atrium on Main is the specific development selected as the Onehunga case study site. A single recent development, it comprises 112 units arranged as a perimeter block with a net density of 64 units per hectare. The development is located towards the northern end of the Onehunga Mall and is within five to 10 minutes' walk of the new Onehunga train station and buses. The Onehunga development comprises different housing types, from studio apartments to three-storey terraced housing. The medium-density housing is part of a mixed-use development, with shops and offices at street level. Completed in 2005, it is fully occupied apart from the retail and office space on the street level facing Onehunga Mall. The location of the site is shown in Figure 1.3, with the 800-metre circle centred on the case study development.

In the Auckland City District Plan – Isthmus Section (Auckland District Plan) - Onehunga was identified as one of the city's traditional suburban retail and commercial activity centres outside of the Central Business District. The town centre is identified in the Auckland Plan for future population and employment growth, involving 3,400 new dwellings and 5,000 jobs, and is prioritised for growth and development over the first three years (2012-2014). Onehunga has a terminal railway station (with potential future extension to the airport). The rail link and bus service provide good connections to the city centre and to other parts of the metropolitan region. The town centre has easy access to the SH20 western ring route, connecting to the western motorway (via a tunnel now under construction), and to the Southern Motorway via the Auckland Manukau Eastern Transport Initiative (AMETI) east-

west link. The Onehunga Town Centre is also located within what is called the 'Southern Initiative', described as an area with the highest social needs, but with significant economic opportunity, close to Auckland Airport.

Figure 1.3: Onehunga case study location

STRUCTURE OF THE REPORT

This report is organised into a number of chapters related to the key research tasks.

Chapter 2: Provides a literature review on recent literature focussing on urban growth management and housing intensification. It begins with a discussion of the historic emergence of urban growth management in the United States as a measure to prevent urban sprawl and induce environmental protection, leading to the concept of 'smart growth'. Consequential research related to the establishment of urban boundaries and the concentration of development in urban centres and transit corridors is discussed. Also considered is a more recent conceptualisation that focuses on achieving urban lifestyles and the idea of urban 'liveability'. Research focused on understanding the processes of plan making and the ability to give effect to urban planning visions and policies is also raised.

Chapter 3: Undertakes an evaluation of the effectiveness of the district plan's ability to influence and deliver its medium density housing outcomes for the Albany and Onehunga case study developments and their neighbourhood contexts. This assessment is informed by an 'urban design assessment' of the quality of the development in its neighbourhood context and the information offered by the urban planning officials who were responsible for the consenting process for each of the case study developments.

Chapter 4: Sets out the findings from the in-depth interviews held with members of 84 households from the three case study sites. It provides: a demographic profile of the research participants and their household members; a discussion of interviewees' housing and housing experiences including residents' housing choices, levels of satisfaction and expectations; an examination of issues around bodies corporate; an analysis of the contact residents had with others in their development and issues around community; an examination of perceptions of safety and security, an analysis of reported transport use and use of local amenities and services.

Chapter 5: Examines housing price dynamics in the case study areas. It offers a descriptive analysis of the sales volumes and price dynamics of units within the case study areas. It also sets out the structure and results of a set of hedonic models designed to examine the relative performance of each of the case study developments within the broader context of the sales of multi-unit dwellings in the Auckland region.

Chapter 6: Takes a comparative focus and provides data and discussion of key findings from the two Ambrico Place studies: the first conducted in 2000/2001 and the second conducted as part of this research project. It compares the two research participant samples, and discusses such issues as a sense of community, transport use, children living in Ambrico Place, the operation of bodies corporate, expectations, future housing intentions and housing preferences.

Chapter 7: Draws some overall conclusions to our research, framed around two key questions from the international research reviewed in Chapter 2: will intensive housing forms meet the aspirations and needs of their future occupants when the traditional suburban family home is the current aspiration and norm for many of the city's residents; and will the market be prepared to invest in the necessary development that will provide the level of amenities and associated urban lifestyle that intensive development must offer in recompense for the suburban lifestyle?

2 COMPACT DEVELOPMENT AND HOUSING INTENSIFICATION: A REVIEW OF RECENT EVALUATIVE RESEARCH

INTRODUCTION

The Auckland Plan is the Auckland Council's strategy for managing future urban growth, and a population increase from 1.5 to 2.5 million by 2040 (Auckland Council, 2012).[1] Whilst non-statutory, the Auckland Plan aims to limit the adverse impacts of suburban sprawl by seeking to concentrate approximately 60-70 per cent of future growth and development within a defined urban growth boundary: the 'rural-urban boundary' (RUB).[2]

Although the Auckland Plan makes provision for new development on 'greenfield' sites on the urban peripheries, most future growth and development is directed to, and around, 103 existing 'town centres' spread across the metropolitan region in what are identified as 'areas of change'. These areas of change and their associated urban 'centres' are designated in a hierarchical order, from the city centre outwards. The concentration of development in these centres will result in intensive housing and a range of multi-storey, multi-unit housing typologies (Auckland Council, 2012, p. 53). The 'centres' are to be serviced by differing degrees of public transit within 10-minute walkable catchments, thus aiming to achieve a range of transit-oriented developments (Auckland Council, 2012, p. 253).

1 The Auckland Spatial Plan is intended to provide a long-term (20 to 30 year) plan for the basis to integrate and align all the regions' urban planning decision making functions, including improving the effectiveness, quality and implementation of urban planning practice (s79, LGACAA 2010; Beattie, 2011). Its genesis can be traced back to the Auckland Royal Commission which found that the existing urban planning processes in Auckland were complex, lacked integration and alignment, and were failing to provide an overarching strategic vision for the future direction of the Auckland region (Royal Commission, Executive Summary Part 2, 2009).

2 The actual delivery of the Auckland Plan's strategic urban planning goals will be achieved through the use of a wide range of urban planning mechanisms including the statutory Unitary Plan and funding through the Long Term Plan (LTP).

Other Pacific Rim cities have adopted similar approaches to managing their urban growth, such as Brisbane, Sydney, Melbourne, Perth, Vancouver, Seattle, and Portland, among many others[3]. Just like the Auckland Plan, their strategies all share the aim of countering the adverse impacts of urban sprawl by seeking to consolidate most of their future growth within existing urban centres in close proximity to public transport infrastructure and along transit corridors. Indeed, the current Auckland Plan's approach to urban growth management is not new. The concept of urban consolidation around town centres was a key element of the 1999 *Regional Growth Strategy* adopted by the now disestablished Auckland Regional Council (Auckland Regional Growth Forum, 1999).

The Auckland Plan (as with strategies in other Pacific Rim cities) bases its case for compactness on the notion that denser cities have greater productivity; make better use of existing infrastructure; make public transport more viable; protect agricultural productivity and the character of the countryside; mitigate the negative effect of uncontrolled urban sprawl and create greater social and cultural diversity (Auckland Council, 2012, p. 42). This suggests that the successful implementation of the Plan should demonstrate (among other indicators of success) higher urban productivity; economic efficiency derived from the use of existing infrastructure; the retention of peripheral rural character; the protection of peripheral agricultural production; less environmental damage with regard to water, habitats, and air quality (and control over urban sprawl); greater use of public transport (and conversely, reduced private car usage and transport congestion); and the effective delivery of more compact development and neighbourhoods that are valued and able to provide quality of life experiences, well matched to the needs and aspirations of future generations.

This chapter reviews recent research that evaluates the efficacy of policies and strategies that aim to mitigate unsustainable urban sprawl and provide more compact urban form that delivers enhanced and quality life styles. The review draws mainly on research from New Zealand, Australia and North America. Observations and conclusions are also drawn from interviews that the authors have had with key stakeholders responsible for urban growth management in eight cities in the Pacific Rim[4]. This review does not purport to be comprehensive, but rather a selective commentary drawing on research considered to be useful in contextualising the three case studies of housing intensification in Auckland that are the subject of this research project. It should also be noted that since urban growth management plans are long term strategies implemented over 20-30 year timeframes, any evaluation at this stage will be partial.

The chapter first considers the emergence of urban growth management in the United States as a measure to prevent urban sprawl and induce environmental protection, leading to the concept of 'smart growth'. Consequential research related to the establishment of urban boundaries and the concentration of development in urban centres and transit corridors is discussed. Also raised for discussion is more recent conceptualisation that

3 The urban growth management strategies can all be sourced on the Internet: South East Queensland Regional Plan 2009-2031 (Brisbane, adopted in 2009), Sydney 2030 (adopted in 2008); Melbourne 2030 (released in 2002, and updated in 2008 as Melbourne @ 5 million); Directions 2031 (Perth region, released in 2010); Metro Vancouver 2040 – Shaping our Future (adopted 2011), King County Comprehensive Plan (Seattle region adopted in 2008); Portland Metro: The Nature of 2040 (Portland region, adopted 1995).

4 Information in this review includes that acquired by the authors from a research project interviewing key stakeholders responsible for urban growth management strategies in the following cities: Vancouver, Seattle, Portland, Auckland, Brisbane, Sydney, Melbourne and Perth. The funding support from the University of Auckland Faculty Research Development Fund for this project is acknowledged.

focuses on achieving urban lifestyles and the idea of urban 'liveability'. Research focused on understanding the process of plan making and the ability to give effect to urban planning visions and policies is raised, leading to conclusions at the end of the chapter.

FROM 'SMART GROWTH TO 'LIVEABLE CITIES'

The origins to urban growth management can be found in the environmental movements in the United States during the 1970s. Concerns about uncontrolled suburban sprawl, and the destruction of farmland and natural environments, led initially to the enactment of growth management programmes as a way of advancing environmental protection, with the U.S states of Maryland and Oregon leading the way with state-wide legislation (Ingram, Carbonell, Hong & Flint, 2009). The desire to limit suburban sprawl to protect and ensure food supply through agricultural land protection was also evident in British Columbia, Canada during the 1970s and 1980s (Beattie & Haarhoff, 2011).

Critics of these approaches argued that environmental protection would be obtained at the cost of constraining economic growth and that urban growth management was essentially anti-growth. This resulted in a refocusing in the early 1990s on 'smarter' urban planning policies and approaches *for* economic growth *and* environmental protection, which in the United States were referred to as 'smart growth'. At the same time, sustainable urban growth agendas and policies emerged, recognising that low density was associated with inefficiency, car dependency, and noxious environmental emissions (Newman & Kenworthy, 1989). As such, encouraging higher density development and increased public transport ridership was seen as a way of limiting urban sprawl and car dependency. In 2003, in Massachusetts, for example, state legislation provided additional funding to incentivise local communities to amend zoning to allow intensive housing near transit and town centres (Ingram et al., 2009, p. 7). With a renewed emphasis on economic development, Ingram et al. see smart growth now being focussed on policies aimed at revitalising cities, reforming local zoning to encourage compact development and infill, coordinating state agencies and their growth policies, and better aligning capital investments with sustainability agendas.

Smart growth policies, however, have not been without controversy. Alves (2004), in his assessment of urban growth management in Australia, suggests that among '... alleged benefits by far the most frequently cited are those which appeal to notions of sustainability', derived from compact development and higher density. He goes on to suggest with some scepticism that '... the development of medium density housing, wherever it proves economically viable, has been cast in the role of improving the sustainability of the urban environment in Australia' (Alves, 2004, p. 2). Property rights advocates and interests aligned with suburban development have argued that urban growth boundaries cause land scarcity, which in turn pushes up land prices and housing costs, making housing less affordable. In New Zealand, the Government's Productivity Commission has raised similar concerns. However, housing costs are the product of a range of factors, including construction costs, land tenure issues, and the ability to obtain the long-term finance needed to develop intensive housing forms (New Zealand Government, 2012).

Some research on the cost implications of urban growth boundaries and compact development suggests a more positive outcome. For example Jaeger, Grout and Plantinga (2008) argue that there is clear evidence that, in the case of Portland, the purpose of the land regulations in force is intended to guide and control the location of development rather than

to limit the supply of developable land. They argue that this does not '... produce scarcity-induced price increases as has been suggested in much of the prior literature' (Jaeger et al., 2008, p. 15).

Notwithstanding, there is an ongoing backlash against urban growth management, and in the United States according to Ingram et al. (2009, pp. 8-9), this has resulted in the term smart growth falling out of favour, and replaced by initiatives for 'quality of life' and 'liveable communities'. This newer terminology can be found in the more recent iterations of urban growth management policies, including the Auckland Plan. On this point Alves (2004) observed that compact development (and 'urban consolidation') has now been associated, albeit uncritically, with greater liveability and better urban quality of life[5].

This concept of liveability underpins recent iterations of urban growth management strategies in Australia and New Zealand. The Auckland Plan aims to create the 'world's most liveable city' (Auckland Council, 2012, p. 10). The urban design protocol produced by the Australian Government asserts that liveability is one of three cornerstones to creating quality urban places (Australian Government, 2011, p. 7). Similarly, the South East Queensland Regional Plan 2009-2021 (Queensland Government, 2009, p. 8) states that 'creating liveable communities and improving quality of life for residents in growth areas' is an essential part of managing future growth.

The concept of liveable cities and neighbourhoods promotes the primacy of street life, a sense of urbanity, walkable neighbourhoods, and connected communities. It has, in part, led to a strong movement calling for the replication of 'traditional town forms in which these urban qualities are embedded, and the practice of New Urbanism (Barnett, 2003). Critics of this approach have questioned whether such traditional qualities can be achieved solely through design actions and manifestos (Dixon & Dupuis, 2003), and doubts can be raised about whether manifestations of New Urbanism in the form of gated communities result in the urban public life envisaged.

5 Terminology in the literature on urban growth management varies across time and countries, and this requires an explanation. 'Smart Growth' is a term that emerged from the United States where it remain current, to describe an urban growth management strategy (among others) that includes the following measures: limiting urban sprawl through an urban containment boundary, measures to protect agricultural land and environmental areas, focussing future development within the defined urban areas, and aims to achieve sustainable urban form. These measures lead to future development being at a higher density resulting in 'compact' urban form (Raman, 2010; Woodcock, Dovey, Wollan & Beyerle, 2010; Vallance, Perkins & Moore, 2005; Randolph, 2007; The Auckland Council, 2012) and 'intensification' in New Zealand (Carroll, Witten & Kearns, 2011; Symes, McGregor & Mead, 2005), and 'intensification' (Dixon & Dupuis, 2003; Randell, 2008; Thomas, Walton & Lamb, 2011; Phan, Peterson & Chandra, 2009) are among other terms used. 'Urban infill', at least in the context of New Zealand refers to the insertion of additional housing units on an original subdivision, under a variety of tenure arrangements (Vallance et al., 2005). The spatial concentration of compact development is another key element to smart growth and compact development. Transit-oriented development (TOD) is a generic term to describe development concentrated within walking distance public transport. The nodal concentration of development (including commercial, retail and housing uses) is also associated in Victoria, Australia with the term 'activity centre' (Victoria Government, 2010; Goodman & Moloney, 2011), 'urban growth centres' (Jain & Courvisanos, 2008), urban 'centres' in the Auckland Plan (Auckland Council, 2012) at neighbourhood, town, local and metropolitan scales. In this review the terms used are 'smart growth' as a type of urban growth management, leading to 'compact' urban form, concentrated at 'activity centres' or 'centres' and resulting in 'housing intensification' where a range of attached housing typologies are deployed.

THE URBAN GROWTH BOUNDARY AND COMPACT DEVELOPMENT

A key smart growth strategy has been the control of urban sprawl by establishing an urban boundary, and directing development to locations within the urban area. The robustness of growth boundaries depends on their legal status, which varies from one city to another in Australasia and North America. In Vancouver, for instance, urban development is limited by legislation that reserves surrounding land for agricultural use and the fact that the city's southern edge is the border with the United States. In Oregon, state legislation requires all incorporated urban authorities to have an urban growth boundary that is reviewed every five years to ensure that there remains a 20-year land supply capacity. In parts of Australia and in New Zealand, urban growth boundaries are defined by local, regional, or state urban planning policy that can be legally challenged.

There is a reasonable body of literature aimed at evaluating smart growth outcomes, especially in North America, where such policies have been applied for a number of decades. Measures of successful outcomes include higher density within an urban boundary, halting sprawl, protecting peri-urban agriculture and the natural environment, and greater use of public transport to reduce traffic congestion.

One of the more comprehensive assessments of smart growth is that undertaken by the Massachusetts-based Lincoln Institute of Land Policy. Their study compared the performance of four US states with explicit smart growth policies (Florida, Maryland, New Jersey and Oregon) with four states that used other land management approaches (Colorado, Indiana, Texas, and Virginia) between 1990 and 2000 (Ingram et al., 2009). Promoting more compact development is a primary aim of smart growth policies. As such, the authors assessed compactness by measuring changes in spatial concentration. They found that smart growth policies were successful, with more concentration in urban areas and less marginal land consumption, although the differences between the two sets of states in the study were small. Moreover, the goal of improving the environmental and natural resource protection produced mixed results, especially in protecting undeveloped land, with neither group of states outperforming the other.

Increasing the use of public transport is another indicator of success and this was measured by changes to commuting modes and reducing traffic congestion in the states evaluated. Here the smart growth states produced reasonably strong results. Whilst the evidence for increased cycling and walking was less than compelling, there was more cycling and walking combined with public transport in the smart growth states than in the comparison states. Available data for assessing reduced traffic congestion, measured by time spent commuting was considered less reliable, although the report concludes that the smart growth states have a '... statistically significant and behaviourally meaningful effect on reducing congestion' (Ingram et al., 2009, p. 140). Oregon performed best on these measures, and the four states that performed best on transport also performed best on spatial concentration.

A key conclusion from the study is that although bottom-up delivery is far more effective, local government with no regional coordination is 'unlikely to deliver good outcomes because of the overspill effects from communities pursuing their parochial interests' (Ingram et al., 2009, p. 11). Regional governance plays an important role in the efficacy of urban growth management strategies and in the way it exercises authority to achieve these

goals. Overall, the Lincoln study concludes that the evidence 'does not sustain the widely held view that state-wide programmes are either necessary or sufficient to attain all smart growth objectives, although all programmes clearly make progress on one or more of [the smart growth objectives]' (Ingram et al., p. 43). As the authors observed, the sample of smart growth states as a group only marginally outperformed the states with other land management approaches.

Other studies, such as the more detailed evaluation of smart growth policies in Portland by Knaap, Song, and Nedovic-Budic (2005) provide evidence of good outcomes, despite significant challenges to smart growth strategies over a number of years. They found that Portland exhibited fewer characteristics of urban sprawl than cities that did not use smart growth policies, noting that this is interesting '... given all the controversy over its urban growth boundary and other land use controls' (Knaap et al., 2005, p. 9).

Overall, though, the indications are less clear cut. Wassmer (2005) in his evaluation found that certain forms of smart growth policies are achieving their desired goal with increasing urban densities. However, less optimistically, Wassmer concluded that, across the United States, regulations designed to foster compact urban economic development '... may not be enough to bust the sprawl-generating impacts of other natural evolution, flight from blight, and fiscalisation of land use factors currently driving urban sprawl' (Wassmer, 2005, p. 21). This raises questions not about the strategy of smart growth, but rather the vested interests that oppose this form of urban growth management.

With smart growth programmes now addressing new environmental objectives such as lowering carbon dioxide emissions, reducing energy consumption, ameliorating the effects of climate change, we have, according to Ingram et al. (2009, p. 134) '... raise[d] the stakes on their success.' Seeking to bolster the argument that compact development is more sustainable than low-density sprawl are studies that compare the environmental and social costs of different growth scenarios. A recent assessment by Trubka, Newman, and Bilsborough (2008) examined the embodied costs of infrastructure provision, transportation, greenhouse gas emissions, and health in a study that compares urban redevelopment (infill) with urban fringe development (greenfield). The findings demonstrated that the substantial cost savings associated with infill redevelopment arise from making better use of existing infrastructure, as well as savings from lower CO_2 emissions, and associated health costs.

Another recent evaluation, prepared for the New South Wales Department of Planning (Centre for International Economics, 2010), evaluates the benefits and costs of alternative growth paths for Sydney, related to the development of their urban growth management strategy. The strategic issue was finding a balance between new greenfield expansion and infill intensification to accommodate the expected population growth of around 1.1 million by 2031. Costs and benefits were modelled for different scenarios of the percentage of intensification versus greenfield development using the following criteria: transport costs (including congestion), physical infrastructure, social infrastructure, environmental impacts, impacts on existing residents, and transformative benefits other than the cost of housing in the different areas[6]. Costs were found to be higher in greenfield sites for all but the last two criteria. In the case of transformative benefits, these were found to be higher for infill

6 The scenarios modelled were the 2005 Metropolitan Strategy that has an infill/greenfield distribution of 70-30 per cent; a 50-50 per cent split, and a more intensified infill strategy at 9-10 per cent (Centre for International Economics, 2010, p16)

development. However, the impact on existing residents was found to have both positive effects (such as increasing the provision of services and amenities) and negative effects (such as greater transport congestion). A key factor is the benefits derived from increased amenity resulting from infill development, although the researchers could not quantify these elements.

Overall, the macro-evaluations of the efficacy of delivering smart growth show that it has positive outcomes when compared with alternative methods of managing urban growth, although in the United States study the differences on some measures were small. More positive outcomes can be seen when comparing the infrastructure and social costs of developments in existing urban areas compared with greenfield locations on the urban periphery of Australian cities. This lends some weight to the argument for compact development as a key strategy for urban growth management and the aim of achieving more sustainable urban forms. The key mechanism for delivering the intensification of existing urban areas is to concentrate future growth and development in and around existing activity centres, and relevant research is reviewed in the next section.

ACTIVITY CENTRES AND CORRIDORS

The promotion of transit-oriented development (TOD), a strategy to reduce private car dependency and promote compact development, has emerged as an aspect of smart growth management. Calthorp (1993) and Dittmar and Ohland (2004) are among early practitioner-advocates of the need to counter the inefficiency of suburban sprawl with denser, multi-functional neighbourhoods within walking distance of public transport. This focuses development on neighbourhood centres associated with transit stops. Calthorp (1993, p. 43) also argued for further infill and redevelopment along the transit corridor itself, referred to as 'node and noodle' planning in Portland[7].

Transit-orientated development is an explicit strategy in many urban growth management plans, notably those of Vancouver and Portland. In the case of Vancouver, investment in the light rail network (the Skytrain) provided an incentive for planning initiatives and market-led investment in higher density development in close proximity to train stations. In the City of Vancouver, land adjacent to the transit corridors is zoned for appropriate commercial and retail usage, and land within walking distance zoned for intensive housing[8]. The City of Vancouver has applied this concept to the recently approved *Camble Corridor Plan* (City of Vancouver, 2011) that exploits the investment made in the new Canada Line running from the CBD to the airport. The aim is to focus on opportunities to integrate development with transit along and around the Canada Line to support the City's goals of 'environmental sustainability, liveability and affordability ... (with an emphasis on) walking and cycling trips, especially those integrated with transit' (City of Vancouver, 2011, p. 19).

The City of Melbourne (2009) produced a study investigating potential corridor development along the metropolitan region's extensive tram network. The proposal was argued to be a 'missing link' to the Victorian Government's *Melbourne 2030* Plan that focuses nodal development at rail-based activity centres. Although land available in the urban corridors was just 3 per cent of the total land within Melbourne's growth boundary, the study

7 Interviews with planning officials at the City of Portland and in Seattle.

8 See City of Vancouver Zoning District Plan at http://vancouver.ca/commsvcs/currentplanning/coloured_zoning_map.htm

demonstrated that there was a capacity to accommodate 840,000 people at a density of 200 persons per hectare. In a recent study by Woodcock et al. (2012), this concept is re-examined with the conclusion that all of the forecast growth in Melbourne @ 5 Million (Victorian State Government, 2008) can be accommodated within activity centres combined with 4-5 storey development along existing tram routes.

Corridor development was a key idea in the Auckland Regional Council's 1999 *Regional Growth Strategy* and was further investigated by the City of Auckland in the 2008 *Liveable Arterials Plan*. The Plan sought to reconcile the conflicting interests of local neighbourhoods with regional movement and the intensification of development.

However, corridor initiatives are not explicitly mentioned in the current iterations of urban growth management plans for either Auckland or Melbourne: instead, development is focussed in and around 'activity centres' in Melbourne and 'centres' in Auckland. At the time of writing, the Unitary Plan for Auckland that will define land use activities and zoning is still being prepared, but it is anticipated that it will include 'up zoning' to achieve higher densities (Auckland Plan, 2012, p. 65) in the 103 centres and the suburban areas of change. It has been suggested that corridor development would find support among local residents if, as argued by Woodcock et al. (2012), the urban design outcomes are realistically modelled, but it is not a certain outcome. Among the reasons for the shift away from corridor development strategies is possible resistance from affected (often affluent) residents, fear of a political backlash, and market scepticism that housing in the context of busy arterial roads would be successful. Forsyth, Nicholls and Raye (2010), reporting on corridor housing initiatives in Minneapolis-St Paul, point to the same difficulty of infill development from resident resistance that drove up the costs and affordability.

The intent to concentrate development in nodes, rather than along transit corridors, is clearly articulated in the urban growth plan, *Melbourne 2030* (Victorian State Government, 2002) and its update, *Melbourne @ 5 Million* (Victoria Government, 2008) with additional higher order activity centres in the latter plan. The significance of activity centres is underscored in the Victorian Government's (2010, p. 1) promotional guide, *Activity Centre Toolkit: Making it Happen*. The concentration of development in this way is considered to be '... the lynch-pins of a multi-centred structure for metropolitan Melbourne where people can enjoy the benefits of living closer to work with less congestion on the roads and public transport networks'.

A hierarchy of Metropolitan, Town and Neighbourhood centres underpins the Auckland Plan (Auckland Council, 2012). The *Metro Portland 2040 Growth Concept* (2012) also focuses development intensification in a hierarchy of Regional and Town centres, and 'Station Communities' where transit oriented development is promoted[9].

Intensification and the medium-density housing associated with 'activity centres' is promoted to achieve compact development, generally with little or no intervention in surrounding low-density suburban areas beyond walking distance of the centres or transport corridors. Despite some evidence of progress towards this aim, Woodcock et al. (2010, p. 95) observe that, 'seven years into the implementation of Melbourne 2030 ... not only has there been

9 Metro Portland's 2040 plan refers to "transit communities" that combines Portland's station areas (the half mile radius around its light rail and streetcar stops), and the quarter mile around its quality bus corridors (divided into segments based on shared characteristics) (see Metro Portland, 2010). Corridors are also identified in the Portland 2040 Plan, but these are essential key transportation routes relating to freight movement and industrial activity

very little intensification of activity centres in established suburbs, but there have been few urban design visions that might engage the public imagination or that of the development industry'. This observation raises at least two questions. Is the market willing to deliver the kinds of building required by compact development, and is there a current and future demand for the urban lifestyles visualised in the urban growth plans?

Goodman and Moloney (2011) point to the fundamental link between the capacity to deliver a strategic plan (such as *Melbourne 2030)* and how the function of government is defined. In the politics of neo-liberalism they suggest that the primary role of planning is to facilitate market-led development to drive economic growth. Recognising a need to engage with the development market to promote transit-oriented development, Metro Portland has undertaken an economic evaluation ranking all stations on the light rail network. Based on five key criteria, the assessment determines 'investment readiness' for housing, retail, and commercial development (Metro Portland, 2010). The Metro's *Transit-Oriented Development Program* (2010) thus serves a critical implementation-based role to provide incentives, primarily in the form of modest funding grants, to private developers to build intensive, mixed-use projects located near transit. This programme also aims at innovation to 'push the envelope' in terms of density or building type, acknowledging that these projects are often more expensive to build or carry additional risk[10] (Metro Portland, 2010, p. 5).

Recognising the significance of activity centres in promoting compact urban form, and a need to consider incentives to promote market interest, also led to a survey of developers in Auckland (Harding, 2011). A range of development incentives is identified, including direct financial incentive, urban planning instruments, public infrastructure investment, and special governance arrangements, as a way of encouraging denser development at designated activity centres.

Similarly, the Victorian Government's *Activity Centre Toolkit*, referred to above, aims to promote and 'assist local government, business associations, property owners and other government agencies implement activity centre policy and structure plan initiatives to improve activity centres and attract investment for development'[11] (Victorian State Government, 2010). A successful outcome of this activity centre model of compact development is, as Goodman and Moloney (2011) point out, '... an essential part of a strategy aimed broadly at supporting a more sustainable urban form (and of) central importance to the implementation of the strategy as a whole'. While this comment is directed at *Melbourne 2030*, the same question can be directed at other cities with the same approach to urban growth management. Beyond the policies, plans, and investment that cities are prepared to make, what will incentivise developers to invest in intensive developments in activity centres ranging from metropolitan to suburban neighbourhood scales?

10 The Station Community at Orenco is an often-cited example of Transit-Oriented development in Portland (see Beattie & Haarhoff, 2011; Haarhoff & Beattie, 2011).

11 The activity centre identified in Melbourne 2030 as a 'Specialised Activity Centre' is cited in this Toolkit as an example of partnership between the public and private stakeholders facilitating development well aligned to the compact city strategy. For a critical appraisal of University Hill see Beattie and Haarhoff, 2012.

Over a number of decades, certain types of commercial and retail activity traditionally found in the central business districts has dispersed to business parks, shopping malls and 'big-box' retailers, serving the car-dependent residents of sprawling suburbs. The activity centre model, of course, seeks to curb this type of dispersal, and to concentrate future retail and commercial development around public transport nodes (Goodman & Moloney, 2011). But as Goodman and Moloney (2011) comment, there are few assessments of the impact of the activity centre policy. They view the problem to be '... a lack of regulatory strength, leaving outcomes to be determined through negotiations between local government planners and developers resulting in variable and inconsistent decision making' (Goodman & Moloney, 2011, p. 5). Attracting jobs to the activity centres rather than to Melbourne's CBD is a major challenge without significant incentives. The policy had little impact '... in directing new housing construction towards nominated activity centres' (and) the role of the market in determining urban development outcomes is left unchallenged' (Goodman & Moloney, 2011, p. 8). Moreover, they found that the amount of housing located within one kilometre of major and principal activity centres in Melbourne had declined to less than 20 per cent by 2007. Achieving compact urban form will require the trend to be reversed over the remaining life of the *Melbourne 2030* plan.

Phan et al. (2009), in their study of the spatial distribution of new residential construction between 2001-2006 near the City of Clayton on the metropolitan periphery of southeast Melbourne, would concur. They found that the goal of directing development to activity centres has not yet been achieved. Much of the residential development occurred as urban sprawl beyond an 800 metre walking distance of public transport in designated activity centres. Other recent studies from Melbourne concerned with the form of development on the metropolitan fringes include one by Jain and Courvisanos (2008). They discussed the challenge of development associated with activity centres on the urban periphery where detached suburban sprawl has its greatest impact, and found a lack of investment in infrastructure and jobs. The same concern was expressed in a comparative study of fringe areas of all Australian state capital cities by McDougall and Maharaj (2012). They concluded more positively that, although equipping activity centres is dearer than areas closer to the city centre, '... it is likely to be outweighed by benefits, particularly benefits associated with workforce and transport productivity enhancements' (McDougall & Maharaj, 2012, p. 139).

Making an effort at compact development on the urban fringe under certain circumstances *can* work. An example of successful mixed-use development is University Hill in the City of Whittlesea on the northern edge of Melbourne. It has created 4,000 business and industry related jobs, 1000 medium-density housing units, and a main street retail environment. Whilst this example demonstrates that a high-quality urban experience related to an activity centre on the urban fringe can be achieved, it is the outcome of an innovative process involving city officials, a professional team, and an enlightened developer willing to take a risk (Beattie & Haarhoff, 2012; Haarhoff & Beattie, forthcoming; Reed, 2008). University Hill is an exception. Better understanding the process that created it may enable the model to be replicated elsewhere. Transforming activity centres into attractive places that offer urban lifestyle choices to residents, as articulated in the vision statements of urban growth management plans, is yet to be achieved in most cases. This shifts the discussion to how best to achieve the urban lifestyles and quality of life associated with compact living in activity centres, which is discussed below.

URBAN QUALITY OF LIFE AND IMPROVED LIVEABILITY

Newer iterations of urban growth management strategies have outcomes that seek to enhance quality of life experiences and deliver urban liveability (Ingram, et al., 2009). This aim is underscored by Alves (2004, p. 3), who sees urban consolidation in the case of Australian cities being closely associated with '... improved liveability and urban quality of life opportunities'. Activity centres in Melbourne are described as being places that will enable 'Melbournians to stay close to friends and family in their local area, while having access to goods and services and a reliable public transport network [... also] older people will be able to maintain their quality of life with access to quality services' (Victorian State Government, 2010, p. 2). Similarly, the Auckland Plan (Auckland Council, 2012), articulates the advantage of a compact city as enhancing 'social cohesion and interaction by attracting people across all demographic groups to a mix of cafes, restaurants, shops, services, and well-designed public spaces'. The Auckland Plan goes on to suggest that such places 'provide a range of activities to meet the full spectrum of people's everyday needs – for work, for play, for shopping and for education' (Auckland Council, 2012, p. 42). Moreover, these quality of life experiences are asserted to be the outcome of the compact city model, which concentrates future development in activity centres in multi-storey, attached housing typologies, close to shops and other businesses and employment, all within walking distance of public transport.

Of course, high-density urban living like this is not really new. All the cities included in this review already have a range of higher density urban lifestyle options on offer. However, the implicit issue is that in the future, higher density housing will become the dominant option available for more and more people, while suburban housing may remain static, decline, or may simply become too expensive. So how does the compact city model match future housing demand? Will it give residents the quality of life described in the vision statements? And what of the supply side of housing provision? Will the market-led housing sector be willing to invest in the compact city model, and the higher density building typologies it requires to deliver the liveability' envisaged?

To answer these questions, we must consider the research that sets out to understand public perceptions of housing options and compact urban lifestyles. Social surveys of residents are undertaken from two different perspectives. First, studies that explore the attitudes of existing residents who are subject to the imposition of higher density development and housing intensification in their neighbourhood. Secondly, studies that focus on understanding the quality of life experiences of residents who already live in higher density accommodation. Research findings may assist planners in framing policies, and developers in designing housing.

Residents' responses to compact development in their neighbourhood is often characterised by NIMBY ('not-in-my-back-yard'). A study by Vallance et al. (2005) of housing infill in Christchurch suburbs had this focus. Infill housing involves the subdivision of sites to accommodate additional housing units. For the original residents, this was perceived to be a negative change to what they valued about suburban lifestyles. However, infill development of this kind is very common. It has expanded the range of housing options available, and has contributed towards housing supply and higher density. Nevertheless, infill housing remains dispersed, car-dependent, and does not result in the nodal-based concentration of density around activity centres within walking distance of public transport.

There are, however, a number of studies that deal with residents' attitudes to housing intensification resulting from urban growth plans that incorporate nodal concentration at activity centres. Taking two areas designated for compact development in Brisbane, McCrae and Walters (2012) were interested to know if location and the intensity of development made any difference to the attitudes of existing residents. The comparison involved an inner suburb that has changed from medium to high density, and an outer suburb that had changed from low to medium density. The survey focused on the perceived effects to the neighbourhood environment and impact on their quality of life that the densification may bring. Residents in the inner and outer locations responded differently. Surprisingly, residents in the outer suburb were far more positively disposed towards increasing density, because, as McCrae and Walters (2012) argue, development in the outer suburban areas was seen to bring the benefit of new services and amenities associated with higher density development (such as libraries, cafes, and more efficient public transport).

A similar study based in areas designated for intensification by the Provincial government in Thunder Bay, Ontario, Canada, came up with similar findings (Randell, 2008). Using visual preference survey methodology, the findings indicated commonly observed preferences among the residents towards lower density forms. However, some residents did have positive views towards intensification, related to their stage of life, and to the environmental and architectural design aspects of the visualisation presented to them. Moreover, one-fifth of respondents indicated that they would be prepared to trade-off to a denser urban form if it enhanced neighbourhood amenities.

Importantly, this research shows that compact development can have positive outcomes, although studies also reveal contradictions. There is a tension between wanting the amenities that urban consolidation offers, but not becoming overcrowded; recognition of the advantages of good public transport, tempered with a reasonable perception that car dependence will not readily change and therefore will result in traffic congestion; and that the value of local lifestyles will be under threat (McCrea & Walters, 2012). Moreover, residents appear willing to consider some kind of trade-off between the low density suburb, and the amenity that more compact development can offer. This aspect is a crucial factor to take into consideration for promoting the compact urban model.

Beyond the NIMBY attitudes of residents towards the changes that higher-density development bring to their neighbourhood and quality of life, there is research focused on housing choices between suburban and urban options. A survey in Cardiff, Wales, sought to understand whether residents selling houses in suburbs were interested in a new inner city dockland redevelopment (Senior, Webster & Blank, 2004). Overwhelmingly, there was very little interest in the new dockland development, undermining the city's plan to promote more sustainable urban form by encouraging housing intensification. Most households surveyed did not aspire to live at higher density. They valued gardens and parking space, and expressed a strong preference to continue living in the suburbs. Yet, as the researchers pointed out, urban living preferences are susceptible to change, and there is a chance that people living in certain household types will value compact development options more than others. Single people and couples without children may be more attracted to new residential environments in central city areas (Senior et al., 2004). Development opportunities responding to changing household types and attitudes towards urban lifestyles were underscored as a reason for the success of a new mid-rise development in Portland (ten storeys). The Pearl District is a regeneration project on previous industrial land: a mixed-use, high-density neighbourhood, close to downtown Portland that has become popular with

the 'Y'-generation. Planners assumed that the largely single and couple households would move to the suburbs to raise families, but this has not been the case. Many are choosing to continue the urban lifestyle and raise families there[12]. Fincher and Gooder (2007) are among researchers who find Portland's increasing vibrancy, economic activity, social diversity and urban amenities, as marketed by developers, also beneficial for its residents.

This implies that we need to better understand the implications of changes to the distribution of household types over future decades, and how this may alter housing demands. This is significant when the proportion of smaller households (singles, couples without children, and the rising number of retired households) is increasing relative to households with children, and how this might be expressed as a preference for compact development and urban lifestyles.

Social surveys of residents of higher density housing reveal valuable information about their quality of life in their developments and, more broadly, in their neighbourhoods. This is important research because the findings can help planners align their planning strategies, policies, and plans with what people want and can inform the architectural design. In order to make higher density housing more attractive to people living in suburbs, we need to understand the trade-offs people are prepared to make between the benefits of suburban living compared with the amenities (cafés, walkable neighbourhoods, convenient services, and easy access to public transport) that compact housing options can offer.

One particular study of significance to the present research, by Dixon et al. (2001), is a social survey of residents in a medium-density development, Ambrico Place, within walking distance of shops, services, and a railway station in the town centre of New Lynn, Auckland. Ambrico Place is re-surveyed in this current research project, and affords us the opportunity to compare outcomes with the earlier study and reveal how household composition, attitudes, and environmental conditions have changed over a decade (reported in Chapter 6).

The original 2001 survey of Ambrico Place concerned the residents' satisfaction with the quality of their housing and, more significantly, of the neighbourhood. Overall, there were positive responses to the quality of the housing and the neighbourhood, and proximity to a range of facilities in New Lynn. Residents commented favourably on the physical features of the development itself, and its layout and traffic flows. Dixon et al. (2001) suggested that the positive responses reflected three factors: that three-quarters of the residents had moved from other parts of West Auckland and had a preference for living in the area; almost 40 per cent of residents had experienced higher density living elsewhere, so did not need to adjust to this living style; and some valued the affordability of parts of the development. However, the residents who moved into the first housing development complained that they were unaware of other impending (and lower cost) developments on the site at the time they made their purchases. Also, despite the availability of transport in the town centre and the transit-orientated intentions of the New Lynn Town Plan, car usage for a number of activities was not high.

12 Information from planning staff at the City of Portland interviewed by Errol Haarhoff and Lee Beattie in 2011.

A survey of residents in central Christchurch by Ancell and Thompson-Fawcett (2008) also revealed positive and negative attitudes to the experience of urban lifestyles and housing intensification. Importantly, this study validated key variables of affordability, housing quality, transport, facilities, neighbourhood quality, and relationship to the community as criteria used by respondents in expressing their quality of life experiences. Respondents found housing to be affordable, but some feared that gentrification would push prices up. Complaints were expressed about the quality of the buildings, but people valued the central location and being able to walk to the central city. While they appreciated the area being well endowed with entertainment and cafes, they felt that more basic amenities like a supermarket and parks were not conveniently located. Such surveys indicate that while there are negative attitudes to the experience of living in higher density housing, they could be addressed by better design: both of the buildings themselves and the environment in which they are located. The positive views suggest that demand for higher density housing will meet the needs of sectors of the urban population. Understanding the implications of the relationship between changing future household sizes and types, and the migrant composition of future populations, among other demographic changes, is another key factor in better matching housing demand and supply.

An unexpected outcome of the finding in the Ambrico Place study was the frustration and dissatisfaction expressed with the body corporate management companies that oversaw the management of each of the nine separate developments in Ambrico Place (Dixon, Dupuis & Lysnar, 2001). A lack of communication with owners, difficulty in changing rules, language problems (noting that 40 per cent of residents were born overseas), and off-site owners who did not advise tenants of body corporate rules, were among the negative issues identified by the research participants in Ambrico Place. The issue of bodies corporate, and, in particular, strata title tenure in multi-unit development was also identified by Randolph (2007), and emerged from his research on the implication of compact development in Australian cities. Anticipating that an ever increasing proportion of future development will be multi-unit, he goes on to conclude that for '... urban consolidation policies to succeed, Strata Title must also succeed as a fully accepted and trouble-free form of property ownership' (Randolph, 2007, p. 13).

Urban consolidation policies also require diverse communities to succeed. Randolph (2007) warns against the danger of planning for thousands of flats in intensive centres for singles, empty-nesters, and DINKS (dual income no kids), while families are by default consigned to houses in lower density suburbs. This, he correctly observes, would be a '... perverse outcome that hardly meets prevailing notions about the importance of socially inclusive cities with more balanced communities' Randolph (2007, p. 485). For Randolph (2006) issues of family life in higher density housing are of concern in promoting compact development, especially where the quality of life impacts on children. A study by Carroll et al. (2011) considered the issues related to parents bringing up children in high-rise central city apartments in central Auckland. Noting that many apartments in this central location have not been specifically designed for families with children, they nevertheless stated that apartment living *per se* is not bad for children. However, they conclude, this does not mean that family needs cannot be addressed in high density housing. It should be noted that the experience of living in high-rise apartments in the central city, especially with regard to children, may produce a different experience compared to other compact housing typologies such as row and terrace housing in other parts of the city. Conscious of the need to create more balanced high-density communities, some cities include requirements for a range of apartment sizes to be

constructed as part of the development application. The City of Vancouver, for example, which promotes central city resident development as part of the City Plan, requires the inclusion of 20 per cent family housing in downtown housing developments (Punter, 2003).

Similarly, some cities are required to include family housing as part of the development contribution system. As Carroll et al. (2011) noted, the environment plays an important role in enhancing the quality of family life. Access to quality amenities and spaces in the central city '... are crucial domains that can potentially ameliorate the constraints of apartment life' (Carroll et al., 2011, p. 365). Randolph (2007), in concluding his discussion of the implications of the compact city in Australia, suggested that the following are crucial elements in creating conditions for social stability and cohesion: adequate provision of open space; provision for children, including education; community buildings and services; good urban design and building quality; and appropriate location. On this last point, he questioned the extent to which 'activity centres' are the best location to foster a sense of community and provide liveable urban neighbourhoods.

These studies reveal that the experiences of residents living in higher density living environments are valued in different ways and that urban amenities can contribute to residents' quality of life. In this regard, the building development on its own is not sufficient; the quality of the neighbourhood and its social amenities are also important.

Theorising the concept of urban liveability has also received the attention of researchers. McCrae and Walters (2012), in their study of urban consolidation in Brisbane's inner and outer suburbs, saw this as part of overall quality of life (QOL) experiences. Pacione (2003), referred to QOL dimensions as including domains such as satisfaction with work, relationships, community and neighbourhoods, and satisfaction with neighbours, traffic, access to open spaces, and so on (McCrae & Walter, 2012). Others, such as Searle (2010), highlighted the tensions between urban consolidation and urban liveability: issues such as a loss of green space, threats to community in the form of demographic change, overshadowing from high rise developments, and the effects of densification on congestion, and access to amenities.

Other researchers have referred to Maslow's hierarchy of human needs (Ansell & Thompson-Fawcett, 2008; Carmona & Sieh, 2005). A report by Chile et al. (2011) uses Maslow's concept of 'belonging' to argue that human connectedness is a fundamental drive, and this is important in the understanding quality of life experiences. Connectedness is used to explain how residents gauge liveability and quality of life in urban contexts. More comprehensively, van Kamp, Leidelmeijer, Marsman and de Hollander (2003) provided a multidisciplinary conceptual framework of environmental quality and quality of life, based on a literature study.

Concentrating future development in activity centres is a feature of the urban growth management plans referred to earlier. However, housing intensification resulting from infilling - the process of subdividing suburban residential sections into small units, or (where the urban planning regulations permit) building more than one dwelling unit on a single subdivision – is also significant. Infilling tends to be piecemeal, resulting from up-zoning development rights. In cities such as Auckland, infill housing has contributed significantly to compact development, although the result is not necessarily good urban form. In the absence of good urban design guides, infill development can lead to a loss of green space and gardens, loss of privacy between houses, extensive impermeable surfaces in the form of new driveways, and increased population that may not be well located with respect to local

centres and public transport. Although the Auckland Plan envisages compact development being achieved mainly through intensification at centres, this only accounts for approximately three-quarters of future development within the Rural Urban Boundary (RUB). Around one-quarter is effectively infill development in what are described as 'areas of change' – ranging from 'significant to some change' (Auckland Council 2012, p. 56). Precisely how this will be promoted or achieved is not described other than the need for increasing capacity through up-zoning mechanisms permitting higher density in the forthcoming Unitary Plan.

HOUSING SUPPLY AND AFFORDABILITY

Another important body of research is that which examines the supply side of housing, and especially the viability of market investment in the range of higher density typologies associated with compact development and activity centres. Placing a value on benefits that densification can deliver is an important factor in promoting compact development. In a study undertaken by Johnson Gardner (2007) for Metro Portland, the benefits were qualified in economic terms. Successful urban environments represent a marketable amenity, the value of which should be reflected in higher effective pricing for residential units. Using hedonic statistical modelling based on 2006 home sale prices, they concluded that '...the proximate availability of a range of urban amenities in Portland has a substantive impact on achievable residential pricing'. They also argued that the development of a greater number of residential units within walking distance of commercial concentration increases the viability of that concentration, attracting 'a superior tenant mix that then increases the premium for residential uses' (Johnson Gardener, 2007, p. 1).

In a similar way, Huston and Kozlowski (2005) explored the impact relationships between the changing urban environment and property prices of two redevelopment sites and their surrounding areas. However, they reported that while there is an expectation that urban design master planned inner city enclaves will boost property prices, the evidence is inconclusive because property submarkets in the two locations are segmented by the heterogeneity of building stock, accessibility and the effects of urban blight.

Certainly, being able to demonstrate elsewhere the relationship between commercial viability and having residential housing close by will add weight to the idea that having a range of public and private amenities adds value to the investment and command some kind of premium. Valuing amenities of this kind can promote compact development. Who pays for the community amenities related to intensified development is another issue. The City of Vancouver has been aggressive in developing a process to extract development charges to fund significant community facilities from major development projects, related to the uplift in land values created by rezoning. These include downtown areas such as False Creek and Coal Harbour, as part of its discretionary project approved system. In these projects, commercial development has created major public amenities including day-care facilities, parks, and public access to the waterfront (Punter, 2003)

Randolph (2007) raised a number of questions about aligning the supply and demand for housing in Australian cities. Noting that compact city policies will require up to 1.115 million new higher density homes being added to the housing stock over the next three decades, he raised questions about the implications. He predicted that the investment market would play a much bigger role in driving the rate, scale and location of new residential development. As a consequence he predicted that demand would not be driven by households looking

for homes to buy, but by the perception and behaviours of residential investors. Moreover, he suggested that, if a current predilection among investors and developers for smaller apartments were to prevail, there would be an oversupply, because there is no certainty that empty nesters would move from their suburban dwellings.

Ultimately, the delivery of the compact city to provide quality of life opportunities for a variety of households in the city centres, major centres outside the central areas, and in a plethora of local neighbourhood centres, is a vision that will be difficult to achieve. No matter how good the strategies, plans, and visions may be, it is essential that there is an alignment between changing housing demands and supply though market mechanisms.

The attractiveness of the cities included in this review has a downside – better liveability and quality of life tends to push up housing costs, as exemplified in Vancouver, Portland, Sydney, and Auckland. In Vancouver, major housing developments must include a 20 per cent affordability component, although this has been made harder with a withdrawal of federal funding for social housing subsidies (Punter, 2003, p. 384). The most recent development, originally built for the 2010 Winter Olympics, now known as the Village on False Creek, provided 371 social housing units, although the funding for this project and its link to the Games has created a fiscal crisis for the city.

Housing affordability remains an issue for many cities, including Auckland. A key finding of a major study by the Productivity Commission (2012) is that home ownership in New Zealand has been falling, at the same time as rental housing has become less affordable. Obstacles include restrictions on land supply, difficulties in achieving scale in new house construction, and inefficiencies, costs and delays in regulatory processes. The Productivity Commission's comment on the effect of urban growth management strategies on housing affordability is significant:

> *The introduction of growth management techniques has been one method through which planning has attempted to satisfy multiple economic, social, cultural and environmental objectives. The increasing reliance on the principles of Smart Growth as a means of managing urban development means that planning is closely implicated in the impact of intensifying urban areas on housing affordability.*
>
> (Productivity Commission, 2012, p. 107).

While noting this link between housing affordability and smart growth planning strategies, we have no way to assess the impact of any other urban growth management strategies to make a comparison.

DELIVERING PLANNING POLICY INTENTIONS

This final section reflects on a key issue that is under researched, and concerns the efficacy of the planning system to deliver the visions and outcomes envisaged. The Auckland Plan (along with the Unitary Plan and all the district plans evaluated as part of this study) is, like a number of Pacific Rim urban planning systems, based on the notion that there is a causal link between urban planning and action, between implementation and results or outcomes (Hoch, 2007; Berke, 2006; Alexander & Faludi, 1989). This is commonly referred to as the conformance-based urban planning mandate, where there is a direct correlation between

the plan's policy intentions and the built outcomes achieved on the ground; as opposed to a performance-based planning approach, where the plan is seen as a guide for the forms of the development activities that could occur (Oliveria & Pinho, 2010; Alexander, 2009; Laurian et al., 2004a).[13]

In New Zealand, the link between plans and outcomes is at the heart of the urban planning process, that is, it is assumed that the plan will deliver a means of action to achieve its intended outcomes on the ground. This is usually achieved through the plan's stated methods, for example, the district plan (or unitary plan) uses a normative, conformance, rational-based urban-planning approach (RMA, ss30, 74) to plan-making, where a Permitted Activity development proposal should directly reflect (and give effect) to the district plan's urban planning policy intentions.

Some have asked how much influence a plan can have over the urban planning process (Oliveria & Pinho, 2010; Alexander, 2009; Laurian et al., 2004a). Beattie (2010) has shown that the implementation of RMA-based district plans has been problematic. In an examination of three of the previous Auckland Council's district plans, he found that the majority of the plans' methods would not actually deliver the plans' intended outcomes in practice, and that there was little, if any post-plan (*ex post facto*) evaluation of the policy intentions and actual outcomes in practice. In addition, there was a knowledge gap evident between the district plan makers and the plan implementers that exacerbated the negative outcomes achieved in practice.

Likewise, Carmona and Sieh (2005) showed that plan implementation can be difficult, given the political commitment required to implement the plan, which can change over the life of the plan and may erode the plan's intentions. This is supported by the work of Gilg and Kelly (1997) who found that some councillors (or the decision makers) failed to show on-going commitment to their urban planning policy development and plans. They also revealed, like Beattie (2011), a gap between planning policy intentions and their implementation in practice. Brody, Highfield and Thornton (2006) found that economic, social, and geographical factors can influence a plan's implementation. Similarly, Seasons (2003) demonstrated that the statutory plans in Canada were rarely evaluated in full, due to insufficient staff resources and expertise, and noted attribution was difficult to determine given their vague intended outcomes.

In New Zealand, despite the requirements of the RMA (ss.35 (2)(b) and 75) to evaluate district plan success, there has been little work published. Exceptions are Beattie's (2010) work mentioned above; the consideration by Laurian et al. (2004b) of the impacts of the consent implementation process in achieving the district plan's intended outcomes for stormwater and urban amenities; and Mason and McEwan's (2005) unpublished consideration of plan effectiveness in protecting heritage buildings in Wellington. Day, Mason, Crawford and Kouwenhoven (2009), building upon the work of Laurian et al. (2004b), have developed a working guide for evaluating the effectiveness of district and regional plans.

13 The English urban planning system used under the Town and Country Planning Act 1990 is an example of a performance-based system.

CONCLUSIONS

This review has discussed the rationale for urban consolidation, and perceived benefits and shortcomings, drawing largely on evaluative research from cities in Australasia and North America. The urban planning policy responses (strategies) all share the same aim of countering the adverse impacts of urban sprawl by seeking to consolidate most future urban growth within existing urban centres in close proximity to public transport infrastructure and along transit corridors.

More recent iterations of urban growth management strategies in Australasia and North America have tended to move away from smart growth, to the notion of creating compact urban form and liveability as a means of achieving more sustainable urban form. Despite this shift, the strategies remain focused on having measures in place to prevent urban sprawl, and to concentrate growth in a nodal way at urban centres within an easy walking distance of public transport.

At a macro-level, there is a good body of research focussed on evaluating the extent to which the desired outcomes of urban concentration are being achieved. Evaluating the outcomes to such policies in American cities where they have been in force for almost three decades has produced some encouraging results. Overall, these suggest that smart growth has produced intended outcomes, and thus increased urban densities (and urban concentration), public transit ridership, and reduced urban sprawl and the loss of land with high amenity value, among other indicators, although the gains in some cases are relatively modest. Another key factor, argued by Wassmer (2005), is that despite the social and environment benefits that can be marshalled for smart growth, there may not be enough to 'bust the sprawl-generating' impacts from political positions, interest groups and the neo-liberal economic context that is currently driving urban sprawl (Wassmer, 2005, p. 21). In many ways these factors present significant obstacles to implementing smart growth.

At a micro-level, there is also a growing body of evaluative research examining key issues and strategies embedded into smart growth, and newer iterations of urban growth management approaches. There is, and remains, a strong focus on the idea of concentrating future development in, and around, existing urban centres. In part, this relates to the obvious benefits of increased concentrating around services and amenities within walking distances, and reducing car usage and emissions. There is also some evidence showing that investment in existing centres is more economical, than the cost of greenfield development on urban peripheries.

Much of the research relates to identifying the obstacles to achieving these aims. A crucial factor is meeting potential resident demands for the higher density, multi-unit housing typologies required, and having a market willing to invest in these developments. Better understanding of the demand side of housing is urged, especially the potential unmet needs arising from particular demographic cohorts that will become more dominant in future, for whom housing intensification may be more appealing. Another key factor is to better understand the trade off that suburban dwellers are prepared to make when considering the option of housing intensification. What appears to be valued in higher density development is the range of public amenities and services, such as public transit, gyms, cafés, restaurants, and good public spaces, which this potentially delivers. These factors also stress the significance in ensuring that the outcomes are well-connected, quality urban places and spaces. On the other hand, where quality outcomes have the consequence of higher costs

and prices, this in turn affects affordability, and remains a very difficult issue in the cities considered in this review. The extent to which smart growth in itself creates unaffordability in the housing market, or the extent to which it can be feasibly addressed by the market on its own, remain as significant questions.

Better understanding of the added value that mixed use, higher density development can potentially deliver, is another area highlighted in the research. Recognising this potential factor may encourage more flexible and innovative partnerships between local authorities and developers, especially where there is the opportunity to trade off on the development value that up-zoning delivers.

Issues were raised about the plan implementation process itself, drawing on a small, but significant area of research. In New Zealand, the link between plans and outcomes is at the heart of the urban planning process, that is, it is assumed that the plan will deliver a means of action to achieve its intended outcomes on the ground. This suggests that the process, through which urban growth management plan is implemented, is as important as the plan and its policies.

Finally, the effective implementation of housing intensification and compact development requires higher-density housing typologies for existing and emergent town and neighbourhood centres. In summary, two key questions framed the review: will intensive housing forms meet the aspirations and needs of their future occupants when the traditional suburban family home is the current aspiration and norm for many of the city's residents?; and will the market be prepared to invest in the necessary development and recognise that the key to success could lie in the level of amenities and associated urban lifestyle that intensive development must offer in recompense for the suburban lifestyle?

3 DELIVERING URBAN POLICIES AND PLANS: AN ASSESSMENT OF CASE STUDY DEVELOPMENTS IN ALBANY AND ONEHUNGA

INTRODUCTION

The planning system used in New Zealand, and developed under the Resource Management Act 1991 (RMA), is based on the notion of a causal link between urban planning and action, and between implementation and outcomes (Hoch, 2007; Berke, 2006; Alexander & Faludi, 1989). This is commonly referred to as a 'conformance-based urban planning mandate' where there is a link between the plan's policy intentions and the built outcomes achieved 'on the ground'. This form of mandate or urban planning system is common and currently used in some form in Australia, Canada and parts of the U.S.[1]

District plans are the key instrument in the 'conformance-based' method that uses a normative approach (RMA, ss.30, 74) to district plan making, where a permitted activity proposal should directly reflect (and give effect to) the district plan's urban planning policy intentions, as expressed within the district plan's objectives and policies. The unitary plan, currently under preparation, will replace the districts plans established by the previous local authorities in the Auckland area. It will be informed by the visions and policies embedded in the Auckland Plan.

The aim of this chapter is to assess the extent to which the relevant districts plans and consenting processes for two of the medium density case study developments have influenced and directed the urban intensification. This assessment is considered to be relevant given the assumption that if the user of the district plan follows the intended policy outcomes (and associated district plan methods), the outcome will achieve the district plan's

1 This is different to a performance-based planning approach, where the district plan is seen as a guide for the forms of development activities that could occur (Oliveria & Pinho, 2010; Alexander, 2009; Laurian et al., 2004). The English urban planning system used under the Town and Country Planning Act 1990 is an example of a performance-based system.

intended policy via the development process. Delivering compact development and housing intensification, and achieving the quality urban outcomes and vibrant centres advocated in the relevant district plans, will in part depend on the efficacy of this urban planning system to deliver outcomes. Understanding the efficacy of this process may point to potential deficiencies in the new unitary plan for the Auckland region, and its alignment with the Auckland Plan.

Methodology, Case Study Locations and Chapter Structure

The assessment of the assumption that a district plan can influence and direct the development process, has involved two evaluative measures. First, the relevant district plan's urban planning policy intentions for each case study development is identified and discussed using a policy intention mapping technique. Details of the method are explained below.

Second, each of the case study developments and their neighbourhood contexts are described using urban design attributes for achieving quality medium density housing in the context of a walkable neighbourhood. Again, the specific methods deployed here are explained in more detail below.

Each case study development is then assessed to consider the extent to which the urban planning policies in the district plans have been reflected in the development concerned. This assessment is informed by the following information. [2]

- An 'urban design assessment' of the quality of the development in its neighbourhood context.

- Information offered by the urban planning officials who were responsible for the consenting process for each of the case study developments.

2 There are some caveats to this assessment that are set out below:
The findings from each of the case studies reflect the outcomes generated from discrete evaluations. It cannot be assumed that they reflect an overall trend for each of the District Plans considered.

The interview process only considered the actions of the council process officer (resource consent officers) and not all of the actors involved in the resource consent process, which may have affected the final built forms.

No other New Zealand urban planning instruments, apart from the RMA, were considered. For example, no consideration was given to the impacts of Long Term Plans prepared under the New Zealand Local Government Act 2002, or any other plans developed under other pieces of New Zealand legislation, or how they impact upon the case-study sites.

No examination was undertaken of whether the central government's National Policy Statements (NPS) and/or National Environmental Standards (NES) had assisted the delivery of medium-intensive housing, except to acknowledge the relevant literature.

No examination was undertaken into the effectiveness of the Auckland Regional Council's Regional Policy statement in achieving medium intensity housing developments.

Case Studies

Two case study developments have been selected for this assessment, namely 'The Ridge' (Spencer Road) and 'Masons' (Mason Road) in Albany and the 'Atrium on Main' in Onehunga. The New Lynn case study (Ambrico Place) was excluded for a number of reasons. This development constitutes nine separate developments (and thus nine consenting applications) and the complexity was considered to be outside the scope and time limitations of this research project. Moreover, a key part of our assessment involved interviews with the urban planning officials responsible for the consenting process (explained below). Since the consenting process for the nine developments dates back over a decade and a half, many of those involved can no longer be identified or located.

Determining the District Plan Urban Planning Policy Intentions

We used the district plan policy intention mapping technique ('policy outcome mapping') to determine the desired urban planning outcomes for each of the case study sites (Beattie, 2010). Policy outcome mapping uses methodologies drawn from Laurian et al. (2004) and Ericksen, Berke, Crawford and Dixon (2003) for examining the outcomes and quality of district plans and how they have influenced and directed the development process. We evaluated each of the relevant district plan's objectives and policies (with reference to the district plan's policy framework expressing its intended outcome) and compared them with the environmental results expected (ERE) to derive the district plan's intended urban planning outcomes for medium density housing.

This approach enables a theoretical policy framework map to be constructed, outlining the intended urban planning outcomes for each of the case study areas. The map can then be compared with the results achieved on the ground (the actual built form) to determine the degree to which district plan's intended policy outcomes are achieved (Beattie, 2010). This approach also enabled us to undertake a detailed consideration of the quality of the relevant policy frameworks (objectives and policies), and the effectiveness of their methods, including the actual district plan drafting.

Typically, district plans have three layers, each providing a policy framework as follows:

1. The strategic urban planning policy response to the issues the district or city faces. This section sets the policy direction for the rest of the district plan, with lower order policy frameworks giving effect to these issues;

2. Plan-wide sections that cut across specific policy issues in the district plan; and

3. The specific policy frameworks that set out the intended policy responses to a particular issue.

Each of the specific policy frameworks also contains methods to give effect to the intended policy outcomes. Each layer is developed in accordance with the policy model, and this requires the district plans to be internally consistent, both vertically and horizontally. That is, specific policy frameworks and their methods must give effect to the higher strategic policy. A specific policy framework, along with its methods, should also integrate with the other specific policy frameworks and *their* methods, to ensure that the district plan is both

consistent and coherent. By adhering to this process, urban planners should create an urban planning document that is capable of delivering the agreed urban planning outcomes without any internal inconsistencies.

Consequently, to understand the relevant district plan's overall intended urban planning policy outcomes, the policy frameworks have to be examined across all three district plan layers. It should also be noted that the district plan evaluations used to determine the policy outcome maps were derived from the relevant district plan as it was at the time the actual resource consent application was considered and approved, namely:

- The operative North Shore District Plan (1994) was used, as amended until 2004 for The Ridge (Spencer Road) and Masons (Mason Road) applications.

- The operative Auckland City District Plan – Isthmus Section (1996) was used as amended until 2004 for the 287 Onehunga Mall applications.

A full description of the methodological approach is given in Appendix One. The analysis was undertaken only for the parts of each district plan that *directly* affected the medium-density case study developments.

Urban Design Assessment

The quality of the development in the context of its site and neighbourhood is assessed using the urban design evaluation method in the Ministry for the Environment's *Medium-Density Housing: Case Study Assessment Methodology* (2012) guide. This provides a consistent and comparable framework for the assessment of the case study developments. We note that this guide also includes a scoring system, which we have not used for two reasons. First, the process involves considerable subjectivity in the scoring of the attributes. Instead, we chose to draw on the information from our interviews with urban planning officials (resource consent officers) responsible for the resource consent process. Second, in the guide, various attributes ('sub-elements') receive equal weighting. We consider the neighbourhood context to be as important to the delivery of a quality living experience as the development itself, but the undifferentiated scoring system does not reflect this reality. Nevertheless, we have used the key attributes in the guide to frame the description of each of the developments, as provided Table 3.1 opposite.

Key urban design areas	Sub element
Site context and layout	Neighbourhood context
	Site context
	Landscape coverage
	Outdoor living spaces
	Car parking and access
	Service areas and utilities
Building form and appearance	Horizontal modulation
	Continuous building line
	Building roofline
	Façade articulation
	Material use and quality
Street scene	Street edge continuity and enclosure
	Building entrances
	Façade opening
	Street boundary treatment
Internal configuration	Internal / external relationships
	Visual privacy
	Aspect / natural ventilation

Table 3.1: Urban design assessment criteria
Source: Ministry for the Environment's *Medium-Density Housing: Case Study Assessment Methodology* (2012).

Part of the quality experience anticipated from higher density housing is derived from the services and amenities available to residents in their immediate neighbourhood, and easy access to public transit. For this reason we produced a list of services and amenities within the 800 metre walkable distance from the case study sites.[3] Land use activities were named using the ANZSIC (Australian and New Zealand Standard Industry classification) method. The data supporting this analysis is included in Appendix Two.

Interviews of the Urban Planning Officers

To gain an in-depth understanding of the factors that may have influenced or prevented the district plan from achieving its intended aims, we interviewed urban planning officers (resource consent officers) who were involved in the North Shore and Auckland City case study developments at the time the resource consents for these developments were processed. The interviews were conducted as one-to-one meetings, where the respondent was asked to discuss their area of expertise. The respondents were chosen on the basis that they were regarded as having sufficient seniority and experience in their area of expertise.

3 Walkable neighbourhoods are well defined in transport and land planning practices as being areas within a 5-10 minute walking distance of amenities, estimated at between 400 and 800-metres. Also referred to as 'ped-sheds' (pedestrian shed) especially with regard to transit-oriented development, where this refers to the walkable time or distance to transit points. The Auckland Plan uses 800 metres (10 minutes) to define walkable 'town centres' areas. See http://pedshed.net/?page_id=5 and Auckland Council (2012)

All were qualified urban planners who had at least five years' experience at the time of their involvement with the relevant resource consent application. The confidentiality of the respondents has been preserved in the reporting of the interviews.

The interviews followed a qualitative approach as outlined by Lunt and Davidson (2003), and allowed for semi-structured and open-ended questions. As Forester (1999) suggests, the interviews were geared to allow the respondent to tell their story, in this case, with regard to their perspectives and reasons for decisions around plan making decisions. This approach was considered appropriate because of the highly technical nature of the urban planning, and the level of knowledge the urban planning professionals had of the urban planning process.

The intention of the interview process was twofold. First, to probe the resource consent officers' understanding of the policies and tools in the district plan promoting medium density housing. Second, we sought to understand why, in their view, these outcomes may, or may not have been achieved, and to identify what factors affected the outcomes through the resource consent process.

The question areas, their rationale and the questions put to those interviewed are listed in Table 3.2 below.

Question area	Question rationale	Interview Question
What was their involvement in the process?	To ensure relevant officers were interviewed, with an in-depth understanding of the resource consent application process	What was your involvement in the resource consent process for the development/s?
What were the key District Plan's policy outcomes for medium density housing?	To gain an understanding of what the processing officers thought were the District Plan's outcomes for medium density housing	What do you think are the District Plan's key intended urban planning outcomes for medium density housing adjacent to existing town/sub-regional centres?
Did the District Plan policy frameworks and methods achieve those outcomes?	To gain an understanding of the processing officer's views as to whether the District Plan provided the tools to achieve those outcomes in practice	Do the District Plan policy frameworks (objectives and policies under the plan (at the time you assessed the application)) provide you with a clear policy picture/direction of the plan's intended outcomes for medium density housing developments? If not, why not? If yes, what were they? Does the District Plan (rules and assessment criteria) provide methods that will give affect the District Plan's intended policy outcomes? If not, why not? If yes, how so?

Did the development represent a good design outcome and how could it be improved?	To gain the processing officer's views on the design quality of the development and how, in their view, could it have been improved.	In your view, does the development represent a good urban design outcome? If not, how, in your view could the development have been improved? What were the factors preventing you from achieving those outcomes in practice?
Did the development integrate into the surrounding environment?	To gain the processing officer's views on how well the development integrated into the surrounding environment.	How do you feel the development integrates into the surrounding environment?
What were the factors that contributed to the actual results gained?	To gain the processing officer's views on what factors influenced the result gained in practice.	Were there any factors that in your view may have contributed to the results gained in practice? Is there anything else you would like to cover regarding your involvement in these developments?

Table 3.2: Interview questions

The assessments of the two case study developments are reported below. For each of the case studies the relevant district plan is discussed in terms of policy outcomes mappings, and the wider town centre context in which the developments are located, is described.
A description of the case study developments follows (two in Albany, and one in Onehunga). This is followed by an assessment of the extent to which the urban planning policy intentions have been delivered in the developments, and is discussed with reference to urban design assessment and outcomes, and to the interviews with resource consent officers.

ALBANY CASE STUDY

There are two developments in this area in the Albany case study: 71 Spencer Road (The Ridge) and 60 Mason Road (Masons). The Spencer Road development was granted resource consent (land use consent) via a consent order in December 2004 following an Environment Court hearing. The consent for the Mason Road development was granted in October 2004. The number of units, land area and net density is given in Table 3.3 below.

	Sites	No of units	Land area (sqm)	Units/ha
Albany	71 Spencer Road	93	13866	67
	60 Masons Road	76	11483	66
	Total	**169**		

Table 3.3: The Albany case-study developments

Both developments are now fully occupied, predominately as rental accommodation. They were designed for, and constructed, by the same development company (the applicant) and have similar building layout and construction methods. The two bedroom residential units in both developments are 49.5 square metres in area.

The District Plan

The North Shore District Plan (NSDP) was made operative in 2003 and uses conventional land use classifications to determine land uses for business, residential, rural and public open spaces. Two of the developments are located within the NSDP's Area D (Varied Residential) Zone (referred to as 'Area D Zone'), one of five residential zones established to facilitate urban expansion.

The Area D Zone was established as part of a two-step structure plan process intended to determine the appropriate level of future urban growth in these areas. The first step was part of a wider structure plan process covering areas bounded by the Northern motorway, East Coast Road, Oteha Valley Road, and Hugh Green Drive. The case-study sites are located in the Albany South Structure Plan area.

The second step involved a finer grained neighbourhood unit plan analysis, which allocated the actual land use zones.[4] However, the requirement for the neighbourhood unit plan process was removed from the district plan through an Environment Court decision on the grounds that the initial structure plan process was sufficient, and that the neighbourhood unit plan process would add an unnecessary layer of urban planning regulation before development could be undertaken. This decision left the policy frameworks and implementations method contained within Section 17A of the plan (Albany and Greenhithe Structure Plans) as the primary instrument available to influence and direct development in this area.

The North Shore District Plan does not have a zone statement or any objectives and policies that address the Area D Zone directly, but there is a general residential amenity policy framework that applies to the Area D Zone and the other four structure plan zones. These are set out in section 17A.2.5, where they seek to *ensure a high level of residential amenity*.

This is supported by two policies that aim to:

1. [ensure] the layout and design of residential lots and buildings achieve a high standard of security, visual and aural privacy, and usable public and private open space, particularly in the case of higher intensity development.

2. [enhance] the amenity values of arterial and collector routes through appropriate street planting.

North Shore District Plan (17A.2.5)

4 The structure plan process developed five land use zones, ranging from large environmental protection lots (1ha +) to a mixed-use zone.

There are no Environmental Results Expected (ERE) attached to these objectives and policies preventing the development of a policy outcome map. This raises questions over how the community and/or district plan drafter can evaluate the effectiveness of this policy framework. This part of the district plan cross-references aspects of the residential section (section 16) and provides some form of guidance for medium density housing development applications.

In terms of the Varied Residential Zone (Area D), one of the urban planners interviewed noted:

> *The Area D varied residential arose out of the Albany structure plan process that was in turn based on a number of new urbanism principles. Although it is derived from a similar process Area D zone can be seen to extend over a much greater radius around the Albany sub-regional centre than would normally be expected of an intensive, walkable intensive zone and it creates a number of challenges that don't really relate well to town centres.*

This comment questions the application of the Area D Zone in an undifferentiated manner, without taking account of topographical variability. Whilst not part of this research project, it is interesting to note that two residential zones predominate around the Albany sub-regional centre: the Area D Zone and Residential 5 Zone (New Development). The Residential 5 Zone (New Development) is predominately aimed at new greenfield subdivisions creating single-lot housing developments on 500+ square metre sites. This raises the question as to whether the surrounding residential catchment is sufficiently large to accommodate a walkable sub-regional centre that is not solely reliant on private vehicle trips to ensure its success. Moreover, the majority of these areas have now been developed, predominately in single lot housing, with very limited opportunities for re-development at a higher density within the foreseeable future.

The Area D zone methods (17A Rules: Structure Plan Zone activities) provide for a range and mix of housing topologies, with single housing units as a permitted activity. This is subject to compliance with a range of development controls addressing bulk and mass issues, such as building height and site coverage. Medium density housing is supported on the case study development sites at a density of 150 square metres per dwelling unit as a discretionary (land use) activity, subject to policy assessment criteria and effects assessment through the resource consent application process. However, as one of the urban planners interviewed noted:

> *Area D zone is, I think, a bit of an experimental zone and it can be seen to provide the same policy framework for two completely different outcomes. It provides as of right for what you'd call conventional suburban development of detached housing down to 500 metre lots and then by way of a consent process one can apply for intensive housing down to 1 to 150. That's in my mind two very significant land use outcomes with very different risks and issues that ... struggle to be reconciled within one zone framework.*

Policy Outcome Mapping

As discussed above, most of New Zealand's district plans are multi-layered, and the North Shore District Plan follows this format. In order to understand the North Shore District Plan's actual intended outcomes for the case-study developments we considered all three layers of the plan.

Using the policy outcome mapping method, it is difficult to define, with any certainty, a clear policy picture of the North Shore District Plan's intended urban planning outcomes for medium density housing. The policy frameworks are confusing and do not cascade or link from the strategic policy level down to the lower policy levels, which makes interpretation difficult. Nonetheless, it is clear that at the strategic level the NSDP seeks to provide for housing choice with high-quality design, especially in locations adjacent to regional and local centres. This provides the context in which medium density housing should achieve and contribute to the wider urban fabric.

Despite the intention to have a district plan that is structurally sound and able to influence and direct development to meet its policy aims, the actual process indicates deficiencies. The direction given by the actual objective and policy wording is unclear and at times contradictory. This also raises a question about what policy frameworks the district plan users and district plan resource consent officers are required to give effect to. These issues are also addressed in the interviews with resource consent officers, provided below.

As a result the deficiencies mentioned above, it is not possible to develop a planning policy map for each of the case study sites with any degree of certainty. However, if one adopts the assumption that the North Shore District Plan's strategic policy frameworks are the main indicator of the plan's intent, with limited support given through the plan-wide and matter-specific policy frameworks, it follows that all the case-study developments should have been high-quality, medium-density housing developments, especially since they are all located within 800 metres of the sub-regional centre and transit options.[5]

The Town Centre Context

These two Albany developments are within what is designated by the North Shore District Plan as a Sub-Regional Centre (and an 'emergent' Metropolitan Centre in the Auckland Plan). Falling within an 800 metre radius of the case study developments is Westfield Albany, one of the largest regional shopping centres in New Zealand. This provides a large range of retail facilities including a supermarket, department stores, banking, restaurants and cinemas. In addition, there are further 'big-box' retail outlets to the west of the mall, including another supermarket (collectively referred to as the Albany Mega Centre). These amenities are of a size and scale to service the wider region, including the case study developments and surrounding residential areas. Table 3.4 below (following the method defined above with details in Appendix 2) lists additional services and amenities within the 800 metre radius of the case study developments. Figure 3.1 shows the location of the two developments in their town centre context and also indicates the extent of surrounding current development. As can be observed in Figure 3.1, there remains a considerable area of undeveloped land in the Albany Centre, and especially to the north and east of the shopping mall. The Albany Park 'n Ride bus station is the only facility located in this land area at the present time.

5 The NSDP does not define a walkable catchment distance from its town and sub-regional centres. As a result the 800-metre distance was used to provide a frame of reference for this research project.

Albany Report

by Division

Division				
	C	*Manufacturing*		*1*
	D	*Electricity, Gas, Water & Waste Services*		*0*
	E	*Construction Services*		*0*
	F	*Wholesale Trade*		*0*
	G	*Retail Trade*		*7*
	H	*Accommodation & Food Services*		*0*
	I	*Transport, Postal & Warehousing*		*0*
	J	*Information Media & Telecommunications*		*0*
	K	*Financial & Insurance Services*		*0*
	L	*Rental, Hiring & Real Estate Services*		*0*
	M	*Professional, Scientific & Tech. Services*		*2*
	N	*Administrative & Support Services*		*0*
	O	*Public Administration & Safety*		*0*
	P	*Education & Training*		*5*
	Q	*Health Care & Social Assistance*		*3*
	R	*Arts & Recreation Services*		*2*
	S	*Other Services*		*2*
	unk.	*Unknown Use/Activity*		*0*
	vac.	*Vacant/For Lease*		*0*
			Total	***22***

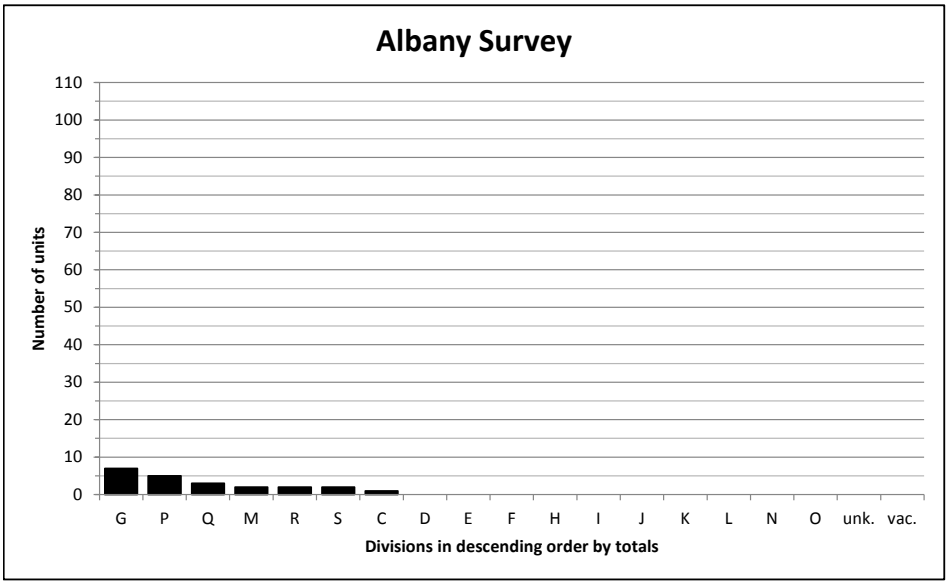


Table 3.4: Albany case study: Additional local services and amenities other than those available in the Albany town centre (see Appendix 2 for source details).

Figure 3.1: Albany town centre services and amenities within the 800 metre radius of the case study developments.

The case study developments consequently have a high level of services and amenities available in the area, principally located within the Albany town centre (including Westfield Albany, New Zealand's second largest shopping centre), all within an 800 metre radius. Beyond the Albany town centre, there are few additional facilities available (listed in Table 3.4), presumably because of the competition posed by the Albany town centre. Among the other notable amenities is the Pinehill Primary School, which was mentioned favourably by case study residents interviewed for this research. A small group of local shops is located to the south in Greville Road, just beyond the limit of the 800-metre radius of the case study developments.

The facilities available in the Albany town centre suggest that the case study developments are well supported by shops, and other services and facilities. However, the district plans concerned (and more forcibly, the Auckland Plan), stresses the 'walkability' of neighbourhoods and reduction of car-dependency to achieve the quality built environments. Apart from the local primary school that is within easy walking distance of the developments concerned, other services and facilities, including Westfield Albany and the Albany Park 'n Ride bus

station, can only be accessed along busy roads and poorly developed pedestrian paths. This is compounded by the large undeveloped areas surrounding the Albany Mega Centre and Westfield Albany. The Northern Motorway also bisects the area, with only one bridge link between the case study developments (and the surrounding residential areas), and Westfield Albany, the Albany Mega Centre and Albany Park 'n Ride bus station. For these reasons, accessing most services and facilities will depend on car access, thus mitigating against the aim of creating walkable neighbourhoods.

Development at 71 Spencer Road (The Ridge)

The Ridge is a 93-unit residential development located at the corner of McClymonts and Spencer Roads on what had been a vacant site. The Northern Motorway bounds the site to the west, with the Albany sub-regional centre (less than 800 metres distant) beyond. Single housing typologies on 500+ square metre sites surround the site to the north and south, with the Pinehill Primary School located on the opposite corner to the development.

Figure 3.2: Aerial photograph of 71 Spencer Road, Albany (Source: Google Earth).

The two-bedroom units are located in seven 2 – 3 storey blocks that front McClymonts and Spencer Roads. A large surface car parking area surrounds the blocks and there is a large communal open space beyond the car parking areas. This area lacks high-quality landscaping or amenities except for some seating. The service areas (waste disposal facilities) are located adjacent to the car park.

Figure 3.3: Spencer Road, Albany: Shows the extent of surface car parking and poorly positioned waste disposal facilities. The photograph was taken inside the development, looking towards the southwest corner of the site (Source: Lee Beattie).

Figure 3.4: Spencer Road, Albany: Photograph taken from the corner of Spencer and McClymonts Roads and shows the typical dwelling construction used at The Ridge, with two residential units on each floor. It also shows the private open space allocated for ground floor units (set behind the perimeter wall) to the other units, with the first and second floor balconies above (Source: Lee Beattie).

Figure 3.5: Spencer Road, Albany: The garden area with sand pit play area, and the Northern Motorway is beyond the fence. The photograph was taken at the edge of the car parking area (Source: Lee Beattie).

Figure 3.6: Spencer Road, Albany: The development looking south from the street vehicle entrance to the parking area beyond (Source: Lee Beattie).

Development at 60 Masons Road

The Masons is a 76-unit residential development. Whilst technically it has two street frontages, on to McClymonts and Masons Roads, due to the gradient fall across the site effective pedestrian access is from McClymonts Road. Vehicle access is gained via an access way off Masons Road. The Northern Motorway bounds the site to the west, with the Albany sub-regional centre (within 800 metres) beyond. Single housing on 500+ square metre sites are found to the north of the site, with vacant land on the other boundaries.

Figure 3.7: Aerial photograph of 60 Masons Road, Albany (Source: Google Earth).

The two-bedroom units are located in five three-storey building blocks placed in two linear rows. The topographical features, which include a significant grade change across the site, have prevented the buildings fronting the street and this affects access to the communal open space, especially from the northern block. The surface car parking areas are located directly in front of the residential units, with the communal open space behind the western linear block and the Northern Motorway beyond. The private open space for the ground floor units is, unlike The Ridge, located at the rear of the units, and all first and second units have balconies. The service areas (waste disposal facilities) are located adjacent to the surface car parking areas.

Figure 3.8: Masons Road, Albany: View of the development from McClymonts Road, looking into one of the ground-level car parking areas, with the communal open space beyond at a higher level. The considerable slope across this site is also evident (Source: Lee Beattie).

Figure 3.9: Masons Road, Albany: The street frontage with pedestrian access to McClymonts Road (Source: Lee Beattie).

Figure 3.10: Masons Road, Albany: Three storey apartment units adjacent to uncovered parking on the street side of the development (Source: Lee Beattie).

ALBANY CASE STUDY: ASSESSMENT

Table 3.4 below provides our urban design quality assessment using the Ministry for the Environment (2012) attributes as discussed.

Urban Design Assessments

Key urban Design Areas	Sub Element	Comments
Site context and layout	Neighbourhood context	There are some good local amenities in close proximity, such as the primary school across the street, although it is a reasonable walk (500 metres) to the Albany Park 'n Ride bus station and further to the shops at the town centre. However, there is a very poor pedestrian amenity, which would not ensure their use, especially at night. Proximity of the motorway and orientation of the units means that the residents probably experience significant ambient noise levels from traffic.
	Site context	The site is large and significant earthworks have been carried out to create a level building platform. This creates a flat surface for the car parking and open space, but it has created some difficulties for the street interface, particularly at the Spencer Road end of the site, where the units are significantly lower than the street. The buildings themselves are located around the periphery of the site and create a strong edge to the street. The remainder of the site is given over to surface car parking and a large communal open space area. The site plan shows the overall site layout, dominated by car parking.
	Landscape coverage	The landscaping that has been provided on site is sparse and does not add any significant amenity to the site. This includes the shared open-space area, which is a grassed area with small areas of planting around the periphery. This is a missed opportunity to provide a quality communal open space area. There is an unfortunate relationship between the communal open space and the car park – there is no landscaped edge to mark the transition between the two, and as such the open space has a traffic island quality, as it is surrounded by cars. Features such as large planting, shaded areas, better seating, children's play equipment or a pool could have been included, which would have greatly improved the on-site amenity.
	Outdoor living spaces	Most ground floor units have small front yards as their only 'private' outdoor space, but this is effectively public not private, so there is no private open space associated with each unit. The exception is the block of units across the north of the site, which has a rear yard adjacent to the boundary. This provides a low level of outdoor amenity to each unit, which is unfortunate given the small amount of balcony space provided, and the low amenity of the communal outdoor space.
	Car parking and access	Surface car parking is the dominant element across the site, occupying approximately half the site area. The parking spaces are communal, with some allocated to each unit, plus visitor car-parking. There is poor pedestrian access throughout the site and a general feeling of car dominance. Given the large site area, there appears to be a lost opportunity to provide car parking in other ways, such as undercroft or individual garaging, which would have had a less adverse impact on the amenity of the site.
	Service areas and utilities	The recycling and rubbish facilities are poorly located. While they are central to the site, they detract from the communal open space. Locating these in a screened area would help to increase on-site amenity.

Building form and appearance	Horizontal modulation Continuous building line Building roofline Façade articulation Material use and quality	Overall the architectural appeal of the development is good, as it utilises a familiar terrace house typology, concealing the true number of units provided on the site. The mass is broken up in to a series of different buildings, which are more in keeping with the suburban, detached house character of the immediate area than a large apartment building would be. An improvement to the appearance of the development would be the inclusion of more architectural variety across the site. Each block is of the same style and appearance, which leads to an element of visual monotony. The units appear to be of solid construction.
Street scene	Street edge continuity and enclosure Building entrances Façade opening Street boundary treatment	There is a good overall relationship with the street, with units orientated to the street along both street frontages. Each unit on McClymonts Road has its own pedestrian entrance, however, the Spencer Road units do not. This is largely due to the site excavation lowering the ground floor of the Spencer Road units below street level. The street frontage to this cul-de-sac is less well resolved than the main road, and the buildings do not respond to the level change in the street and so have large retaining walls at the front yards of the lower levels, reducing levels of light available to the front yards and the amenity of these spaces as front yards. Street boundary treatment: There are three main areas of street boundary treatment, and each is treated differently. The Spencer Road frontage suffers from site level changes, particularly at its westernmost end. A simple fence treatment runs along the entirety of this section of the site, interspersing visually permeable and impermeable elements. At the intersection of McClymonts and Spencer the wall becomes a solid element, and then becomes visually permeable again as it proceeds up McClymonts Road. While creating visual interest for passers-by, this does create the problem of making the only 'private' open spaces very public, and creates privacy issues. Landscaping and other fencing treatments could have been utilised to achieve a greater element of privacy for residents while still creating a positive relationship with the street.
Internal configuration	Internal / external relationships Visual privacy Aspect / natural ventilation	The units are all configured to be double aspect, which helps with daylight access and ventilation. Generally, the rear outlook of the units is quite poor as their dominant view is of car parking, and then the visually uninteresting grassed open space area with the Northern Motorway beyond. Generally, the balconies are too small to be useful. Few balconies have anything on them, at most only a chair or two, which indicates they are not well used. Both front and rear balconies are small, which is odd, given that the overall large site area would have made it simple to design more generous balconies. Choice of visually permeable balcony rails provides for good 'eyes on the street' but may have the dis-benefit of making the inhabitants of the units feel exposed – this is possibly indicated by the number of units who had their curtains drawn at the time of the site visit (late morning). The external walk-up staircase access to the upper units is not ideal in terms of safety and amenity.

Table 3.4: the Spencer Road development urban design assessment

The assessment underscores the small size of the residential units, together with the poor quality private open space associated with the ground-floor units that potentially compromises their use by families. The dominating large surface car park and low-quality communal open space also compromise the on-site amenity. Whilst this development has some good points, including the type of construction used and the street appearance, there are deficiencies. Perhaps the greatest deficiency in terms of meeting policy outcomes, is the poor pedestrian connection the development has with the Albany shopping centre, and in particular, the Albany Park 'n Ride bus station.

Key urban Design Areas	Sub Element	Comment
Site context and layout	Neighbourhood context	While some local amenities are close by, such as the Albany Park 'n Ride bus station and shops in the town centre, there is a low level of pedestrian amenity, which would not ensure high pedestrian use, especially at night. Proximity of the motorway and the orientation of the units mean that they probably experience significant ambient noise levels from traffic.
	Site context	The site is a rear site and has no road frontage The buildings themselves are located around the periphery of the site. The remainder of the site is given over to surface car parking and a large communal open space area. The site plan shows the overall site layout.
	Landscape coverage	The landscaping that has been provided on site is sparse and does not add any significant amenity to the site. This includes the shared open-space, which is a grassed area with small areas of planting around the periphery. There is a missed opportunity to provide a quality communal open space area. The communal outdoor area has a good relationship with the units to the east, providing them with a pleasant outlook. Because of the fall of the site and resulting retaining, the outdoor area is successfully separated from the car parking area and so is more successful than that at the 71 Spencer Road site. However, it suffers from the same low level of landscaping and amenity as the Spencer Road site and does little to provide a high standard of amenity for the residents. Features such as large planting, shaded areas, better seating, children's play equipment or a pool could have been included which would have greatly improved the on-site amenity.
	Outdoor living spaces	Ground floor units have outdoor courtyards of reasonable size; however, this does little to offer private open space due to overlooking issues. This provides a low level of outdoor amenity to each unit, which is unfortunate given the small amount of balcony space provided, and the low amenity of the communal outdoor space.
	Car parking and access	Surface car parking is the dominant element across the site, occupying approximately half the site area. The car parking spaces are communal, with some allocated to each unit, plus visitor car parks. Given the large site area, there appears to be a lost opportunity to provide car parking in other ways, such as undercroft or individual garaging, which would have had a less adverse impact on the site.
	Service areas and utilities	Providing these in a screened-off area would help to improve the on-site amenity.

Building form and appearance	Horizontal modulation	These units are largely of the same design and construction as the Spencer Road development. Overall the architectural appeal of the development is good, as it utilises a familiar terrace house typology, concealing the true number of units provided on the site. The mass is broken up into different buildings, which are more in keeping with the suburban, detached house character of the immediate area than a large apartment building would be. An improvement to the appearance of the development would be the inclusion of more architectural variety across the site. Each block is of the same style and appearance, which leads to an element of visual monotony. The units appear to be of solid construction.
	Continuous building line	
	Building roofline	
	Façade articulation	
	Material use and quality	
Street scene	Street edge continuity and enclosure	As this is a rear site, there is no direct relationship with the street edge, with the exception of the driveway.
	Building entrances	
	Façade opening	
	Street boundary treatment	
Internal configuration	Internal / external relationships	These units are of the same layout as the Spencer Road development. The units are all configured to be double aspect, which helps with daylight access and ventilation. Generally, the rear outlook of the units is quite poor as their dominant view is of car parking, and then the visually uninteresting grassed open space area with the Northern Motorway beyond. Generally, the balconies are too small to be useful. Few balconies have anything on them, at most only a chair or two, which indicates they are not well used. Both front and rear balconies suffer from the same small dimensions which is odd, given the overall large site area would have made it simple to design more generous balconies. Choice of visually permeable balcony rails provides for good 'eyes on the street' but may have the disadvantage of making the inhabitants of the units feel exposed – this is possibly indicated by the number of units who had their curtains drawn at the time of the site visit (late morning). The external walk-up staircase access to the upper units is not ideal in terms of safety and amenity.
	Visual privacy	
	Aspect / natural ventilation	

Table 3.6: 60 Masons Road urban design assessment

As with the Spencer Road (The Ridge) development, the Masons Road (Masons) development's small sized residential units compromises their use by families. The extensive surface car park and low-quality communal open space also compromises on-site amenity, in the same way as these features also dominate the Ridge. The main difference between the two developments is that the Masons development's relationship to the street is far less well resolved, when compared with The Ridge.

Overall, the urban design assessments indicate that whilst both developments have some good points, including the type of construction used and the street appearance of Spencer Road, they could have achieved much better design outcomes in quality terms. It is our opinion that neither of the case study developments fully meets the North Shore District Plan's strategic urban planning outcome intended in the district plan, which sought a high-quality built environment close to the Albany centre and easy access to high frequency public transit.

Interviews with Planning Officers

We have set out the general themes that emerged from the interviews and used direct quotations where relevant to underscore issues raised. Given the similarity of the two Albany developments, the questions were generalised to both, reporting on specific development issues where relevant.

Question One: *What was your involvement in the resource consent process for these developments?*

All the interviewees had been directly involved in processing the two applications, with some involved in the Environment Court appeal process.

Question Two: *What do you think are the district plan's key intended urban planning outcomes for medium density housing adjacent to existing town/sub-regional centres?*

Most of the interviewees expressed the view at the relevant district plan was clearest at the strategic policy level, especially with regard to seeking higher residential densities around town centres and walkable communities. However, giving effect to these policies through the development consenting process was far more difficult, especially when applied to the Area D Zone. All respondents expressed the view that the district plan lacked clear policy direction to achieve the high-level policy aims, and that this was largely left to the discretion of the planning officer when determining the district plan's response to development proposals.

On this point, one interviewee stated:

> *I think what happened there was a fundamental misunderstanding by the district plan drafters between what they thought the RMA process was about and what the actual RMA process is about and so I think the Council thought that, perhaps puritanically, it doesn't matter what the rules say but if an application is discretionary or non-complying, anything is up for grabs. In reality it doesn't work that way and even though rules strictly may not apply, they tend to be something of a pretty enshrined starting point ... from a judicial perspective especially. The same could be said about the assessment criteria.*

These types of responses are not unexpected given the problems we found trying to develop clear policy intentions for medium density housing in the North Shore District Plan.

Question Three: *Does the district plan policy framework (objectives and policies under the plan), at the time you assessed the application, provide you with a clear policy picture/ direction of the plan's intended outcomes for medium intensity housing developments? If not, why not? If yes, what were they?*

A set of issues emerged around the district plan drafting process. The wording used in the policy frameworks was described as vague, lacking clear direction, or simply seeking to mitigate adverse effects. Those who we interviewed considered that this limited their ability to develop a clear policy picture of what the district plan was seeking to achieve. Thus, while the district plan acknowledged the need for good design, it did not provide guidance on what this meant in practice and how it was to be achieved.

As one interviewee stated:

> *It talked about good design outcomes without quantifying, (or) qualifying what some of those things were.*

Question Four: *Will the district plan methods (rules and assessment criteria) give effect to the District Plan's intended policy outcomes? If not, why not? If yes, how so?*

All the officers interviewed said that the assessment criteria and associated rules did not reflect, or give effect to, the weak policy ideas provided by the district plan, and therefore diluted the ability to achieve good design built form outcomes. In part, this was due to the fact that the policies were weakly framed, and the assessment criteria did not set out how to prioritise the relevant issues. As one interviewee stated '*what are the 'must haves' and what are the 'nice to haves' when considering development proposals*. This was especially relevant in the Environment Court case.

All of the respondents were of the view that the underlying rules, such as car parking and density standards, became the predominant factors determining a design solution.

As one interviewee stated:

> *Well I suppose you've ended up with a built intensity and densities which the district plan allowed you to maximise ... the only way to deal with a poor outcome was actually to not maximise the density provisions of the plan ... you'd assume that it would be scaled back but I think this is a classic example of well 'let's keep the maximum number of units on site', even though we don't actually get a wonderful outcome design-wise.*

Another noted:

> *What you had was a whole array ... there's quite a raft of [assessment] criteria there but no sense of balance between them ... the district plan was at that time - it had a whole lot of contrasts in it which led to designing to achieve a certain rule outcome - so the thresholds for car parking sat at 50 sqm basically, so every apartment came in at 49.9 square metres [so as not] to have to provide that. The district plan also didn't have a rule around visitor car parking yet the traffic engineers supplied a standard of 0.5 everywhere regardless of location.*

The absence of a unit size standard within the district plan also impacted upon the district plan's ability (and that of the processing officers) to improve the quality and usability of the residential units. Finally, the rules conflicted with each other and did not reflect the design outcome intended by the district plan drafters. This again raises serious questions about the nature of the tools available within the district plan to achieve intended outcomes.

Question Five: *In your view does the development represent a good urban design outcome?*

All interviewees responded in the negative; this mirrors the urban design assessment that identifies deficiencies in both case study developments, when measured against the planning policy intentions.

One interviewee noted:

> *I think any of the general public would probably sort of see it as at the low end of the market in terms of cheapness - just sort of streetscape, quality of finishes and probably because it's that tilt slab construction as well it's got a degree of monotony about all the blocks. They all look the same. They're just sort of replicas and it's got that sort of mass production type process that one would assume that every unit is identical right throughout.*

Question Six: *If not, how, in your view could the development have been improved?*

The interviewees indicated that there were a number of design solutions that could have improved the quality of these two developments, including increasing the size of the units, limiting car parking, using semi-basement car parking, changing the design and arrangement of the private open and communal space. However, the key point that emerged from the interviews is the difficulty for a processing office to suggest redesigning aspects of proposals at an advanced design stage. This highlights the advantages of considering alternative solutions at a preliminary design stage.

Question Seven: *What were the factors preventing you from achieving those outcomes in practice?*

All interviewees believed (setting aside factors beyond the Council's control) that the major issues related to the provisions contained in the district plan. The comment below reflects their overall views:

> *My main criticisms lie with the plan. The main deficiencies of the plan are thus: One, the Area D Zone was over optimistic if not naive in its application over a wide area of land - many areas of which are inherently not suitable for the kind of density that's provided for the zone. The approach being it doesn't matter to zone bad land because the resource consent process will fix it. That's demonstrably not how it works. When land is zoned for a use, inherently that use is suitable. Second, there were a number of rules that were missing and otherwise not represented. For instance, in the Spencer Road/Ridge application a number of living courts are essentially walled in and sunk below ground level like little enclosed boxes. Unfortunately of all the rules the plan had, it didn't have rules talking about not having sunken enclosed living spaces and again, although it may not be what people like to think the process should be about, the mechanics of how the process actually works are that if it's not a rule, it's clearly not that important; and so the numeric requirements were met, [but] the qualitative aspects were not met.*

Question Eight: *How do you feel the development integrates into the surrounding environment?*

All interviewees agreed that the developments were within walking distance of the associated centres, but in the case of Albany, the area's incompleteness, poor pedestrian connections, and the overtly car dominated environment at, and around, the Albany centre, creates a highly dysfunctional relationship between the case study developments and their neighbourhood environment.

Question Nine: *Is there anything else you would like to cover regarding your involvement in these developments?*

There were no additional points offered.

Albany Case Study Discussion

Overall, the appearance of the two developments is considered to be good and positive, with mass broken into smaller blocks, providing a small-scale relationship with the surrounding residential development. The use of concrete walls enhances the quality of the appearance and no doubt will be favoured in the light of the current 'leaky building' crisis.

The Ridge/Spencer development has a more coherent relationship with the surrounding streets, except that the excavation in some places has necessitated retaining walls, with the overlooking of the private garden from the street. Ground floor units have access to small private gardens, facing the street in the case of The Ridge/Spencer development, and the internal garden in Masons. The location of the ground floor outdoor spaces in The Ridge is problematic, being wedged between the street boundary and the building. Upper level units all open to small balconies, and although modest, provide some private outdoor amenity to residents.

The overall driver in the site layout appears to have been the provision of surface car parking that dominates both developments, and compromises the shared site amenity. Landscaping in both cases is minimal, and the communal outdoor spaces poorly located with respect to units. It is sparse in its provision, leading to low levels of on-site amenity.

Both developments have provided standardised two-bedroom units of 49.5 square metres, with the consequence that room sizes are very small. This unit size is significantly less than the 70 square metres required for a two-bedroom apartment or unit in Auckland's CBD.[6] This is considered to be a factor that adversely affects family dwelling arrangements.

From the interviews with council resource consent officers concerned, it became apparent that the size of the units (in both developments) was a direct result of the district plan control (introduced through Plan Change 1: Intensive Residential Development), that required all residential development over 50 square metres to provide at least two car parking spaces.[7] This, coupled with the Council's own traffic engineering advice seeking at least 0.5 visitor car parking spaces per residential unit, became, in the respondents' views, one of the major determining design factors. This outcome was contrary to the policy direction

6 Rule 6.16, Auckland City's Central Area District Plan (Auckland City Council, 2003).
7 The previous control only required one car-parking space per residential unit.

given. Plan Change 1 was introduced (and made operative) in 2002 by the North Shore City Council in order to address some of the initial problems that had arisen through the structure plan process, including the need for better design controls and location of medium density residential developments (MFE, 2012). This came about despite the advice given to the applicant by the processing officers that they would have supported larger units with lower car parking requirements in order to achieve better design and resident amenity outcomes for the sites. But the applicant, in the view of all the urban planners interviewed, was understandably unwilling to amend their design given the uncertainly that could arise through the process of applying for a car-parking dispensation. This suggests that developers prefer to minimise risk, and therefore stick to district plan rules and avoid entering long discussions about urban design issues.

Another strong theme that emerged from the resource consent officers' interviews was the district plan's density control and its influence on the design process. All the urban planners were of the view that the applicant simply divided the gross site area by 150 square metres and that defined the housing yield for the site. This approach is not uncommon throughout the application process, especially when the district plan has provided a density standard for residential development. It thus appears that car parking and the density controls were the two major determining design factors for the developments.

As discussed above, the development in The Ridge/Spencer Road was subject to an Environment Court appeal. The applicant challenged the Council's decision to refuse a resource consent application, made partly on the grounds that the development represented a low quality urban-design outcome. In essence, all the urban planners interviewed believed that the Court took the view, given the lack of clear policy direction and the failure of the district plan to prioritise the relevant urban planning issues (especially within its assessment criteria and rules), that if a development met more than 50 per cent of the District Plan criteria, it was a '*pass mark and should be approved*'.[8]

Perhaps a far greater deficiency has been the development's relationship to the 'emergent' 'metropolitan centre' in Albany. Although there is a good relationship to some local amenities, such as the primary school, on the whole this aspect is considered highly deficient as an environment that delivers good urban amenity. Despite the Albany Park 'n Ride bus station and Albany shopping centre (with its supermarkets and wide range of retail, commercial and entertainments facilities including Westfield Albany and the Albany Mega Centre), the physical connections are very poor, are not pedestrian friendly or safe, and not conducive to walking. Of particular note, the assessment points to the poor quality of the pedestrian environment between the developments and the bus station, especially the pedestrian environment across the motorway bridge. The reality is that the Albany shopping centre is largely car-oriented, and residents appear to use cars to access these services and facilities, making use of the free parking available.

8 This should not be taken as a criticism of the Environment Court by the authors, but as a reflection of the views expressed in the interviews.

Figure 3.11: Albany Centre: Pedestrian access from the case study developments to the bus station and Albany shopping centre looking towards McClymonts Road - the so-called 'goat track' as referred to by residents in the resident interviews (Chapter 4) (Source: Lee Beattie).

Overall, while the district plan provided for the opportunity for medium density housing, through the density standards set out within the Area D Zone, it did not achieve the high quality, well integrated design outcomes sought.

ONEHUNGA CASE STUDY

The Onehunga case study development (known as 'The Atrium on Main') is located at 287 Onehunga Mall, Onehunga. The development was approved through a two-step process, with an initial application approved in 2003. This was followed by an S.127 application (under the Resource Management act 1991) in 2004 to amend the original consent approval. The S.127 application was consequent to a change of ownership and a new developer taking over the project, and changing the design layout. The number of units, land area and net density is given in Table 3.7 below.

	Units	No units	Land Area (sqm)	Units/ha
Onehunga	287 Onehunga Mall	112	6822	164

Table 3.7: The Onehunga case-study development

The District Plan

The Auckland City District Plan (Isthmus section) was made operative in 1999 and has been subject to a significant number of plan changes since that time. Like the North Shore District Plan, the Auckland City District Plan uses a traditional land-use zoning method to designate land uses for business, residential, rural and open space activities.

The Onehunga case study development is located within a Business 2 Zone. The Business 2 Zone has been applied to suburban retail centres throughout the previous Auckland City Council area. In these locations, the zoning seeks to ensure that the suburban centres remain the focus of their local community by providing for a range of shops, offices, and commercial activities. It also seeks to minimise the adverse effects on surrounding residential zones. Residential development is a permitted discretionary activity in the Business 2 Zone.

Policy Outcome Mapping

As with the North Shore District Plan, in order to understand the district plan's intended outcomes for the case-study developments, all three of the district plan layers were considered.

Using the policy outcome mapping analysis method, it is almost impossible to get a clear picture of the district plan's desired outcomes for medium-density housing in the Business 2 Zone. This is because the district plan does not have any policy direction for residential activity or, indeed, any other non-business activity within the Business 2 Zone. However, the district plan does have methods that relate to residential activities within the zone. This is contrary to the RMA's plan-making model, where rules or methods are only created to give effect to a policy outcome, developed through the S.32 process.

At the strategic level, the district plan seeks to provide for housing choice, whilst managing urban growth that supports compact town centres and public transport, and minimises conflicts arising between land-use activities. We have assumed, given the lack of policy direction for residential use within the Business 2 Zone that the intended outcomes have been left to the Council's resource consent officers' discretion through the application process. From the interviews with council resource officers, it became apparent that lack of clear policy direction left them in a difficult position to influence the unit's size, layout and overall design of the development.

As with the North Shore District Plan case discussed above, this highlights a serious issue in the district plan-making process relating to a lack of clear direction and directives. This is despite the intention to prevent confusion, and have district plans that are structurally sound, and able to positively influence and direct development. This again raises the question about what policy outcomes the district plan-users and resource consent officers are required to give effect to.

These issues lead to the same conclusion reached for the North Shore District Plan and the Albany case studies: it was not possible to develop a policy framework map for the Onehunga case-study development. However, we assumed that the district plan's intended strategic policy frameworks, supported by the Auckland Regional Policy Statement were the only driver for development applications of this type, and that the district plan seeks to manage urban growth that supports compact town centres and public transport and minimise the conflicts between land uses.

The Town Centre Context

A ground survey of services and amenities within an 800-metre radius of the case study development was undertaken, and is summarised in Table 3.8 below (details in Appendix 2). A total of 521 services and amenities were noted, including retail activity (the highest number at 207), arts and recreation (88) and manufacturing (68). This suggests a vibrant town centre delivering not only a range of amenities and services, but also employment generating activities. Also of note is the existence of the train station within the 800-metre radius of the case study, and to the larger surrounding residential area. This factor, along with good bus services, provides Onehunga with good transit connections to the wider city.

Figure 3.12 indicates the concentration of development in this town centre, including the services and amenities listed in Table 3.8. The close proximity of the case study development to these services and amenities is evident, especially to the range of retail outlets, schools, parks, library, and other community facilities. The range and proximity to these services and amenities was positively reported on in the resident interviews (chapter 4). In this instance we consider that district plan's strategic goals for urban consolidation in the existing town centre have been met, and are reflected by the good location of the development.

Onehunga Report

by Division

Division				
	C	Manufacturing		68
	D	Electricity, Gas, Water & Waste Services		2
	E	Construction Services		27
	F	Wholesale Trade		30
	G	Retail Trade		107
	H	Accommodation & Food Services		50
	I	Transport, Postal & Warehousing		12
	J	Information Media & Telecommunications		3
	K	Financial & Insurance Services		9
	L	Rental, Hiring & Real Estate Services		9
	M	Professional, Scientific & Tech. Services		21
	N	Administrative & Support Services		4
	O	Public Administration & Safety		4
	P	Education & Training		12
	Q	Health Care & Social Assistance		19
	R	Arts & Recreation Services		10
	S	Other Services		88
	unk.	Unknown Use/Activity		9
	vac.	Vacant/For Lease		37
			Total	521

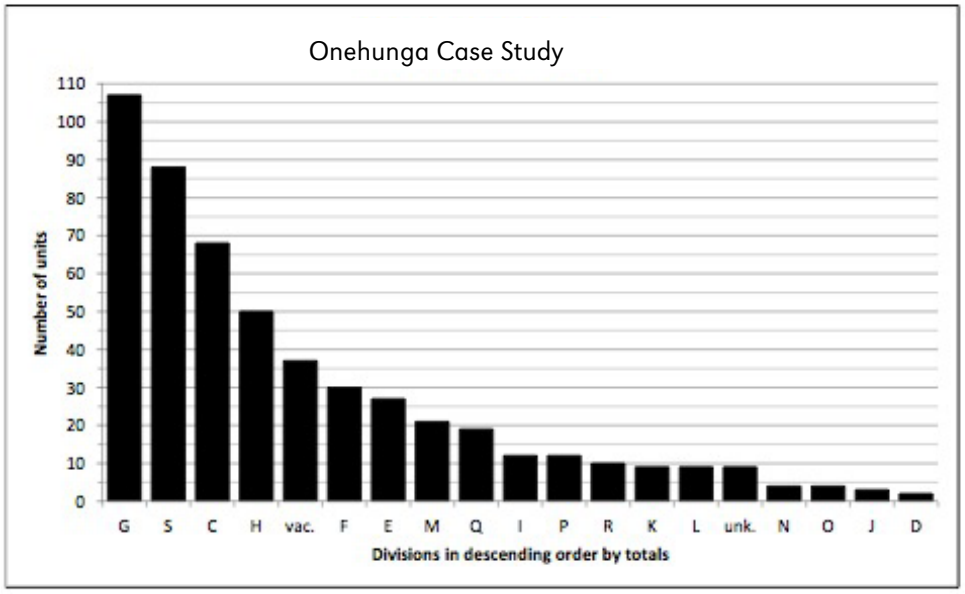


Table 3.8: Local services and amenities (See Appendix 2 for details)

Figure 3.12: Onehunga local services and amenities within an 800-metre radius of the case study development.

Development at 287 Onehunga Mall

The development is a perimeter block construction facing Onehunga Mall on the western side. It incorporates some retail and office spaces at street level. Most of the parking is located in a basement garage, with some two-storey units having individual garaging accessed from the upper level. Resident access is via a single security controlled door at street level or through the basement garage (also with security access control). Units vary from single level to three levels. The sole outlook of some of the single-storey units is an internal courtyard overlooking a small shared lap pool.

Figure 3.13: Aerial photograph of the Onehunga development (Source: Google Earth).

Figure 3.14: The Atrium on Main: View of the development fronting the Onehunga Mall (Source: Lee Beattie).

Figure 3.15: The Atrium on Main: View of development fronting the rail reserve area to the north, which in the absence of any development provides good outlook for these apartments (Source: Lee Beattie).

ONEHUNGA CASE STUDY: ASSESSMENT

The urban design quality assessment of the case study is set out in Table 3.9 below, following the key attributes from the Ministry for the Environment's Guide (discussed above).

Urban Design Assessments

Key urban Design Areas	Sub Element	Comments
Site context and layout	Neighbour-hood context	Very good local amenities in close proximity, it is a reasonable walk (800 metres) to the train station, to the shops in the high street, and with very high pedestrian amenity
	Site context	Buildings have been constructed over a level building platform created with car parking underneath.
	Landscape coverage	A mix of building typologies co-ordinated around a very small internal courtyard and an internal roading network.
	Outdoor living spaces	A mix of underground/undercroft parking and individual garaging.
	Car parking and access	Apartment blocks are orientated to the Onehunga Mall frontage and the northern boundary, adjacent to the open space, and rely on these aspects for their outlook.
	Service areas and utilities	Retail and office units face the Onehunga Mall frontage.
		Some of the single-storey units only look out on to the lap pool in the internal courtyard.
		There is no soft landscaping on the site.
		The central courtyard contains a lap pool.
		The complex relies on a disused railway designation to the north of the site to provide an element of green open space for the occupants of the complex.
		The units have small private balconies, which vary in the amenity provided, depending on size, orientation and outlook.
		Good with undercroft car parking. However, the access way to the individual garaging, adversely impacts on the amenity of the site, and reduces the opportunities for outdoor living spaces.
		The recycling and rubbish facilities are appropriately located. However, screening of these area would help to increase on-site amenity.
Building form and appearance	Horizontal modulation	The development uses a variety of complementary architectural forms to achieve a consistent appearance. From the main street the only visible elements are the northern and western blocks, which present a well articulated façade to the street.
	Continuous building line	On the northern (open space) frontage there is a lost opportunity to create a better interface between the units and the open space at ground level, as the first floor of the block contains parking and therefore presents a blank façade to the open space.
	Building roofline	
	Façade articulation	
	Material use and quality	

Street scene	Street edge continuity and enclosure	While retail units are located on the Onehunga Mall frontage, these are less successful than they could have been, due to the change in level between the street and the shop fronts, and the recess back from the street frontage. The Onehunga Mall frontage also contains the main vehicle and pedestrian entrance. The pedestrian entrance suffers from being recessed significantly within the terraced retail area, and not being easily visible from the street, while the large vehicle entrance has an unfortunate visual relationship with the main street.
	Building entrances	
	Façade opening	
	Street boundary treatment	
Internal configuration	Internal / external relationships	There are too many units on the site, with small spaces between them. The outlook from many of the units is poor, and the cramped relationship between buildings creates privacy issues.
	Visual privacy	
	Aspect / natural ventilation	

Table 3.9: The Onehunga (The Atrium on Main) development urban design assessment

Overall, we consider that the strong points of this development relate to its favourable location within the Onehunga town centre, giving residents easy access to public transport, and a wide range of local and commercial services and facilities. The use of a perimeter block form is considered to be good, by creating a well defined and potentially active street edge (consistent with existing development in Onehunga Mall). Deficiencies arise from the insertion of the two blocks within the inner courtyard area that restrict internal outlook. The inclusion of access driveways to lockup garages at the upper courtyard level also eliminates the potential for these spaces to be developed for resident amenity.

Interviews with Planning Officers

Key issues arising from the interviews with planning officers involved in the consenting process for this development is discussed below.

Question One: *What was your involvement in the resource consent process for these developments?*

All the interviewees were directly involved in processing these two applications.

Question Two: *What do you think are the district plan's key intended urban planning outcomes for medium intensity housing adjacent to existing town/sub-regional centres?*

All agreed that these were not well expressed within the district plan. The responses expressed the attempts to achieve medium density development in town centres like Onehunga, as a '*struggle to understand intensive development'*. However, when it came to the Business 2 Zone, all stated there were no policy outcomes within the zone, apart from those relating to commercial and business activities.

Question Three: *Does the district plan policy framework (objectives and policies under the plan) at the time you assessed the application provide you with a clear policy picture/ direction of the plan's intended outcomes for medium density housing developments? If not, why not? If yes, what were they?*

Confirming the themes developed in question two above; there was no policy direction within the Business 2 Zone. As one interviewee noted:

> *So it was all done on very much an applicant thinks this is what the market wants and I can't remember the size of the units but they were very much a standard response. I know now we have that sort of desire to mix up the apartment sizes to get a bigger demographic but that wasn't in place at the time.*

Another commented:

> *It was just left up to the processing officer to decide what was the best outcome for the site.*

Question Four: *Do the district plan methods (rules and assessment criteria) give effect to the district plan's intended policy outcomes? If not, why not? If yes, how so?*

All agreed that the district plan did not have any methods, apart from the actual activity status aimed at addressing residential activities within the Zone.[9] As one interviewee noted:

> *It was more about just activity status and I think my expectation was that it was probably something like restricted discretionary ... a very generic criteria again, from memory. You know traffic, amenity, parking access, that sort of thing.*

All agreed it was effectively left to the processing officers to try and make the appropriate judgements for the development. They noted (as with the Albany case study) that it is difficult for a resource consent officer to get an applicant to redesign a proposal at an advanced design stage. This again highlighted the advantage of applicants seeking preliminary advice at an early stage.

Question Five: *In your view does the development represent a good urban design outcome?*

All respondents replied negatively, and this response reflects aspects of the urban design quality assessment. All interviewees agreed they had little control over the design quality. As with the Albany case study development, concerns were raised about the need to address car-parking issues at the expense of design quality. All were very concerned about the internal layout and the amenity values this provided for the future residents. The provision of retail space on the ground floor, whilst excellent in potentially contributing activity on the street frontage, is compromised by the sloping street, and the difficult access this creates.

9 It should noted that Plan Change 154 has addressed a number of these issues raised here, by providing a range of assessment criteria and development control dealing with residential activities. However, this Plan Change did not fix the policy vacuum.

Question Six: *If not, how, in your view could the development have been improved?*

As with the Albany case study sites, the interviewees suggested there were a number of design solutions that could have improved the quality of the development, including the internal layout, the vehicle entry points (both service vehicles and residents' cars), the retail frontage, and pedestrian access to the development.

Finally, all interviewees agreed that the Council (both the previous Auckland City Council and the present Auckland Council) had gone some way to address the question of urban design quality, but there was still much more that could be achieved.

Question Seven: *What were the factors preventing you from achieving those outcomes in practice?*

One interviewee commented on the high level of development activity being undertaken at that time, and noted that issues of urban design quality were not as central as is the case today. Another raised the issue of the rail corridor on the north boundary to the development. This provides a good green outlook for apartments, but will change should the rail line be installed in the future.

Question Eight: *How do you feel the development integrates into the surrounding environment?*

All believed that the development was appropriately located at the end of the Onehunga Mall (High Street) and placed medium density housing within good walking distance of the town centre, thus giving effect to the wider strategic and regional policy outcomes.

Question Nine: *Is there anything else you would like to cover regarding your involvement in these developments?*

There were no additional points offered.

Onehunga Case Study Discussion

The development generally takes the form of a perimeter block located over a basement parking garage, although the internal courtyard space accommodates two additional blocks, overlooking a shared swimming pool. The development directly fronts Onehunga Mall to the west, and includes retail activities at street level, with apartments above overlooking the street. While this is considered to be a good arrangement in urban design terms, and provides a potential active street frontage not unlike the lower retails parts of Onehunga Mall, the design execution is deficient. The design response to the sloping street has resulted in compromised access to the retail areas (and it is not surprising to see that these were largely vacant when surveyed).

As a perimeter block, the individual units face outwards in four directions, to the street (Onehunga Mall), to the north and an open space designated as a future rail corridor, with the other two sides overlooking neighbouring properties. Units also have views into the central space, and while this may compensate for the compromised external outlook, the inclusion of the two inner blocks in the courtyard space reduces the potential on-site amenity.

The development provides for good resident security, with access control to the main entrance off Onehunga Mall and to the basement parking. The development incorporates a variety of unit types, ranging from single level studio apartments, to three storey apartments that include a lock up garage at the entry level. This larger range of units types is considered to be more desirable to the single type offered in the Albany case study, offering a larger range of units sizes, types and costs, and thereby likely to appeal to a wider range of residents.

Overall, we consider that the strong points of this development relate to its favourable location within the Onehunga town centre, easy access to public transport, and the provision of a wide range of local and commercial service and facilities. The use of a perimeter block form is considered to be good, creating a well defined and potentially active street edge (consistent with existing development in Onehunga Mall). Deficiencies arise from the insertion of the two blocks within the inner courtyard area that restrict internal outlook. The inclusion of access driveways to lockup garages at the upper courtyard level also eliminates the potential for these spaces to be developed for resident amenity.

As in the Albany case study, the aim here has been to assess the extent to which the relevant district plan has informed the case study development in its town centre context, and achieved the policy framework concerned. The operative plan for this case study is the 1999 Auckland City District Plan (Isthmus section). The case study is located in a Business 2 Zone where residential use is provided for as a discretionary activity. The policies seek to ensure that the suburban centres remain the focus of their local community by providing for a range of shops, offices, and commercial activities, whilst seeking to minimise the adverse effects that such activities can have on residential areas. However, they do not provide guidance on how future residential development within the zone should be undertaken.

As with the Albany case site developments, this lack of policy support has adversely impacted upon the design quality of the Onehunga development. It should be noted, however, that all the officers interviewed believed that the Auckland District Plan had introduced a range of urban design principles into the district plan which should improve the design quality of future residential development proposals.

OVERALL CONCLUSIONS

The aim of this chapter has been to assess the assumption that district plans influence and direct development to achieve the intended urban planning outcomes for medium density housing. This was assessed using the two case study developments identified in Albany and one in Onehunga, all within walking distances of their respective town centres. The developments were consented to under two of the Auckland Council's legacy district plans namely, the North Shore District Plan and the Auckland City District Plan (Isthmus section).

The method involved understanding the relevant district plan's intended outcomes for medium density housing using the policy mapping technique. To do this, we compared our urban design quality assessment and the comments and information gained from the interviews of resource consent officers, with the district plan's intended outcomes. The extent to which we found an alignment is set out in this conclusion.

Overall, we suggest that the district plans have had limited impact on influencing and directing the development process, especially in terms of achieving high quality medium density housing. While it could be inferred that both district plans sought to provide for good quality medium density housing outcomes, they both have weak policy direction on how this would be achieved. In the case of the Auckland District Plan, there was no policy direction for any other land use activities in the Business 2 Zone apart from business activities. This is significant because a sizable proportion of medium density housing constructed in the previous Auckland City over the last ten years has been within the business zones.

We found evidence of weak and unclear policy drafting within both district plans, where the objectives and policies (policy frameworks) failed to clearly articulate both the district plans' intended outcomes and how these could be achieved in practice. The objectives were typically too broad, loosely written, unquantifiable, and often the policies failed to sufficiently support them.

With regard to the case studies reported on, the district plans failed to clearly articulate an urban plan vision. There is also a disconnection between the weak policy direction and both the district plans' methods. The North Shore District Plan's failure to prioritise the relevant issues, including those within its assessment criteria, led towards rule-derived outcomes. The case study developments in Albany were thus largely determined by car parking and density controls, which adversely impacted on the provision of on-site amenities and the residential unit size. This is not the design led, good quality outcome sought by the district plan, and suggests that developers would prefer to minimise their risk and stick to district plan rules and avoid entering long discussions about urban design issues.

The Auckland District Plan provided methods to address residential activities in the Business 2 Zone, but these methods (rules and assessment criteria) had no policy support. This left the resource consent officers in a difficult position and without sufficient tools to achieve good quality design outcomes through the application process. Again, the car parking control, and lack of a minimum unit size were the determining factors in the developments overall design and on-site amenity provision.

While both the district plans did not set residential density targets for medium density, all the developments assessed have met the Auckland Plan's density targets for metropolitan or town centres, using building typologies up to three storeys. However, the issues of design quality, residential unit size, parking and on-site amenities in the developments are questioned in terms of achieving the high quality design outcomes that the plans and policies envisage.

This raises an issue about the degree of influence the district plan's policy directions have over the development process and the urban planning process currently used. Moreover, it raises questions about the how the delivery of the new Auckland Plan's intended outcomes will be achieved.

4 LIVING AT HIGHER DENSITY RESIDENT INTERVIEWS

This section of the report sets out the results of face-to-face interviews with a sample of 84 residents from across the three case study sites. More specifically, it provides information on how effectively the outcomes of smart growth policies have met the expectations, aspirations, and needs of this group of intensive housing residents.

RESIDENT INTERVIEWS: AIMS AND METHODOLOGY

The aims of the resident interviews were:

1. to gather data from a sample of residents of intensive housing developments in the case study areas in order to establish:
    - a demographic profile of the residents;
    - their previous housing histories, current housing situation; and future housing intentions;
    - their housing preferences and expectations;
    - their opinions on living in medium density housing with respect to community, transport, leisure, recreation and consumption facilities and the use they make of these facilities;
    - general perceptions regarding intensive living.
2. to build on and extend earlier research work previously undertaken by the researchers into intensive housing in Waitakere City and elsewhere, and in so doing offer some reflections on changes in this housing sector over time.
3. to provide the broader project with information on the social dimensions of housing intensification to complement the planning, design and economic dimensions of the project included elsewhere in the report.
4. to provide high quality information to Auckland Council on one of its key research priorities, namely intensification.

In order to fulfil the research aims, the research team developed a questionnaire in consultation with Auckland Council staff, to be administered face-to-face with residents from the three case study developments. The questionnaire was adapted from research instruments used in earlier research with Ambrico Place residents (Dixon, Dupuis & Lysnar, 2001; Dixon, Dupuis, Lysnar, Spoonley & Le Heron, 2001) and the Crown Lynn Condominiums (Dupuis, Dixon & Read, 2009), in order that comparisons could readily be made between current and past research findings. For some of the interviews extensive notes were made. These were written up as soon as possible after the interview was completed. The notes provided us with qualitative material that has added an extra dimension to the research. In all, 84 interviews were completed: 54 with Ambrico Place residents, 18 with residents from The Ridge and the Masons developments in Albany, and 12 with residents from the Atrium on Main in the Onehunga development.

ETHICAL CONSIDERATIONS

Before the research commenced, approval to proceed was sought and gained from the University of Auckland's Human Participants Ethics Committee. The major ethical issues identified in the ethics application were: soundness of research methods; informed consent; confidentiality; conflict of interest; and minimisation of harm.

We were acutely aware that we were asking participants to give their time, knowledge and understanding to this project. The in-depth interview was selected as the research method that offered an appropriate medium for participants to contribute to the project.

To ensure that participants had sufficient information about the project to give informed consent to take part, we gave them a full explanation of the research aims and processes prior to commencing the interview. We provided an information sheet prior to the interview as well as a full oral explanation before the interview to ensure potential participants were fully informed of their rights. For example, they were informed they could decline to answer any particular question without compromising their intention to continue with the interview; to withdraw at any stage from the interview itself; and to withdraw information from the research for up to two weeks after completion of the interview.

We were aware of the high proportion of immigrant groups in the selected case study areas. It was likely that some participants would have limited spoken English, which could impair their informed consent. Accordingly, the information sheet and consent forms were translated into Chinese, and a mature Chinese-speaking male interviewer was employed. We were confident that Chinese residents would have full information about the study and would be able to take part.

Participants' confidentiality was maintained through the conscientious handling and storage of data, according to the University of Auckland's ethical guidelines. No third parties were used to gather information about individual participants. Interviewers signed agreements prior to commencing work to maintain confidentiality with regard to any personal information elicited in the interviews. Additionally, the interview documents were identified by number only and stored securely on University premises once interviews were completed. The consent form with address and/or e-mail details, collected in order to send participants a project summary, were annotated with a corresponding number. Completed consent forms

were stored separately from completed interview surveys so that the fewest possible people in the research team could identify individual participants. Data were securely locked and will be stored for a period of at least six years on University premises before being destroyed.

Participants were made aware that the research was partly funded by Auckland Council before they consented to take part. They were also reassured that no information given to the Council could identify them personally in any way.

RECRUITMENT OF RESEARCH PARTICIPANTS

Once we had obtained ethical approval, the lead interviewer obtained contact numbers for the on-site managers for Atrium on Main and The Ridge and made an appointment to discuss the research with them. Both on-site managers were enthusiastic and strongly supported the intent of the research, suggesting locations for displaying information about the research. They also agreed to the interviewers conducting a letter drop to each apartment. This support was essential at Atrium on Main in particular, as it is a closed building and we would not have obtained access to the post boxes without the support of the on-site manager.

A different process was used to recruit participants from Ambrico Place which does not have an on-site manager and comprises a number of different complexes and bodies corporate. Thus it proved difficult to identify any specific person on-site with whom contact could be made. The interviewer therefore undertook a letter drop, with the information sheet, to every Ambrico Place unit. Material was also displayed at the New Lynn Kindergarten, which is located within the complex.

The distribution of materials resulted in a number of residents at all three sites making contact with the interviewer. Chinese residents in particular were reluctant to participate, especially in Ambrico Place, which has a significant number of Chinese residents. We were concerned that without their input we would not be able to gather data that reflected the views of the majority of this community, and we knew that many of the past research surveys and interviews on intensification have had low response rates from new migrant groups. To ensure Chinese participants had full information regarding the project, as described above, Chinese language materials were prepared and distributed and we recruited a Chinese speaking researcher.

At Ambrico Place and The Ridge, the second round of information distribution took the form of door knocking each apartment to provide information about the research in person in both Chinese and English. This proved very successful for recruiting Chinese participants in particular, and some snowball contacts ensued. It is notable that snowball contacts did not eventuate for most other ethnicities, with many participants citing a lack of knowledge of, and contact with their neighbours. We decided to offer second round contact participants a $25 grocery voucher in recognition of the time they gave to the project. The gift vouchers were also distributed to the participants we had already interviewed and another information drop with the offer of a gift voucher was undertaken at the Atrium on Main.

Our recruitment strategies required some flexibility to achieve the numbers needed and ethnic representation. We modified our approach to take account of Chinese language requirements. Both the distribution of information materials and researcher recruitment strategies were site specific, and the flexibility of our approach was rewarded by a sample that reflected the diversity of residents at each location.

INTERVIEWS AND DATA ANALYSIS

Most of the 84 interviews were held in the interviewees' homes, although a few were held in cafes or other sites to accommodate participants' wishes and time frames. The interviews took between one and four hours. Some participants had very interesting stories to tell and welcomed the opportunity to make their views known and provide information for the project. The data gathered were entered into SPSS (a statistical package for the social sciences) for analysis. The frequencies thus generated provided data for the written material and graphs in later sections of this report. As well as filling in the interview schedule during the interview, the researchers wrote up notes once the interview was completed which provided an invaluable source of qualitative information that augmented the quantitative data that comprises much of this report.

THE RESEARCH PARTICIPANTS: A DEMOGRAPHIC PROFILE

This section of the report provides demographic data on residents in the 84 households that comprised the sample and about whom information was sought.

Age

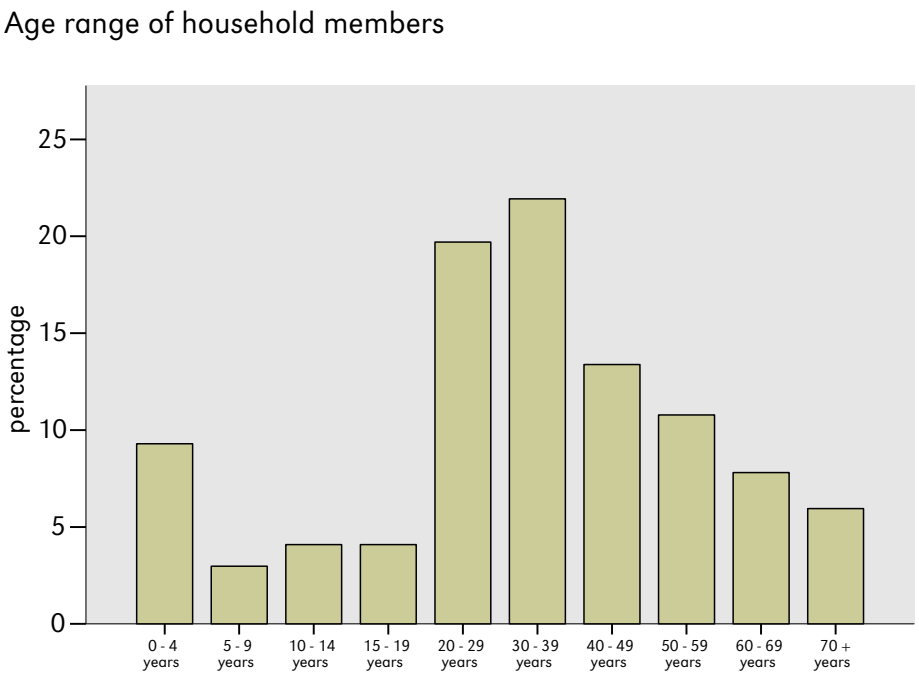


Figure 4.1: Age range of household residents

The majority of residents (55 per cent) were aged between 20-49 years of age. A further 25 per cent were 50 years of age or over. Children younger than 15 years of age accounted for 14 per cent of household residents; over half of those were younger than four years of age.

The data reveal an unusual demographic mix with a predominance of residents in their 20s and 30s, quite young children, and a significant group of those over 50.

Gender

There was a preponderance of women over men with 128 females and 95 adult males living in the households sampled, giving a ratio of 7.5 men to every 10 women. Our sample therefore reflects an interesting feature of Auckland's population that was evident in 2006 Census data (Figure 4.2): more females than males in every age group over 30 years of age (Auckland Council, 2011).

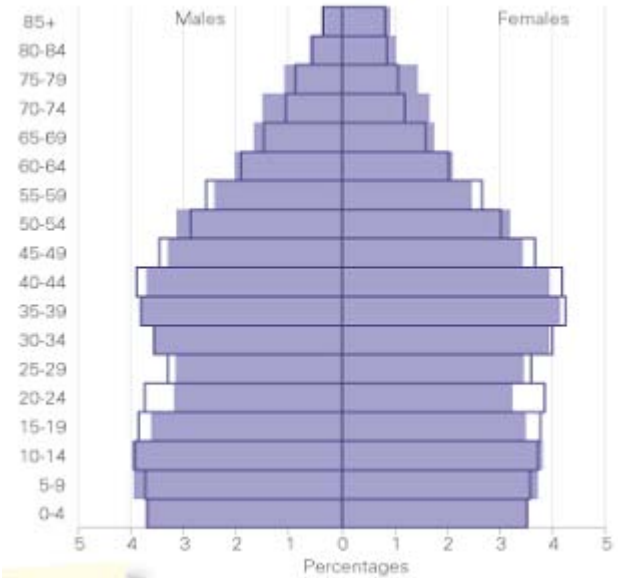


Figure 4.2: Age and sex structure for Auckland (shaded) and New Zealand (blue line) (2006) Source: Auckland Council, (2011)

The greater number of women in the sample could also reflect the fact that women were the only adults in 12 households in the sample. In addition, 55 children lived in these households: 31 girls and 24 boys.

Ethnicity

Figure 4.3 shows the ethnicity of the 224 residents for whom ethnicity data were collected.

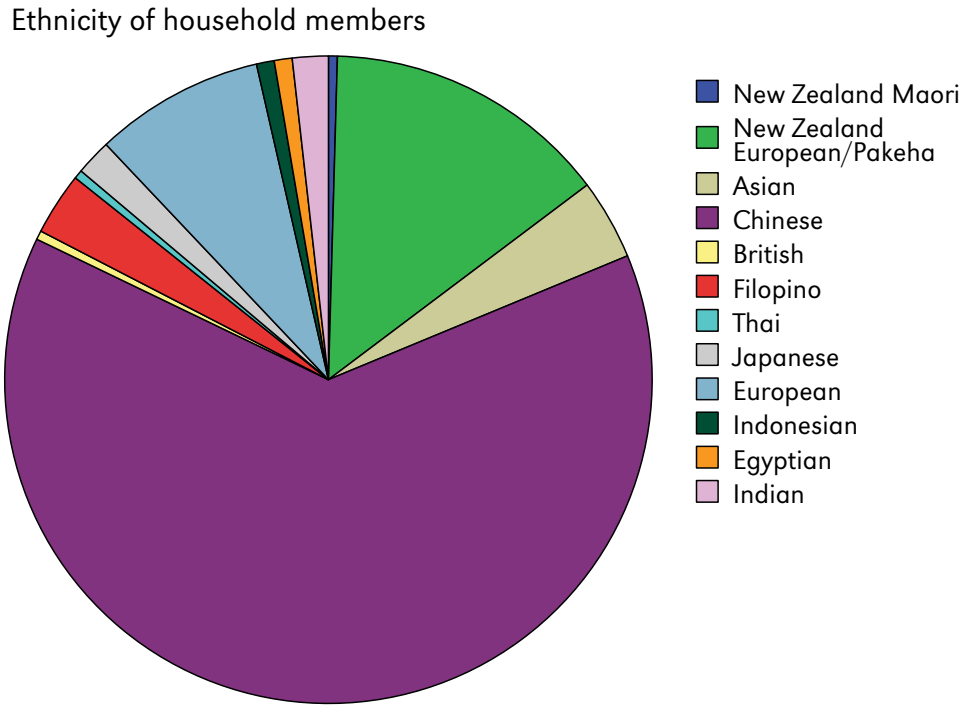


Figure 4.3: Ethnicity of household members

The most obvious feature regarding the ethnicity of the household members in the sample is the high proportion of Chinese residents (over 63 per cent). In part, this reflects our intention to recruit Chinese residents for the sample, given the dearth of information that is currently available on the experiences of Chinese immigrants in Auckland. Nevertheless, it also reflects the relatively high proportion of Chinese residents in the selected case study developments, especially Ambrico Place.

It is significant that Auckland's most numerous ethnic group, New Zealand European/ Pakeha (56.5 per cent at the 2006 Census) make up only 14 per cent of our sample. In part this is explained as a consequence of the specific case study sites chosen, where the proportion of New Zealand European/ Pakeha residents is relatively low. It is also explained by the proportion of the sample who reside in Ambrico Place, which has a high Chinese population. The proportion of New Zealand European/ Pakeha is consistent, however, with the low proportion of residents – 21 per cent – in the Census Area Unit of Lynn Mall (where Ambrico Place is located) who, in 2006, were categorized as 'European Ethnic Groups'.

Also significant is the fact that 19 per cent of the sample identify as Asian from countries other than China.

The three case study areas exhibited different ethnic compositions.

Residents of the Atrium in Onehunga were predominantly New Zealand /European, although a small number of people were Chinese, Indian, and other ethnicities.

The Albany developments had some Chinese residents but also included many other ethnicities and nationalities, including people from various Middle Eastern countries, Korea, Japan, the Philippines, and South Africa. The majority were however, New Zealand European/ Pakeha. These developments were almost exclusively rental properties and attracted many international students.

Ambrico Place had the highest concentration of Chinese residents in our sample. In the Ambrico Place sample 87 per cent of all household members were born in China. While somewhat higher than expected, this is not inconsistent with 2006 Census data where the proportion of the Lynn Mall CAU categorized as from 'Asian Ethnic groups' was 61 per cent.

Birthplace

Figure 4.4 shows the birthplace of all research participants and members of their households. Approximately three quarters of household residents (including children) were born outside of New Zealand. Just over three quarters of the sample who were born outside New Zealand were born in China (Figure 4.5). The remainder of overseas-born residents came from a range of countries including the United Kingdom, the Philippines and Indonesia. Ambrico Place-specific data for those born overseas (Figure 4.7) shows an even higher percentage of overseas-born residents who come from China.

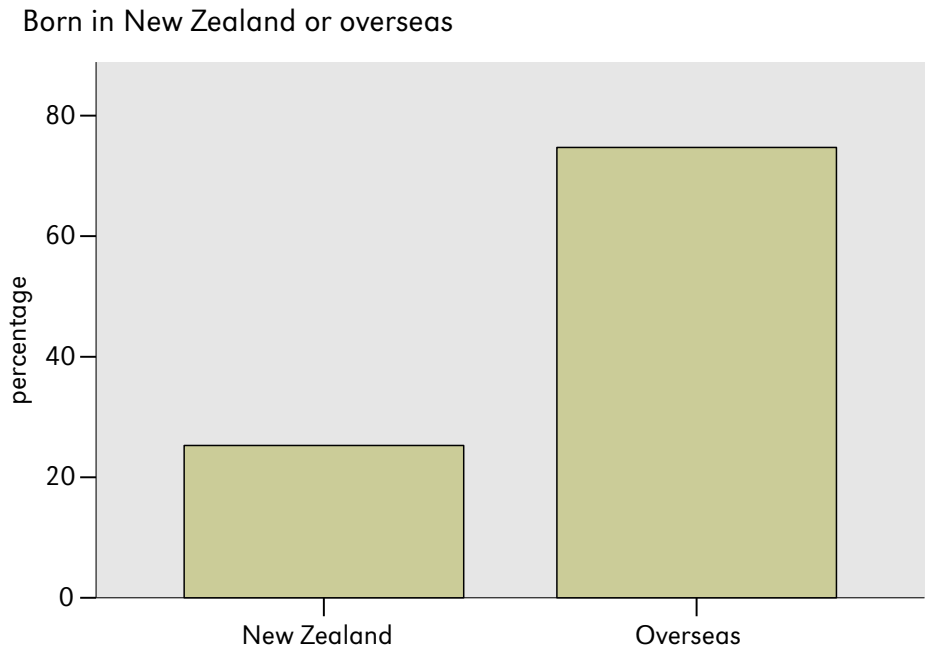


Figure 4.4: Place of birth (sample)

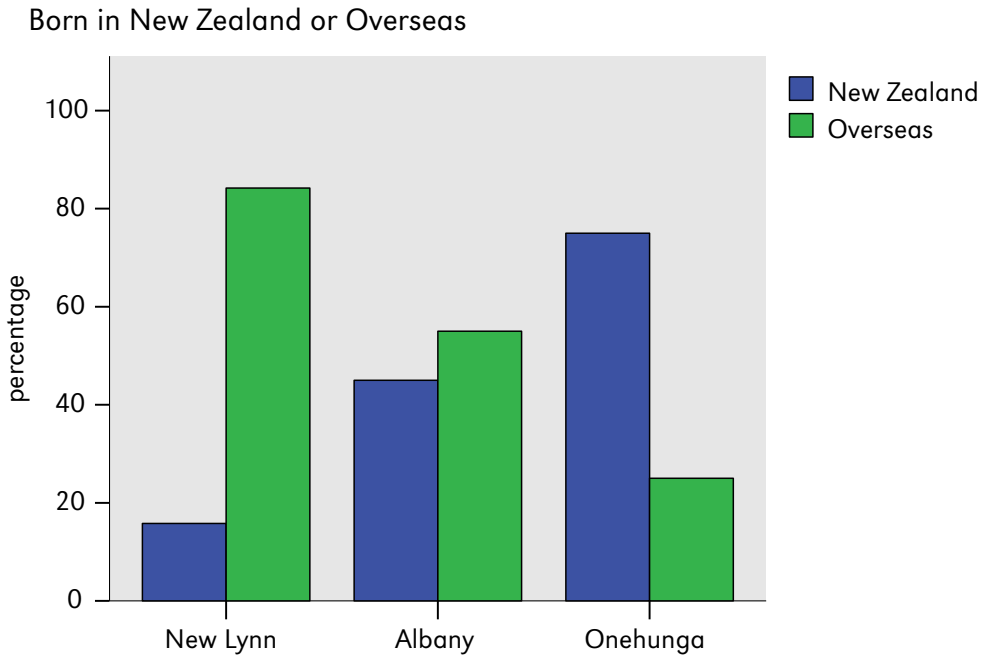


Figure 4.5: Place of birth by development

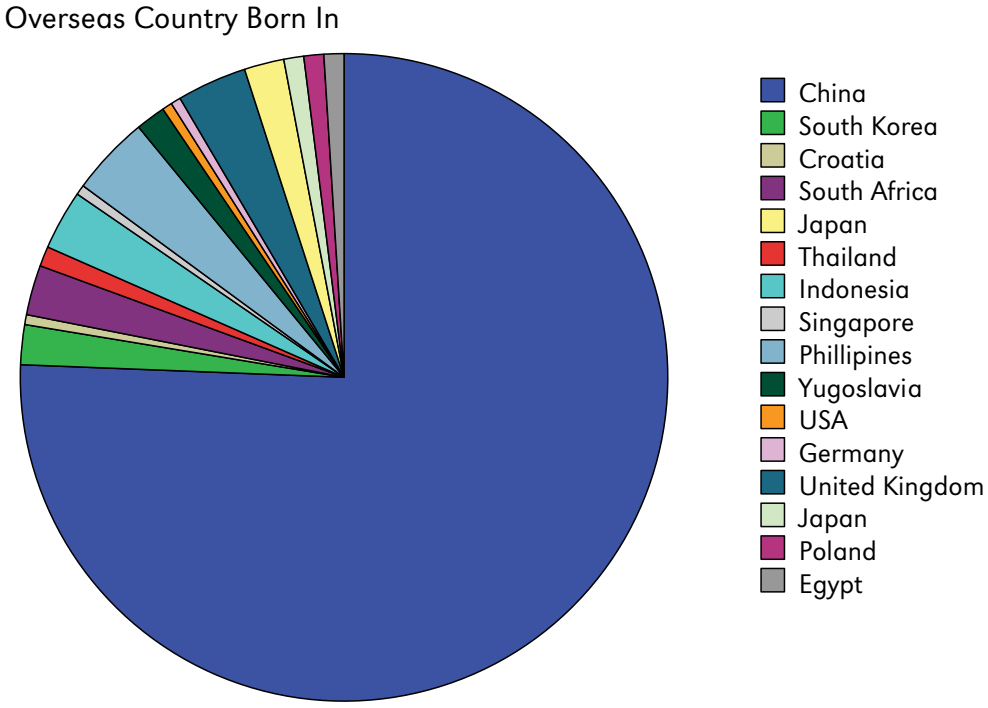


Figure 4.6: Country of birth for those born outside of New Zealand

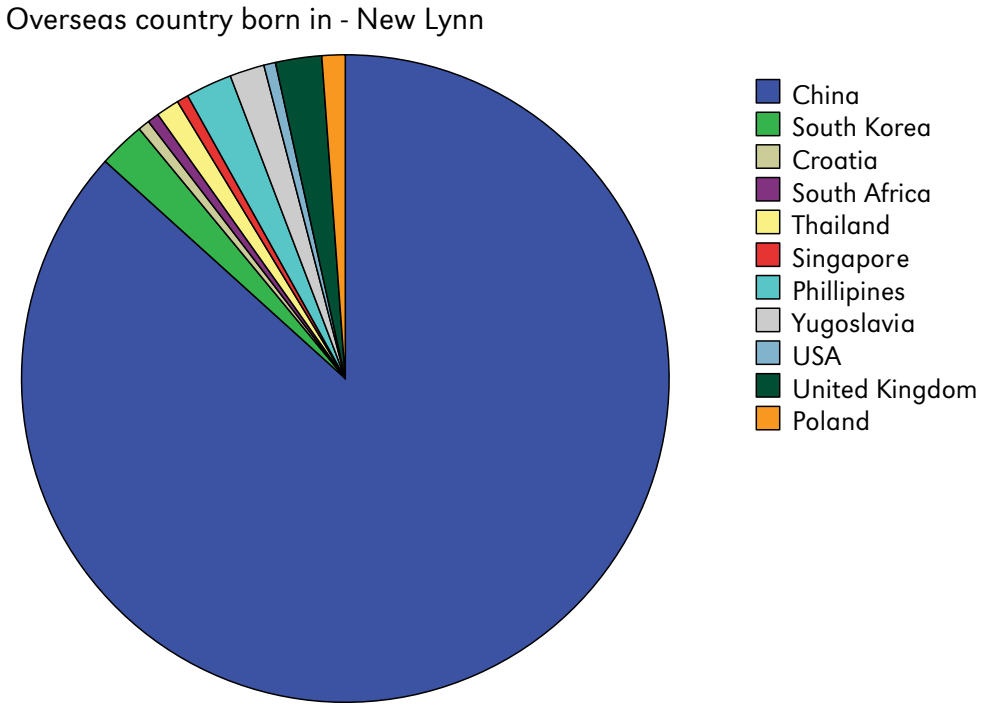


Figure 4.7: Country of birth for those born outside of New Zealand for Ambrico Place residents

Length of residence in New Zealand

Almost 70 per cent of residents who were born overseas had lived in New Zealand for more than 5 years. Nearly 48 per cent of residents born overseas had been in New Zealand for more than 9 years.

Length of time living in New Zealand is important, as it ensures the majority of participants have had a reasonable length of time to experience housing conditions and circumstances in New Zealand.

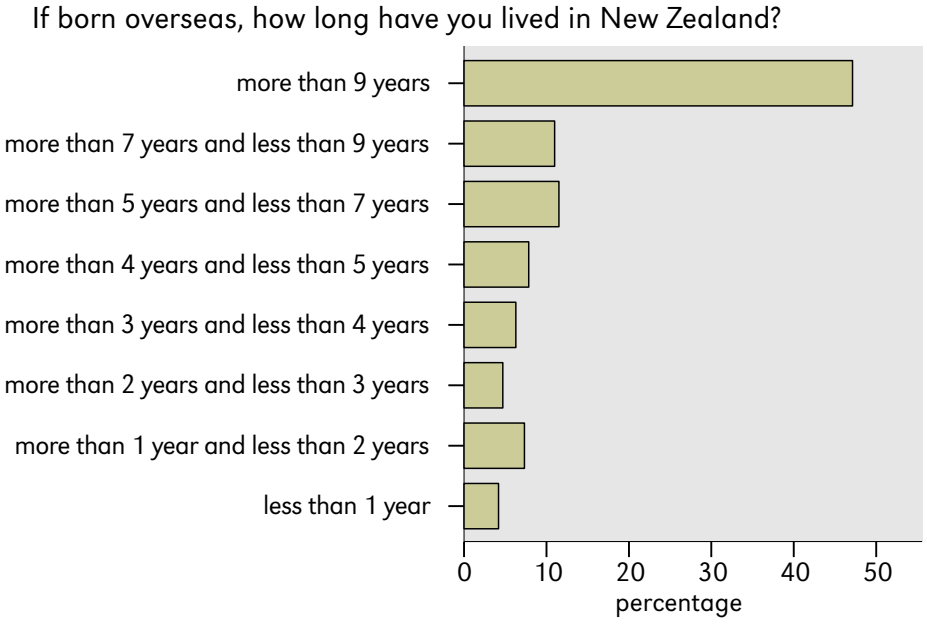


Figure 4.8: Length of residence in New Zealand

Income

For a number of reasons, questions on income are problematic. Interviewees might not know the income of other household members or might be unwilling to reveal their own, or others', incomes. In this research the question on income asked interviewees to estimate the approximate income for each adult in their household. The incomes of 102 adults for whom we have data are shown in Figure 4.9.

Nearly three quarters had an individual annual income of less than $50,000. Thirteen per cent of the sample earned $70,000 or more and 5 per cent earned more than $100,000 per annum.

In June 2012, the median weekly earnings for working individuals in Auckland was $840, equating to an annual income of $43,680, higher than the median for those in our sample. The relatively modest level of incomes could likely reflect: the significant proportion of people from new immigrant groups in the sample; the younger age of a proportion of participants; and the lower fixed incomes of some retired participants.

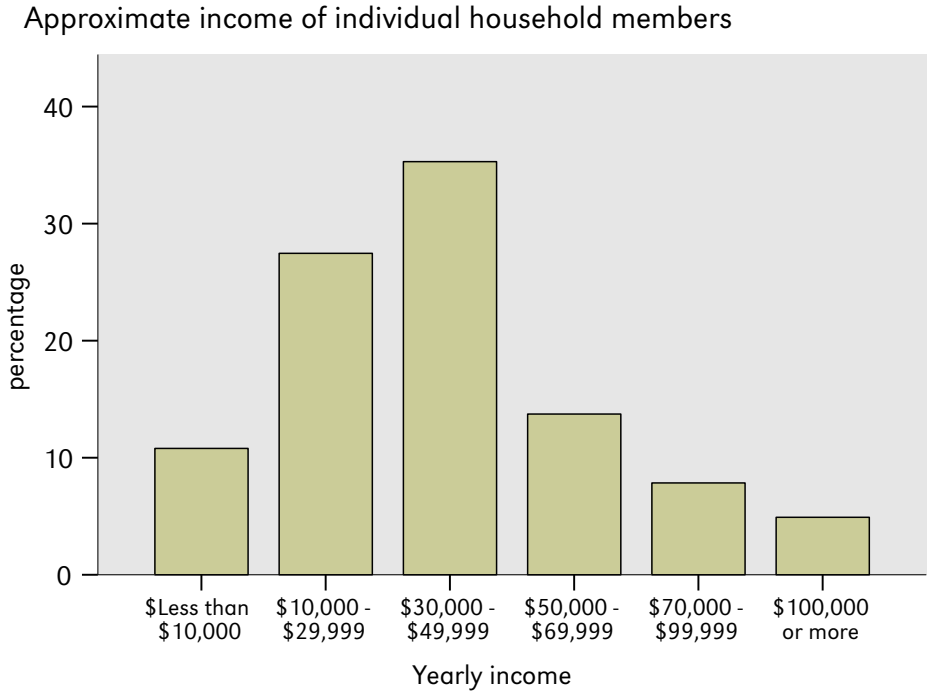


Figure 4.9: Annual Income

Educational qualifications

Figure 4.10 shows the highest educational qualifications for household members of interviewees. The key finding regarding educational qualifications is our sample as a group were well educated.

The 2006 Census reported that 19 per cent of adults in the Auckland region had a tertiary qualification, whereas over 57 per cent of our sample reported having a university qualification – nearly 45 per cent had a Bachelor's degree, while 12.6 per cent had a postgraduate or professional qualification.

The highest level of education for just under 20 per cent of adults was a primary or secondary school education.

The 2006 New Zealand Census showed that for people 15 years of age and over, 40 per cent of the population had some form of post-school qualification. In comparison, 80 per cent of residents in our sample had some form of post-school qualification.

An explanatory factor for this difference in qualification levels could be the skill levels required of immigrants for entry into New Zealand.

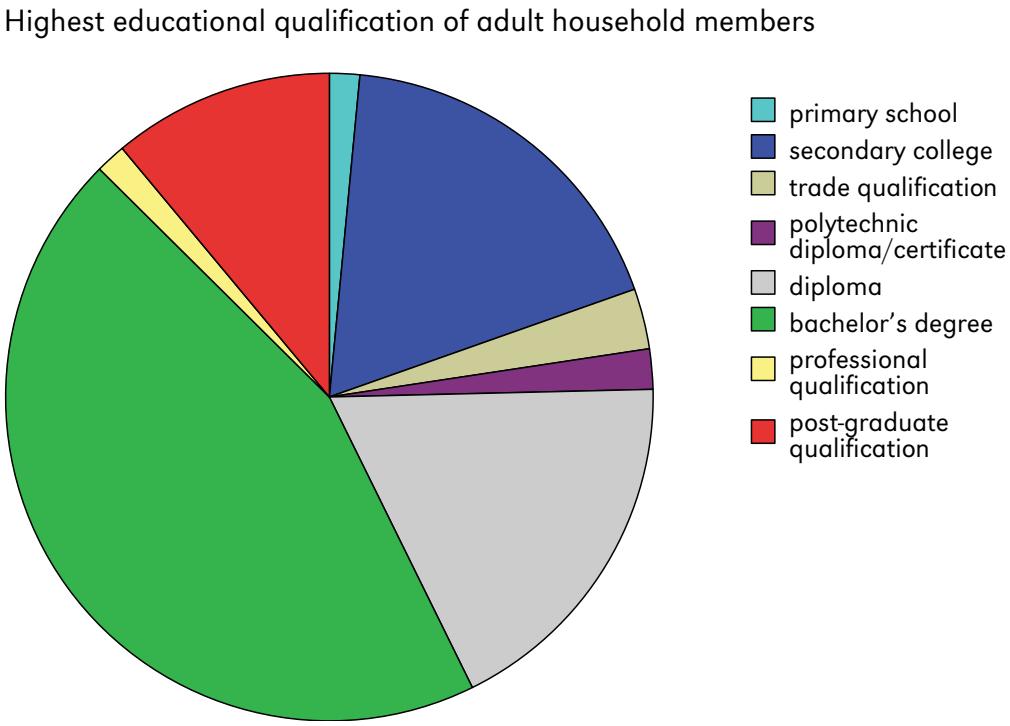


Figure 4.10: Highest Educational Qualification

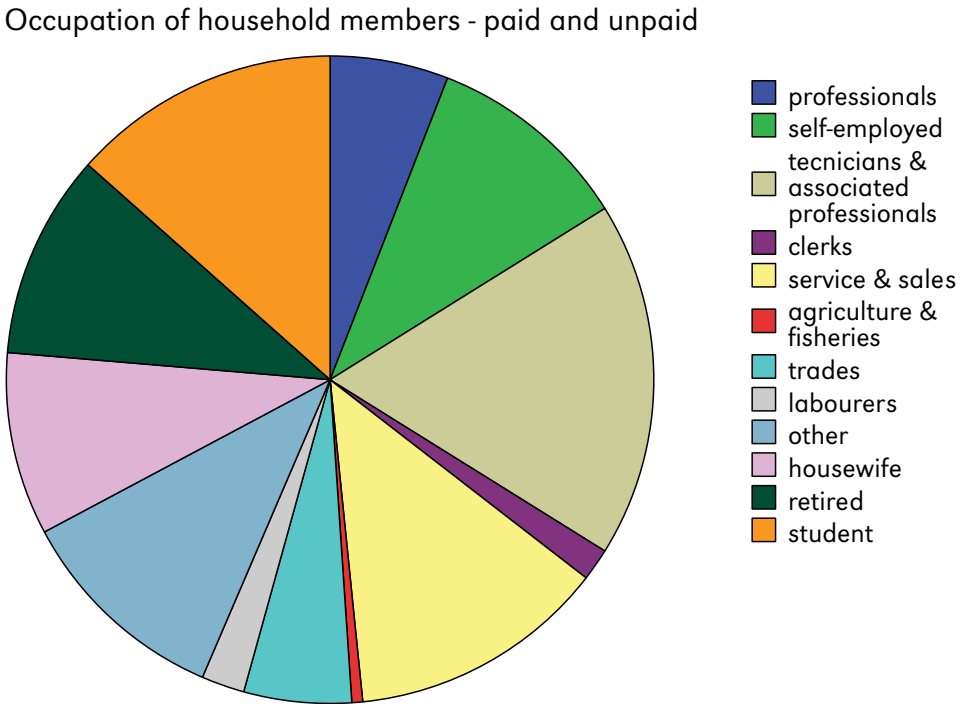


Figure 4.11: Occupation of all adults

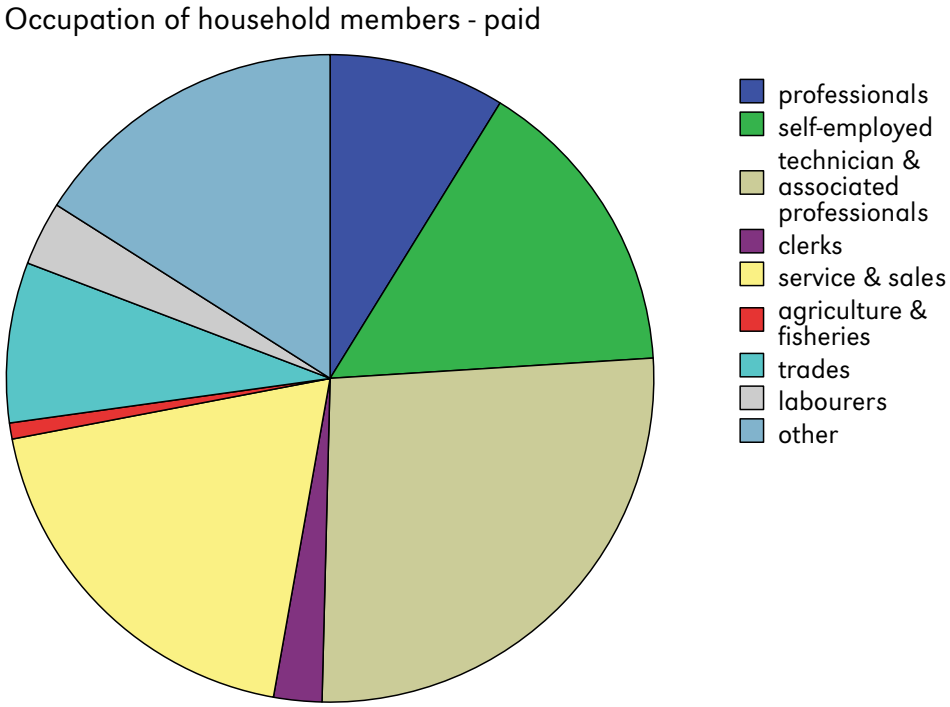


Figure 4.12: Occupation of adults in paid employment

Figures 4.11 and 4.12 refer to occupations. Figure 4.11 provides data on the occupations of all adults in the sample, including those whose occupations were reported as retired, housewife and student, whereas Figure 4.12 shows the occupations of those in paid employment.

Occupations were categorized following a variant of the Australian and New Zealand Standard Classification of Occupations. Figure 4.11 indicates that approximately one third of adults in the sample were not in paid employment. Over 13 per cent were students and nearly 11 per cent retirees.

Approximately 9 per cent of the sample fell into the category of mother/ housewife/ caregiver. A similar percentage was unemployed.

The largest single category of occupations for those in paid employment was technical and associated professionals (26 per cent), followed by sales and service (19 per cent) and self-employed (15 per cent).

Hours worked

For those in work almost four fifths were in full-time work (defined as 30 or more hours per week), the remaining one fifth in part-time work (fewer than 30 hours (Figure 4.13)). Of those in full-time work a relatively large number reported working quite long hours and a few very long hours. Sixty two reported working 40 hours a week, 15 reported working between 40 and 50 hours a week, 7 of whom reported working 50 hours per week. There were two reports of household members working between 40 and 60 hours per week, one resident worked 55 hours per week and two worked for 70 hours per week.

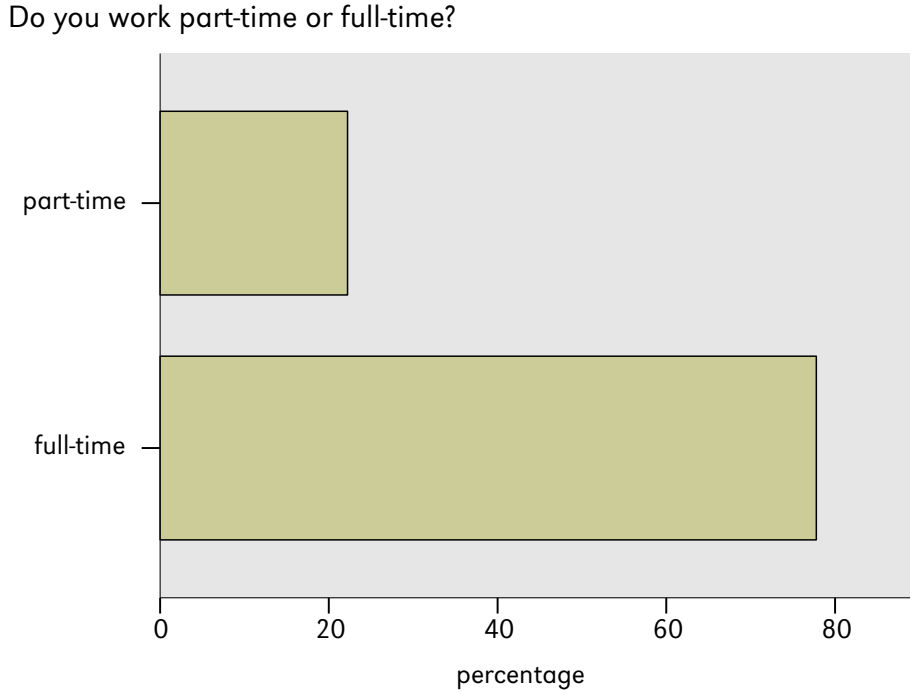


Figure 4.13: Full or Part-time Work

HOUSING AND HOUSING EXPERIENCES

This section provides an overview of aspects of living in the developments in the sample. More specifically, the section reports on participants' past and present housing experiences including: tenure, residential choice and satisfaction, and future housing intentions. It also reports participants' views on the extent that medium density housing living has met their expectations.

Previous residence

To provide some background with regard to their housing history, interviewees were asked about the location of their previous residence.

Most respondents (nearly 73 per cent) had moved to their current residence from within the Auckland area. Nineteen per cent of interviewees had been living in the same suburb before they moved into their current residence; nearly 54 per cent had lived elsewhere in Auckland, while a few (7 per cent) had lived elsewhere in New Zealand.

Of those who had lived in Auckland, over half came from the Central City area and a further 25 per cent from West Auckland. However, one fifth of the interviewees had lived outside New Zealand before moving to their current residence.

Respondents were also asked to describe the type of residence they lived in immediately before moving to their current residence. The responses are shown in Figure 4.14 below.

The majority of interviewees had not been living in intensive housing. Exactly half of those interviewed had previously lived in either a detached house on a full sized section or a detached house on a small site. The other half had lived in range of more intensive-type housing forms.

Only 16 per cent of interviewees had previously lived in either a low-rise apartment (up to 4 storeys) or high-rise apartment (5 storeys or more).

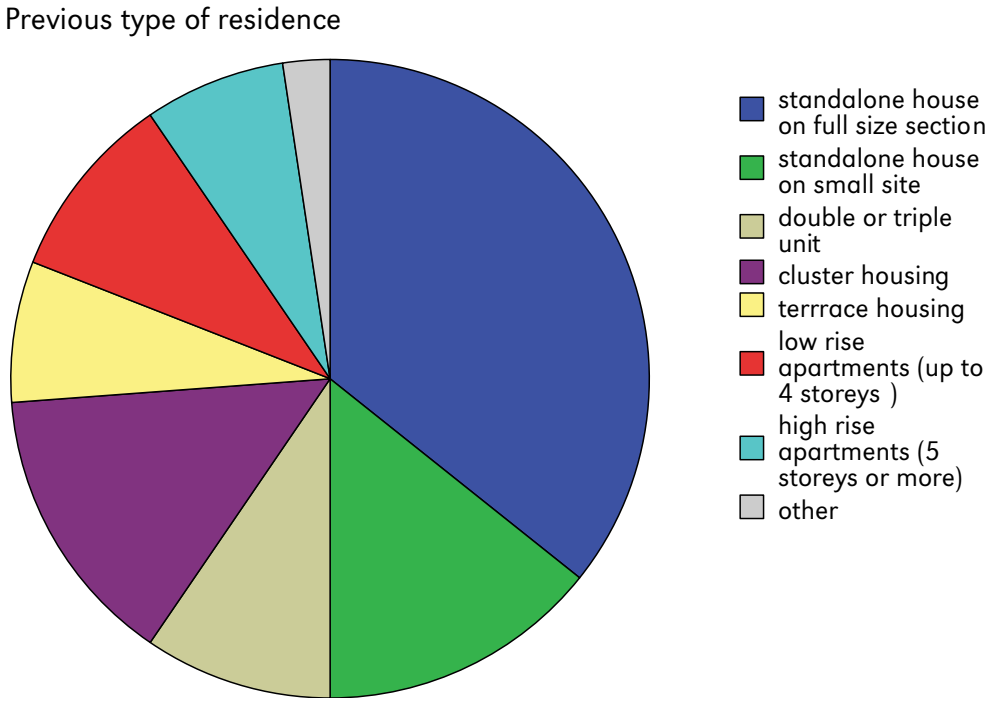


Figure 4.14: Previous Residence: Housing Type

Length of time in current residence

Figure 4.15 graphs the length of time interviewees had been living in their current residence. It shows that over 52 per cent had lived in their dwelling for over 3 years and 31 per cent for 5 years or more, with nearly 23 per cent having lived there for less than a year. One quarter of the interviewees had lived in their current residence for at least one year but less than 3 years.

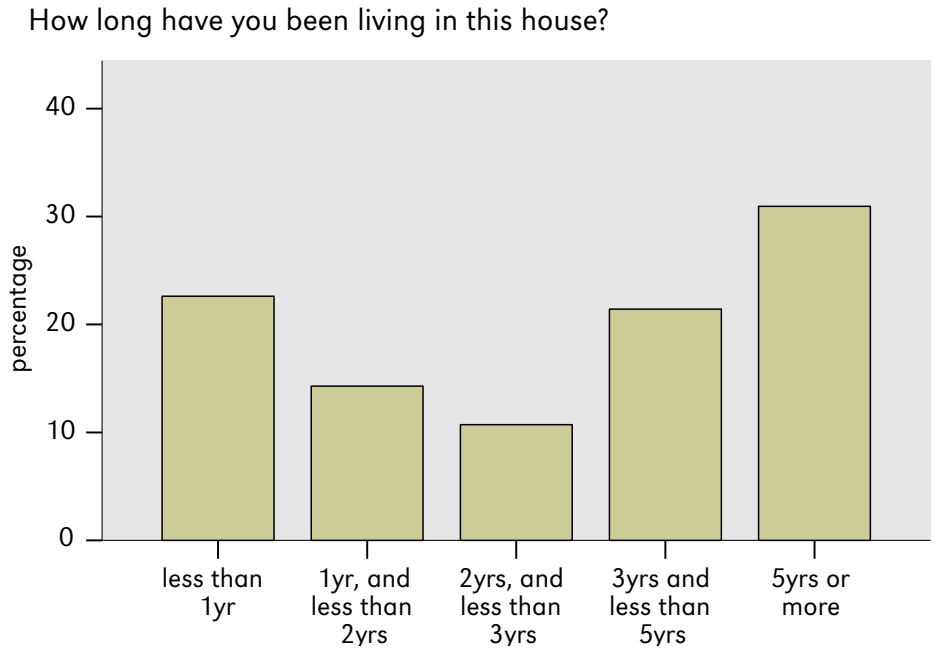


Figure 4.15: Length of time in current residence

Moving to current residence

Figure 4.16 shows the reasons participants across all three areas offered for moving to their current residence. Multiple responses were given.

The most common reason was location: proximity to transport, shops, the city, facilities and Motorway links for example. Social factors too were important. Many participants mentioned moving to their current residence because they wanted to be near family and friends, such as one man who said he chose the development because his girlfriend and other friends lived there. For many Chinese residents in Ambrico Place it was important to be around others who spoke the same language. One interviewee noted that living in Ambrico Place was not his choice as such, as he lived with his son. This latter comment picked up on a phenomenon we came across in a few Chinese households where elderly parents lived with their adult children.

Affordability was mentioned by a number of participants. One participant for example, said his unit at the Atrium on Main was cheaper and larger than what he could get in Epsom. Others noted that living costs were comparatively low in their chosen area. Housing-related factors included: similarity to the type of housing the participant had lived in previously; not having responsibility for garden and lawn care; and positive features about the environment and design.

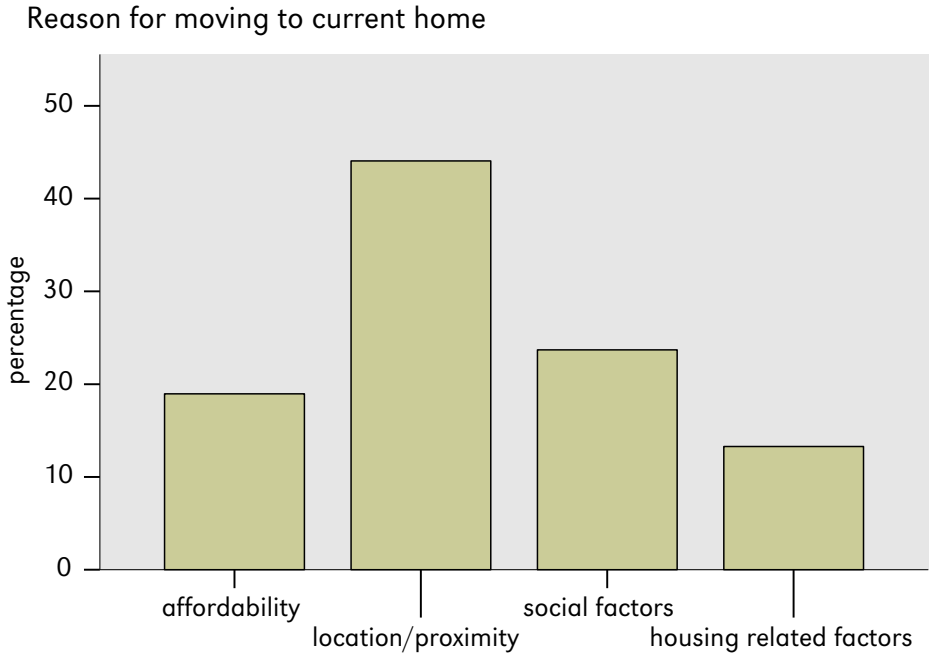


Figure 4.16: Reasons for moving to current residence

The following material separates out the main reasons participants gave for *moving to their current residence* broken down by development.

Albany

Several residents chose to move to Albany because it was close to their place of work or their children's school. The area is considered safe and is close to transport. Other reasons expressed for moving to the area included being closer to family and friends, and a desire to live on the North Shore.

Onehunga

Some residents chose Onehunga because it was familiar to them, or close to somewhere they had previously lived. Others chose it because it is close to their workplace at the Airport, the CBD, or Mt Wellington.

New Lynn

Many residents moved to New Lynn to live with and help family – reasons most evident in the interviews with Chinese residents. Several had moved because it was closer to other Chinese speaking residents. Another reason offered was its proximity to shops and transport. This latter reason was a particularly strong reason for Chinese residents, who commented on the proximity to Chinese supermarkets and shops where they could buy Chinese newspapers. A few residents moved to Ambrico Place for security reasons, or because they felt that the neighbourhood was a good one, and a few were already familiar with the area.

Tenure

For the whole sample, the owner/renter split was almost equally divided, with just over 51 per cent of households rented and just under 49 per cent owner-occupied (Figure 4.17).

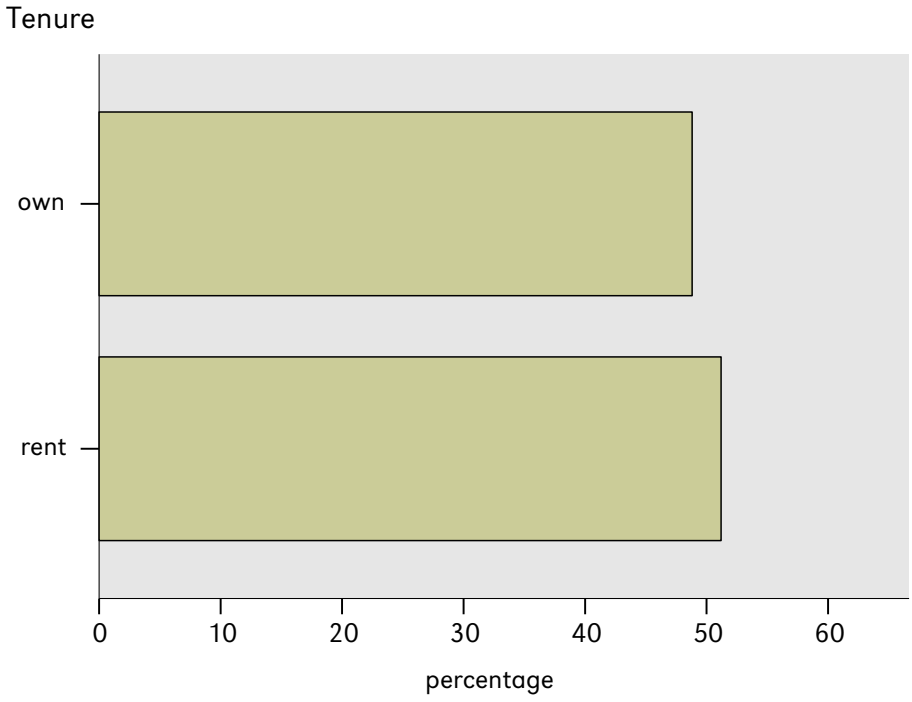


Figure 4.17: Tenure of all residents

Individually, the three developments showed quite different patterns of tenure (Figure 4.18). As noted in Chapter 5, for each of the case study developments, we analysed the name and mailing address of each rate payer to produce a broad proxy measure of tenure status. We made the assumption that where the mailing address of rates notices was the same as the dwelling address, the unit was owner-occupied. Alternatively, where the ratepayer's address was not the same as the dwelling address the unit was considered to be owned by an investor.

This showed that the three newer developments, Atrium on Main (84 per cent), The Ridge (94 per cent) and Masons (92 per cent) are dominated by investors (or non-resident owners), whereas 61 per cent of units in Ambrico Place are owner-occupied.

Ambrico Place has different ownership patterns in different complexes. The higher-value units tend to be owner occupied and the lower-value units tend to be rented. Overall, about 63 per cent of our sample households were owner-occupied. Hence, the rate of owner occupation in our sample was very close to the proxy measure (61 per cent).

The vast majority of units at Albany are rental units (Figure 4.18). The owner-occupier/renter split in the Albany developments in our sample is fairly close to the proxy measure discussed above. A proportion of the apartments at Albany are occupied by students, not exclusively attending nearby Massey University. The nearby Motorway also makes it convenient for students to attend Auckland University and the Auckland University of Technology.

Analysis of the Atrium on Main in Onehunga suggested that it began with a high proportion of owner-occupiers but the proportion has fallen over time. Nonetheless, the proportion of owner-occupiers at the Atrium was considerably higher in our sample than the proxy measure indicated.

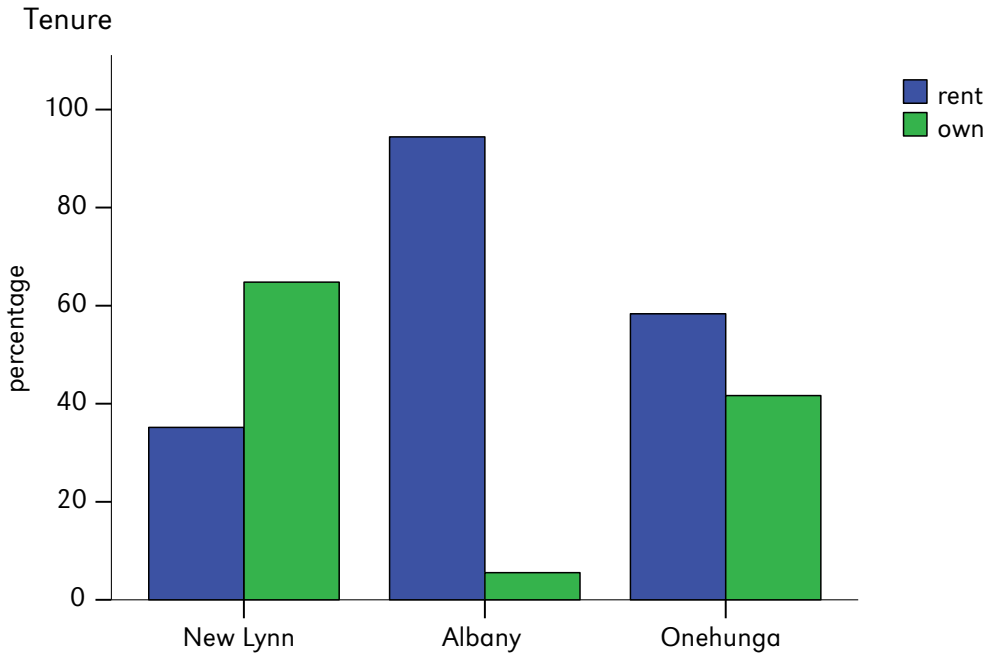


Figure 4.18: Tenure by development

Rents

Figure 4.19 shows the weekly rents paid by households in the sample. Nearly two thirds of households paid weekly rents of between $351 and $400. Current rental statistics from the Department of Building and Housing (2012) for the average rent for each of the three areas for a 3 bedroom house, a 2 bedroom flat, and a 1 and 2 bedroom apartment were as follows:

Suburb	3br house	2 br flat	1 br apartment	2 br apartment
New Lynn	$404	$306	$262	$330
Onehunga*	$502	$359	$380	$369[1]
Albany	$490	$383	$279	$383

*Including Oranga/ Te Papa

The rents paid by residents in our sample were consistent with market rentals for the area.

1 The difference between the average rents for one and two bedroom apartments may result from the small sample size (only 18 bonds for one-bedroom apartments) and the positively skewed nature of the data. (The average rent is greater than the median rent and the standard deviation is $122 for 1-bedroom apartments compared with only $32 for 2-bedroom apartments). A couple of apartments seem to have been rented out at a very high rate. Given the skewed nature of the data the median rent would be a better measure of central tendency. These figures for Onehunga are $340 for a 1 bedroom and $360 for a 2 bedroom apartment.

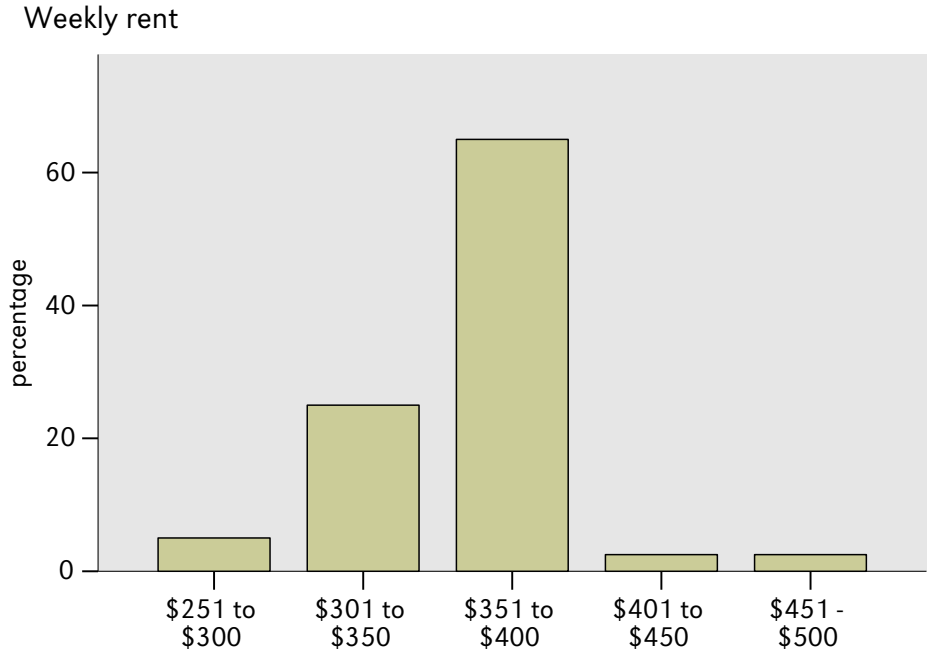


Figure 4.19: Weekly rent

Participants were asked to rate the affordability of their unit on a scale of 1-5, with 1 being very unaffordable to 5 being very affordable. Figure 4.20 shows the responses. 22 per cent of respondents reported this cost as unaffordable.

> *One interviewee noted that although she was on the maximum benefit she was still struggling but hadn't found anywhere more affordable.*

Thirty four per cent reported this cost as affordable while 44 per cent responded neutrally to the question, indicating their rental costs were satisfactory for them.

> *Another participant commented that although her current accommodation was reasonably affordable it was still fairly expensive, especially in comparison to the city where she had previously lived where the rent had been $280 a week for a modern unit in a comparable area, but the unit had been considerably larger. She noted that other units they had looked at in Auckland before renting their current unit were all very small. She also made the point that not only was Auckland comparatively expensive but also very competitive and that is was important for potential tenants to be quick off the mark and to have references ready if they wanted to find good rentals.*

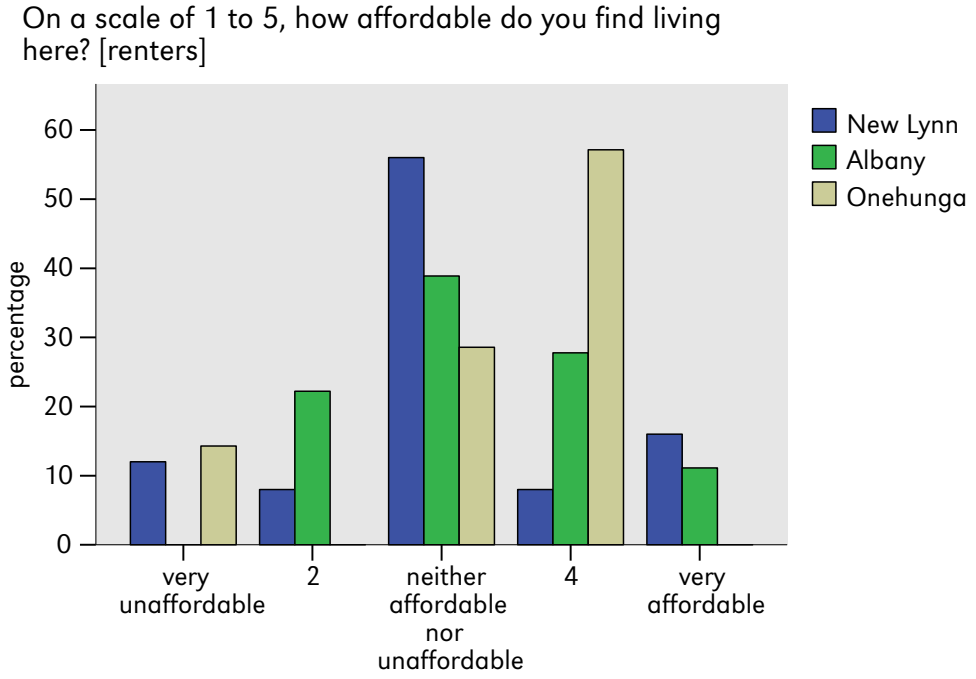


Figure 4.20: Perceptions of affordability (renters)

When asked whether they would consider buying into their development, the majority of respondents, nearly 61 per cent, indicated it would not be a consideration. The most common reason offered was cost. However, many respondents referred to the poor quality of the building, and Ambrico Place residents also added the factor of leaky building syndrome.

> *One participant, for example, said he did not have the money at the moment but if he did he would buy a stand-alone house.*
>
> *Another commented that she would not buy into their development because of the poor quality of the housing as many were leaky and the value of the units had not increased for many years. In addition, she did not like the unit's internal design and if she were to buy a house it would be elsewhere.*

Residents also mentioned not wanting to buy an apartment, and said if they could afford it they would prefer a detached house. These respondents often made reference to lack of space in their current circumstances, and linked it with future family needs, especially if they intended to have children.

> *One participant stated that they intended to leave as soon as they could. The unit was too small and they wanted to put their money towards purchasing their own home.*
>
> *Another noted that while living in an apartment was good for the present it was not how she imagined living in the future, especially when she and her husband had a family.*
>
> *Yet another stated that while he would not buy into his current development to live in he would consider buying into the complex as an investment, but the next home he and his wife would move to would be somewhere where they could 'live' and have a family.*

However, nearly one third of the sample said they would consider buying into their complex.

> *An Ambrico Place resident gave a number of reasons for saying he would buy into the complex: many Chinese people lived there; it was well located, being convenient to transport and shops; and the units were well priced making medium density housing top of his options list.*
>
> *Another participant said they would consider buying into their current complex depending on circumstances such as work, or deciding to have a family.*
>
> *Still another mentioned that the current complex could provide for her future needs at an affordable price.*
>
> *Many Atrium on Main participants mentioned how well the on-site manager managed their complex. One participant gave the quality of management of the complex as a reason for buying into it. She also said that the complex fitted well into their lives.*

A further eight per cent were uncertain, saying 'maybe' they would buy into the complex, depending on certain circumstances.

> *A typical equivocal response came from a woman who said buying into the complex would depend on finances. She and her husband had not discounted the option but would prefer a stand-alone house on its own section. They hoped to still be able to live in Onehunga as they 'loved' the area, saying it was different from what they were used to in the UK where they came from. Cultural diversity, convenience of services and facilities and the quality of life in Onehunga were all mentioned as draw cards for the area. This participant repeated that they did not want to move to a suburban area that felt much the same as the UK.*

Mortgage payments

Owner-occupiers in the sample were asked a set of questions relating to their mortgage, mortgage payments, affordability and perceived capital gains. As Figure 4.21 indicates, over half the sample paid a weekly mortgage of between $251 and $350. Nearly 25 per cent of the sample paid between $150 and $250 a week.

Figure 4.22 indicates that approximately 80 per cent of owner-occupiers in the sample thought their weekly mortgage payments were affordable. In terms of weekly outgoings, it is interesting to note that the rental households in our sample were paying more than the owner-occupied households. However, this does not take into account the body corporate fees that home owners pay, the length of time owners had been in owner-occupation, or the amount of equity they brought to the purchase.

> *Owners provided a number of reasons why they found their mortgage affordable including: having purchased their unit at a time when house prices were more affordable; economizing on other spending like travelling, so their income could adequately cover their costs; having two incomes with both partners working; and having a tenant to contribute to costs.*

Many owners recognized the extra costs associated with home ownership and the impact on affordability. For example, one owner commented that while the mortgage was affordable he had to be aware that rates and the body corporate fees were added costs on that sum which could be increased at any time, meaning he had to carefully manage his finances.

One participant noted that, as a couple, they could manage but knew that a stand-alone house would be more expensive.

Weekly mortgage payments

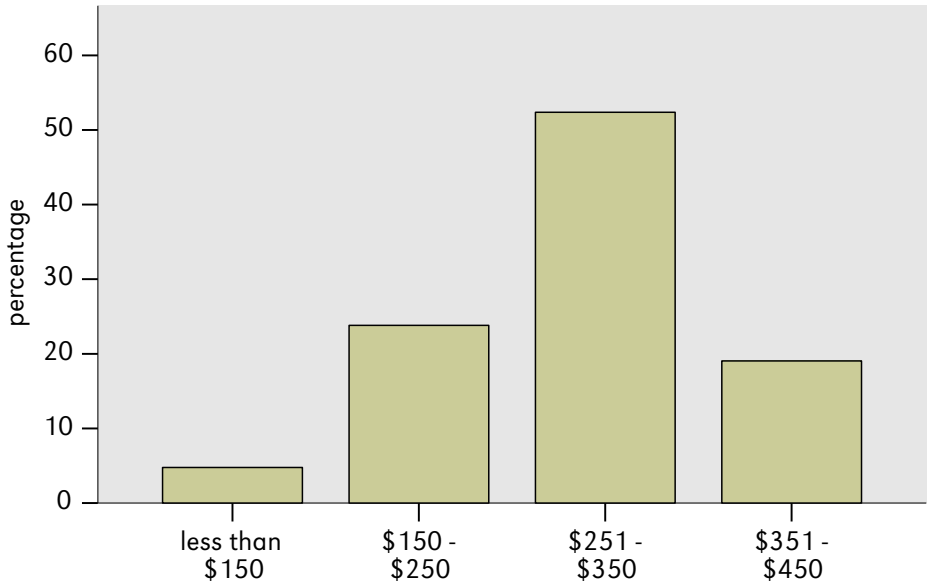


Figure 4.21: Weekly mortgage payments

On a scale of 1 to 5, how affordable do you find living here?

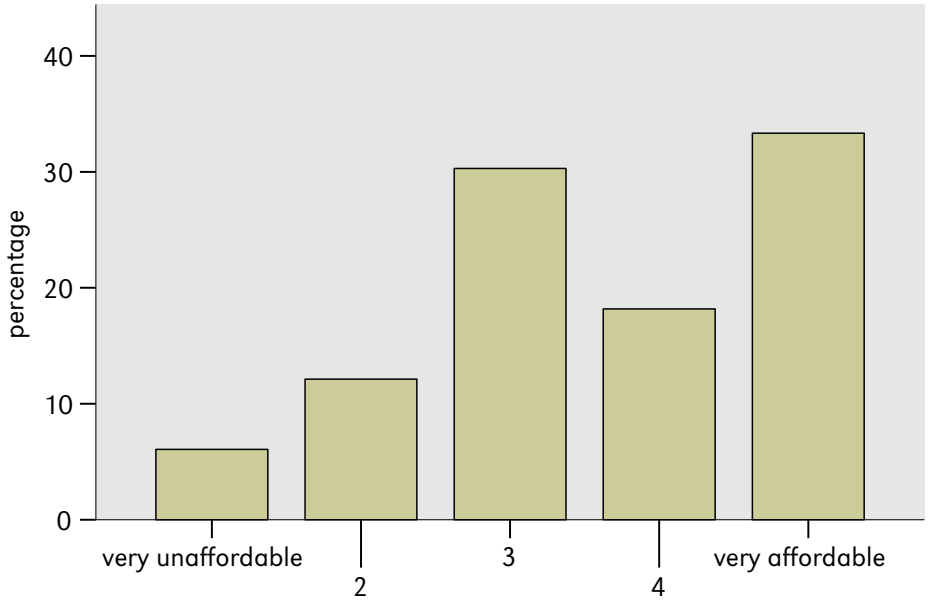


Figure 4.22: Perceptions of affordability (owner-occupiers)

Capital gains

We asked owner-occupiers if they thought they had made a capital gain since they had been living in their unit. Approximately half thought they had and slightly fewer (44 per cent) thought they had not (Figure 4.23).

> *One participant commented that she was not sure how much they had made but knew that when they bought their apartment prices were at their lowest.*

A high proportion of home owners in our sample were from Ambrico Place. Many of the developments in Ambrico Place have been badly affected by leaky building syndrome. It impacted on people's perceptions of a range of factors, including capital gains, and was discussed at some length in many of the interviews.

> *An Ambrico Place interviewee told us that in 2008, when they tried selling their apartment which they had paid $335,000 for some years before, the suggested sale price was $275,000. A similar apartment had been recently sold for $295,000, but since then they had been advised that the market value for their apartment post repairs should be $450,000.*

> *Another participant offered the view that few people now wanted to purchase medium density housing and the leaky building problem had made a huge impact on the market. He also suggested that many new migrants would buy stand-alone housing as soon as they arrived in New Zealand.*

> *The financial fallout of being a leaky home owner was brought home vividly by one of our participants who said because of the water tightness issues their GV had gone down by over half of what it was when they purchased their unit. Despite currently going through remediation we were told this reduced GV could not be removed for 5 years. As such, this participant said it was not possible to sell their unit as they doubted they would ever be able to recoup their money.*

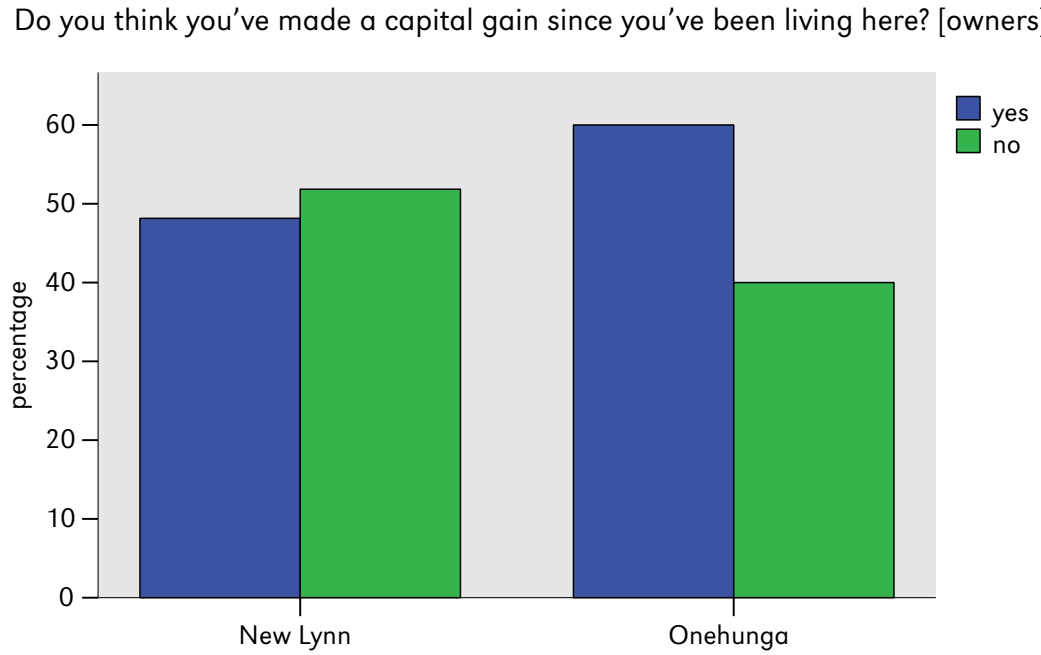


Figure 4.23: Perception of capital gain[1]

1 There were insufficient home owners in the Albany sample to include in this Figure.

Residential choice

Our questions on residential choice sought information on why interviewees chose to move to their neighbourhood and live in medium-density housing. Responses to the question are shown below in Figure 4.24. It is clear that location and proximity were the most mentioned features in all developments. Social factors were mentioned more often by New Lynn interviewees and affordability somewhat more frequently by Atrium on Main residents.

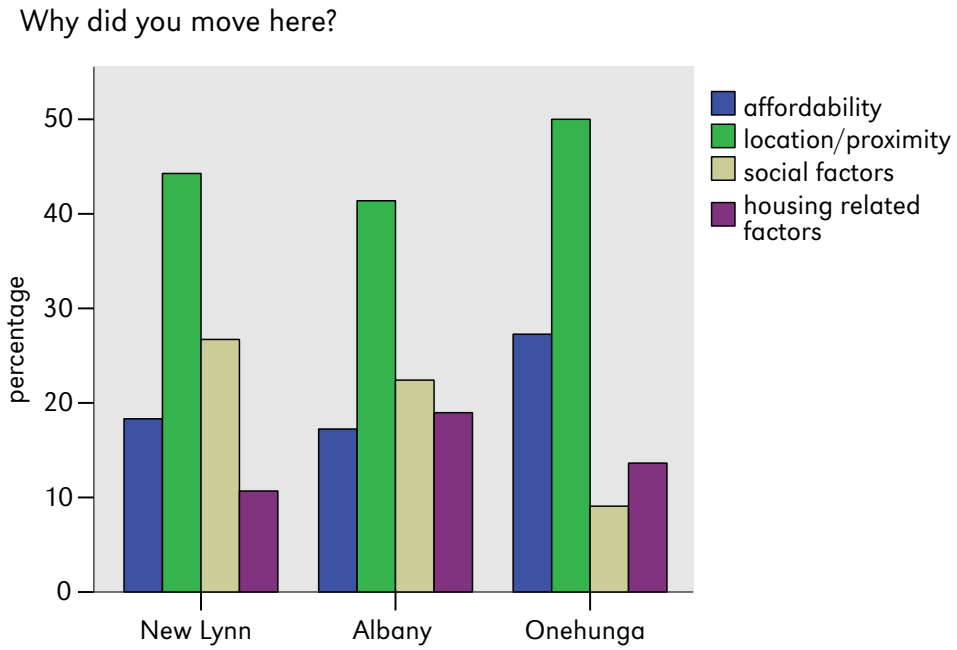


Figure 4.24: Residential choice

Responses to the question on residential choice according to development are set out below.

Albany

Location and proximity to shopping, employment, and transport, particularly the Motorway, were features shaping Albany residents' choice to live in their development. A number of interviewees also mentioned proximity to the local school. Responses indicated affordability as a reason, particularly regarding what interviewees could afford, or thought they could afford, in terms of housing options. We were also told that the Albany area has very little affordable housing. Some residents indicated they chose this type of apartment living over flatting with others to have a place of their own. Some simply liked apartment living and preferred a smaller space with low maintenance, and having people around made them feel safe. For others accommodation had been arranged by family members.

> *One resident advised that their Albany unit was near public transport and close to work at the Mall. She also mentioned that she wanted to be near the coast and liked living on the North Shore.*
>
> *For another resident the nearby school was an important factor in choosing their development. They had a son attending the school just across the road from their development and had researched schools before deciding on the area. They also*

mentioned being close to Motorway links and found the area affordable. She also said that they did not want to live in a lower socio-economic area and perceived Albany as being relatively upmarket.

A further reason given for choosing to live in a medium density development was the affordability of this housing type. One participant indicated that the cost of renting a detached house was prohibitive and anything that was affordable was, according to another participant, 'grotty and old'. This same participant discounted flatting with others, which might have meant they could live in a better quality detached house. Apartment living was chosen as the best option in that it was modern, clean and light and in a safe area. This resident also stated she did not want to live in other more affordable areas on the North Shore, such as Glenfield or Northcote, as she considered these areas unsafe.

Good value for money was also a reason given by a participant who told us that when she and her sister had had been looking for an apartment to rent they had found one $20 a week cheaper elsewhere in Albany, but that it was smaller, darker and did not have a proper kitchen. Other detached house options were too expensive or older, dirty or required significant maintenance.

Onehunga

Responses from Onehunga residents indicated they chose The Atrium on Main because of its location and proximity to services and transport. The type of housing was also mentioned, because it is low maintenance, tends to be newer and more affordable than stand-alone options, and thus seems to offer better value for money. It also has an on-site manager, and is safe and secure, so residents can lock up and leave.

One owner-occupier reported they had made a decision to buy the apartment after living in the Atrium on Main but also after extensive research into what else was available. He explained that he would never have considered Onehunga as a possible place to live if his partner had not already been living there, as Onehunga was unknown to him and his aspirations would have predisposed him to live in suburbs like Parnell, Mt Eden and Epsom. He commented that Onehunga has been a revelation and apartment living provided for their needs as a young couple with no children. Having lived there as renters they looked to buy in the area which was very central but still affordable. Moreover, the apartments were selling cheaply because the development company was in receivership and apartments represented better value for money than detached houses of a similar square footage. Onehunga's location, being only 10 minutes from the city, was also remarked on, and while he had imagined himself living closer to the inner city, Onehunga was seen as still very close.

Another Atrium owner-occupier reported that on arriving back from the UK she wanted to move onto the property ladder and her parents helped with a deposit. She found that apartment living represented an affordable option and Onehunga an affordable suburb.

Another resident mentioned that as a couple they both worked at the Auckland airport so looked extensively in the Onehunga area because of easy access to their place of employment.

New Lynn

Given the high percentage of Chinese residents in the Ambrico Place subsample, it was not surprising that many of the respondents cited reasons to do with their ethnicity including: proximity to specifically Chinese shops and services, and having Chinese neighbours. Affordability was also cited, especially when compared with stand-alone options. Others mentioned that the area was safe. Some residents noted they were familiar with more intensive housing, that Ambrico Place is newer than other affordable options, it is low maintenance, and has a community feel.

> *One comment typical of many made by older Chinese residents indicated that living in Ambrico Place was very convenient and affordable. We were told that because so many Chinese people lived in the area the language barrier that could be experienced when communicating 'with local Kiwis' was not an issue. This resident lived with her daughter to whom she paid rent, a situation which suited her well.*
>
> *A Chinese owner-occupier told us that living in Ambrico Place was a good choice. The high number of Chinese people living there meant she had many Chinese neighbours. Ambrico Place was also within convenient walking distance to shops and supermarkets which was important as she did not drive. This resident stated that she had to be self-reliant as her son could not live with her. She also mentioned safety. She had had recently gone back to China for three months leaving her house empty, but that it was perfectly safe.*
>
> *Another owner-occupier stated that this was their first house; it was affordable, had easy access to public transport and to Chinese and Kiwi supermarkets and that they liked the neighbourhood because of the number of Chinese people already living there.*

Residents' satisfaction

Respondents were also asked a number of questions about how satisfied they felt about their housing circumstances now they were living there. We gauged resident satisfaction (and dissatisfaction) through questions on particular likes and dislikes with regard to medium-density living, neighbourhood, and development. Satisfaction with units focused on questions around privacy, noise, and sunlight. For these questions multiple responses were gathered.

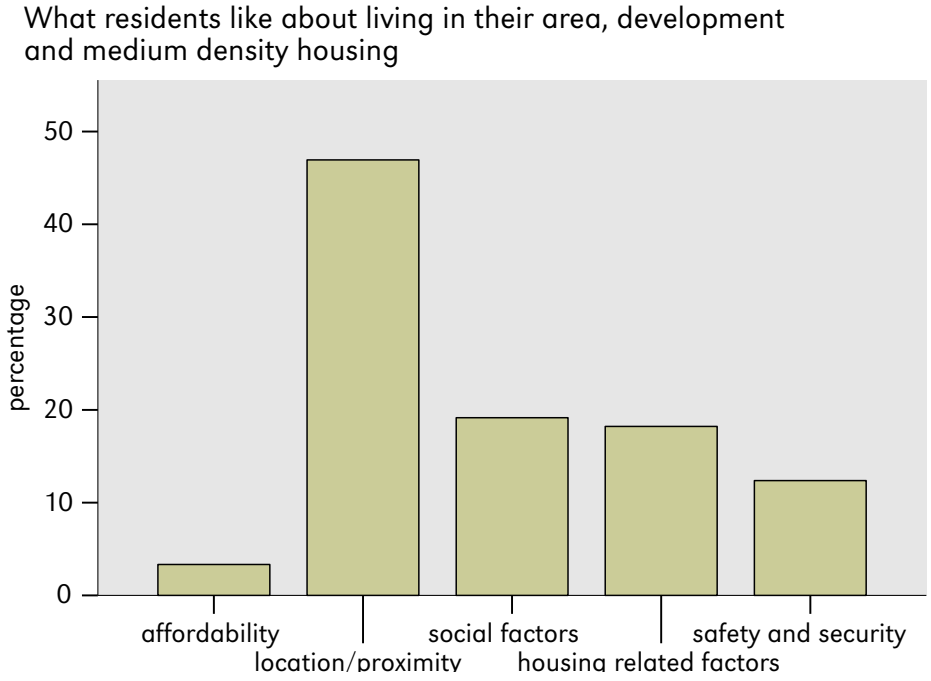


Figure 4.25: Satisfaction factors

The key feature of Figure 4.25 is the importance of factors to do with location and proximity. Multiple responses were gathered for this category and included such features as proximity to various modes of transport, services, amenities, and places of work. The category 'housing related factors' includes car-parking and internal and external factors to do the design of the development. 'Safety and security' includes having neighbours nearby. 'Social factors' also includes suitability for children.

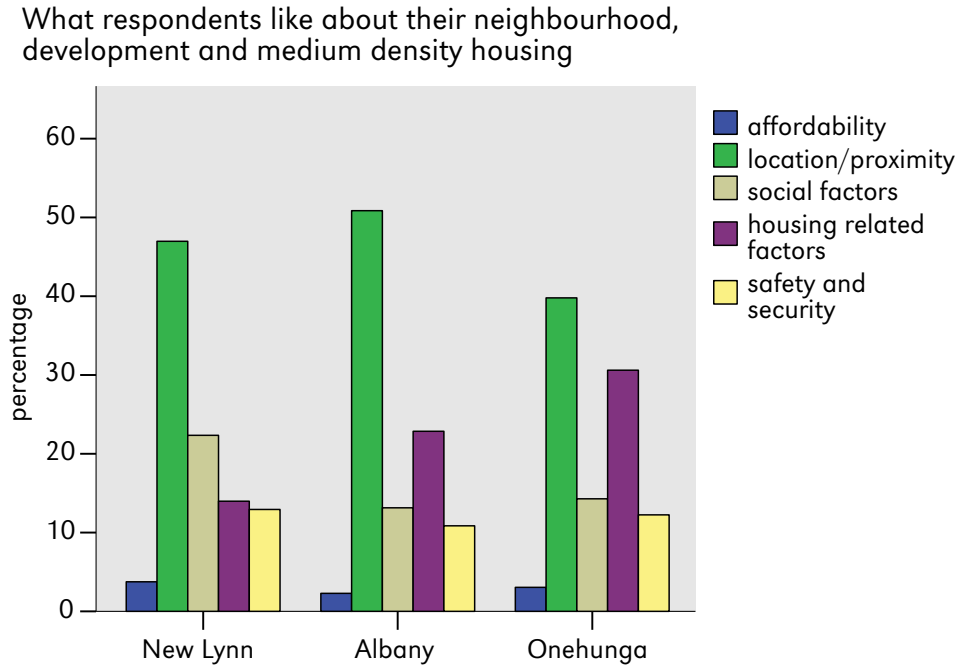


Figure 4.26: Satisfaction factors by development

Figure 4.26 shows the breakdown of satisfaction factors according to development. All three developments focused on location as the key factor of satisfaction, with varying emphases given to the other factors. Ambrico Place residents put more emphasis on social factors, which may indicate that Chinese residents, including retirees, enjoy living amongst other Chinese. Housing related factors appear stronger for Atrium on Main residents, and we think are likely to reflect the higher quality of their development.

Responses to the specific question of what residents liked about *medium density housing generally* are set out below.

Albany

Typical responses included liking the location, being near the Mall, schools, and the Motorway. Others liked the community aspect of the development and having people around, including people from other ethnicities or cultures. Others included comments about apartment living being worry-free and low maintenance. Residents also commented positively on the allocated parking system, safety, and the ability to lock up and leave at any time.

> *One interviewee stated that her complex was not high density living and an apartment felt close to living in a house.*
>
> *Another liked the fact that medium density housing does not 'waste too much land'.*

Onehunga

Typical comments from this development focused on the location of medium density housing, with reference to the quality of facilities, amenities and transport close by, and to amenities offered within the development. Other features included low maintenance, security, and the presence of an on-site manager to deal with issues and maintenance.

New Lynn

Again, comments on the positive features of medium density living focused on location and the quality of the services and amenities offered in the development and locally. The presence of many Chinese-born residents was also seen as a positive factor, as it helped ensure an integrated social life for Chinese residents and also offered a sense of safety and security. Others commented positively on the low maintenance required for building, garden, and lawn upkeep. A few noted affordability. One Chinese resident made the following points:

> *Public transport was very convenient, particularly for elderly people because they did not drive. Also their homes were within walking distance of the community centre. Facilities for food shopping were nearby as was a medical centre, which was 'all the service elderly people need'. It was also mentioned that because many Chinese elderly people live in this area they are good company for each other and speak the same language. One resident noted how important it was for elderly folk to feel they are still capable and independent, implying that living in well sited medium density housing allowed for this.*

Responses to the specific question on what residents liked about their **neighbourhood or area** are set out below.

Albany

Residents like that the 'Park and Ride' is close, as well as the Albany Mall and other good shopping facilities. A primary school is very close and access to the Motorway is convenient, making Browns Bay, beaches, parks and the City all easily accessible by car or bus. It was also remarked that Albany is a safe and family oriented area.

Onehunga

Residents commented that their area feels safe, not only on the main street but in the surrounding residential areas as well. There is a good ethnic diversity and many shopping, café, and dining options in the area. Access to the airport and motorway is easy and convenient and the city is close and accessible. It was also noted that people are friendly and transport is good.

New Lynn

The area is safe, convenient for shopping and other activities, and there is easy access to transport. There is some cultural diversity (particularly Chinese) and there are primary and intermediate schools close by.

Responses to the specific question on what residents liked about their **particular development** follow.

Albany

Responses indicated that the proximity to the bus station, mall, and schools is good. The rubbish collection is good and the property is well maintained. There is a property manager on-site. The car park is well lit at night; and the green space was considered a positive feature even if underdeveloped. There are people (including children) around the development, which makes it feel safe.

Onehunga

Residents liked the available amenities, including a swimming pool, BBQ area, and attached green/park. The building and parking was seen as secure, and controlled access provided a feeling of safety, especially for women and those who worked late. Ethnic diversity was seen as a positive feature, as was the age mix at the complex, including different family sizes. Like Albany, the presence of an on-site manager to handle building and maintenance issues was commented on favourably. Finally, the Atrium on Main's location allowed for easy access to facilities and services in the area.

New Lynn

Many residents commented favourably on the development's proximity to shopping, services, and transport. Other residents, particularly the Chinese-born, liked the development because of the social life. Others made favourable mention of the children's playground and the affordability factor.

Responses to the specific question on what residents liked about **living in their particular unit** follow.

Albany

Many responses indicated that residents liked that white ware was provided, making start-up costs less expensive. The apartments were clean, modern, and reasonably sunny. It was also noted that the patio/courtyard sizes were generous and balconies helped the space feel open and connect rooms to the outside.

Onehunga

Comments indicated that the diversity of unit types seemed to fit the variety of household structures. Parking was said to be good, safe, and secure. Earlier-constructed units have a bath and shower with a separate laundry area; units built later (1-bedroom flats) do not. Insulation and double-glazed windows were said to keep units warm and relatively quiet inside. The design of kitchens and living areas was commented on, being open and spacious, although some residents did say their kitchens, although well designed, were small. Several residents stated they liked the views from their units; views of the harbour (south), adjacent park/green area (for ground floor units), and One Tree Hill/City (to the north). Other responses included units feeling spacious, modern and clean, with good storage, and the use of quality finishes and materials.

New Lynn

Responses for this question identified the following characteristics of the units: most are north and west facing, receive sunlight for part or all of the day, are warm in winter, have fresh air, and are reasonably quiet (particularly end units). In addition, the living room, double garages, and the bedrooms in some units were thought to be generous in size. Many residents had previously lived in China and frequently compared their former homes to their current ones.

Privacy

The questions on privacy asked interviewees about the value they placed on privacy, and how they assessed the privacy of their indoor and outdoor spaces.

Figure 4.27 shows the importance of privacy to interviewees. Of note is the variation in responses across developments. The Atrium interviewees placed the greatest importance on privacy. All interviewees thought privacy was either very or moderately important, with nearly two thirds stating privacy was very important to them. In contrast, a much lower proportion of Ambrico Place residents reported privacy as very important to them. Overall, the data show that privacy was valued by most interviewees.

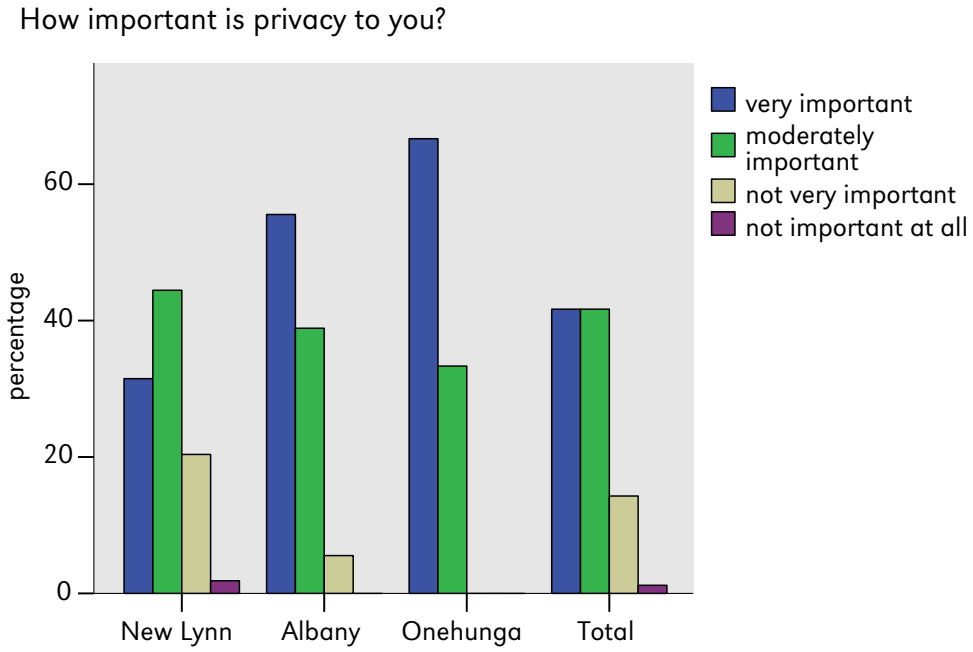


Figure 4.27: The importance of privacy

Figures 4.28 and 4.29 represent interviewees' responses to questions on indoor and outdoor privacy respectively. In general respondents felt the interiors of their units were more private than the outdoor areas. Almost all interviewees said they had an outdoor space (98 per cent) and of these over four fifths of respondents said they could easily access their outdoor space from their units.

All Atrium on Main interviewees described the interiors of their units as either very private or moderately private. The outdoor space of their units was perceived as less private, although the majority of respondents still described their outdoor space as moderately private. Approximately one quarter of respondents said their outdoor space was not very private. Over 50 per cent of Albany interviewees reported their outdoor spaces as either not very private or not private at all. Over two thirds of Ambrico Place described their outdoor space as either not very private or not private at all.

With respect to the privacy of their indoor spaces respondents from Ambrico Place and Albany show similar general patterns. However, Albany responses showed a higher percentage of interviewees who said their interiors were not very private or not private at all.

Over 60 per cent of Ambrico Place respondents described their units as moderately private. Whilst approximately 75 per cent of Ambrico Place residents said their interior spaces were either very or moderately private, only 35 per cent of respondents rated their outdoor spaces similarly.

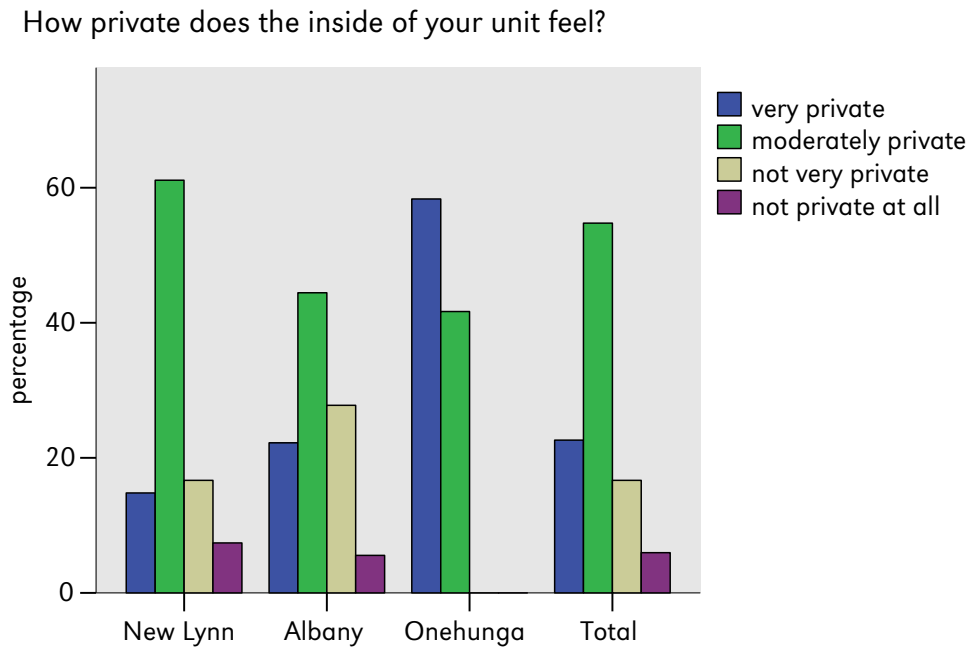


Figure 4.28: Indoor privacy

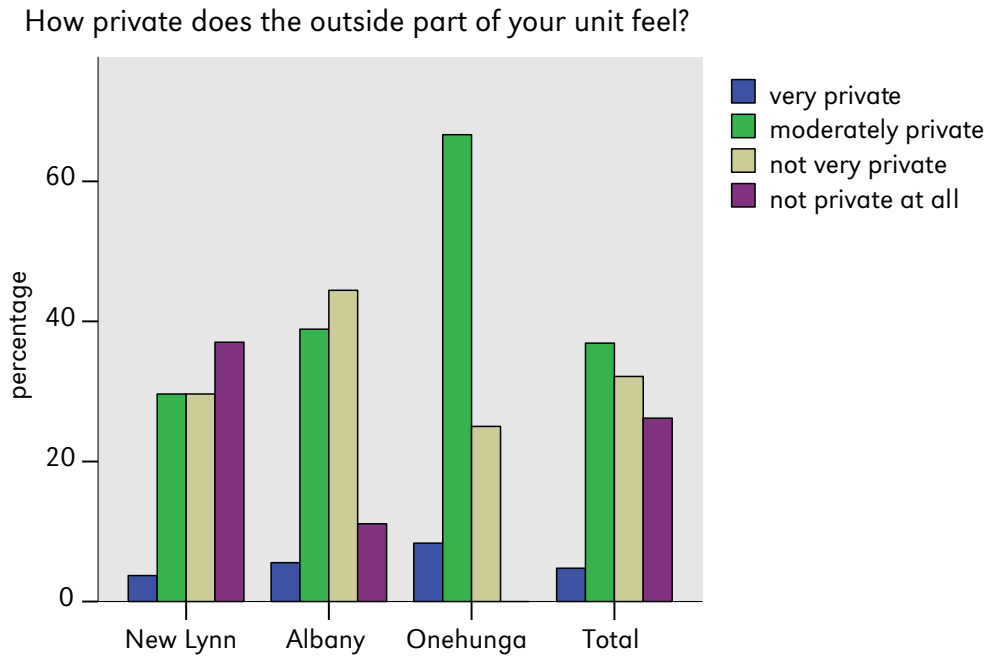


Figure 4.29: Outdoor privacy

Noise

Interviewees were asked about noise levels both inside and outside their units, and whether or not noise bothered them. Responses to these questions are shown in Figures 4.30 to 4.33.

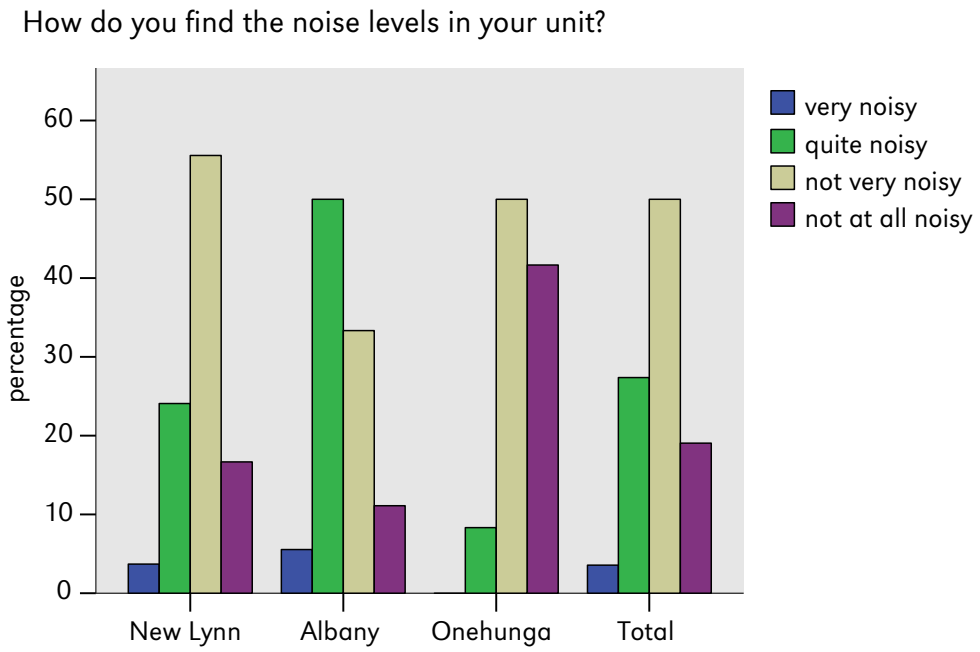


Figure 4.30: Noise levels inside unit

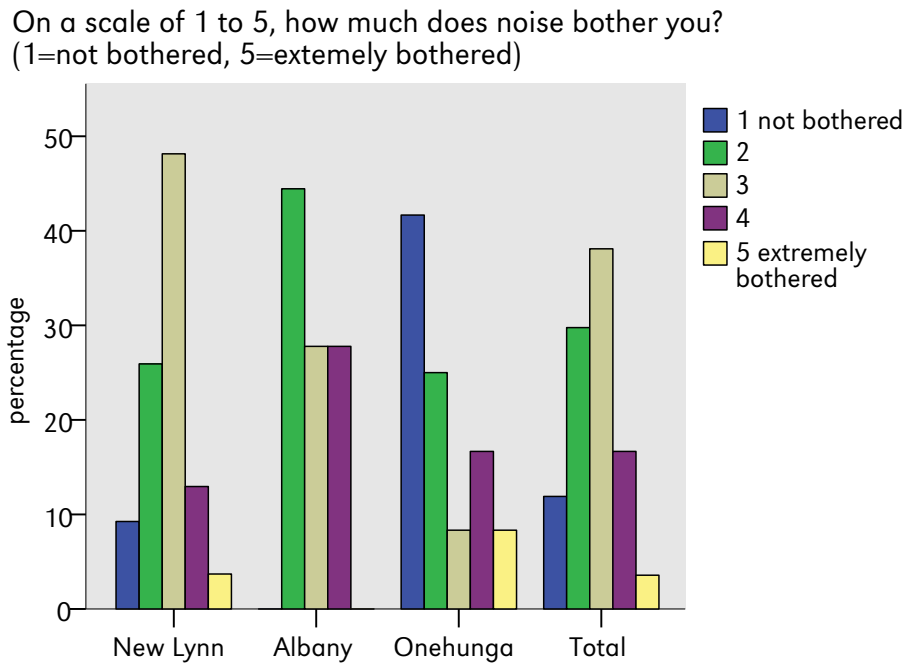


Figure 4.31: Bothered by noise levels inside units

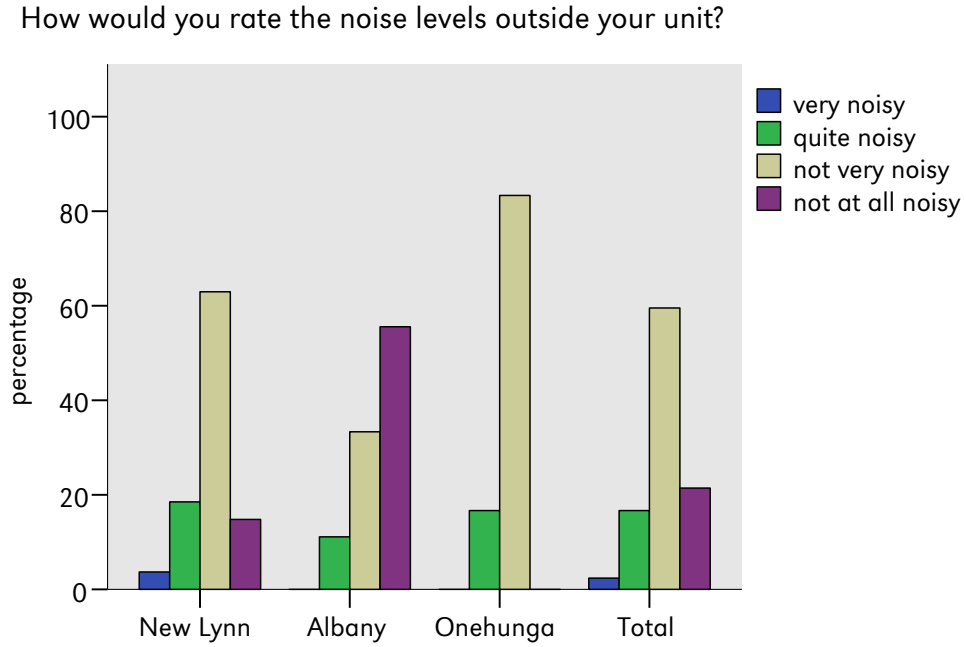


Figure 4.32: Noise levels outside the unit

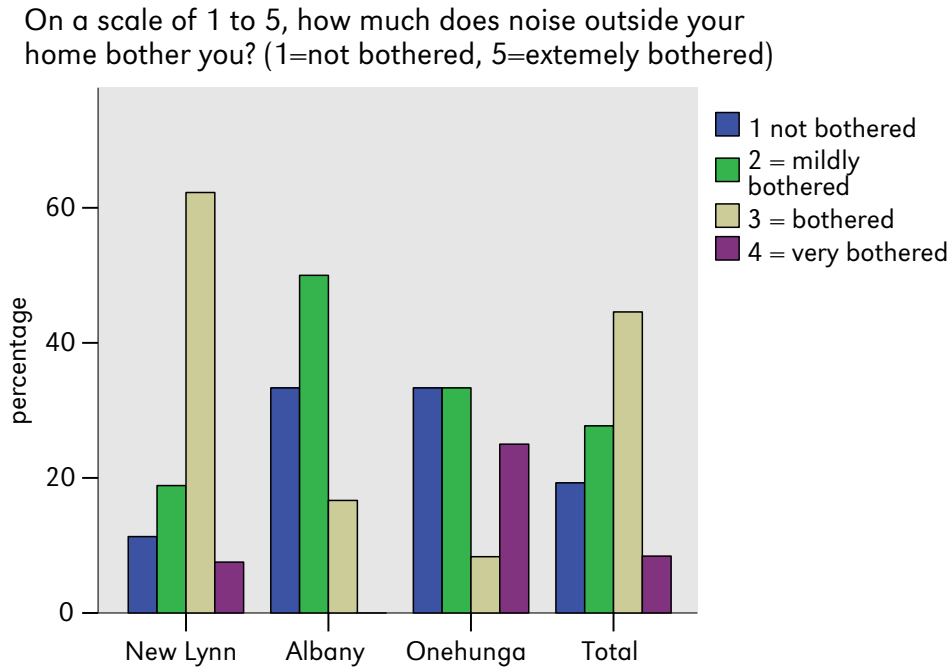


Figure 4.33: Bothered by noise levels outside unit

Albany

Road and traffic noise from Hugh Green Drive and the Motorway was mentioned, and although not always loud it was a constant source of noise. Some residents had become used to it, perhaps because the fencing and plantings screened at least some motorway noise. Traffic noise was louder for upper-level apartment residents. With respect to noise made within the apartments, typically it was noise from units above or neighbouring units

that was commented on. Some residents said that on occasion there were loud parties, but generally this was not an issue. Children were said to be noisy, sometimes quite late at night, as were car alarms at night. While outside noise is a daily occurrence from the school and roads, interviewees indicated the developments are generally quiet and people are usually considerate outside their apartments.

Onehunga

Generally residents found their units quiet, especially because windows were fitted with glass designed to reduce noise. The major sources of noise were said to be neighbours above, noise from families with children, light to heavy traffic, occasional sirens, bands playing in the hotel across the street, church congregations and choirs, and an occasional party. Several residents indicated that these sources were 'life noise' and it did not bother them much. While a few residents were bothered by the noise, generally noise was not an issue. Noise outside was generally traffic noise, particularly on weekends when the area in and around the development is busy. At other times it was said to be quiet, despite the development's central location.

New Lynn

Many residents in the Ambrico Place development indicated that they closed the windows and doors to reduce noise inside their units. A few said that the noise was very bothersome, with one woman saying she put her hands over her ears or covered her head with a pillow and waited for the noise to stop. Some indicated they had no way to reduce the noise. Major sources of noise were the train, the brickworks factory, and traffic on Rankin Avenue. Other sources included the occasional party, neighbours talking loudly, the everyday coming and going of residents, and children playing in the yards and playground; although the sounds of children were described as a 'good noise'. Some residents responded that their units were not particularly noisy and attributed this to a combination of quiet, self-monitoring neighbours, and adequate sound-proofing. While residents identified exterior noises, generally responses ranged from reasonably quiet to very loud. A few residents said that what was important to them was that it was quiet inside their units and noise outside did not matter to the same extent.

Sun

Residents were asked about the importance of sun, both in relation to their indoor and outdoor spaces. As Figure 4.34 shows, all interviewees indicated that having a sunny environment was either very important or moderately important to them.

Whilst almost all participants reported their outdoor spaces as either very sunny or moderately sunny, a higher proportion of respondents from the Albany complexes reported their outdoor spaces as very sunny (Figure 4.35). A lower proportion of Ambrico Place residents described their outdoor spaces as very sunny and also appeared less satisfied with the sunniness of their outdoor spaces than residents from the other developments (Figure 4.36).

A few interviewees mentioned the importance of having a sunny environment to dry their laundry. This was connected with a perceived problem with body corporate rules which forbade laundry being hung out on balconies.

The data on sun inside the units indicates the Atrium on Main has the sunniest interiors (Figure 4.37). Generally, participants were satisfied with the amount of interior sunlight, a higher proportion of Ambrico Place residents (approximately 28 per cent) noted the amount of sunlight inside their unit did not suit them (Figure 4.38).

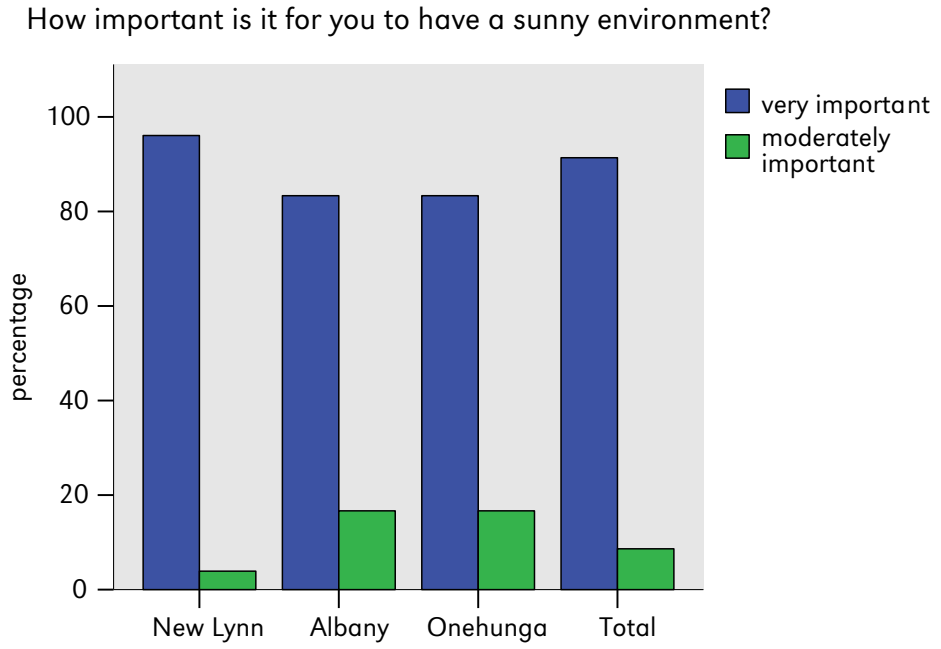


Figure 4.34: Importance of a sunny home

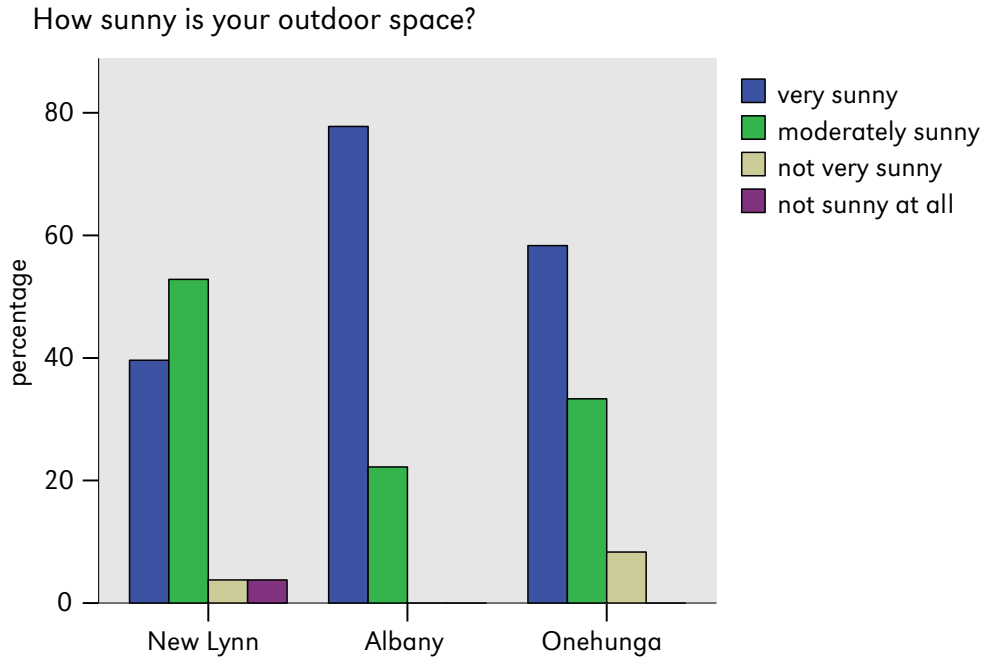


Figure 4.35: Sunniness of outdoor space

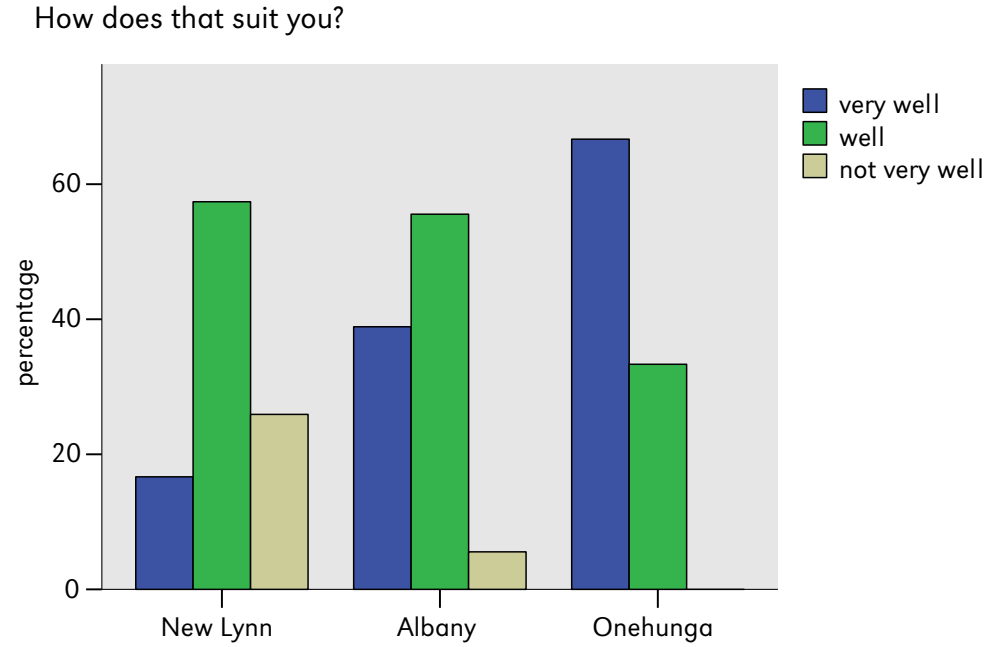


Figure 4.36: How does sunniness of outdoor space suit you?

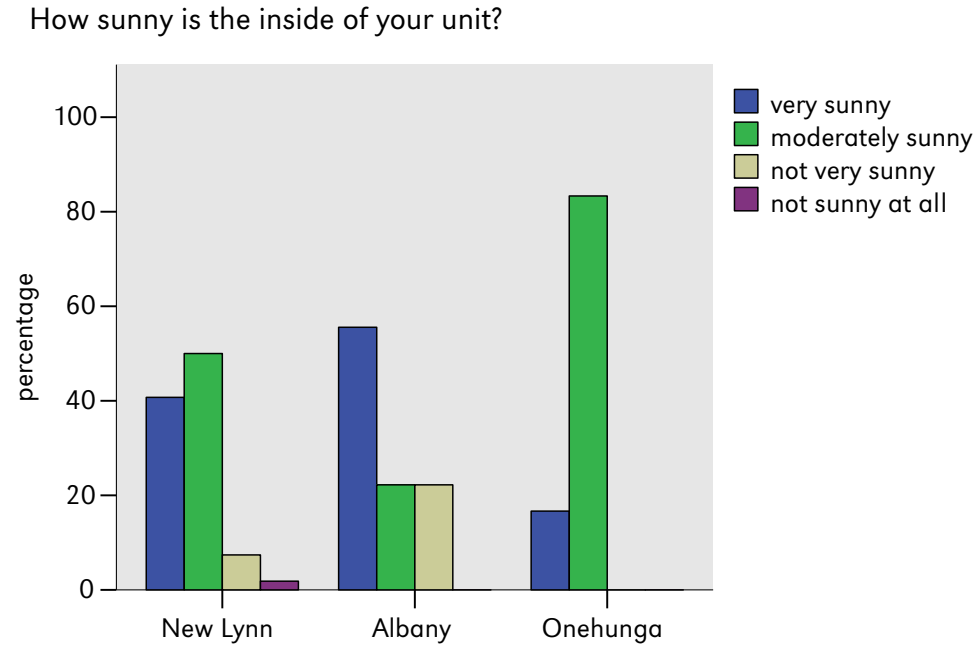


Figure 4.37: Sunniness of indoor space

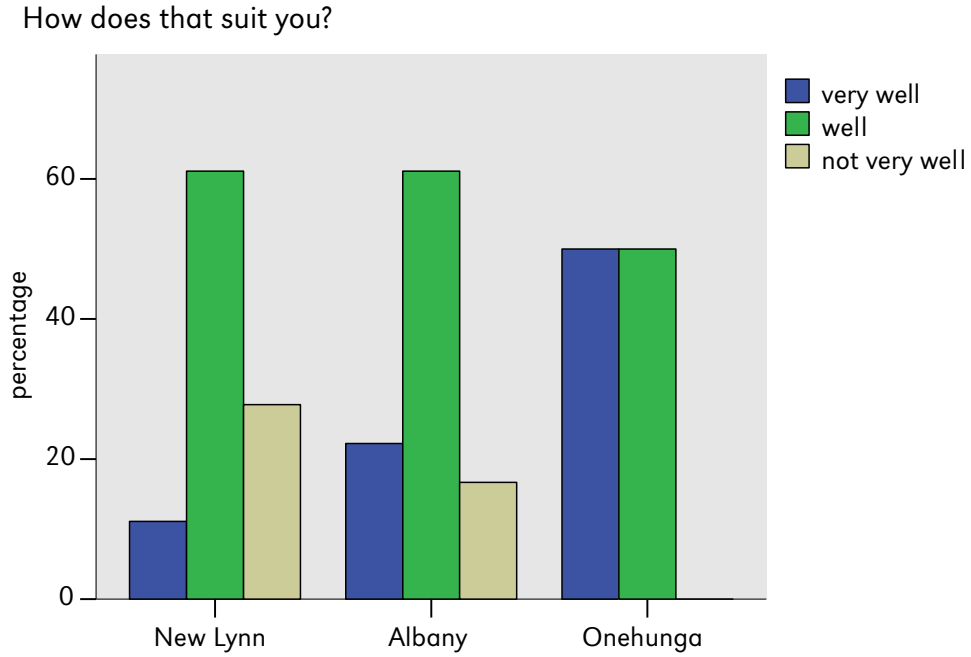


Figure 4.38: How does sunniness of indoor space suit you?

Residential dissatisfaction

Questions on residential dissatisfaction elicited respondents' dislikes of a range of factors associated with their current living circumstances. Figure 4.39 below groups sources of dissatisfaction into 4 categories: location (factors mentioned were few good schools close by, proximity to traffic noise, and lack of nearby amenities); social factors (usually referred to problems with neighbours, often noisy neighbours); housing related factors (which included 'noise' due to lack of sound proofing), body corporate issues, a general lack of upkeep, problems with rubbish, poor design and leaky buildings; safety and security includes such factors as car break-ins and not feeling safe at night when outside.

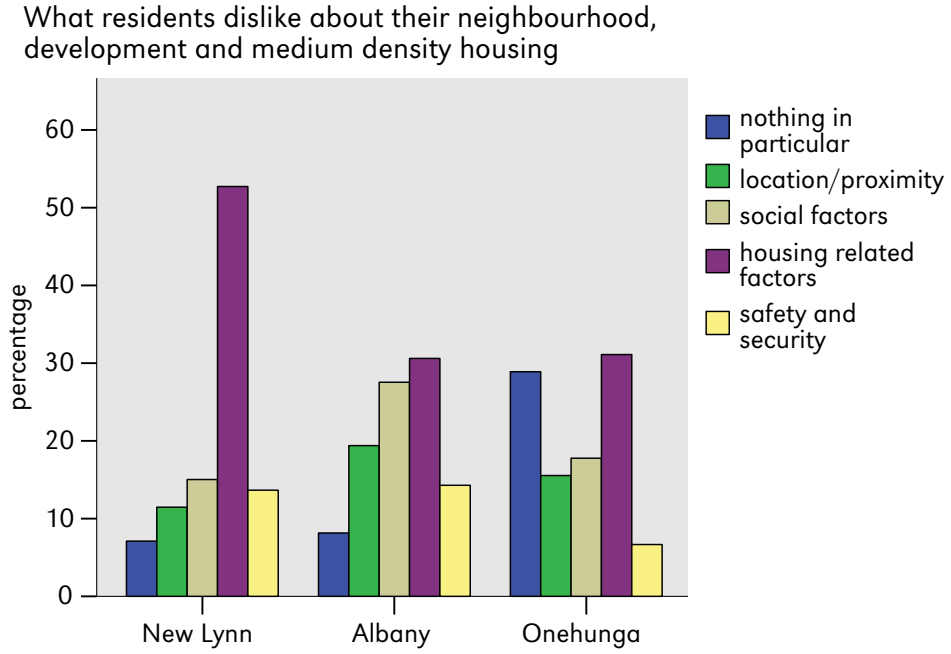


Figure 4.39: Sources of dissatisfaction

Responses to the general question of what residents **did not like about living in medium density housing** follow.

Albany
Responses noted a source of dissatisfaction was having noisy and inconsiderate neighbours and other people smoking. Some said that apartments were not child friendly. Others did not like the fact that they could not have a garden or keep pets.

Onehunga
Disturbing neighbours, noise, and lack of privacy were sources of dissatisfaction, as were not being able to have pets and insufficient space for a small garden. It was also noted that a low owner/renter ratio was undesirable.

New Lynn
Residents mentioned that parking was an issue for medium-density living, with some residents saying there was not enough parking and others saying there were too many cars. Aspects of density were also commented upon. Residents disliked the fact that houses and buildings were too close together and created issues of privacy. Other responses focused on the lack of soundproofing, the potential for conflicts with neighbours when living close together, and the small size of outdoor spaces.

Responses to the question of what residents **did not like about their neighbourhood** are below.

Albany
While interviewees generally liked Albany, they found it was still necessary to use their cars because facilities and services were not easy to walk to. They said it could be difficult getting out of the complex during peak traffic times, particularly at school drop-off and pick-up times. Walking to the bus terminal or mall was problematic as it is necessitated crossing roads at two roundabouts because pavements were not constructed on both sides of the streets. While residents could take a 'goat track' through the grass to these places, the track was difficult to traverse for women with children or with a push chair. Some did not like the fact that there was no future option for rail in the area.

Onehunga
Residents did not like that a bar was located across the road from the development and that it was noisy. Peak time traffic also made it difficult to get out of the development or gain access to the Motorway.

New Lynn
Some general dislikes of the neighbourhood were: that Lynnmall was too small for the area; there was no local movie theatre; and no nearby dairy. In addition, there were concerns voiced over opportunistic crimes, such as break-ins and the growth of the sex industry in the area. There was also a sense that the neighbourhood was unsafe. Some responses stated that there were no good schools in the area. The brickworks and passing road traffic were identified as being very noisy.

Residents were asked what they **did not like about living in their particular development.**

Albany
Noise was mentioned frequently: from the daily activities at the school to other residents who played music loudly. Others mentioned smokers on balconies, body corporate rules which prohibited laundry from being hung outside, and lack of a recycling scheme. Safety was a concern for residents as there have been burglaries, car alarms frequently went off, and the entrances to the development were not controlled. The lack of a proper playground was also mentioned as was not having a place for children to ride bikes.

Onehunga
Onehunga residents voiced few dislikes. Some mentioned noise, another the issue of the convoluted internal access arrangement for vehicles and access Main Street.

New Lynn
A number of residents were dissatisfied with the way rubbish was handled in their development as no bins were provided and residents had to purchase bags. Car parking was also an issue. Landscaping was described as untidy. Some residents mentioned the lack of a swimming pool which had been promised when Tuscany Towers was first erected. Other dislikes referred to poor planning and design, the poor quality of housing, and water tightness issues.

Residents were asked what they **did not like about living in their particular unit.**

Albany
A number of responses referred to lack of space or small units with insufficient storage space. Dampness and mould were mentioned, as were bathrooms with showers only and no bath tubs and a lack of natural light.

Onehunga
While residents recognised that sound proofing between units on the same level was good, this was not the case between levels. Shared balconies between units meant that neither neighbour used the balcony very often. Lack of space was mentioned for both interiors and garages.

New Lynn
Some interviewees responded that the units, or specific rooms in the unit, were too small. The small size meant there was little space for children to play inside. Several residents stated that they did not like the kitchen being open to the living room. A few respondents expressed concern about the stairs for small children and older residents. Others mentioned the poor quality of the building and materials used; noise between units, and walls which lacked soundproofing. Water-tightness issues were frequently discussed. Some units had only a shower and no bath, which was difficult for households with young children. Some residents commented that their units were too hot in the summer and too cold in the winter.

Future housing

We asked interviewees about their future housing plans: how long they intended living in their current residence; what type of housing they thought they would move to if they were to move; what type of housing they thought they would be living in the long-term – their 10 year plan; and their ideal housing form.

Proposed length of residence

Over 31 per cent of respondents did not know how long they would stay in their current residence, a figure which would be expected given the proportion of renters in the sample (Figure 4.40).

> *One resident noted that their length of stay at the Atrium depended on two factors. All three of her children lived overseas and she would like to live nearer to them. However, she really enjoyed her current job and had been given opportunities to develop and extend her workplace skills. It was therefore a balance between her need to develop a secure career and to live near her children.*

Nearly 37 per cent of respondents indicated they would stay at their current residence at least into the short or medium term, with 17 per cent indicating a reasonably long-term intention to remain in their current place of residence.

> *An Ambrico Place resident told us that as she had lived in the complex for about nine years she felt like it was home and would not leave unless some unexpected event occurred.*

Figure 4.40: Proposed length of residence

We received a range of responses to the question 'Is there anything that would make you leave?'

Common among these were responses about change of tenure, especially the intention of buying a house at some future time.

Others said they would leave if they had to move. For example one resident mentioned the possibility of returning to China for health reasons; others mentioned the prospect of changing jobs and a possible shift to another area of Auckland, or moving elsewhere in New Zealand to study.

Some mentioned moving in relation to a change in family circumstances or life-cycle related reasons which included: moving to a single level house to accommodate the needs of an elderly mother; moving to larger accommodation if family members from overseas came to New Zealand; moving to ensure children could attend good schools; or moving because age-related factors meant losing one's independence.

Some participants mentioned they would leave if the environment of their development changed, such as: if there were problems with neighbours or if noise levels increased.

Still others said they would leave because of body corporate-related issues or leaky building-related problems: if body corporate fees were increased or service diminished or if the leaky building rebuild was not successful.

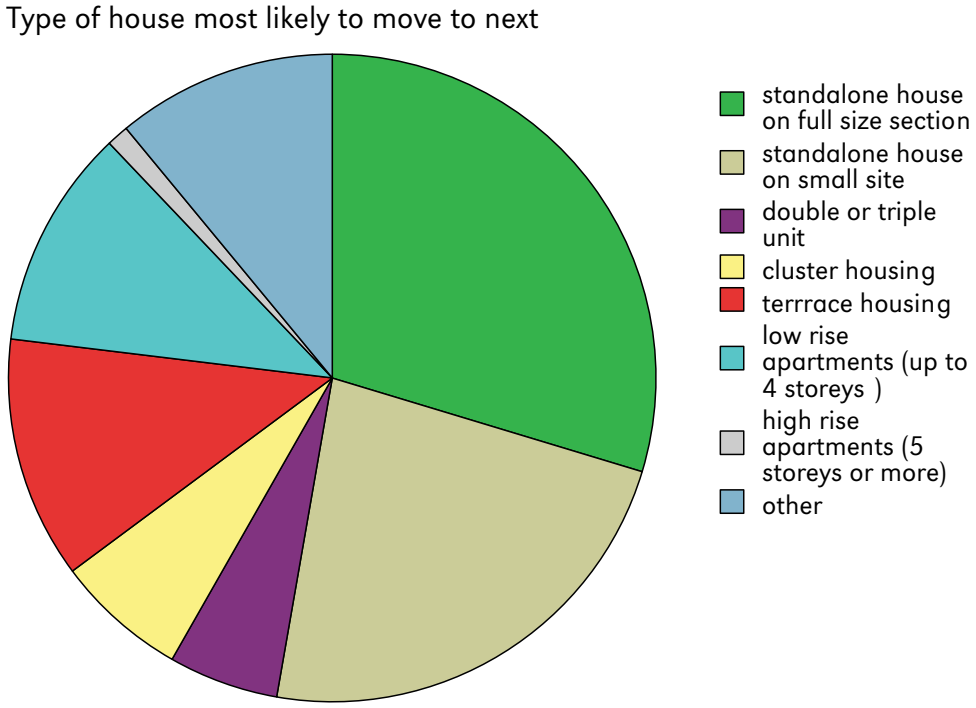


Figure 4.41: Type of housing most likely to move to next

The most distinctive feature of Figure 4.41 is the proportion of participants who indicated their next move would be to a stand-alone house on either a full-sized section or a small site. Such a finding is surprising, since all research participants currently live in intensive housing and were generally satisfied with their current housing circumstances.

The pattern of preference for detached housing becomes even more emphasised when participants were asked to identify their preferred type of housing 10 years on (Figure 4.42). Well over two-thirds of interviewees expressed a preference for living in a stand-alone house in the future. Only 10 per cent of participants indicated their preferred housing type in 10 years would be a terrace house and only 6 per cent a low-rise apartment.

When asked about their preferred housing type in an ideal situation, approximately three quarters of the sample opted for either a stand-alone house on a full site, a stand-alone house on a small site or a lifestyle block (Figure 4.43). These data provide a clear indication that the 'Kiwi dream' of owning a detached house is still very much alive and well, Moreover, given the makeup of the sample, it appears that this dream is not exclusive to the New Zealand-born.

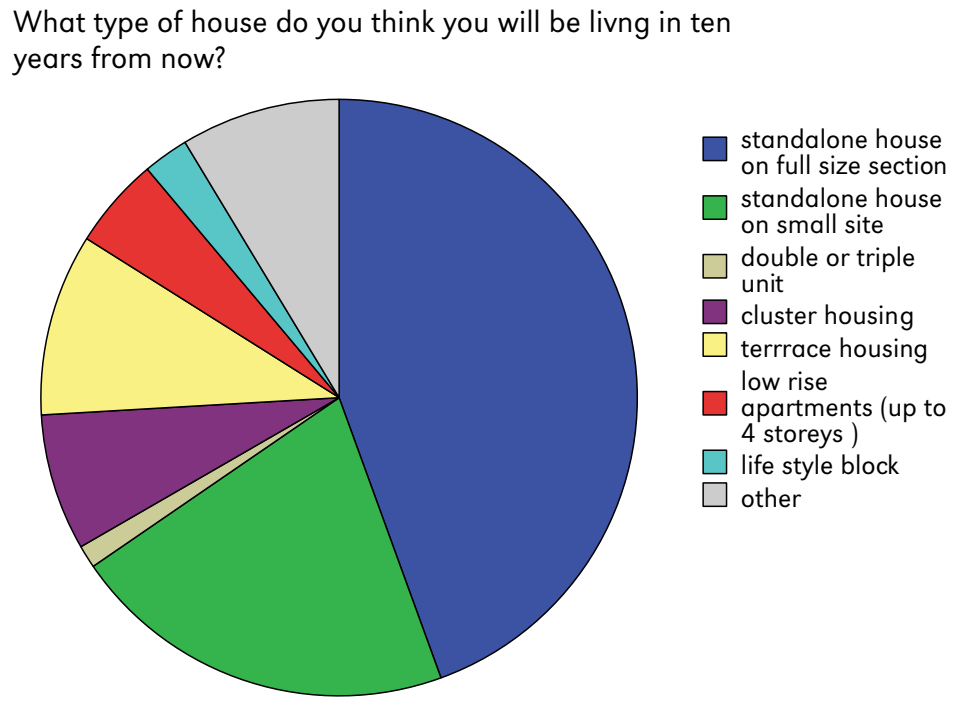


Figure 4.42: Preferred type of housing in ten years time

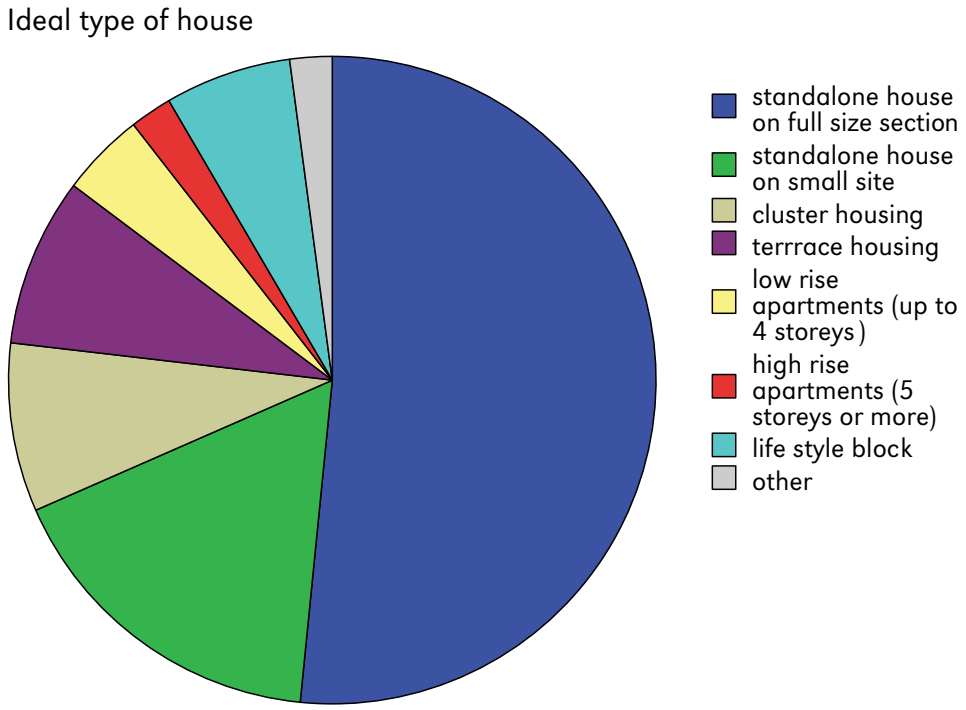


Figure 4.43: Ideal type of house

Meeting expectations

At the end of each interview we asked participants to reflect on whether living where they were had met their expectations. The responses are quantified in Figure 4.44 below. Nearly 64 per cent of participants said that it had met their expectations. Just over one fifth of the sample said it had not met their expectations. About 14 per cent were equivocal.

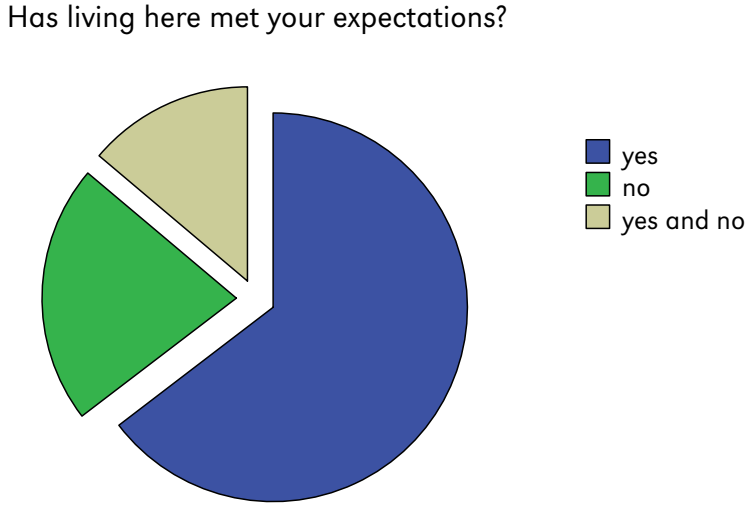


Figure 4.44: Meeting expectations

Figure 4.45 presents the same data broken down by development. It is indicative of the type and quality of the Atrium on Main development that all participants said living there had met their expectations.

Of the three areas, the highest proportion of residents who reported that their expectations had not been met came from Ambrico Place.

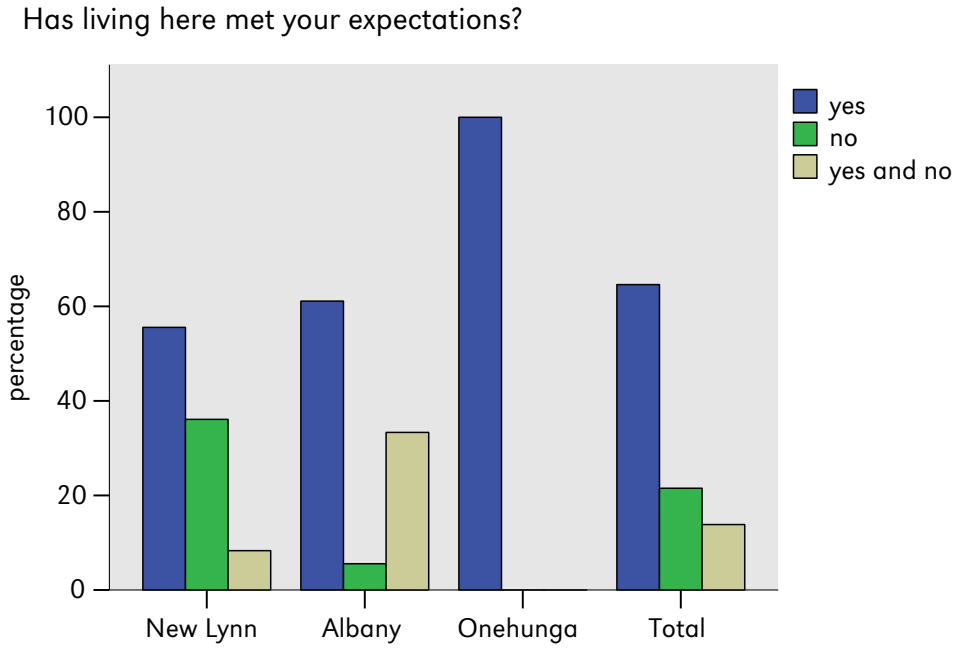


Figure 4.45: Meeting expectations, by development

Interviewees were then asked to clarify in what ways living had or had not met their expectations. Multiple responses were provided. Below are the main themes that emerged in the responses:

One Ambrico Place resident reported not enjoying living there at all because of problems associated with neighbourhood conflict, discrimination, having a leaking house, and safety.

A very different perspective was offered by another Ambrico Place resident who said living there had exceeded expectations and pointed out that everything was very convenient with a library, community centre, supermarkets and many other community facilities available in the area.

Similarly, another Ambrico Place resident expected to live in a place that was safe, convenient for shopping, and one which offered a good environment with fresh air and clean water. All this resident's expectations had been met.

An Atrium on Main resident said she knew exactly what she was getting into. She knew Onehunga well. She knew it was perfect for her circumstances and so it has proved.

An Albany resident reported that living there had mostly met his expectations but was still surprised by how difficult it is to get housing in Auckland and how expensive it is.

BODIES CORPORATE

A body corporate in New Zealand is the legal entity that represents all the owners of a multi-unit property. Bodies corporate come under the Unit Titles Act 2010 (UTA) and are established at the same time as the unit plans are deposited in the Land Registry Office. Rules governing each body corporate are established when the unit plan is deposited and are set out in the Second and Third Schedules of the Unit Titles Act. The body corporate, through its agent, is responsible for the maintenance of common property, payment of rates, setting of levies for owners' financial contributions, arrangement of insurance and valuation, preparation of annual accounts, and conduct of annual general meetings. In law, it is the unit owners who comprise the body corporate. Usually, a body corporate is managed by a company that specialises in property or financial management.

Despite the recent review of the Unit Titles Act, much complexity still surrounds the operation of bodies corporate and their functions are not well understood by the public (Blandy, Dixon, & Dupuis, 2006; Dixon & Dupuis, 2003). This lack of knowledge is not enhanced by the way that ownership of intensive housing is promoted on the basis of lifestyle reasons, particularly those of freeing up owners from having to do upkeep and maintenance on their properties. Real estate promotions especially make no reference to what new responsibilities might emerge for unit owners.

Previous research conducted by the authors with Ambrico Place residents (Dixon and Dupuis, 2002; Dixon and Dupuis, 2003) and residents from New Lynn's Crown Lynn Condominiums (Dupuis et al., 2009) indicated that a major negative feature of intensive living was body corporate problems. It has been argued by the authors that the extent of such problems rests on the fact that intensive housing still represents a relatively new physical urban form, and also a new form of semi-collective urban governance which is still unfamiliar to most New Zealanders.

In this research project, we asked a range of questions regarding interviewees' understandings of bodies corporate and their perceptions of the operation of bodies corporate.

Responses to the question '*What do you understand as the purpose of the body corporate?*' demonstrated a range of understanding.

Nearly one third of respondents indicated that they had a solid understanding of the purpose of a body corporate, making such comments as the purpose of bodies corporate was to maintain the development including the common areas, or to administer the development on behalf of the owners relating to the common costs.

Others (approximately 18 per cent) showed they had an understanding of at least some of the functions of the body corporate and pointed to one function such as being responsible for the insurance of the complex.

However, a significant proportion of residents (46 per cent) indicated they had little understanding of the functions of a body corporate. Some owned up to not knowing much. Comments included that bodies corporate managed issues like parking and laundry or dealt with the difficult behaviour of tenants. A very small proportion of residents (4 per cent) indicated they had no understanding at all of the functions of a body corporate.

Approximately 58 per cent of interviewees reported that they were either familiar or very familiar with body corporate rules (Figure 4.46).

Figure 4.46: Familiarity with body corporate rules

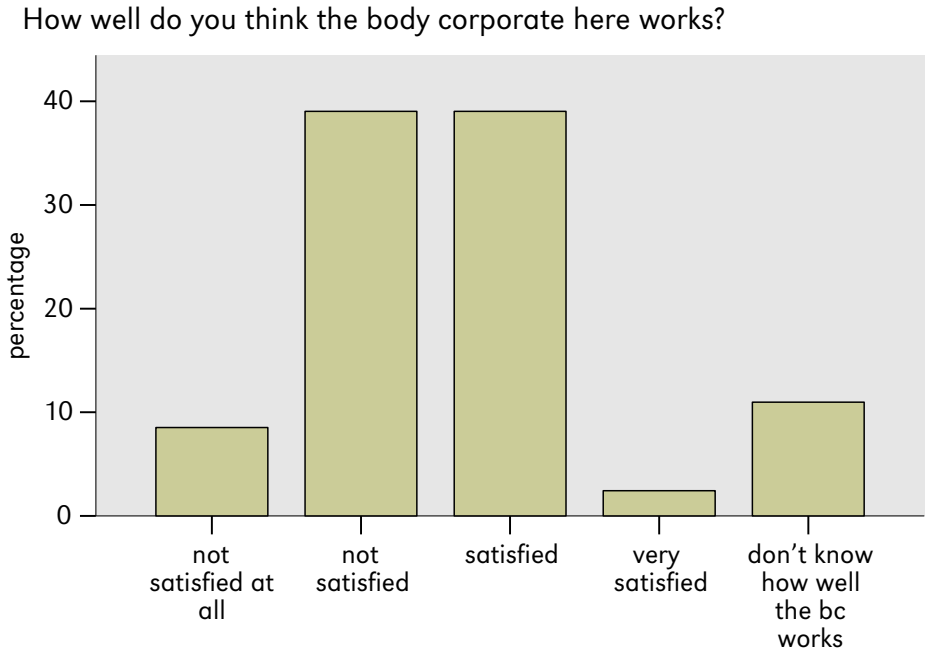


Figure 4.47: Satisfaction with the body corporate

Figure 4.47 shows that a similar proportion of residents were satisfied as were not satisfied with how their body corporate operated.

> *One Ambrico Place resident said she thought her body corporate did not work well. She explained that the body corporate had frequent changes of managers and that rules were not fair. An example she provided was that in the same complex owners could have dogs but tenants could not and would be fined $400 if they brought a dog into the yard. She pointed out that such rules treat residents differently, grading and ranking them.*
>
> *Another commented that the body corporate was 'Generally pretty good', saying that the complex was relatively well maintained and there was a reserve fund for upcoming maintenance expenses. As a consequence, the demands for extra money for cleaning and painting building exteriors would not be onerous.*

A common sentiment among Chinese residents at Ambrico Place was that the body corporate management company did not include them or take account of their concerns. On the other hand, it was also suggested that Chinese residents themselves should involve themselves more in body corporate affairs.

> *A common theme in the Ambrico Place responses was that as no one in the body corporate committee or management company speaks Chinese, Chinese residents who have English language difficulties cannot involve themselves in the decision making process.*
>
> *As a consequence it can appear to many residents that the operation of the body corporate lacks transparency. As one resident said, they saw the management company collect money after they had done some work on the complex, but felt they had not been consulted about this in advance.*
>
> *One resident said that body corporate managers should involve people from 'different' ethnic groups, including Chinese residents. The same resident suggested that Chinese people did not involve themselves much in the management partly because they lacked an awareness of participation in the decision making process for public affairs. This participant held the view that while many Chinese put a lot of effort into their private lives, especially their family lives, they did not realise that quality of life is closely related to the social environment which is regulated by policies and laws and if change is to occur that reflects the wishes of the majority, then people must participate.*

It was also suggested that a proportion of people were not particularly interested in body corporate affairs or attending meetings.

> *One interviewee put this down to the management company not advising people of the meeting in advance. In addition, it was said that such notices should be in Chinese and that residents from non-English speaking backgrounds should have their opinions listened to and discussed in a language they can understand.*

However, we also heard that becoming involved in a body corporate had positive outcomes.

> *One resident commented that their body corporate had managed to change the body corporate manager recently and during the process our participant said she had learned much about the way bodies corporate operated.*

We asked owners if they had had enough information about the body corporate prior to purchasing their unit (responses in Figure 4.48 below).

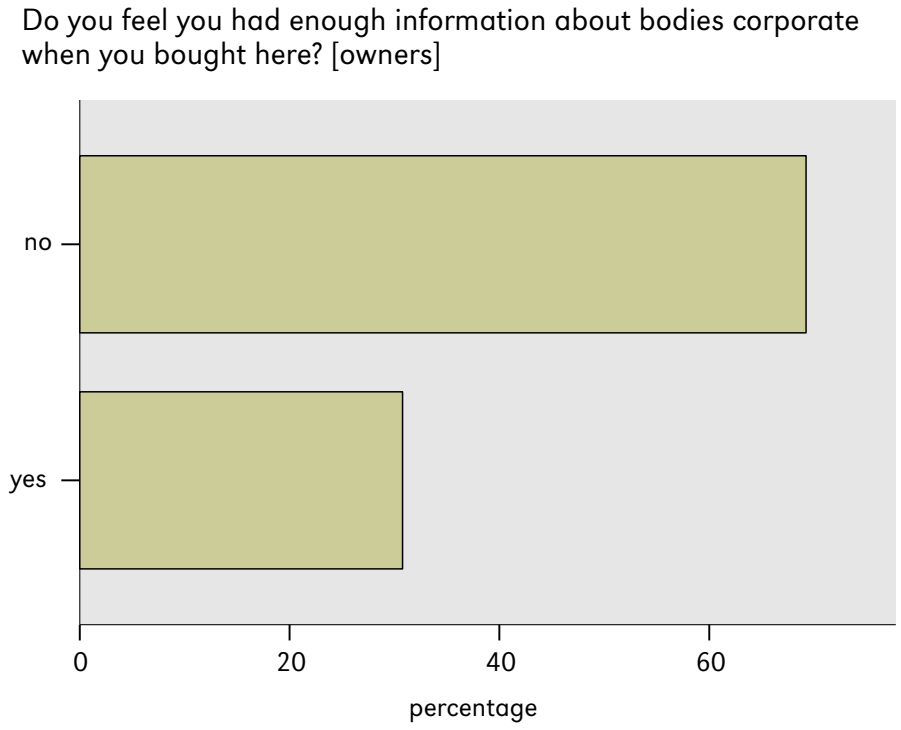


Figure 4.48: Information about the body corporate prior to purchase

About three quarters of owner-occupiers claimed they did not have enough information about the body corporate when they bought their unit.

> *One resident commented that she had discussed the body corporate with her lawyer prior to purchase but not too extensively.*

> *The role of real estate agents in providing information was also commented on, with one participant informing us that all the agent had told them was that the body corporate was a service they would need to pay for. They did not see a copy of the body corporate rules before they purchased, nor did they know the details of the rules. The same interviewee also mentioned the need for information on the quality of the building being more transparent to new purchasers.*

We also asked renters who they spoke to, if anyone, if body corporate-related issues arose for them. As Figure 4.49 shows, a similar percentage spoke to their owner or landlord as spoke to the body corporate or property manager. In a number of instances the owner was a member of the interviewee's family.

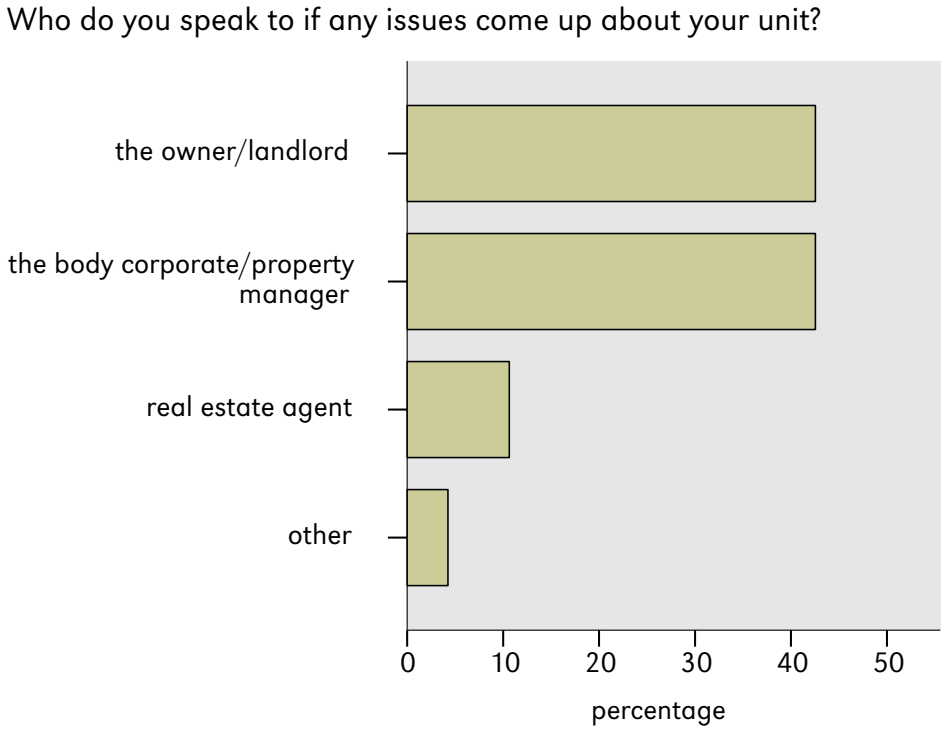


Figure 4.49: Information about the body corporate rules

CONTACT, COMMUNITY, AND SUITABILITY

There is much debate in the academic literature on the extent to which housing forms can encourage the development of a sense of community, or otherwise. Proponents of new urbanism particularly stress this perspective which, as Talen (1999, p. 1361) claims, 'lives by an unswerving belief in the ability of the built environment to create a sense of community'. A component of this 'belief' is that a sense of community can be developed when amenities and services are located in easy walking distance of housing, which allows residents frequent opportunities for social interaction. It is then assumed that the social interaction fosters a sense of community. This perspective has strongly influenced planners, internationally and in New Zealand, and has certainly been important in shaping the choice of location when planning intensive housing developments in Auckland.

The information we report on in this section comes from questions designed to gauge the extent to which people had contact with others in their developments and developed a sense of identification with, or belonging to, their social environment. Contact with neighbours and neighbourliness, socialising with neighbours, and the importance of feeling part of a community are reported on below. A sense of community is closely associated with people's views on who is, or is not, suitable as a neighbour, and why this might be. Opinions on who is best and least suited to living in intensive housing were also canvassed and are included. One particular concern is the issue of children living in intensive developments. Recent research on children living in central Auckland apartments (Carroll, Witten, & Kearns, 2011) found that drawbacks of inner city apartment living were lack of space for children to play, both inside their units and outdoors, and fears about children's safety. Questions were

raised about the suitability of apartment living for children and families in intensive inner-city developments. The extent to which such concerns are pertinent to children living in intensive housing built around town centres was canvassed in this research.

Household composition

As a useful backdrop to understanding issues of both community and suitability, it is important to have information on household composition. As Figure 4.50 shows the usual occupancy of the households in the sample ranged from 1 to 7.

Recent research carried out by the researchers on Crown Lynn Condominiums, another large-scale intensive development in West Auckland, reported that nearly 87 per cent of the sample lived in either one or two person households (Dupuis et al., 2009). As Figure 4.50 demonstrates, this sample differed significantly in that only 31 per cent of residents lived in one or two person households (10.7 per cent in one, and 20.2 per cent in two person households).

In the current sample, just over one fifth of households were 3 person households, and nearly one third 4 person households. In all, approximately 54 per cent of households had 3 or 4 people. Only 15.5 per cent of households had 5 or more people living in them.

Just over half the households contained no children. No households in the sample had more than two children.

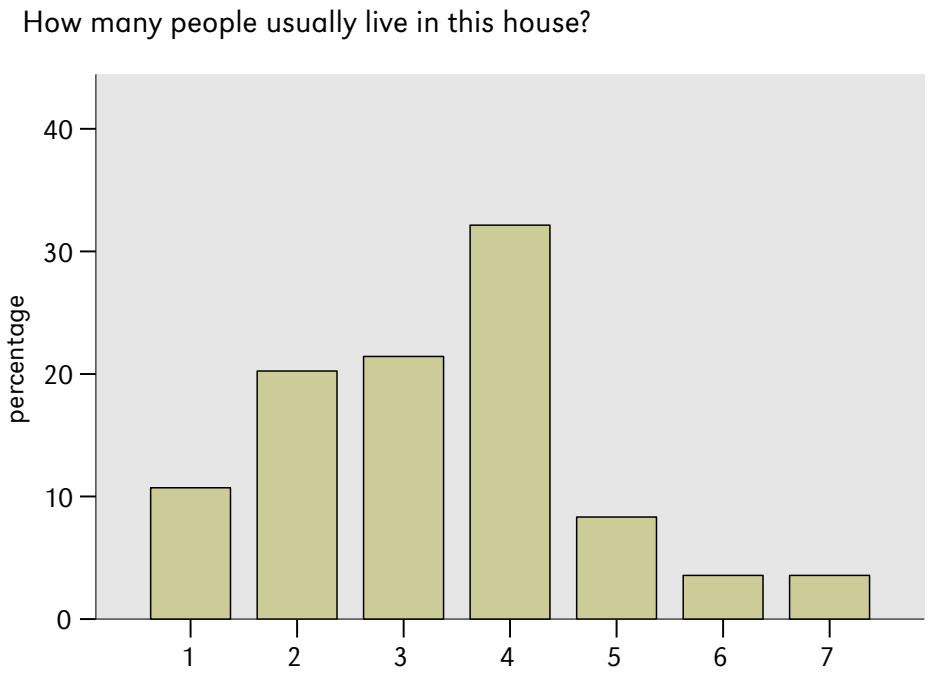


Figure 4.50: Household composition

A sense of community

The first set of questions around community asked about the type and frequency of contact with neighbours. Figure 4.51 below shows the amount of contact interviewees had with others on a regular basis.

Nearly half of interviewees said they had contact with a few people in their development. They tended to mention contact with close neighbours. For example, one commented that she had got to know two sets of close neighbours and another said he knew his neighbours by name. Some responses indicated that circumstances of people's lives meant they did not have a lot of contact with people in their development. For example, one interviewee noted the language barriers between people from different cultures and explained that they were only 'here temporarily', implying that a sense of community required time and effort to build. However, the general tone of responses to questions about contact was positive. For example one resident said she had 'lovely neighbours' and another said that people are friendly and say hello.

About one fifth of the sample told us they had lots of contact with others in their development explaining that they met people in the yard every day, another said she had met lots of people when she was on the body corporate owners' committee and another commented on enjoying the cultural diversity.

Those who said they had no contact provided a range of reasons. Some of these were to do with their own personality, in that they were not interested in meeting people. Others were new to the area and had not had time or opportunity to meet their neighbours. A number of interviewees also said they were busy with work, their families or that their friends lived elsewhere. One commented on conflict within the Chinese community of residents.

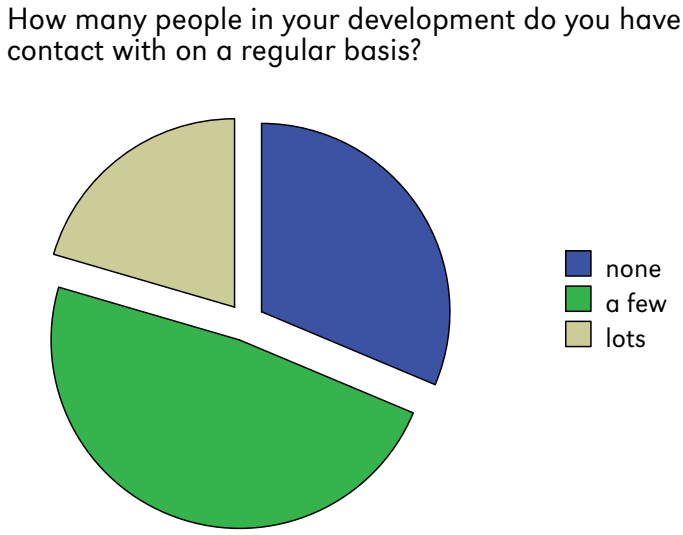


Figure 4.51: Regular contact with neighbours

When asked for further explanation on contact with neighbours, interviewees said, for example:

> *They chatted about weather, interesting news and other interesting topics, and helped each other to pick up Chinese newspapers from local Chinese supermarkets.*
>
> *They did not speak English so only had contact with other Chinese residents.*
>
> *They meet neighbours every day and sometimes go on organized trips or go for dinner together.*
>
> *That they met others when they were out walking and would say hello.*
>
> *There were neighbours they would chat to when working in their garden.*

We also asked participants whether they felt part of a community within their development. As Figure 4.52 shows just over 60 per cent or respondents said they felt part of a community in their development.

Do you feel part of a community within this development?

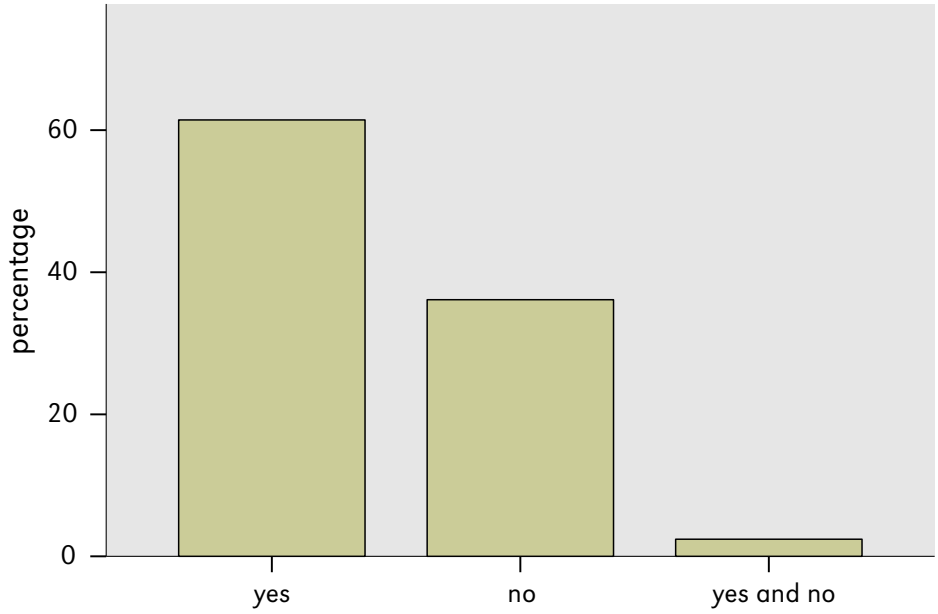


Figure 4.52: Feeling part of a community

Many of those who said they felt they were part of a community made reference to the length of time they had been living in their current residence. For example:

> *One woman said she had lived in her home for over 5 years and because she was a person with passion liked to interact with her neighbours.*
>
> *Another commented jokingly that she should be part of the community now as she had have lived there for 8 years and that made her a 'local person'.*

Others provided reasons why they did not feel part of a community.

> *One interviewee said they did not yet feel part of a community, but qualified that by saying they had only been living there a short while.*
>
> *Another long-term resident said she had felt part of a community in the past but not any longer, as many of the early residents had now moved away.*
>
> *Reflecting on the question one participant responded that she still felt like a guest and not having yet integrated into the environment.*
>
> *An Albany resident said while they would feel comfortable asking anyone for help if they needed it, and also offering help, they felt that mostly people kept to themselves and appeared not to want to intrude too much on each other.*
>
> *Another Albany resident said she did not feel part of a community but at present this did not bother her. However, she knew there were people around her and that was all she needed. She suggested there were too many people living in the complex to get to know, but if she lived in a row of units or terrace houses she believed she would make more of an effort.*

We also asked participants how *important it was for participants to feel part of a community.*

Over 70 per cent of interviewees said it was either quite or very important for them to feel part of a community (see Figure 4.53).

> *One interviewee commented that although there were language barriers she now felt part of the community.*
>
> *'I have a lot of involvement in the community. Some Kiwi has complained about me because I hang my clothes on my balcony but another Kiwi described me as a model resident'.*
>
> *Another noted feeling part of a community when living in Sydney and missing that feeling here, but that work and other friends compensated.*

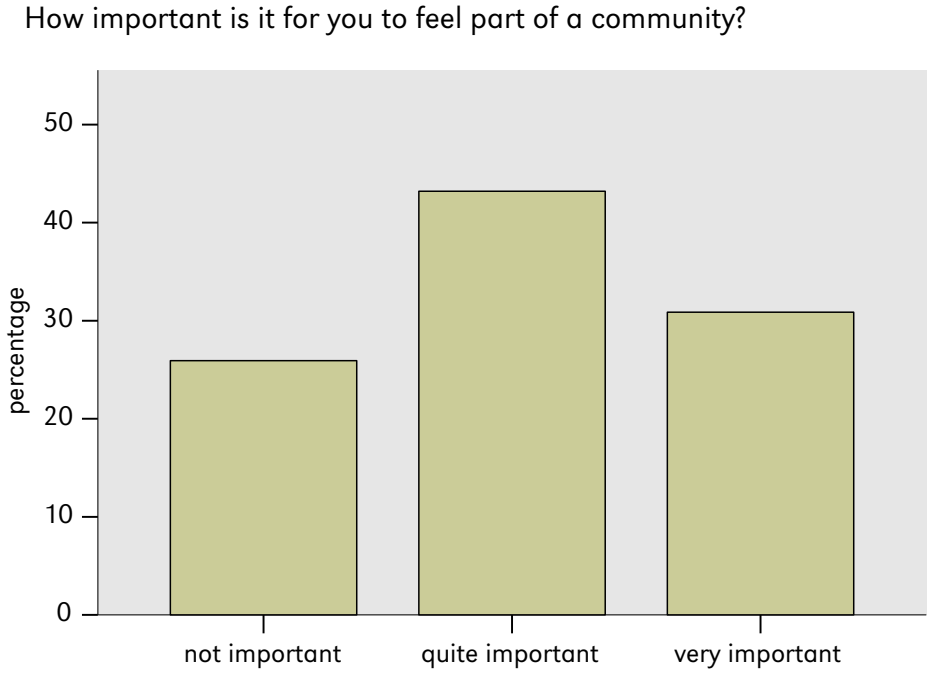


Figure 4.53: Importance of feeling part of a community

The next set of questions asked participants who they thought were most and least suited to living in medium density housing. In our opinion this is an important question for this section on community as it provides insights into who participants would actually like, or dislike, living around them. Responses also draw strongly on participants' experiences of living in close proximity to others.

The questions themselves were open-ended; hence many participants provided more than one response. Responses to the question of who is best suited to living in medium density housing are set out in Figure 4.54. We chose to break these down by the three developments a) to show the differences across developments and b) because the different emphases appear to represent the key differences among the three areas.

Respondents in the Albany developments emphasised young people and young couples, those without children and single people. However, almost by way of contradiction, a significant minority also mentioned people with families.

> *One interviewee gave the following list. Young couples on the whole, and perhaps couples with a young child would be manageable. This interviewee however, thought these developments were not suited to older children and teenagers as there was nothing for them to do, and also possibly suitable for older people who were working and needed a low maintenance unit.*
>
> *Another said young couples but not couples with children.*

For Onehunga residents (and unlike the Albany respondents), the single largest category was working or professional people. However, six other categories of people were also mentioned including families with children.

As one participant commented: young professionals, like themselves, were especially suited to living at the Atrium, as it was a good first step into the housing market. It was also deemed suitable for families with young children because of the facilities nearby. This participant also thought that while it would be better if they lived on the ground floor it would be excellent for older people with good mobility because it was safe and having people around would reduce isolation.

Another interviewee thought that the Atrium was best suited to young people or those with busy lifestyles away from their homes and that the units function best as low maintenance 'crash pads'.

Reponses from the Ambrico Place residents provide a very different pattern, with many different types of people mentioned. In keeping with the proportion of older people living in Ambrico Place, the single largest category mentioned was retired people.

The variety of people was summed up by one interviewee who thought medium density housing suited people who had just come to New Zealand, people on low or medium incomes, students, single employees or young working couples with no children, using intensive housing as a temporary solution for housing.

Another said this kind of housing was suited to most people. With the playground and proximity to schools and transport it was good for children. It was good for couples and having units with three bedrooms meant that people could have others to stay or have a boarder or flat mate to help pay the mortgage.

In keeping with a number of responses one respondent thought Ambrico Place was best suited to elderly Chinese people because they were used to living in intensive high-rise apartments in their home country and living with other Chinese afforded them the opportunity to meet and talk with others with a shared culture background and language.

Responses to the question of who is least suited to living in intensive housing are set out below in Figure 4.55. Again, the multiple responses given by participants have been broken down by development. The category 'families' was separated into two: 'families' and 'big families'.

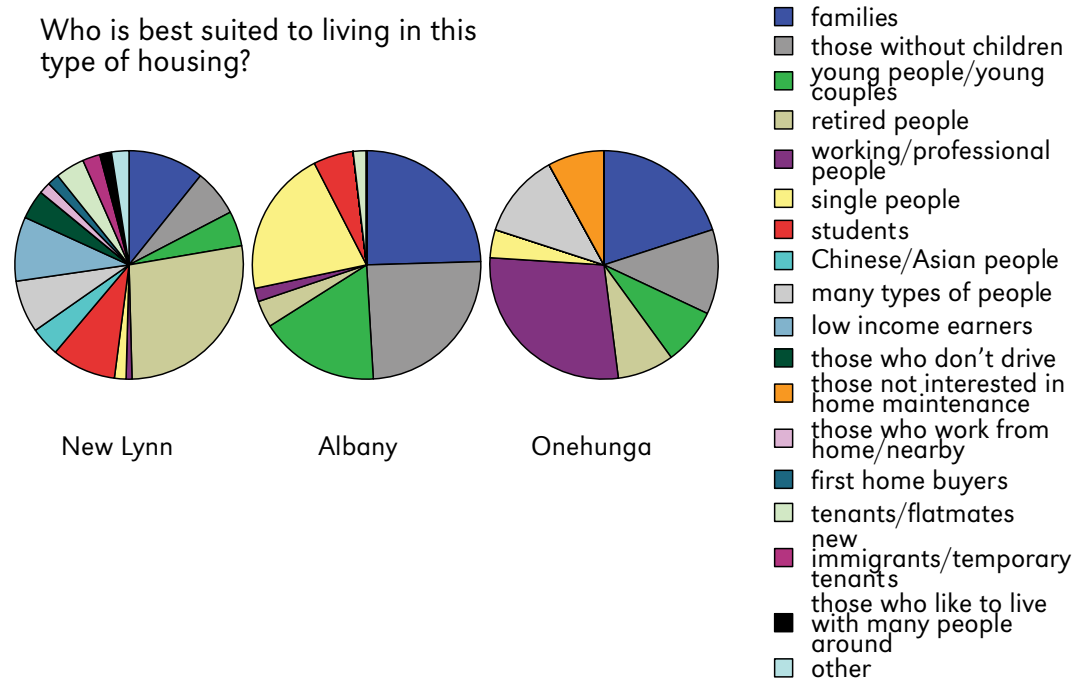


Figure 4.54: Best suited to living in medium density housing?

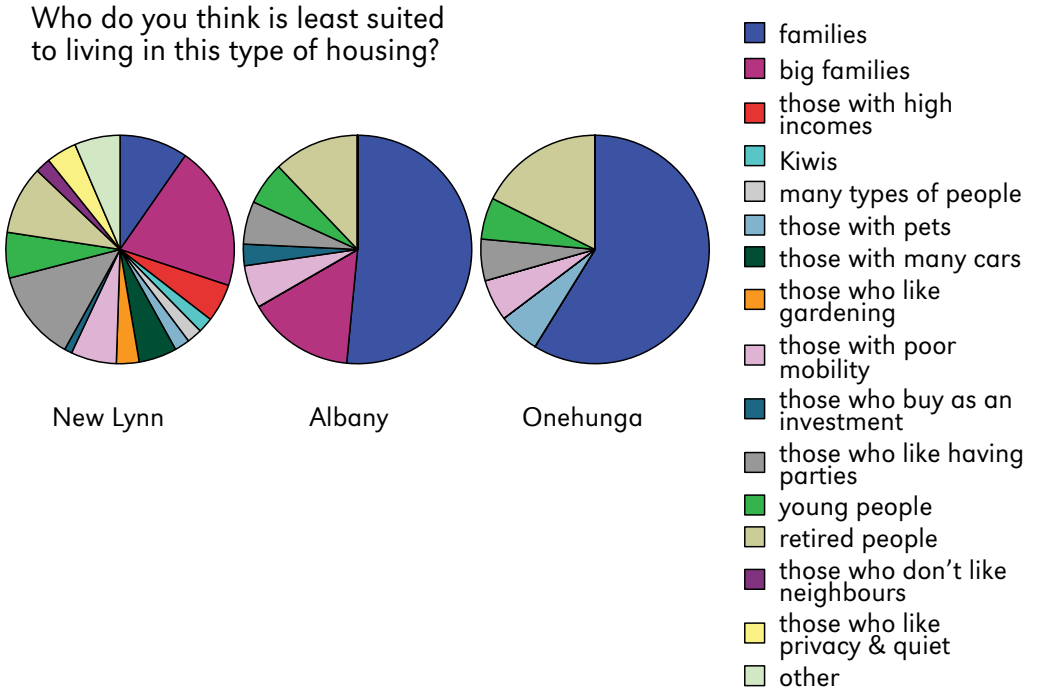


Figure 4.55: Least suited to living in medium density housing?

Figure 4.55 shows that Albany respondents thought that the group least suited to medium density housing was families, whether 'big' families or smaller families.

An Albany resident noted that when her children were young they would likely have been too noisy for the other residents. She also said that while there were some families with children in the complex who did not cause problems, she thought that generally children should have more freedom to be themselves than apartment living provides.

The lack of interior space for children was also commented on. We were told that while it was possible to make a second bedroom to accommodate a child, or children, it made the interior space extremely small, and certainly too small for older children. In addition, there was nowhere outside for children to ride bikes, scooters and skateboards. It would be necessary for parents to take children to parks to play as the green area was not set up for children's play.

It was also suggested that the apartment building was neither suitable for the elderly as it would be too difficult for them to get up stairs, nor for young people who are prone to have loud parties.

The Onehunga data show that that families and, to a lesser extent the retired, were deemed least suitable for living in medium density housing.

One resident commented there is nowhere for children to run about and get dirty. While they could play in the attached park area an adult would have to take them there and supervise them.

The two most commonly mentioned categories for New Lynn participants were big families and people who like parties. It is clear, however, that of the three developments it was Ambrico Place that was perceived as the most suitable for family living.

A positive resident noted that they feel Ambrico Place suits more or less anyone who can cope with stairs, a view shaped by the fact they liked the broad range of ethnicities, age, gender and household make-up of Ambrico Place generally.

Children in medium density housing

Overall, more than half the households in the sample contained children. Figure 4.56 shows that Ambrico Place had the highest proportion of children (54 per cent), closely followed by the Albany developments (40 per cent).

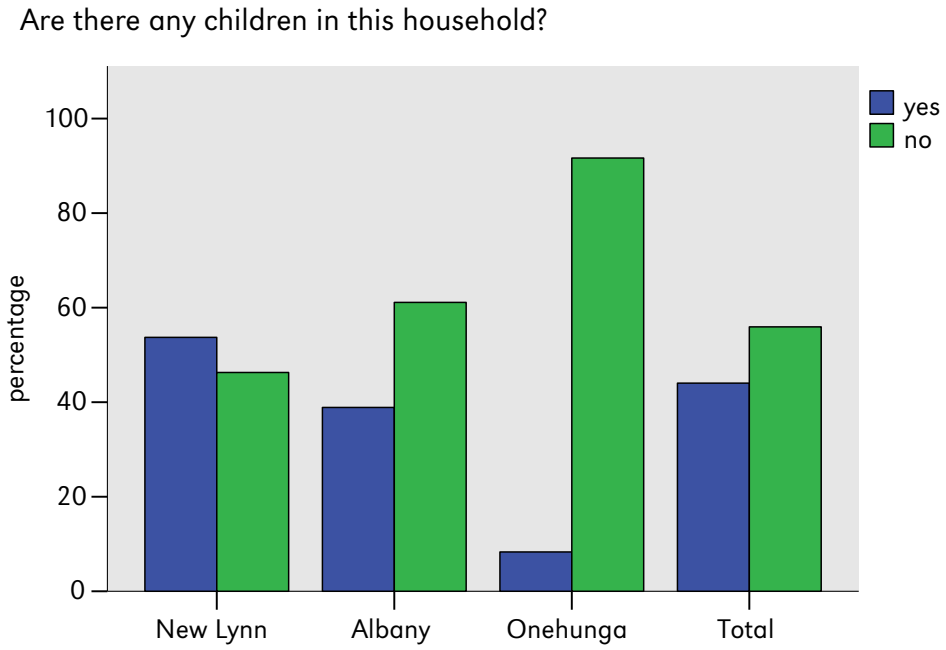


Figure 4.56: Children in households by development

We asked participants whether their development was a good place for children to live. The overall result is shown in Figure 4.57 and the results for the specific developments are set out in Figure 4.58.

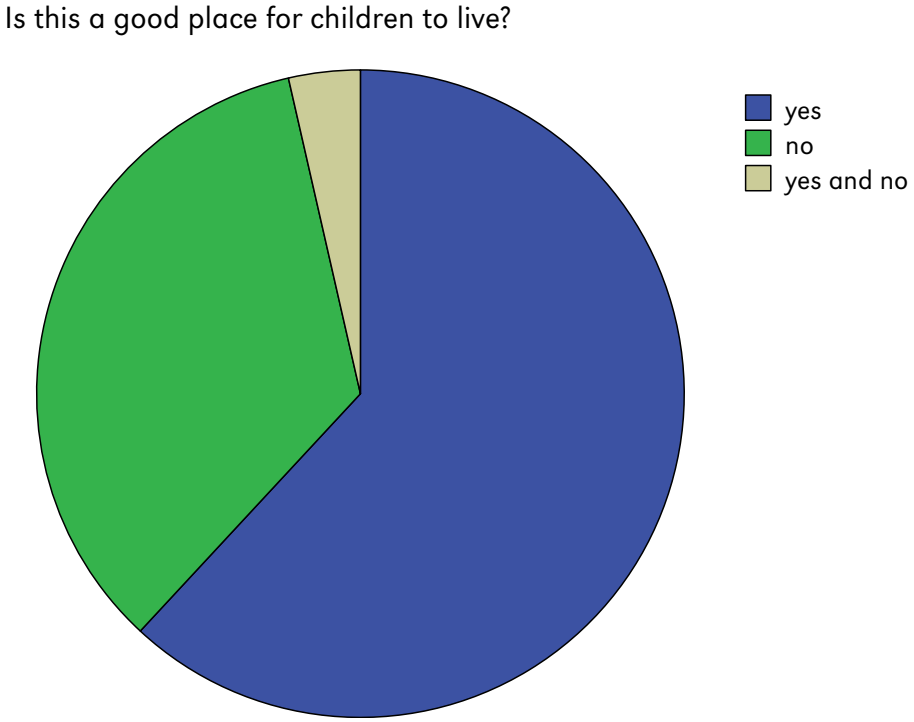


Figure 4.57: A good place for children to live

Albany

The majority of participants described the Albany developments as not a good area for children. Apartments were deemed too small. There was no safe play area and no proper facilities for children. Children had also been banned from riding bikes and skating in the car park. Nevertheless, a proportion indicated it was a good place for children to live, especially younger children, and noted the positive feature of proximity to the local school.

Onehunga

Responses from some Onehunga residents indicated that the Atrium was best suited to younger children, infants and toddlers; but others felt it only appropriate for older, school-aged children. While the pool and the adjoining park were good amenities for children, it would nevertheless be necessary to supervise them and children behaving like children could annoy neighbours. Responses also indicated that there was a lack of space for older children and teenagers to have friends over. Yet many residents were surprised at the number and types of families living at the Atrium, some indicated that they liked having families living there and observed that families seemed to manage well and make it work.

New Lynn

Positive responses commented on the schools in the area and the kindergarten in the Ambrico Place development. Facilities for play were also mentioned by a number of respondents. Ambrico Place was deemed a safe environment for children to play and the extra amenity of the playground was noted as a good place to meet and play with other children. By contrast, a few respondents claimed there was not enough outdoor space for children to pursue outdoor activities. It was suggested that the village green and tennis courts did not work well for children, as children did not use the tennis court and the green was too small. Other negative comments focussed on the small size of some units making them unsuitable for children and the fact that children had nowhere to ride bikes apart from the street and car parks.

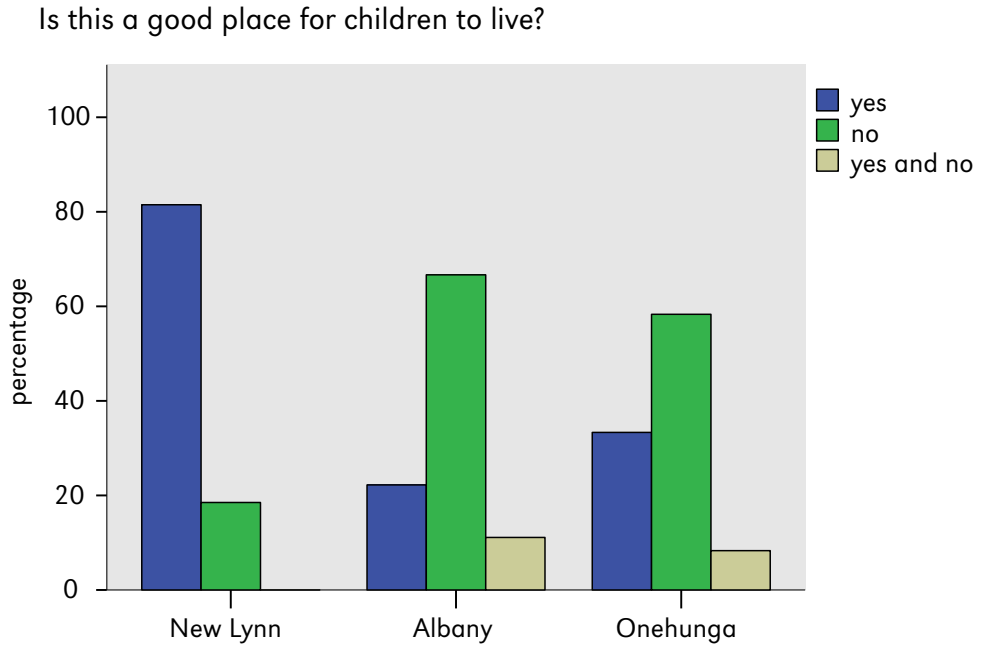


Figure 4.58: A good place for children to live?

SAFETY AND SECURITY

This section reports on a series of questions posed to interviewees intended to gauge their perceptions of safety and security in their local environment. Earlier research on this topic with Ambrico Place and Crown Lynn Condominium residents indicated that they felt comparatively safer in the day than at night and safer the closer to their residence they were. The data on perceptions of safety of residents, presented in the figures below, show a similar pattern.

By grouping responses into the categories 'safe' (for those who gave 'very safe' or 'reasonably safe' as a response) and 'unsafe' (for those who gave 'somewhat unsafe' or 'very unsafe' as a response) 92 per cent of the respondents from Ambrico Place in New Lynn felt 'safe' in their unit during the day, as did 94 per cent of the respondents from the Albany developments, and 100 per cent of the respondents from Atrium on Main in Onehunga (all of whom felt 'very safe').

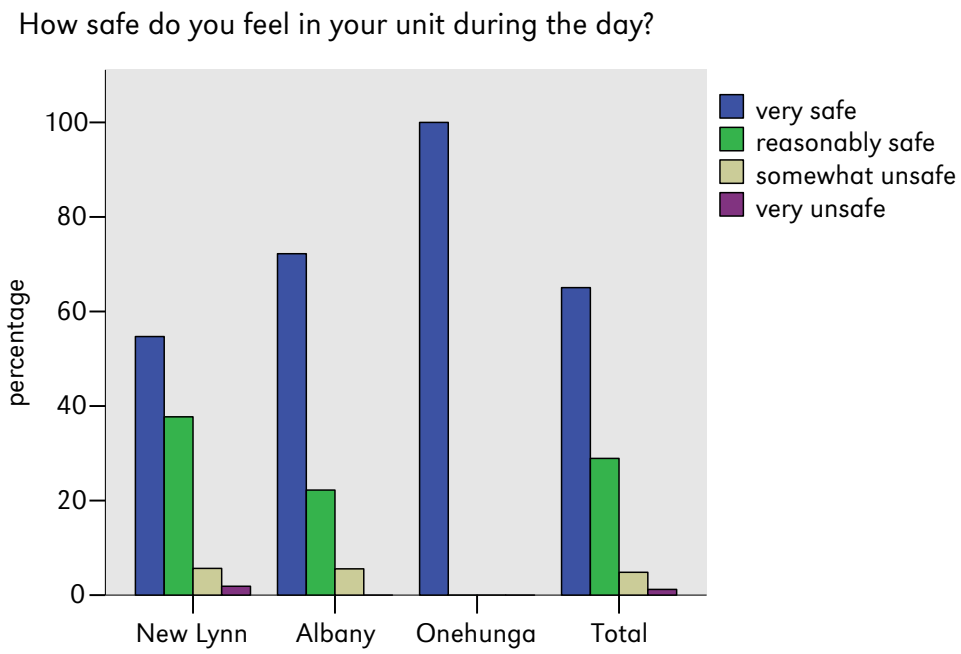


Figure 4.59: How safe respondents feel inside their unit during day

A similar pattern is shown in the following graph (Figure 4.60). Here, 89 per cent and 81 per cent of the respective respondents from the developments in Albany and New Lynn reported that they felt safe inside their unit at night. Again, all the respondents from Atrium on Main in Onehunga reported feeling 'very safe'.

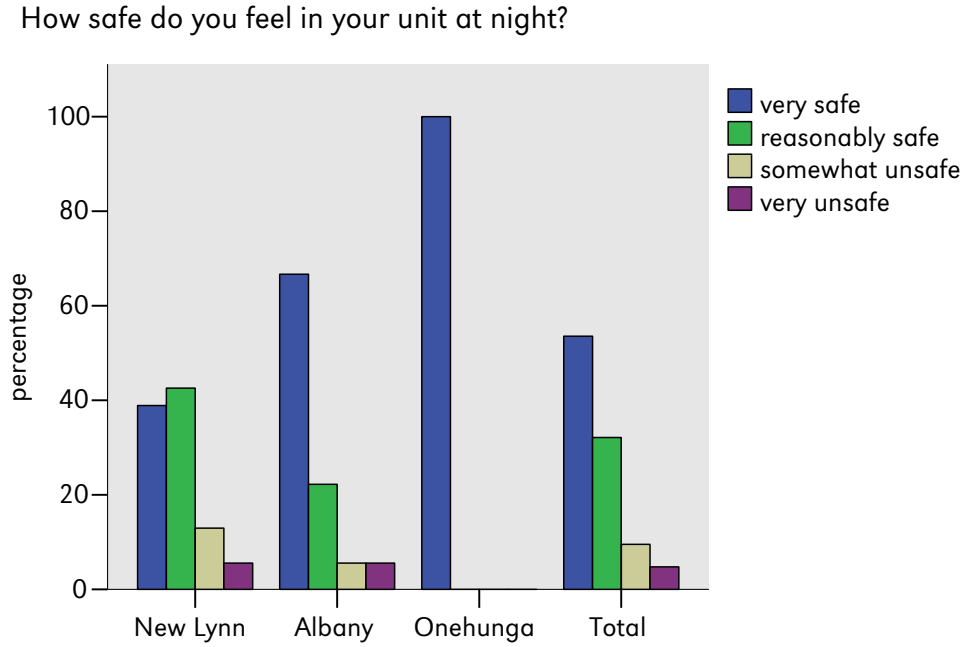


Figure 4.60: How safe respondents feel inside their unit at night

Figure 4.61 below illustrates that the level of safety that respondents feel in their development during the day are very similar to the responses given in Figures 4.59 and 4.60. However, from this point, the safety levels reported by respondents fell.

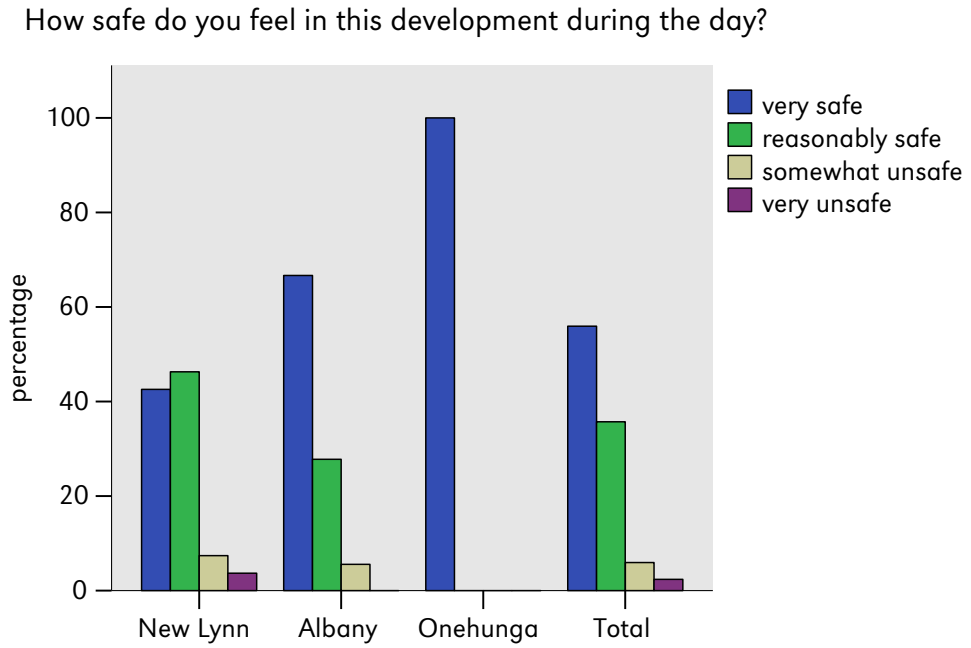


Figure 4.61: How safe respondents feel in their development during the day

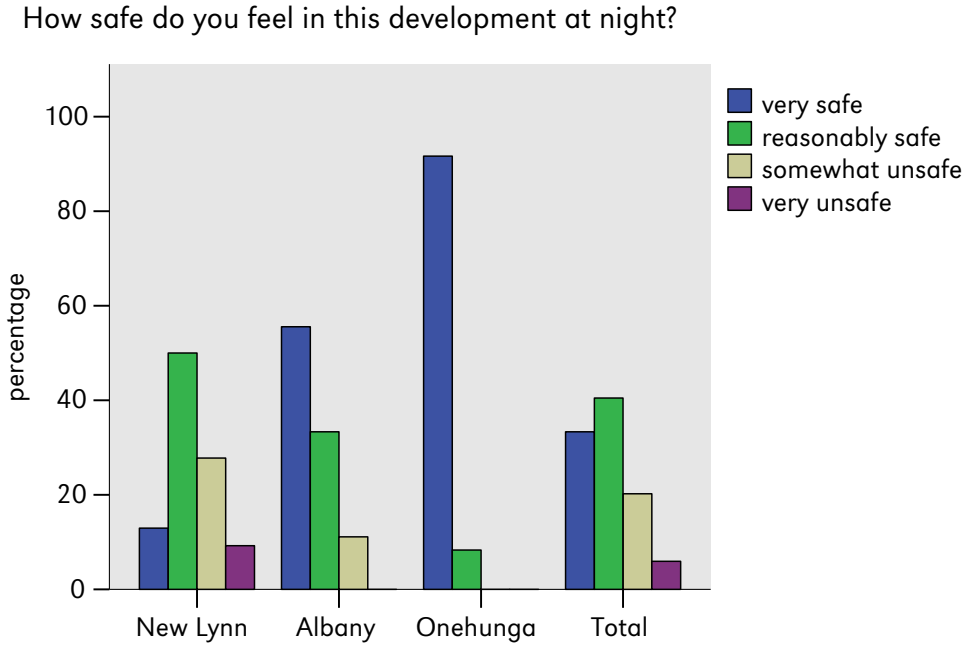


Figure 4.62: How safe respondents feel in their development at night

Respondents in the developments from Albany and Onehunga experienced similar levels of safety in their development at night as they did in their unit at night. However, Figure 4.62 shows that respondents from Ambrico Place feel markedly less safe in their development at night. While 89 per cent of respondents from Albany and 100 per cent of respondents from Onehunga feel either 'very safe' or 'reasonably safe' in their development at night, only 63 per cent of respondents from Ambrico Place stated that they experienced the same level of safety.

Furthermore, respondents from New Lynn stated they felt safe in the development during the day when lots of people were about, but that they would not walk about the development after dark. Some respondents from Albany stated that it was somewhat unsafe for children around the development during the day due to cars coming and going, while other respondents from the same area stated they had no safety issues during the day or night. In general, women were more likely to express a degree of wariness about being out after dark. The Atrium on Main development in Onehunga has swipe card access to the building and key pad access to car parks, and to that extent is secure both day and night. This may explain the high levels of safety reported from respondents from this development.

Figure 4.63 below shows that all respondents from the developments in Albany and Onehunga feel either 'very safe' or 'reasonably safe' in their suburb during the day, while only 81 per cent of respondents from Ambrico Place in New Lynn feel the same way. This response rate of 81 per cent is almost reversed in Figure 4.64 where it is shown that 79 per cent of respondents from Ambrico Place feel either 'somewhat unsafe' or 'very unsafe' in their suburb at night.

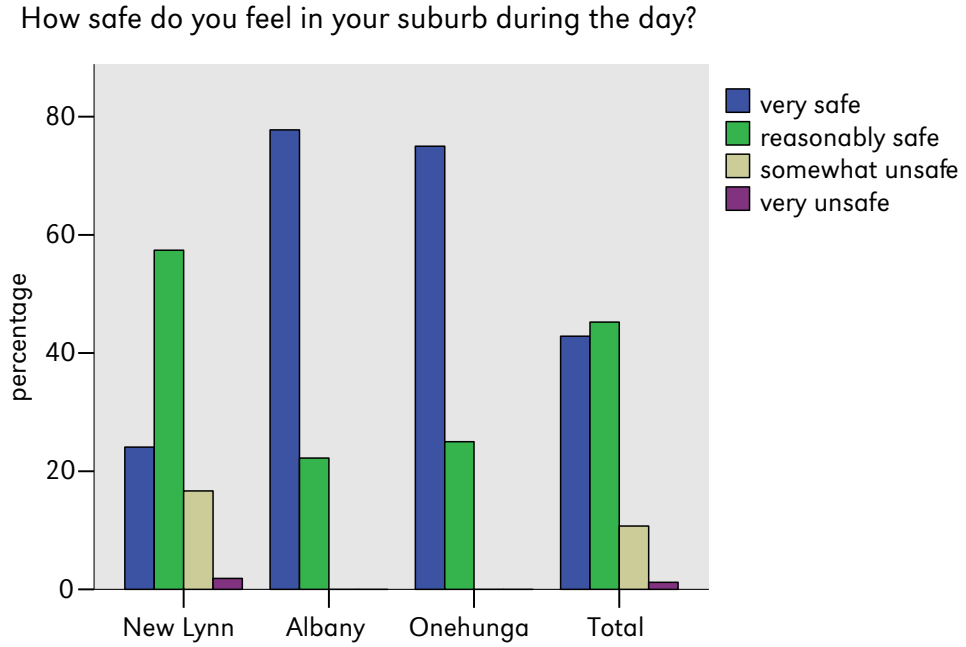


Figure 4.63: How safe residents feel in their suburb during the day

Although public transport was generally seen as safe, some respondents from Ambrico Place reported they would not use public transport at night as, despite the new transport centre, there were still elements of criminal behaviour, misconduct, and loitering. Another respondent from Ambrico Place stated they would not go out alone at night.

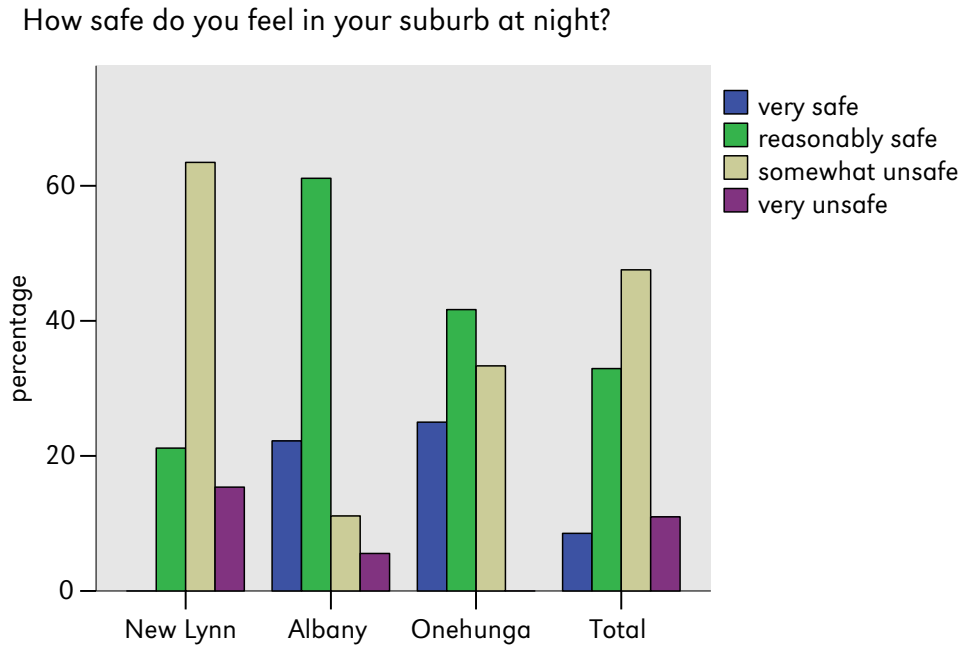


Figure 4.64: How safe respondents feel in their suburb at night

As well as illustrating the high proportion of residents in Ambrico Place who do not feel safe in their suburb of New Lynn at night, Figure 4.64 also shows a drop in reported feelings of safety from respondents in Atrium on Main in Onehunga. Though none of the respondents from this development stated they felt 'very unsafe' in their suburb at night, some respondents indicated they were more aware of the need to be careful at night, particularly during the later hours, and towards the Motorway and wharf end of Onehunga. One resident from Atrium on Main stated she would not walk home from the train after dark.

As we saw above in our discussion of community, respondents' experiences of safety and security are tied to their sense of community and the way in which they feel that their neighbours look out for each, and operate as a 'second pair of eyes' when children are playing in around the development, or when a home may be unoccupied while the occupants are on holiday. This sense of neighbours looking out for each other was particularly evident in Ambrico Place, and might be explained by the higher number of retired residents who are home during the day. Despite this strong sense of community and neighbourliness in Ambrico Place, lower levels of feelings of safety were reported in comparison to respondents from the developments in Albany and Onehunga. One factor that likely explains these lower levels relates to the high levels of dissatisfaction expressed by Ambrico Place residents regarding lack of secure car parking, and the need for residents to park their cars outside their development on the public road. The following section on transport reports on incidents such as vandalism of cars, theft from cars, and theft of cars from around Ambrico Place, which have left residents from this area fearing not so much for their personal safety, but for the safety of their possessions.

TRANSPORT

As we saw in Chapter 2, an important aspect of smart growth policies is situating high-density housing close to public transport. The hope is that it will encourage people to make greater use of public transport, and contribute to overcoming Auckland's traffic problems. This section reports on questions about car ownership and use, and use of and views about public transport.

Car ownership and use

While most households in the three study sites own one or two cars, some households in Ambrico Place in New Lynn owned three or four cars, and a few owned none (Figure 4.64). In comparison, all those interviewed in the developments in Albany and Onehunga had at least one car per household, but no more than two cars per household. The five respondents in Ambrico Place who did not have a car in their household were asked why they did not have a car. Multiple responses were given to this question: not needing a car (33 per cent of responses), not being able to afford a car (22 per cent), not knowing how to drive (22 per cent), poor eyesight (11 per cent) and difficulty with speaking English (11 per cent).

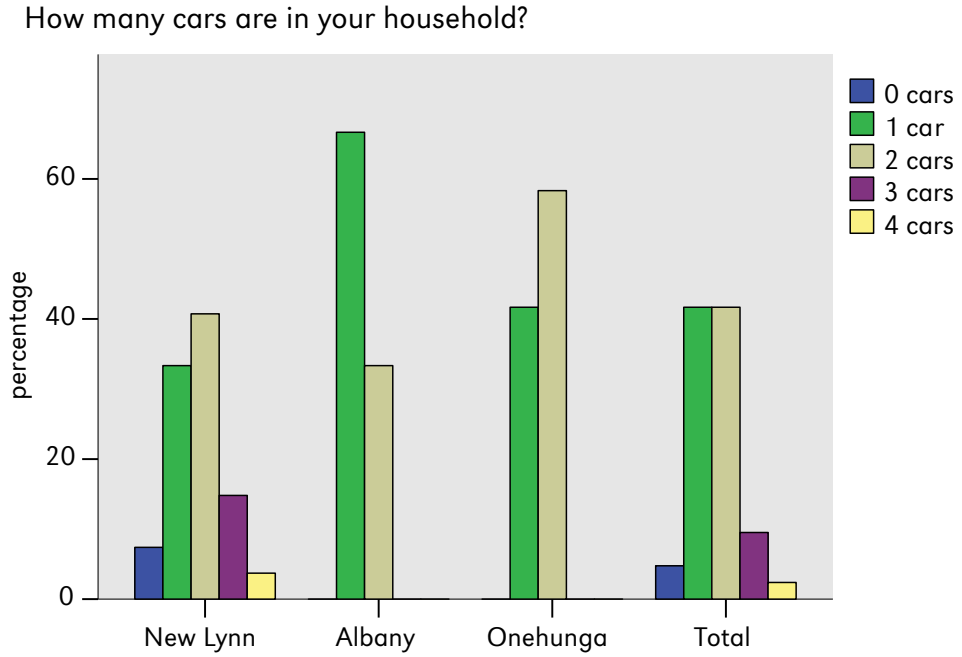


Figure 4.64: Number of cars per household

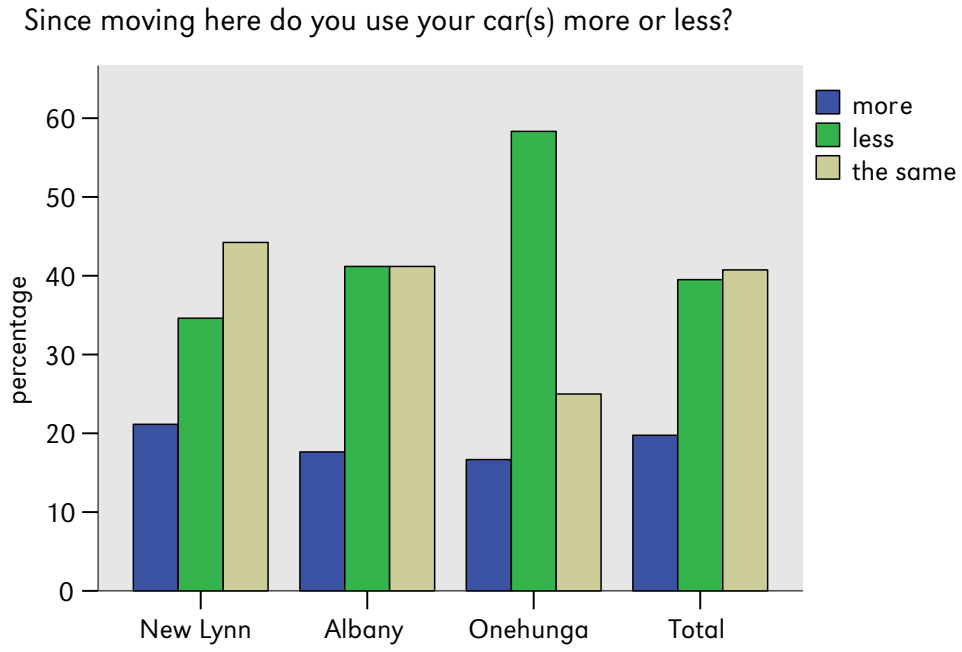


Figure 4.65: Use of car since moving to current residence

Interviewees were also asked whether they used their car more, less or the same since they had been living in their current residence (Figure 4.65). Overall, 20 per cent of respondents reported that they used their car more, while about 40 per cent of respondents stated that they used their car less (39 per cent) or the same (41 per cent). Nearly 60 per cent of the respondents in Atrium on Main reported using their car less.

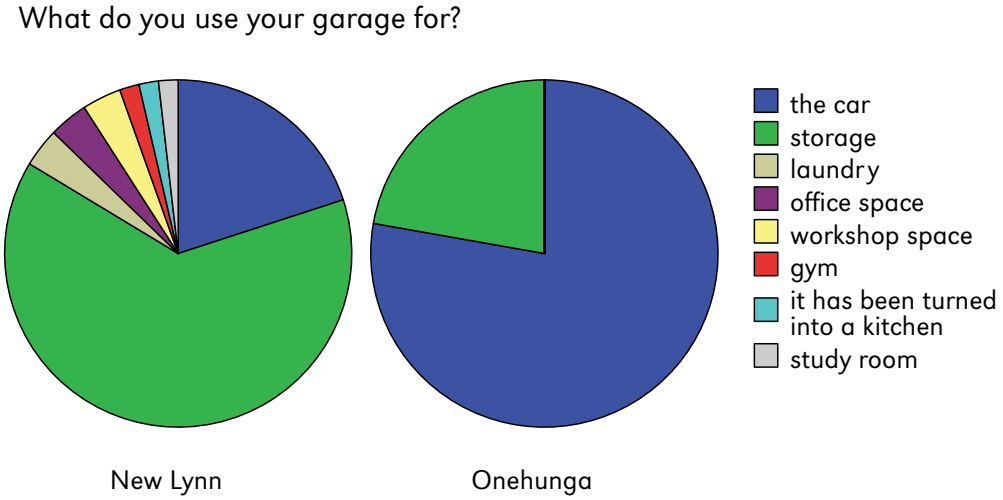


Figure 4.66: Use of garage (The Ridge and Masons developments in Albany do not have garages or carports in their complexes)

Interviewees were also asked whether they had a garage or carport as part of their unit. Over 90 per cent of respondents from Ambrico Place reported having a garage or carport, and 75 per cent of respondents from Atrium on Main in Onehunga. There were no garages or carports at the Albany developments. The 2001 Ambrico Place research had revealed that the garage was not always used for car parking, but for storage or other purposes. In the present research, responses to the question about what the interviewee's garage is used for (Figure 4.66) revealed that residents' garages in Ambrico Place are primarily used for storage (64 per cent) rather than for parking their car (20 per cent).

Less common responses included using the garage as a laundry, office space, workshop space, gym, and study room. One respondent reported that their garage had been converted into a kitchen. In comparison over three quarters of the respondents from Atrium on Main used their garage or carport for parking their car (78 per cent), with the remaining 22 per cent using it for storage. The manner in which residents' garages or carports are used has a bearing on car parking in general. In the following sub-section we report on respondents' satisfaction with car parking in and around their developments.

Car parking

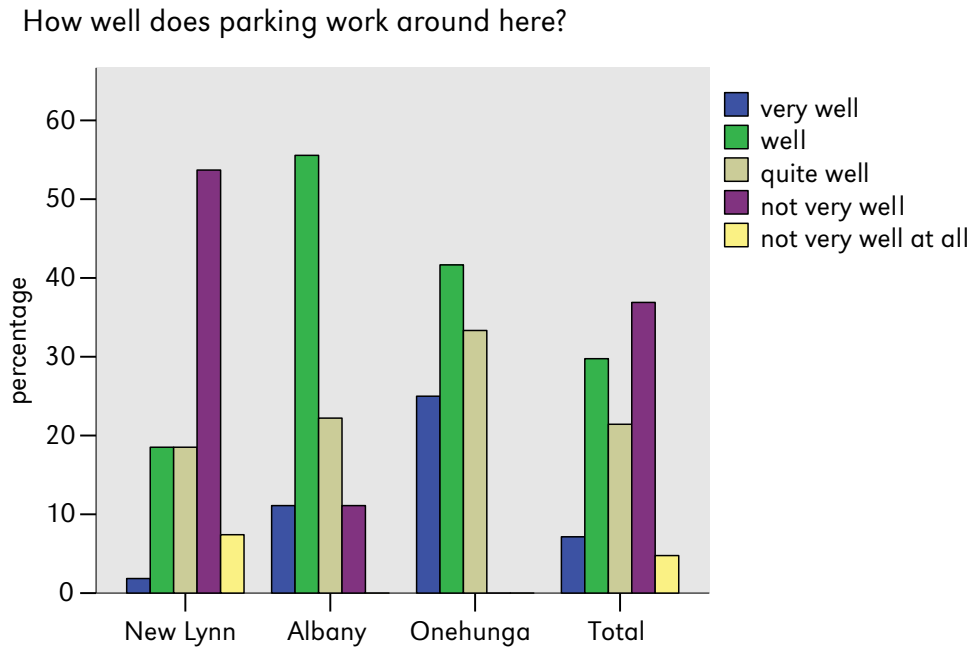


Figure 4.67: How well parking works

Many New Lynn interviewees reported that car parking does not work well for them. Here, 54 per cent of respondents stated that car parking did not work very well, while a further 7 per cent stated it did not work very well *at all.* This compares to responses from Atrium on Main where all the respondents reported that car parking worked 'very well', 'well', or 'quite well'. In turn, 88 per cent of interviewees from the Albany developments reported that car parking worked 'well' or 'very well', with the remaining 11 per cent reporting it did not work 'very well'. To gain a greater understanding on the matter of car parking, the interviewees were also asked whether car parking was an issue for them in particular.

As Figure 4.68 below illustrates, car parking for the individuals interviewed (in Ambrico Place in particular) was less of a problem than for the development or area in general. For instance, while a total of 45 per cent respondents from all three areas reported that parking did not work 'very well' or 'very well at all' (Figure 4.67), only 30 per cent of respondents reported that parking for an issue for them personally (Figure 4.68).

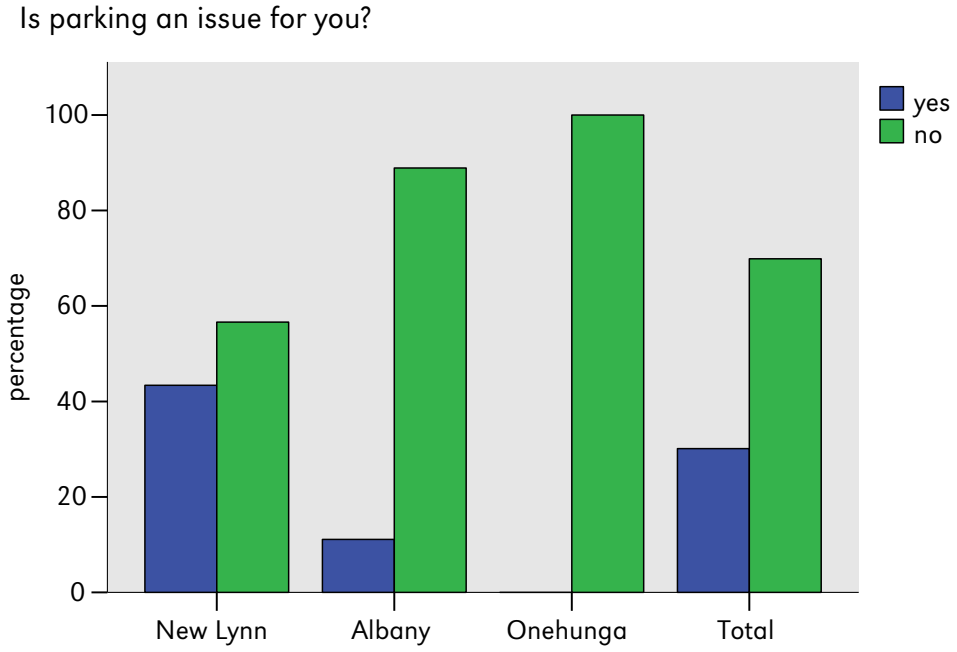


Figure 4.68: Whether parking is an issue for the respondent

The differences in reported levels of satisfaction in Figures 4.67 and 4.68 can be partly explained by responses given to the question as to *why* parking is an issue. Here, respondents from Albany who reported that parking was as issue, stated that they found it difficult to find a car park when returning from work. Respondents from Ambrico Place gave a greater variety of reasons including the reason above stated by respondents from Albany, as well as not enough car spaces in general (33 per cent of responses). This resulted in residents not being able to park their cars within the development itself, and therefore being required to park their cars outside on the street where break-ins, vandalism, and theft of cars had occurred.

Respondents from Ambrico Place also stated that people visiting residents in Ambrico Place sometimes found it difficult to find a car park, and that vehicles used by building contractors working on the houses with leaky building syndrome, occupied residents' car parking spaces. Thus, while car parking might not be a problem for the respondents themselves, it was a problem for their visitors. These issues were also reported on in a further question which asked interviewees why they thought parking worked or did not work, shown in Figures 4.69 and 4.70 below.

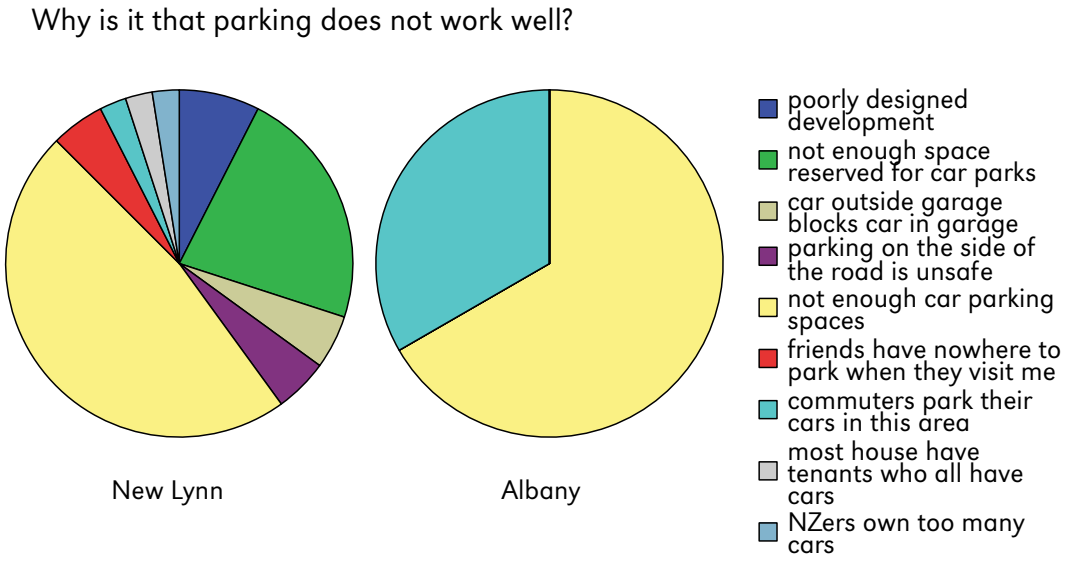


Figure 4.69: Why car parking does not work well (no graph for Onehunga was compiled for the responses to this question as only one respondent replied to this question)

While 44 responses were made in relation to the question of why parking did not work well, 42 responses were given as to why parking *did* work well. Figure 4.70 below lists these reasons. This includes responses from Atrium on Main residents in Onehunga who reported high levels of satisfaction with parking.

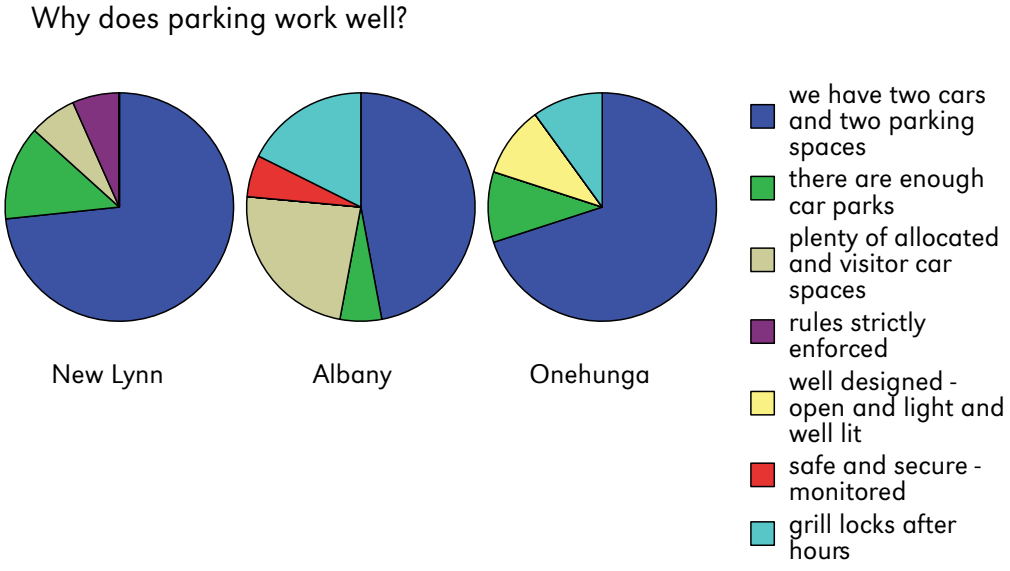


Figure 4.70: Why car parking does work well

Transport used to reach local services and amenities

Whilst the next section addresses the topic of local amenities and services in greater detail, this sub-section addresses the manner in which residents find their way to these amenities and services. This is followed by a discussion of methods of transport for travel to work and school.

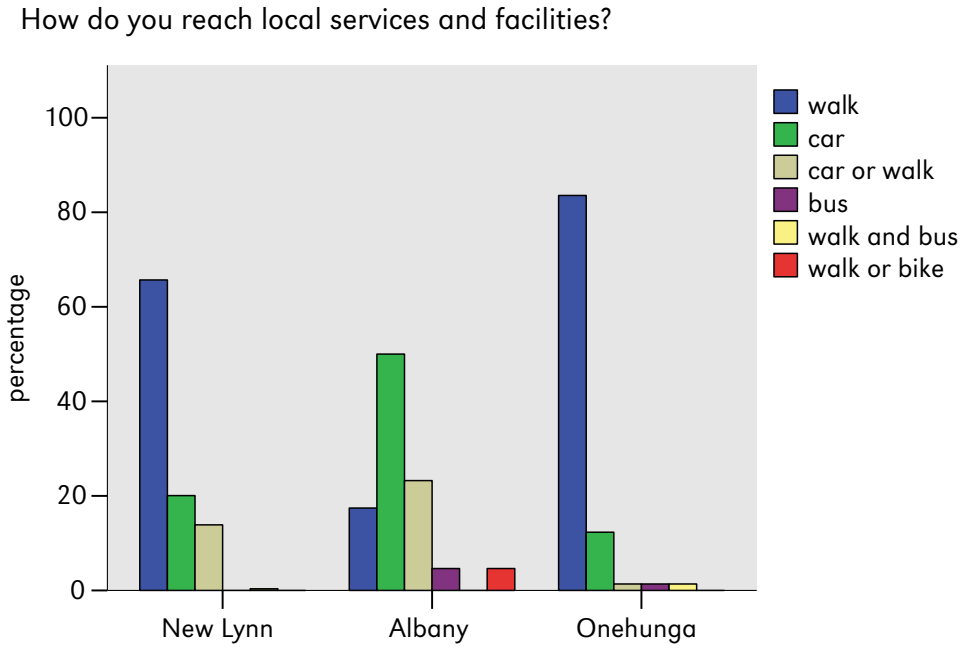


Figure 4.71: Mode of transport used to reach local services and facilities

Figures 4.71 (above) and 4.72 (below) illustrate two different kinds of local amenity. Figure 4.71 refers to services and facilities such as the local gymnasium, medical services, personal services (e.g. hairdressers), cafes and restaurants, kindergartens and day-care centres, laundromats, banks and ATMs, dairies, and government services (e.g. Work and Income). Figure 4.72 reports on public amenities such as the parks, playgrounds, library, and community centres. Walking is the most common way in which respondents reach these local amenities, with the car also commonly used. However, Albany residents more commonly use their car to reach local services and facilities, rather than walk. As discussed in other sections, while the location of services and facilities for the Albany developments are close by, they are not easily accessible on foot, since a direct route requires the walker to negotiate major roads and busy intersections. Residents from Albany also accessed services and amenities in Browns Bay and Takapuna (including beaches), which often necessitated travelling by car or bus.

When asked about their use of local services and facilities, places and spaces, interviewees were specifically asked why they did walk or did not walk to these areas. The most common response to this question was that they would take their car if they had a lot of shopping or other items to carry. Other responses included 'if it was raining', if they were also on their way further afield, 'for safety' or 'at night', if they had their children with them, needed to get somewhere quickly, or were with a group of others.

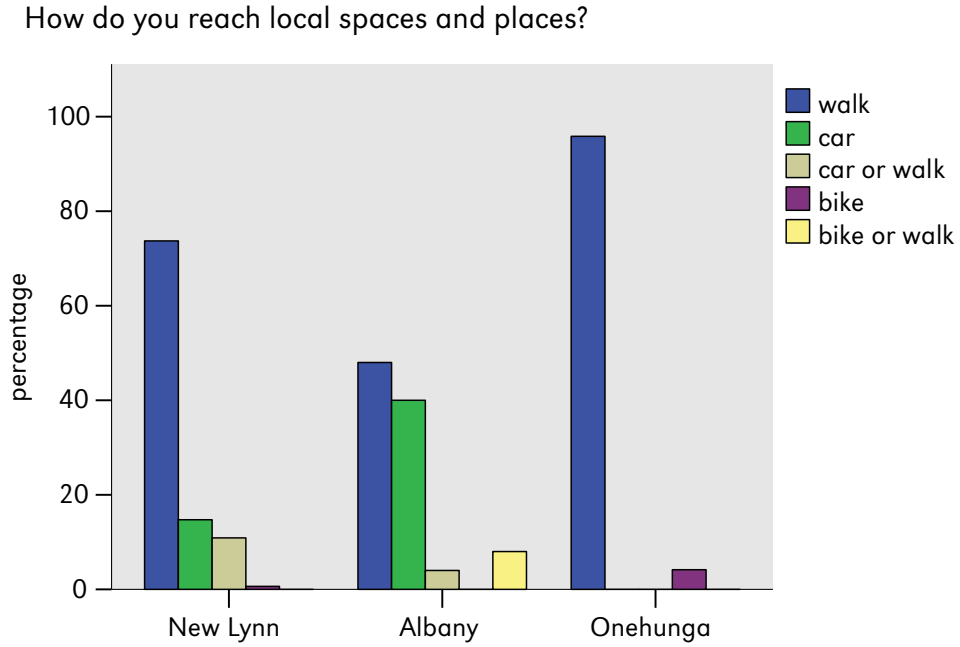


Figure 4.72: Mode of transport used to reach local places and spaces

Transport to school and work

While the children of interviewees mostly walked or used the bus to reach school, their parents more commonly used the car to get to work. Figures 4.73 and 4.74 below provide a snapshot of these two groups of residents. As there were no children living in the households of interviewees from the Onehunga development, Figure 4.73 shows the mode of transport used by children from New Lynn and Albany only. School children living in the Albany complexes either walked or took the bus to and from school, while school children living in Ambrico Place in New Lynn were more likely to be taken to and from school by car. Respondents in Ambrico Place told us they were not happy with the quality of schools in New Lynn, and therefore sent their children to schools in other areas. In Albany, respondents were happy with the quality of local primary and high schools in their area, such as Pine Hill School, which is just across the road from the development, and Rangitoto College, which is a short bus ride away.

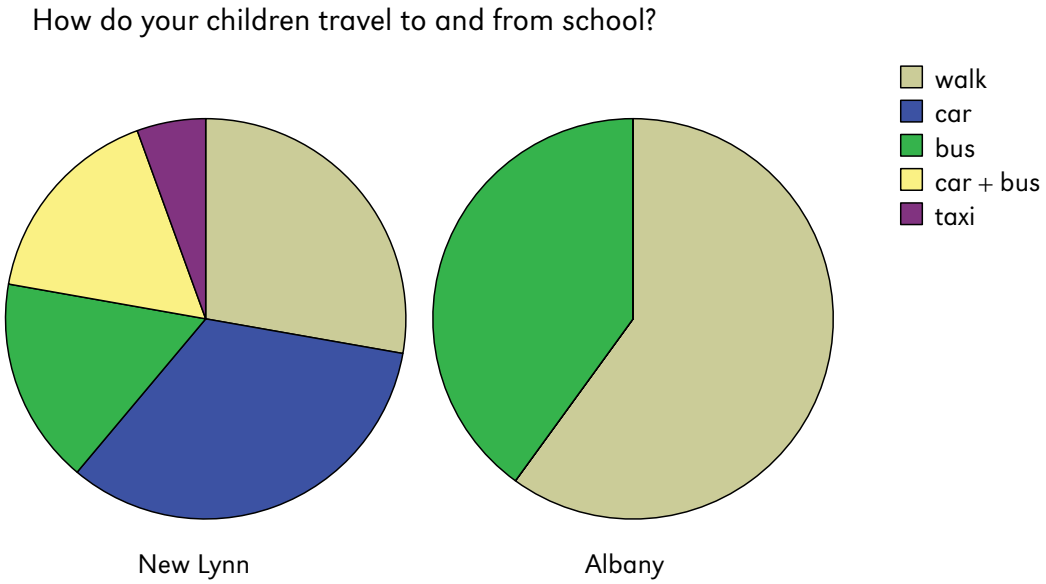


Figure 4.73: Mode of transport used by children to reach school

Many respondents travel to work by car (Figure 4.74), although their workplaces are mostly readily accessible by public transport, such as the central city (Figure 4.75).

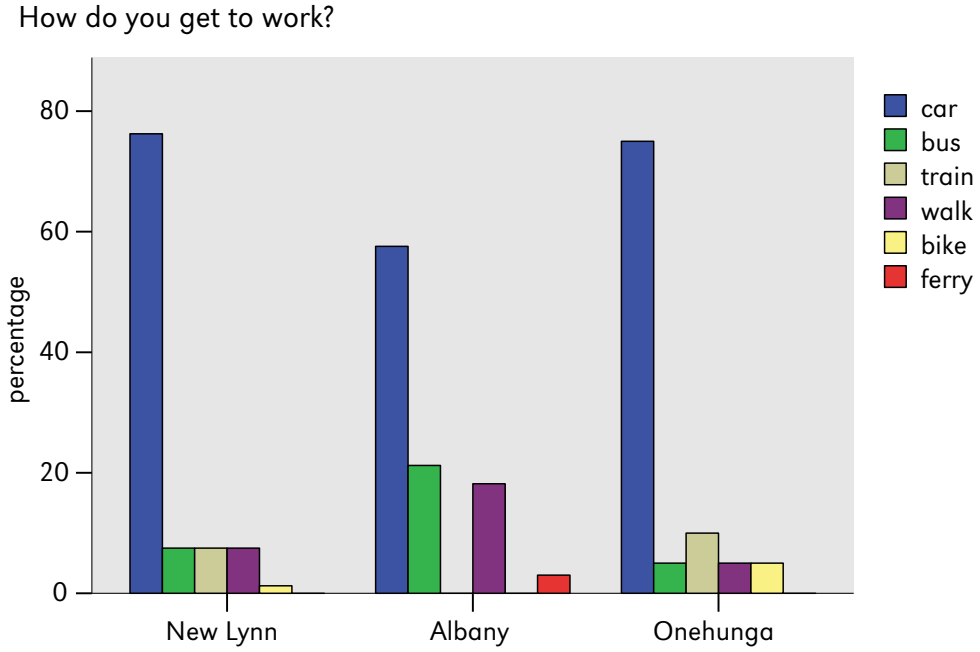


Figure 4.74: Mode of transport used by adults to reach work

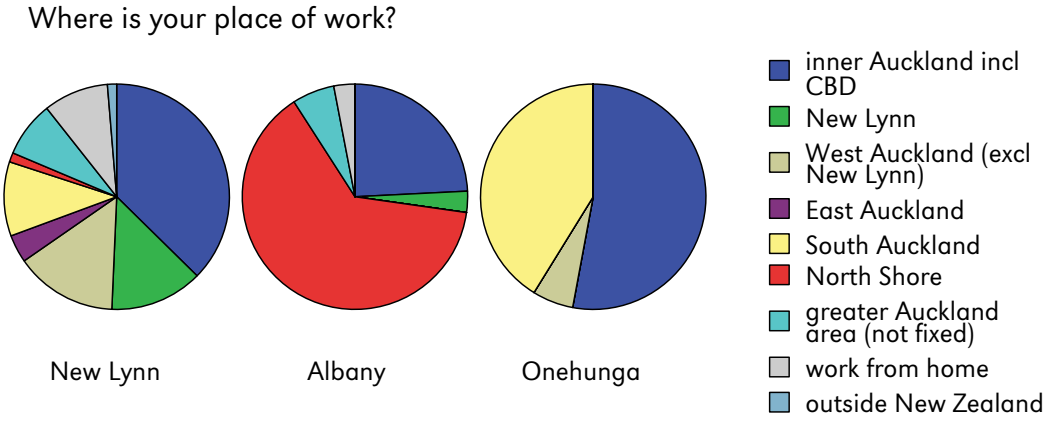


Figure 4.75: Work location

Interviewees from Albany were more likely to work in their own area (North Shore) in comparison to those from New Lynn or Onehunga. Many respondents from Onehunga work either in the central city area or in South Auckland, which borders Onehunga with easy access by Motorway. The workplaces of New Lynn respondents are more widely dispersed.

Use of public transport

Finally, we explored the use of public transport, and comment on respondents' statements about their level of use and their opinions of public transport. We asked interviewees to tell us whether they used public transport, how often, what form, what they used public transport for, whether or not they had used public transport in their previous home, and what would encourage them to use public transport more often. We also asked them to tell us whether they regard public transport as being affordable, reliable, convenient, and safe.

We began by asking whether or not our participants used public transport. Figure 4.76 below shows high levels of public transport use by all residents. Respondents from Ambrico Place in New Lynn cited the upgraded transport centre in New Lynn, and also the fact that Ambrico Place is home to a high number of retirees (compared with the Albany and Onehunga developments).

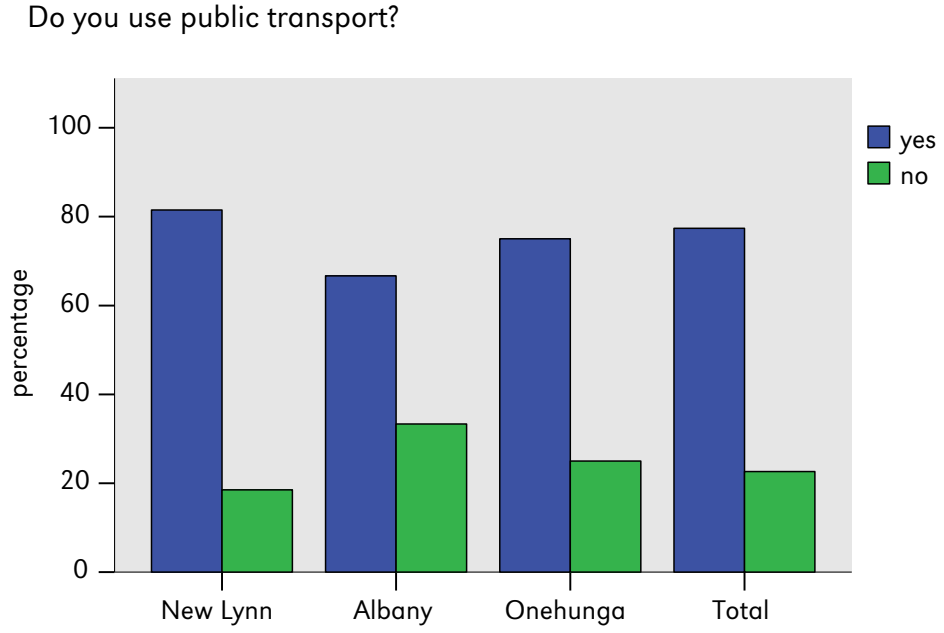


Figure 4.76: Use of public transport

Next we asked 'What forms of public transport do you use?' The responses reflected the public transport options available locally. Respondents from New Lynn were more likely to use both the train and bus (Figure 4.77), while the majority of Albany respondents reported that the bus was the main form of public transport they used (since rail is not available on the North Shore). One respondent from Albany stated they used the ferry as a form of public transport. Presumably this respondent takes a car or bus to the nearest ferry, since Albany is landlocked. Residents from Onehunga were much more likely to use the train than the bus.

What do they use public transport for? Most respondents told us they use public transport to travel to the central city area (Figure 4.78), while a much smaller number stated that they used public transport to travel to work (5.3 per cent of respondents from New Lynn, 19 per cent from Albany and 7 per cent from Onehunga). It is possible that respondents who travel to the city via public transport also travel to work there, but a further question which asked interviewees how often they used public transport suggests this may not be the case. Here, (Figure 4.78) of the 58.3 per cent of respondents (i.e. 49 respondents) who reported using the bus, only 20 per cent (i.e. 10 respondents) reported using the bus nearly every day. Likewise, Figure 4.79 shows that of the 52 per cent of respondents (i.e. 44 respondents) who use the train, only 14 per cent (6 out of the 84 respondents) used the train almost every day.

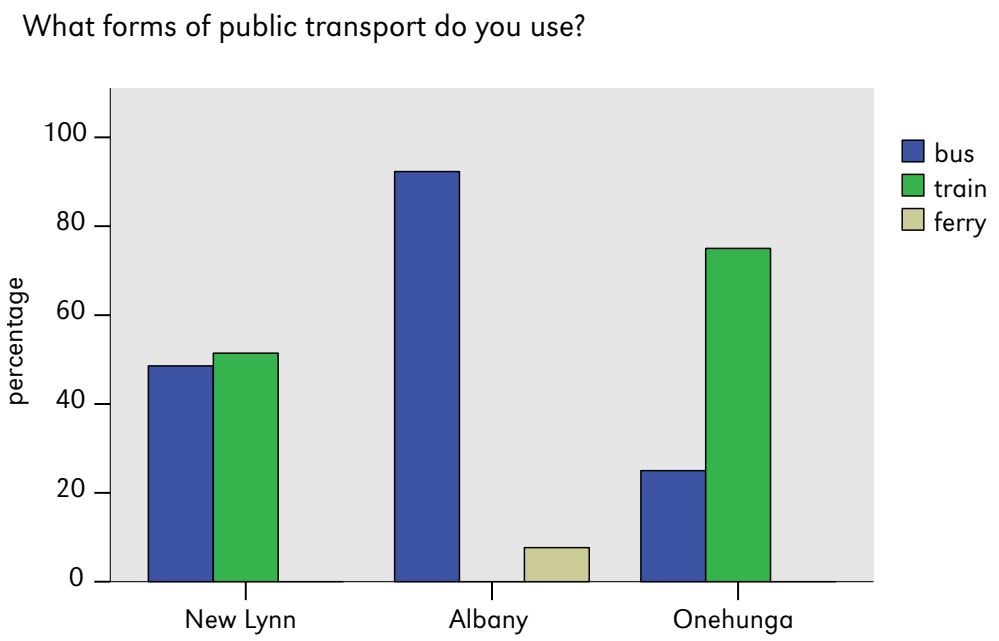


Figure 4.77: Use of public transport

How often do you use the bus?

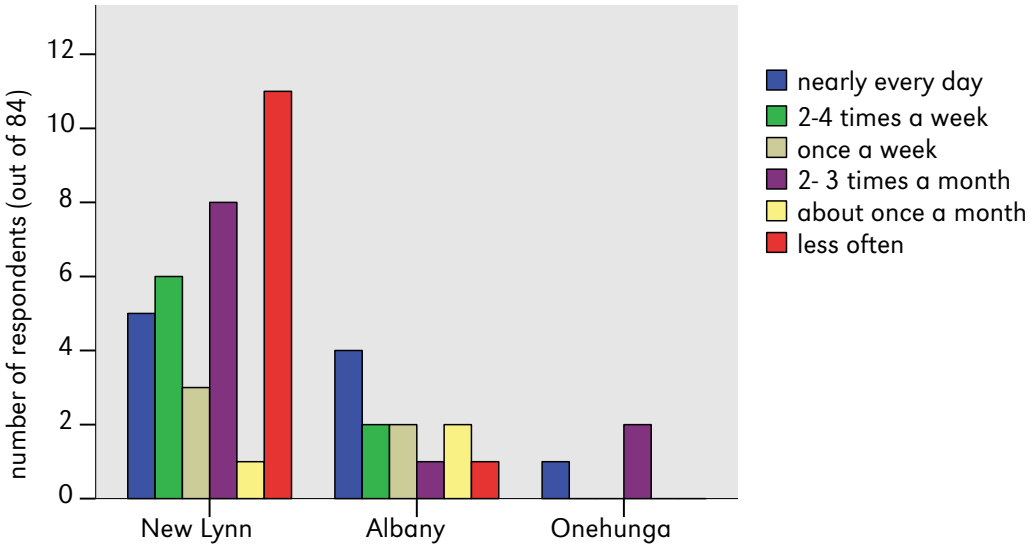


Figure 4.78: Frequency of bus use

How often do you use the train?

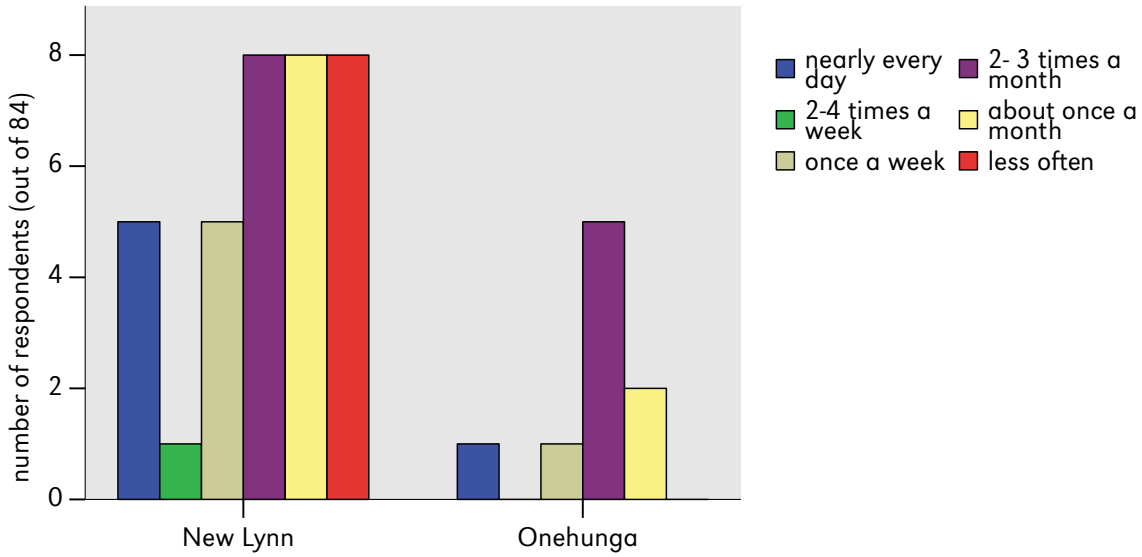


Figure 4.79: Frequency of train use

Patterns of current bus and train usage are similar to respondents' reported use of public transport in the last place they lived. Though only 36 of the 84 respondents reported using the bus previously, (compared to 49 respondents who currently use the bus), more respondents (15) reported using the bus every day previously, compared to the 10 respondents who currently use the bus nearly every day. In terms of train usage, far fewer respondents reported using the train in their previous residence (15 respondents, compared

to 44 respondents who currently use the train). However, 6 respondents reported using the train nearly every day, in their previous residence; the same number of respondents who reported using the train nearly every day at their current residence.

We probed further. 'What would encourage you to use public transport more often?' Of the 106 responses given to this question by 63 respondents (Figure 4.80), 41 per cent of the responses referred to the need for a more frequent service, with better routes and connectivity. A further 33 per cent of the responses mentioned cheaper fares, and 9 per cent referred to the need for public transport to be quicker and more convenient than using a car. A smaller number of responses related to factors such as greater reliability, a rise in petrol prices, and respondents' workplaces being closer to a bus or train stop.

In the final set of questions relating to public transport, we asked respondents to rate the degree to which public transport is affordable, reliable, convenient, and safe. Their responses are set out in Figures 4.81 to 4.84 below.

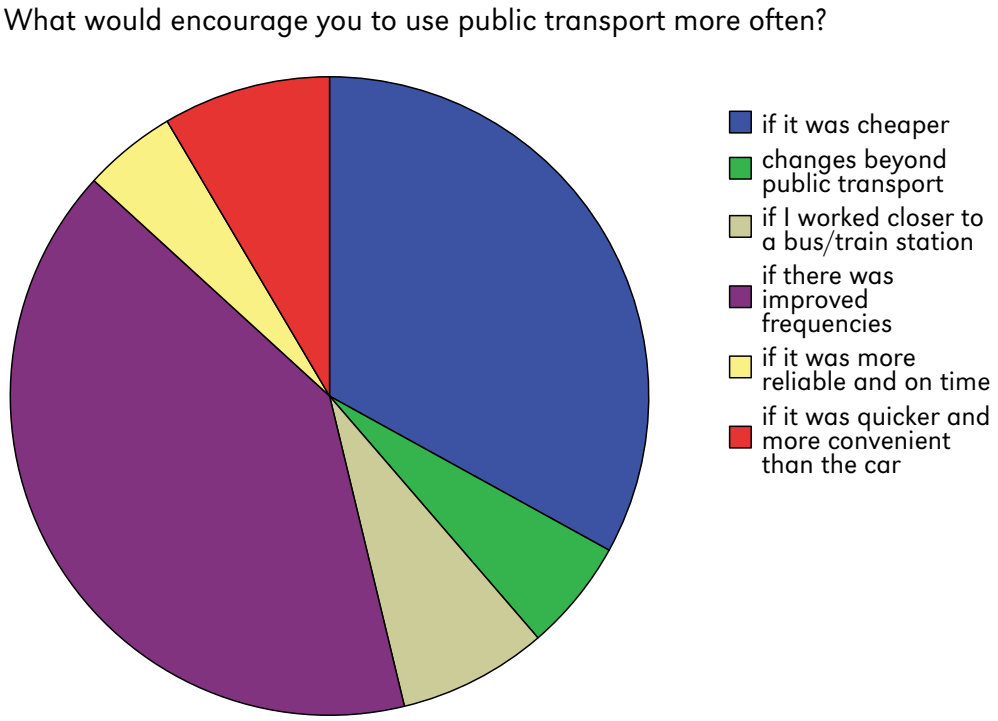


Figure 4.80: What would encourage residents to use public transport more often?

All 84 respondents answered the four questions that required them to rate public transport. Figure 4.81 below reflects the responses given in Figure 4.80, with regard to cheaper fares. More than half of respondents did not agree that public transport is affordable.

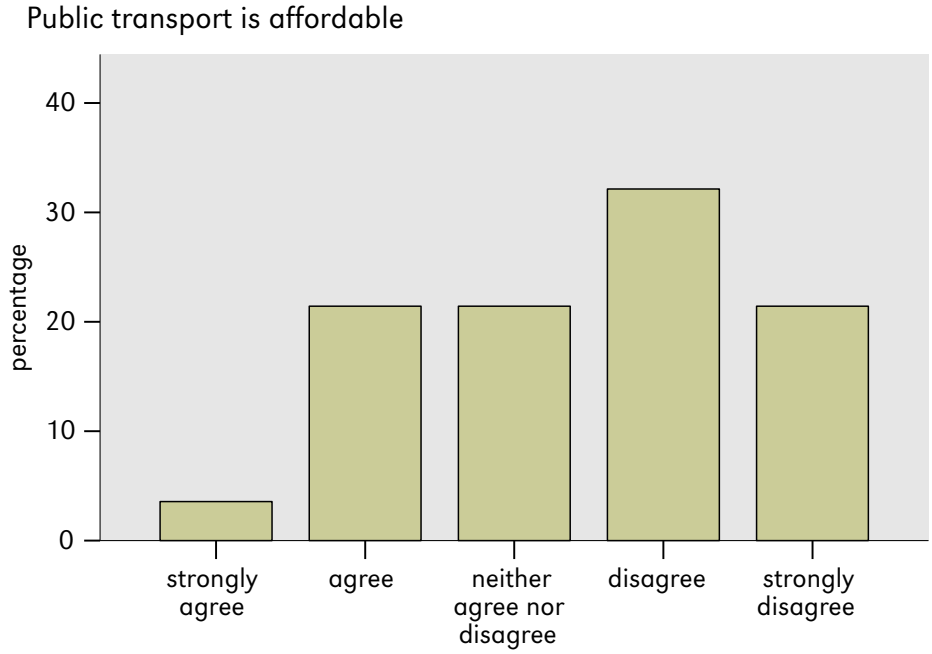


Figure 4.81: Residents' rating of the affordability of public transport

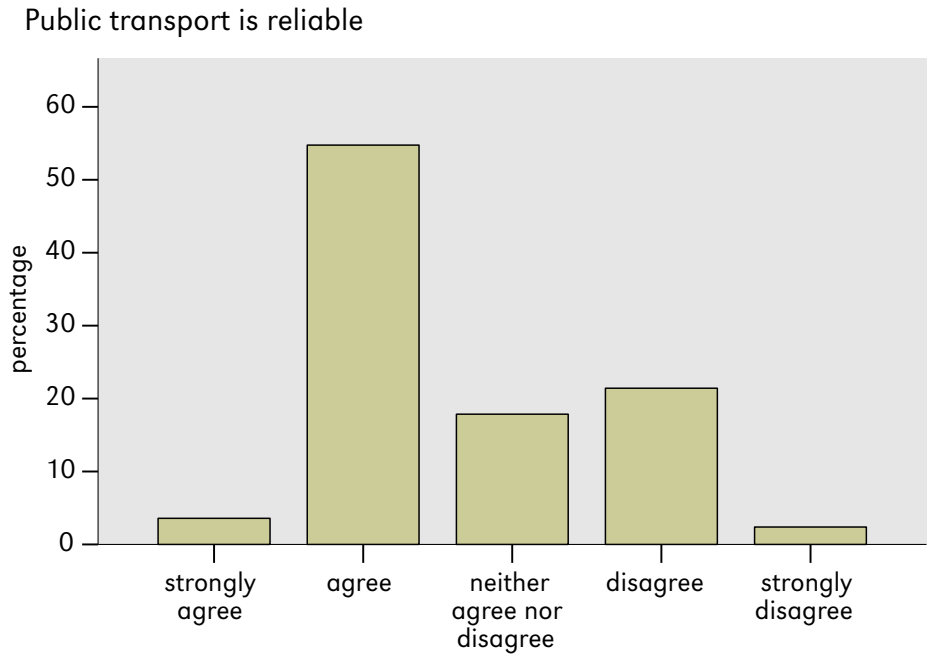


Figure 4.82: Residents' rating of the reliability of public transport

Figures 4.82 and 4.83 provide similar ratings with regard to reliability and convenience, respectively. While 58 per cent of respondents agreed public transport is reliable, 63 per cent agreed it is convenient. Conversely, 20 per cent of respondents disagreed that public transport is reliable and 21 per cent disagreed that it is convenient.

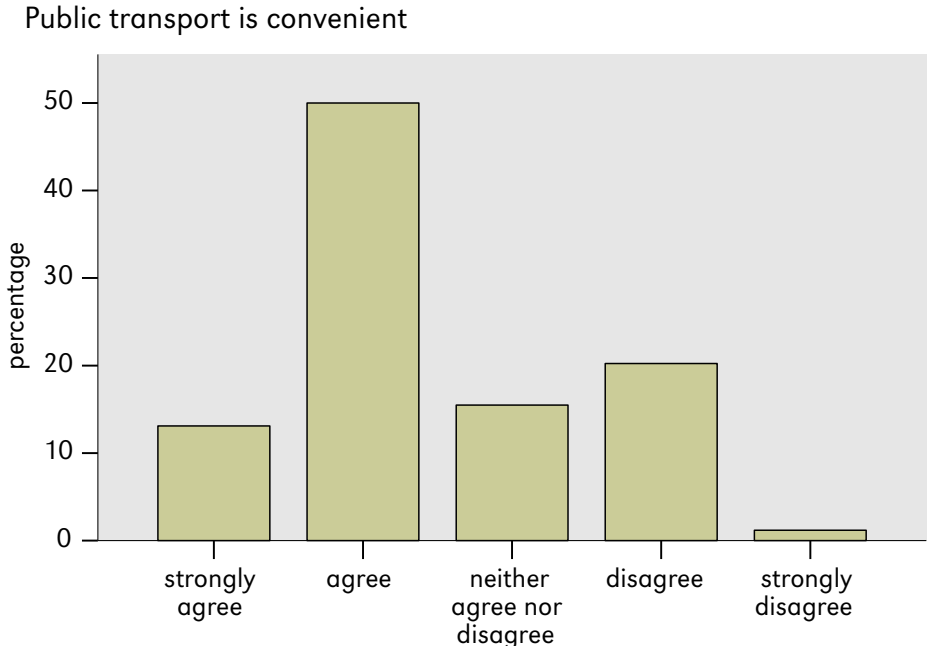


Figure 4.83: Residents' rating of the convenience of public transport

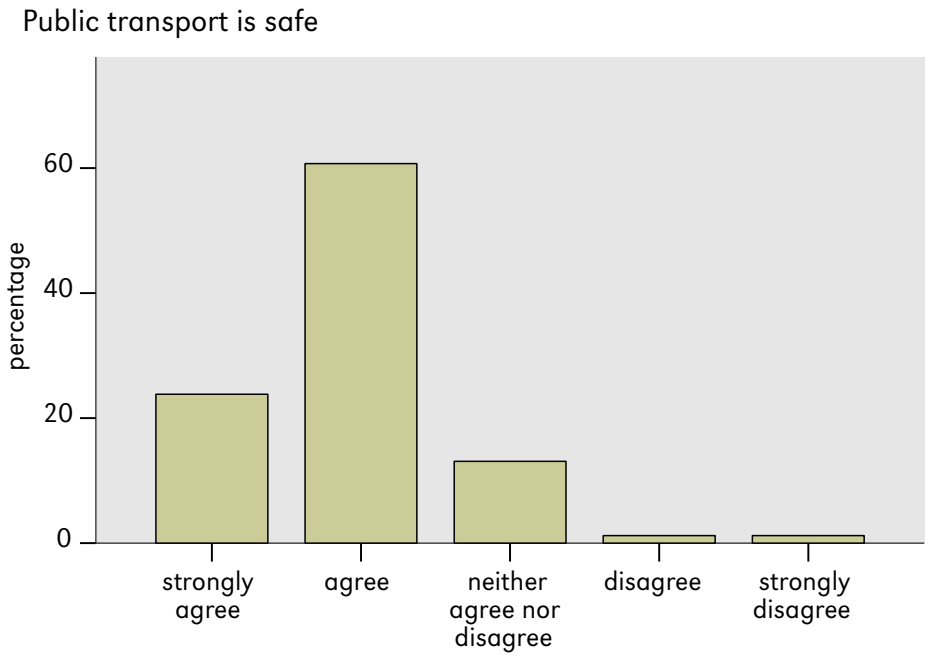


Figure 4.84: Residents' rating of the safety of public transport

Is public transport safe? Almost everyone thought so (Figure 4.84). Only 2.4 per cent of respondents disagreed with this statement. Overall, these ratings of public transport suggest reasonable satisfaction regarding reliability, convenience and safety, but a majority view that public transport is not affordable. When we asked interviewees what would encourage them to use public transport, a third of responses related to the need to lower fares.

This section on transport has traversed the topic areas of car ownership and usage, car parking, modes of transport to school and work, and the use and perceptions of public transport. The high level of car use stands out. It connects in an important way with each of the topics covered in this section, from issues of car parking (availability and security) to relatively low use of public transport.

Is car parking a more important amenity for those who live in intensive housing than the availability of public transport? While there is no doubt that public transport is used by many residents of intensive housing, the low frequency of its use suggests that it is regarded as a 'nice to have', rather than a 'must have'.

AMENITIES AND SERVICES

Intensive housing planning in the Auckland Region pays attention to ensuring easy access for residents to local open spaces, services and facilities. In addition, many medium-density developments offer a range of facilities on site. This section describes the various on-site amenities and services our sample of residents has access to and the use they make of them. Local services and amenities are also described, as is their use and mode of access.

None of the developments have gym facilities on-site. However, Ambrico Place is situated close to the New Lynn gym; the Albany sites are in walking distance of the gym at the nearby Westfield Mall, and Atrium on Main has a private gym next door. Ambrico Place is the only development that has a tennis court.

Atrium on Main has a swimming pool on site and there is also a public pool nearby. Both New Lynn and Albany residents have some distance to travel to access a public pool. For New Lynn residents the nearest pools are at either Henderson or Mt Albert. As previously mentioned, there was a pool planned for Ambrico Place and residents who bought into Tuscany Towers in the initial stages of the development expected a pool to be built in their development complex. Unfortunately, this amenity never eventuated as the developer ran into financial difficulties.

Atrium on Main has a well-developed BBQ area with a playground close by. Although individual residents in the other two areas have their own BBQs, they do not have shared BBQ areas. Ambrico Place also has a children's playground. Children at the Albany development use the school playgrounds across the road. The nearest area where small children can play at Albany is in the Mall, where there is a children's playground with the usual indoor play equipment provided.

All three developments have shared gardens and green spaces. Ambrico Place also has the Manawa Wetlands adjacent, where people come to walk, children feed the ducks, and people admire the results of the tiling project on the walkways. Ambrico Place also has another attractive area planted with trees that was put in place after the road changes made at what had been the roundabout. The green space at the Albany development is sizeable, but very bare, uneven and sloping, which curtails its use as a children's play area.

Atrium on Main has an internal post-box area and each apartment also comes with a separate good-sized locked storage area external to the unit which can store large pieces of equipment, like wetsuits, surf boards, bikes, and furniture. The Atrium on Main is a gated

development with swipecards for residents, and the parking has keypad entry. Ambrico Place and Albany have no barriers to entry, although vehicle access to 14 Ambrico Place requires a swipe card.

Ambrico Place has a kindergarten on site. At the last visit to the Atrium on Main, the retail spaces at the front entrance remained untenanted, although it was reported that a couple were in the process of setting up an after school care facility in one of these spaces.

All three sites are within walking distance of shopping facilities and are close to public transport hubs. However, the route to walk from the Albany developments to the nearby Westfield Mall is not properly paved. If one has a small child in a pushchair, getting to the Mall is no easy task. To stay on the footpath means crossing the road at least four times. The direct route, a track, still requires a couple of road crossings, but does not require crossing a main road. Access for pedestrian traffic can definitely be improved.

Figure 4.85 shows usage of amenities across all three developments.

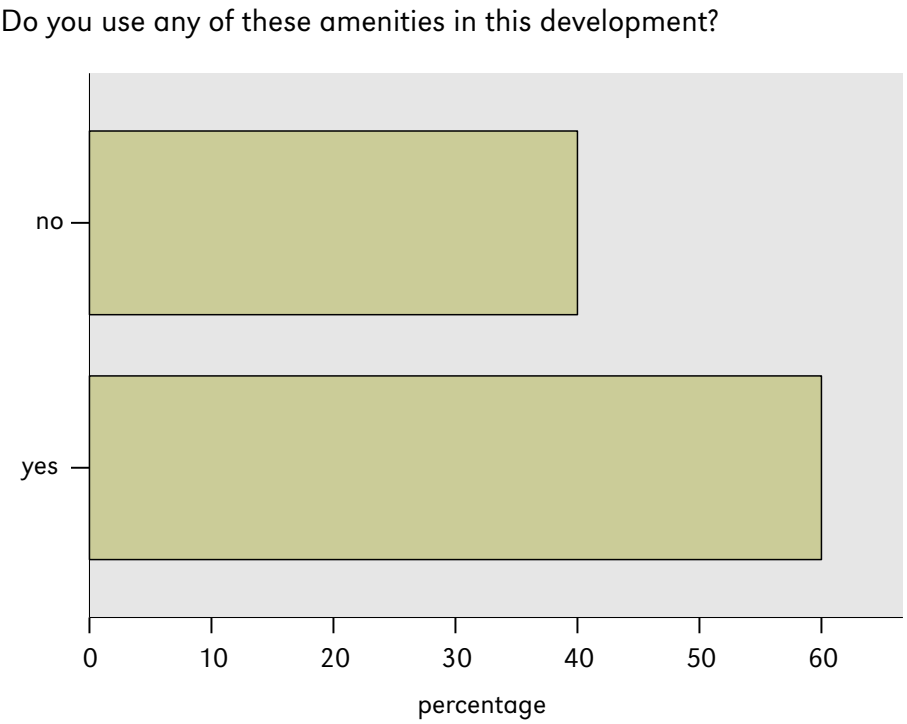


Figure 4.85: Use of amenities in development

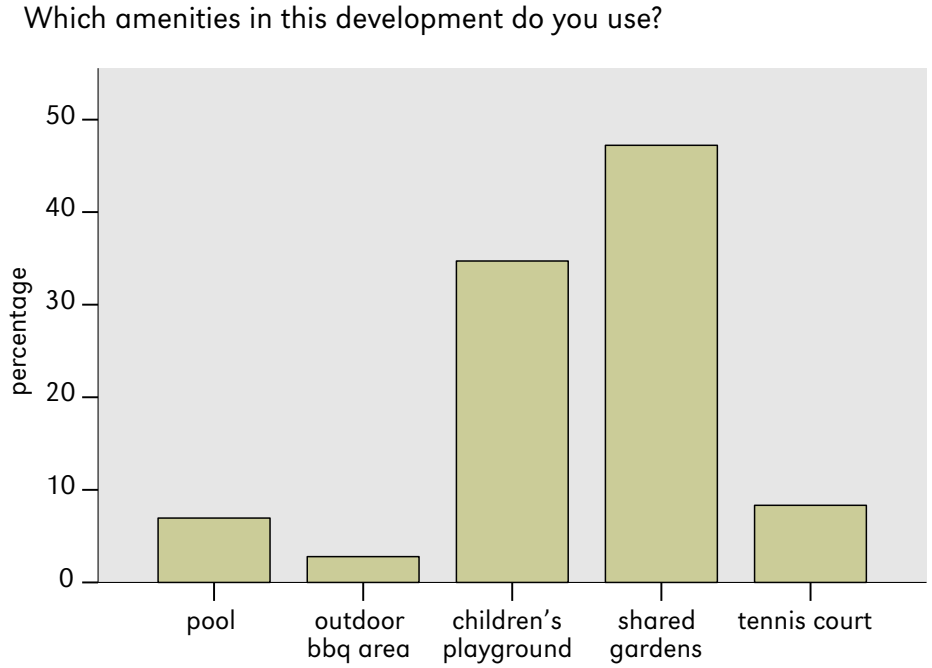


Figure 4.86: Amenities used in development

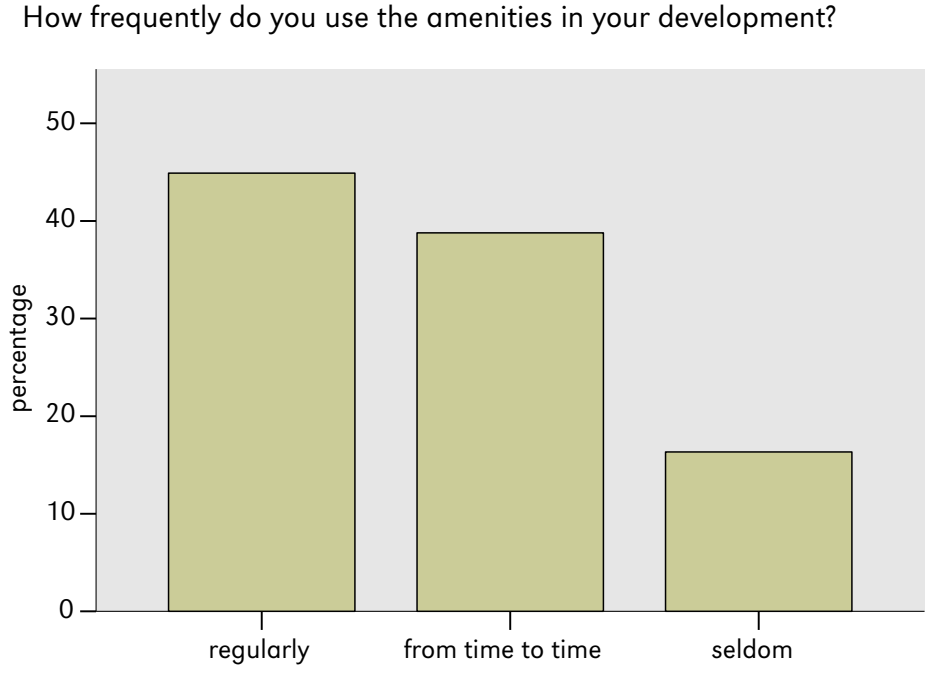


Figure 4.87: Frequency of use of amenities in development

Figures 4.84-4.87 report on residents' use of amenities in their developments.

Albany

Some residents indicated that they were aware of amenities available when they moved in, but were satisfied with was available and did not want to pay more rent for more amenities. Others said a playground for children, or a better play area, was needed. Other facilities that some interviewees would have liked on site were a swimming pool, BBQ area, tennis courts and benches/seating that were sheltered and private. One resident stated that she would use a shared BBQ area more if one were available, rather than have to use her own BBQ on her balcony. Some responses indicated that amenities were not a concern. They were not intending to say for a long time, used facilities off-site and would prefer not to pay more for on-site amenities.

Onehunga

Generally residents enjoyed the amenities at the Atrium on Main, which they said met their needs. However, some residents and temporary residents did not use them. The park area is leased at a significant cost to the development, but this green space is well used, as is the swimming pool, which owners say would add value to their unit if they were to sell.

New Lynn

Some interviewees were disappointed that there was no swimming pool; others expressed disappointment at the lack of play equipment for children and a dedicated space where the elderly people could exercise. Generally, however, residents were pleased with the playground and gardens provided, saying they were close to their units, clean and well maintained. A few comments indicated that if there were more amenities the costs would be higher. Hence, they were satisfied with what was already provided. While there was the odd complaint, such as the tennis court being too small and too close to the houses to use, and that the BBQ area could not be used, generally, the playground and gardens worked and were well maintained and appreciated.

Neighbourhood amenities used

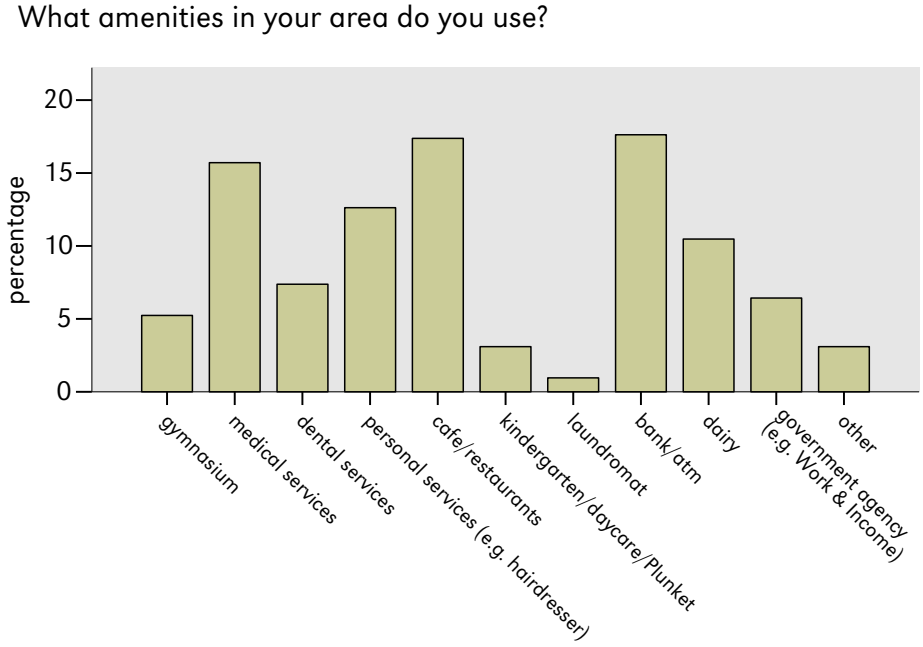


Figure 4.88: Use of amenities in neighbourhood

Albany

Most of the neighbourhood amenities Albany residents needed were accessible locally in Albany or in nearby Browns Bay; although one respondent stated that specialist medical services were not available in the area. Some interviewees indicated they liked the proximity to parks and beaches. However, a lack of entertainment and live music options for younger adults was identified.

Onehunga

Residents generally responded that everything they needed or wanted was available within the area and in walking distance. However, one interviewee noted he accessed leisure activities near his workplace; another noted the lack of a local movie theatre; and one said the area offers little for teenagers. Despite these comments the area has plenty of retail and other services for daily needs although, as noted, the retail space at street level below the development was not leased, giving the entry an uninviting appearance.

New Lynn

A few respondents expressed dissatisfaction with amenities, including being very concerned at the development of a 'red light area' in New Lynn. Residents said they would have liked a movie theatre and swimming pool nearby. However, generally the responses indicated a satisfaction with the amenities and services provided. Access is convenient by car or on foot.

Figure 4.89 shows the form of transport used to access local amenities.

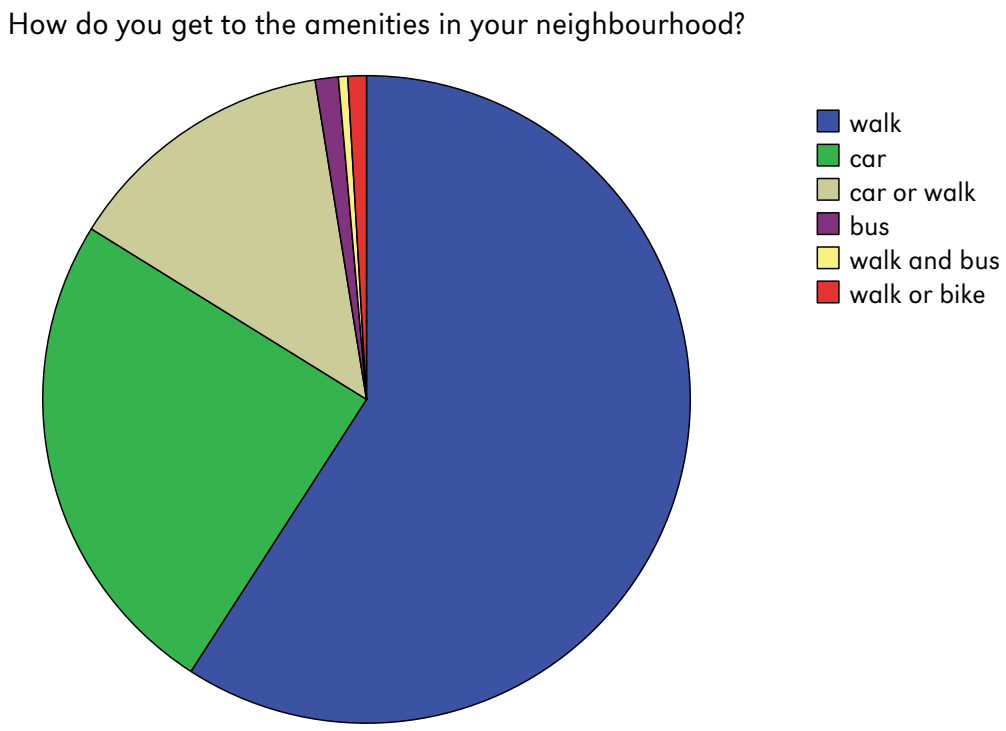


Figure 4.89: Transport used to reach amenities in neighbourhood

CONCLUSION

This section has drawn on interview data from 84 participants from the three selected case study sites in New Lynn, Albany and Onehunga. It has: set out the aims of this component of the research; described the characteristics of interviewees themselves and others in their households; examined their past and present housing and housing experiences; considered bodies corporate issues; discussed contact with neighbours, a sense of community, and explored the question of who is or is not best suited to intensive living; examined participants' use of and views on transport-related questions; and their opinions on local services and amenities.

Each of the three selected developments has demonstrated contrasting features. Ambrico Place is now the home to a significant number of overseas-born Chinese immigrants who have specific needs with respect to settling in and feeling at home in a new environment, where English language prevails. The Albany developments have a high proportion of rental units and younger residents, many of whom are students. The Atrium on Main exudes a more cosmopolitan aura. The diverse characteristics of both the developments and the participants, has ensured that the project has provided a wealth of detailed observations on intensive living.

The data have also provided the basis for making some more general observations regarding intensive living. For example, the data allow us to connect with debates about the suitability of intensive living for children. With particular reference to the Ambrico Place data we have demonstrated that if facilities are appropriate and developments are physically safe for children's play, then intensive developments can provide suitable environments for children. This observation highlights the more general comment that amenities and facilities must not only be useable and functional but, primarily, they must suit the needs of residents. If they do not meet resident needs they will not be used. The use of public transport is a case in point. All three developments were selected because they are transit oriented developments: developments located for ease of access to public transport. Yet we found that people are not keen to give up their use of cars in order to regularly take public transport. In turn, this can lead to major car parking issues in developments where space for parking is limited.

The data also showed that with respect to housing preferences, the stand-alone housing option appears not to have lost any popularity. This finding poses a major problem for planners, developers and the Auckland Council in terms of implementing the Auckland Plan. Embedded too, within the Plan, is an implicit view that the built form can influence the development of a sense of community. Yet if living in these newer developments is viewed by residents as little more than a transitory stage in their lives, then there are implications for developing the vibrant, liveable, community-oriented local environments promoted in the Plan.

5 PRICE DYNAMICS IN THE CASE STUDY DEVELOPMENTS

INTRODUCTION

House price performance has a significant bearing on both homeowner and investor perceptions of medium density housing. For owner-occupiers, house price appreciation (rising nominal house prices) offers financial benefits (e.g. through mortgage equity withdrawal) and the opportunity to trade up in the housing market. However, declining or static house prices can have significant negative long-term effects on owners' housing careers or wealth creation opportunities (Murphy, 2012). Similarly, investors' total returns (rental income plus capital growth) and debt-to-price ratios are affected by house price movements. Medium density housing is a relatively new addition to the range of housing types available within the Auckland housing market. In Auckland it has been associated with monolithic cladding systems and the problems of 'leaky building syndrome'. Rehm (2009) estimates that, since 2002, multi-unit dwellings with monolithic cladding systems in the Auckland region have been trading at a price discount of 10 per cent. To date, little attention has been given to examining changes in house prices at the level of individual housing developments.

As part of this study on medium density housing, we have analysed house price dynamics within the case study areas (Ambrico Place in New Lynn, Atrium on Main in Onehunga, and The Ridge (Spencer) and Masons in Albany. Three datasets were used in the analysis. First, the sales and capital value records for individual units within the case study areas were purchased from QV. These data include information on sales transactions (net and gross price, date of sale etc) and mass appraisal data (condition of property, condition of roof, view characteristics). The mass appraisal data includes qualitative assessments of the condition of the property as assessed by independent valuers. This dataset was used to generate descriptive statistics (number of sales, average sale price, number of repeat sales) for each case study site. The second dataset consisted of the output of an internal study undertaken by the council of their rates records. This dataset offered proxy measures for the tenure structure of each of the study sites. In order to place the price dynamics of the study areas into the wider Auckland context, the individual sales data were linked to a region wide dataset on all multi-unit property transactions[1]. This region-wide dataset, which is held by the Department of Property (University of Auckland), was used to generate a set of hedonic price models. Hedonic models are based on the premise that a house consists of a bundle of characteristics (size, location, date of construction etc.) and these affect the value of the

1 The term 'multi-unit dwelling' is used in this study to refer to the two valuation categories used in this analysis. These are RA and RF, where RA is defined as 'Apartments which are in multi-storey buildings and are on strata title' and RF is defined as 'Ownership home units which do not have the appearance of dwelling houses'. These definitions are taken from the Valuer General's 'Rating Valuations Rules 2008' (Version Date 1 October 2010).

house. Hedonic regression analysis is a standard economic technique that is used to estimate the "marginal contribution of these individual characteristics" (Sirmans, Macpherson & Mead, 2005, p. 3) to the overall value of the house. The content of the Department of Property's dataset is confidential and thus only the outputs of the hedonic models are presented in this study.

The remainder of this chapter is in two parts. Part one offers a descriptive analysis of the sales volumes and price dynamics of units within the case study areas. Part two sets out the structure and results of a set of hedonic models designed to examine the relative performance of each of the case study developments within the broader context of the sales of multi-unit dwellings in the Auckland region.

Descriptive analysis

Micro-level price dynamics provide information on the market performance of the case study sites. Table 5.1 sets out the total number of sales and the average sale price per annum for the case study developments. These data represent the complete sales record for each individual development. The relative price dynamics portrayed in Table 5.1 reflect the different development histories and scale of each development. Ambrico Place, as the oldest and largest development, has the longest sales history (16 years), the largest average number of annual sales (40) and the highest total number of total sales (647) of all of the developments. In contrast, the Onehunga development has only 7 years of recorded sales data, total sales of 64 units and average annual sales of just over 9 units per annum.

The volume of annual sales varies over time and across the developments. Significantly, annual sales of only one unit were recorded in the Onehunga development (2005, 2008) and the Masons development (2003, 2010, 2011). The fact that only one sale was recorded in these developments (for different years) is an important finding as it suggests that these developments were experiencing unusually low sales transaction volumes.

Moreover, in years where only one sales transaction is recorded one must be cautious in interpreting this sales price as an indicator of average values in the development, as one-off sales may have unique characteristics.

	No. Sales	Average Price	No. Sales	Average Price	No. Sales	Average Price	No. Sales	Average Price
Year	Ambrico Place	Ambrico Place	Atrium on Main	Atrium on Main	The Ridge (Spencer)	The Ridge (Spencer)	Masons	Masons
1996	19	209,789						
1997	75	198,140						
1998	21	202,271						
1999	36	185,307						
2000	31	173,395						
2001	46	172,604						
2002	42	210,319						
2003	94	227,421			5	273,000	1	330,000
2004	74	245,535			47	319,468	19	315,368
2005	59	265,851	1	193,313	18	341,111	22	345,227
2006	49	267,190	6	309,510	27	327,204	22	352,000
2007	48	282,398	14	373,824	29	320,672	32	329,750
2008	22	268,141	1	193,313	4	336,250	6	264,667
2009	9	263,056	10	348,300	6	290,590	11	257,291
2010	8	234,875	19	296,789	3	272,500	1	295,000
2011	14	250,221	13	321,923	4	254,875	1	257,500
Total	647	227,886	64	324,753	143	318,738	115	323,337

Table 5.1: Number of Sales and Average Sale Price

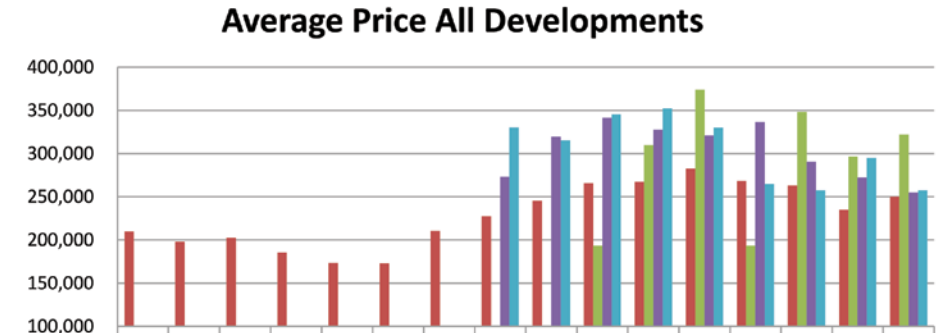
Before continuing our analysis of price trends within developments, it should be noted that the average size of units varied across developments. The Ridge (Spencer) and Masons had the smallest units with an average size of just 59.6 and 48.0 sqm, respectively. These were small units compared to the other case study developments and compared to the average size of multi-unit dwellings in the Albany sub-market (see later discussions and Table 5.7). The average size of units sold in the Onehunga case study was 109.5 sqm and these units were larger than the average size of multi-unit dwellings sold in the Onehunga submarket (78.9 sqm). Units within the Ambrico Place development varied in size. The smallest units were 3 Ambrico Place (67 sqm) and the largest units were 6 Ambrico Place (146.1 sqm). The impact of the size of individual units on the comparative price performance of the case study developments is discussed later in the chapter.

Figure 5.1 charts the trend in average prices across the four study areas. This chart offers insights into intra- and inter-development price dynamics. All four developments display broad boom-slump price cycles. Over a 16-year period, average prices in Ambrico Place declined from 1996 to 2001, rose substantially thereafter, peaking in 2007 ($282,000), declined to $235,000 in 2010 and rose again to $250,000 in 2011. Ambrico Place's house price dynamics mirror national and regional price trends. The rapid appreciation in prices from 2002 to 2007 is in line with national house prices (House Prices Unit, 2008) and the decline post-2007 and recovery in 2011 are reflective of the impacts of the GFC on the New Zealand housing market (Murphy, 2011).

Notwithstanding annual variations, The Ridge (Spencer) and Masons developments experienced average price increases up until 2006 (Masons) and 2008 (The Ridge). In the early phase of these developments average sale prices exceeded $300,000 and peaked at $341,000 in The Ridge development and $352,000 in the Masons development. Since then the volume of sales has dropped considerably and prices have tracked lower. In 2011 the average price of units sold in The Ridge was $254,000 and in Masons it was $257,000. The nominal drop in prices, from their peak to 2011, was 25 per cent in The Ridge development and 27 per cent in the Masons development. This level of price decline exceeds the national average.

The sales data for the Onehunga development are problematic and need to be treated with caution. First, the data cover seven years of sales but in two of these years (2005 and 2008) only one transaction was recorded. The significant drop in the recorded sales price in 2008 (Figure 5.1) may be an anomaly and may not reflect price trends within the complex. Second, over 35 per cent of the QV records for Onehunga did not include a sales transaction (see discussion below). Third, several QV records recorded unusually high sales prices in excess of $900,000 and these sales were excluded from the analysis. The high level of non-sales and the unusually highly priced sales may indicate that the development was subject to unusual developer behaviour. In 2009, the developer went into liquidation and a liquidator was appointed.

Excluding the one-off transactions in 2005 and 2008, average prices in Onehunga peaked in 2007 at $373,000, dropped to a low of $296,000 in 2010 and recovered slightly to $322,000 in 2011. The peak to trough decline in nominal average prices was 20 per cent and by 2011 prices were 14 per cent below their peak.



	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Ambrico	209,	198,	202,	185,	173,	172,	210,	227,	245,	265,	267,	282,	268,	263,	234,	250,
Onehunga										193,	309,	373,	193,	348,	296,	321,
Spencer								273,	319,	341,	327,	320,	336,	290,	272,	254,
Masons								330,	315,	345,	352,	329,	264,	257,	295,	257,

Figure 5.1 Average prices – all case-study sites

In terms of inter-development comparisons, Ambrico Place consistently tracked at a lower average price compared to the other three developments. In 2007 average prices in Ambrico Place peaked at $282,000 but this was $91,000 less than the Atrium on Main average and $38,000 below The Ridge (Spencer) average. Interestingly, in the post peak context the price differential has narrowed. In 2011 the average sales price in Ambrico Place ($250,000) was $71,000 below Atrium on Main and just $4,000 below The Ridge (Spencer) prices.

These data suggest that Ambrico Place prices have proved more resilient during the downturn. Several factors may have contributed to Ambrico Place's price performance during this period. The development is well established and purchasers are likely to have a good understanding of the nature of the community. As the lowest priced development in our study it is arguable that Ambrico Place was the most affordable location throughout the boom. Moreover, during the slump it is possible that Ambrico Place was subject to a 'price ratchet effect' (see Murphy, 2011) whereby, in response to a general price decline, homeowners stay put and the volume of sale transactions decline. After 2008 the number of sales within Ambrico Place declined significantly (see Table 5.1) and this would have acted to stabilise prices.

Repeat sales

The QV dataset provided the opportunity to track repeat sales of individual units and to examine housing turnover within each development. The frequency with which individual units are sold may offer insights into community dynamics within a development. A high turnover of units or a high level of repeat sales of individual properties could be indicative of poor community formation, especially if the vendors are owner occupiers. On the other hand, repeat sales of investor owned properties may be an indicator of poor investment returns or a capital gains strategy. Sales of investor properties may or may not affect community structures as the sales could occur with sitting tenants.

Table 5.2 provides information on the sales frequency of individual units within each of the case study developments. In addition, the table identifies units that were in the QV dataset that had no recorded sales. The absence of any sales record may reflect inaccuracies in the dataset (e.g. unrecorded sales, errors in data entry), unsold units in a new development or units where the developer has retained ownership. Given that a liquidator was appointed to the Atrium on Main development in 2009, the sales process in this development may have been adversely affected.

As was expected, across the newer developments in the study, the majority of units that have sales recorded in the QV dataset have been sold either once or twice (Atrium on Main, 100 per cent; The Ridge (Spencer), 87 per cent; Masons, 94 per cent). Within this group, The Ridge had the highest incidence of repeat sales with 9 units having been sold 3 times and 3 units having been sold 4 times. Significantly, units that have sold three or more times accounted for 27 per cent of total sales in this development (see Table 5.2). The relative importance of these repeat sales within The Ridge development may reflect the active management strategies employed within the development. In this context it should be noted that The Ridge is managed by Freestyle Property Group and is marketed as a good investment opportunity (see http://www.freestylepropertygroup.com/projects).

Ambrico Place, given its longer sales history, has the highest number of sales records (647) and the highest incidence of repeat sales. Significantly, over its 16-year sales history 73 units (27 per cent of units with a sales history) have been sold once and 91 units have been sold twice. In effect, 60 per cent of units that have a recorded sale in Ambrico Place have been sold twice or less. This demonstrates that there are a substantial number of units within Ambrico Place that have had low turnover. The low frequency of repeat sales for these units may reflect a high level of owner satisfaction or may reflect an inability to sell. Insights into this issue may be gleaned with interviews with residents in the development.

With respect to repeat sales, 109 units (41 per cent of units with a sales history) had been sold 3 or more times in Ambrico Place. A total of 38 units (15 per cent of units with a sales history) sold four or more times and these sales accounted for 28 per cent of the total sales in the development. Significantly, 18 units (7 per cent of units with a sales history) had sold 5 or 6 times and these units accounted for 15 per cent of total sales. With 15 per cent of units having an average length of ownership of four or less years, it is clear that Ambrico Place has had a significant level of 'ownership churn'. The churn could reflect a number of factors including:

- Low owner satisfaction
- Owners seeking capital gain
- Financial problems of low income homeowners and investors
- Most properties being bought by first-time owners or investors.

Some of these issues were covered in Chapter 4, reporting on discussions with residents.

Tenure characteristics

The tenure characteristics of any residential development that has a body corporate structure have implications for management practices and community formation processes. Research into bodies corporate highlights the potential tensions that exist between owner-occupiers and investors, especially when it comes to expenditures on maintenance of common areas and contributions to a sinking fund (Blandy, Dixon & Dupuis, 2010). The practices, attitudes, and strategies of owners and investors have important implications for the price performance

Ambrico Place					**Onehunga- Atrium on Main**				
Number of sales	Count- Individ- ual Units	Percent-	Total Sales	Percent of Total Sales	Number of sales	Count- Individ- ual Units	Percent-	Total Sales	
No sale or no notice of sale	18				No sale or no notice of sale	37			
1	73	27%	73	11%	1	59	95%	59	
2	91	33%	182	28%	2	3	5%	6	
3	70	26%	210	32%					
4	21	8%	84	13%					
5	10	4%	50	8%					
6	8	3%	48	7%					
Total (Excl no sales)	273	100%	647	100%	Total (Excl no sales)	62	100%	65.00	

Table 5. 2- Case Study Areas, Individual units' sales frequency

of units within developments, the level of 'ownership churn' and the maintenance of common spaces. In contrast to stand-alone freehold houses, medium density developments are subject to overt and enforceable community governance structures. The 'success' or 'failure' of individual medium density developments as communities is influenced by the ways in which groups (such as owner occupiers, investors, body corporate management companies, and on-site or off-site building managers) contribute to the management of developments.

In a previous study of Ambrico Place (Dixon & Dupuis, 2003) interviews with residents revealed a high number of renters. While resident surveys provide information on the tenure characteristics of those that are surveyed, they can suffer from a lack of representation through either a low response rate or respondent self-selection bias. To overcome these limitations and to complement the surveys undertaken in this study, an analysis of Auckland Council rates data was carried out in an attempt to identify the tenure structure of each of the case study developments

Council staff undertook a confidential analysis of rates data and the aggregate results of this analysis were used in this study. For each of the case study developments information on the name and mailing address of each rates payer was analysed to produce a broad proxy measure of tenure status and to identify multiple ownership within developments.

The following analysis is indicative, so it should be treated with caution. In determining the tenure characteristics of each of the developments the mailing address of rates notices were examined and it was assumed that where the ratepayers' address was the same as the dwelling address the unit was owner occupied. Alternatively, where the ratepayers' address was not the same as the dwelling address the unit was considered to be owned by an investor. Table 5.3 provides information on the 'owner occupier proxy' measure for all of the developments. Using this measure, it is clear that the three newer developments,

		Spencer (The Ridge)					Masons				
	Percent of Total Sales	Number of sales	Count-Individual Units	Percent-	Total Sales	Percent of Total Sales	Number of sales	Count-Individual Units	Percent-	Total Sales	Percent of Total Sales
		No sale or no notice of sale	1				No sale or no notice of sale	0			
	91%	1	56	61%	56	39%	1	43	57%	43	37%
	9%	2	24	26%	48	34%	2	28	37%	56	49%
		3	9	10%	27	19%	3	4	5%	12	10%
		4	3	3%	12	8%	4	1	1%	4	3%
	100%	Total (Excl no sales)	92	100%	143	100%	Total (Excl no sales)	76	100%	115	100%

No Sale Property listed in the database but no record of sale
Percent The number of repeat sales expressed as a percentage of the total number of individual units recorded in each study area.
Total Sales number of repeat sales X Count of individual units

Atrium on Main (84 per cent), The Ridge (Spencer) (94 per cent) and Masons (92 per cent) are dominated by investors (or non-resident owners), and 61 per cent of units in Ambrico Place were owner occupied. Whilst owner occupiers were the majority in Ambrico Place, the analysis suggests that a significant proportion of units were owned by investors (39 per cent).

	Ambrico Place		Atrium on Main		The Ridge (Spencer)		Masons	
Owner-occupier proxy split	Count	%	Count	%	Count	%	Count	%
Ratepayer mailing address = dwelling address	178	61	17	16	6	6	6	8
Ratepayer mailing address NOT = dwelling address	115	39	89	84	87	94	70	92
Total	**293**	**100**	**106**	**100**	**93**	**100**	**76**	**100**

Table 5.3 Owner-Occupier Proxy Measure

Focusing on investors or 'absentee ratepayers', Table 5.4 provides a geographical breakdown of the location of their mailing addresses. Across all four developments the majority of investors had mailing addresses in Auckland. The proportion of investors with mailing addresses 'elsewhere in New Zealand' was significant for Onehunga (21 per cent) and Masons (30 per cent). Significantly, only a small proportion (approximately 5 per cent for each development) of ratepayers had an overseas mailing address.

	Ambrico Place		Atrium on Main		The Ridge (Spencer)		Masons	
"Absentee ratepayer" mailing address	Count	%	Count	%	Count	%	Count	%
Auckland	98	85	67	75	73	84	45	64
Elsewhere in NZ	11	10	19	21	10	11	21	30
Overseas	6	5	3	3	4	5	4	6
Total	**115**	**100**	**89**	**100**	**87**	**100**	**70**	**100**

Table 5.4 Geographical distribution of absentee ratepayers

Using ratepayer data (i.e. names and addresses), Table 5.5 presents an analysis of the scale of multiple-ownership within each of the developments. Table 5.5 (a) provides an analysis based on the ratepayer's name, while Table 5.5 (b) uses the ratepayer's mailing address. The two methodologies produce very similar results, although the address matching procedure identifies more multiple-unit owners. In absolute terms, Ambrico Place has the largest number of multiple owners (12), who between them own 30 properties in the complex (see Table 5.5 (b)). Most of the multiple owners of properties in Ambrico Place own two properties, but one owner owns five properties. Whilst there are fewer multiple owners in the Atrium on Main development, 17 per cent of the units are owned by multiple owners. One investor owns 12 properties.

Ratepayers Name	Ambrico Place	Atrium on Main	The Ridge (Spencer)	Masons
Multiple property owners (MPO) – matched by NAME	Number	Number	Number	Number
MPO (Name) 1	5	8	2	3
MPO (Name) 2	2	4	2	2
MPO (Name) 3	2	2	2	2
MPO (Name) 4	2	2	2	2
MPO (Name) 5	2			2
MPO (Name) 6	2			2
MPO (Name) 7	2			
MPO (Name) 8	2			
Total properties held by multiple property owners	19	16	8	13
Percentage of total properties	**6%**	**15%**	**9%**	**17%**

A) Matched mail address

	Ambrico Place	Atrium on Main	The Ridge (Spencer)	Masons
Multiple property owners (MPOs) matched Mail Address	Number	Number	Number	Number
MPO (Address) 1	5	12	2	3
MPO (Address) 2	4	2	2	2
MPO (Address) 3	3	2	2	2
MPO (Address) 4	2	2	2	2
MPO (Address) 5	2		2	2
MPO (Address) 6	2			2
MPO (Address) 7	2			
MPO (Address) 8	2			
MPO (Address) 9	2			
MPO (Address) 10	2			
MPO (Address) 11	2			
MPO (Address) 12	2			
Total properties held by multiple property owners	**30**	**18**	**10**	**13**
Percentage of total properties	**10%**	**17%**	**11%**	**17%**

Table 5.5 Multiple ownership proxies

Owning multiple units on a single site could be viewed as a poor investment strategy as it concentrates risk and the owner fails to achieve any diversification benefits. In this context, the presence of multiple property owners in each of the developments suggests that these investors have confidence in the investment characteristics of the units. Moreover, given that most of the multiple property owners own only two properties, and given the 'cottage industry' nature of the private rental market, it may be that multiple-ownership confers management benefits for investors.

Modelling house prices

The case study sites are heterogeneous in terms of their design, building materials, facilities and locations. While descriptive statistics offer insights into site-specific price trends, it is important to situate the case study developments within the broader dynamics of multi-unit developments within the Auckland region. To this end, a series of hedonic models were developed that examine the relative price performance of the case study developments compared to regional and local market dynamics.

From an economic perspective, housing is a composite good that consists of a bundle of physical (e.g. size, number of bedrooms, type of construction) and environmental (e.g. neighbourhood characteristics, views) attributes. Hedonic modelling is a standard multiple regression procedure used in housing economics that is designed to discover the relative price of these individual attributes within a market (see Leishman, 2003: Rehm, 2009; Sirmans, et al., 2005). For the purpose of this study, hedonic modelling was used to compare the relative price characteristics of the case study sites compared to other multi-unit dwellings across a variety of spatial scales.

The QV data, detailing individual sales within the case study developments, includes a range of quantitative and descriptive variables for each property. These data were integrated within a larger dataset maintained by the Department of Property (University of Auckland) that includes the sales records of all multi-unit dwellings in the Auckland Region.

For the purposes of modelling, the newer developments (Atrium on Main, The Ridge (Spencer) and Masons) were treated as individual single developments. However, given the scale and structural diversity of the Ambrico Place development, it was decided to separate the Ambrico Place data into nine discrete sub-areas. These nine sub-areas were identified by their street addresses as follows:

1 Ambrico Place
3 Ambrico Place
4 Ambrico Place
6 Ambrico Place
12 Ambrico Place
14 Ambrico Place
8 Margan Avenue
1 Melview Place
1c Rankin Avenue (re-named 1c Briar Way)

The location of each of the sub-areas within Ambrico Place is set out in Figure 5.2 (overleaf).

The price dynamics of any residential development are profoundly affected by its locational characteristics. All four of the subject developments were located within the Auckland Region, which has for many years had the highest national house prices and, more specifically, has experienced substantial house price inflation since 2002. Thanks to urban intensification policies, the Auckland region has experienced considerable development of multi-unit dwellings. However, within the Auckland region there are distinct meso-level housing markets that align with the boundaries of the old territorial units. In comparative terms, since the 1990s, average prices in North Shore City and Auckland City have been higher than average prices in Waitakere City and Manukau City. Moreover, the prices of units differ from one local (neighbourhood) market to the next. For the purpose of modelling prices, four spatial scales were used in the analysis: the Auckland Region, a three-city model (North Shore City, Waitakere City, and Auckland City combined), the city level (the relevant former territorial local authority area), and a derived 'local' market area.

For this study, the Auckland Region comprised all the former territorial areas: Rodney, North Shore City, Auckland City, Waitakere City, Manukau City, Papakura, and Franklin Districts. The three-city model comprised North Shore City, Waitakere City, and Auckland City. For the city analysis, each development was analysed in relation to the prices of multi-unit dwellings in the territorial authority in which it was located (i.e. for Ambrico Place, Waitakere City: for Atrium on Main, Auckland City: for The Ridge (Spencer) and Masons, North Shore City).

The 'local' market area was generated by a two-stage process. First, the area unit in which the development was located was identified and then the area units that bordered the case study area units were amalgamated into a generic local market. Secondly, the housing and socio-economic characteristics of each of the 'bordering' area units in the generic local market were examined. If an area unit had significantly different housing or socio-economic characteristics compared to the relevant case study area unit it was excluded. The final local markets consist of spatially contiguous area units that have similar housing and socio-economic characteristics. Table 5.6 lists the area units that comprised the 'local markets' and Figure 5.3 (overleaf) maps these markets. Table 5.7 (below) provides descriptive data on housing and socio-economic characteristics of the derived 'sub-markets' (Albany, New Lynn, and Onehunga) and information from the individual developments.

	Submarkets		
	Albany	New Lynn	Onehunga
Subject Area Unit	Northcross	Lynnmall	Onehunga South East
Additional Surrounding Area Units	Pinehill	New Lynn South	Onehunga South West
	Oaktree	New Lynn North	Onehunga North East
	Albany	Rewarewa	Onehunga North West
		Fruitvale	Te Papapa
		Avondale South	

Table 5.6 Local Submarkets (area units included in analysis)

Using these geographical areas, a series of hedonic models were constructed. These models incorporated all of the sales records for multi-unit dwellings in each of the geographical areas and range in size from 30,000 sales records (the Auckland Region Model) to 1,200 sales records (the Onehunga Sub-market Model). The model specifications are set out in the following pages.

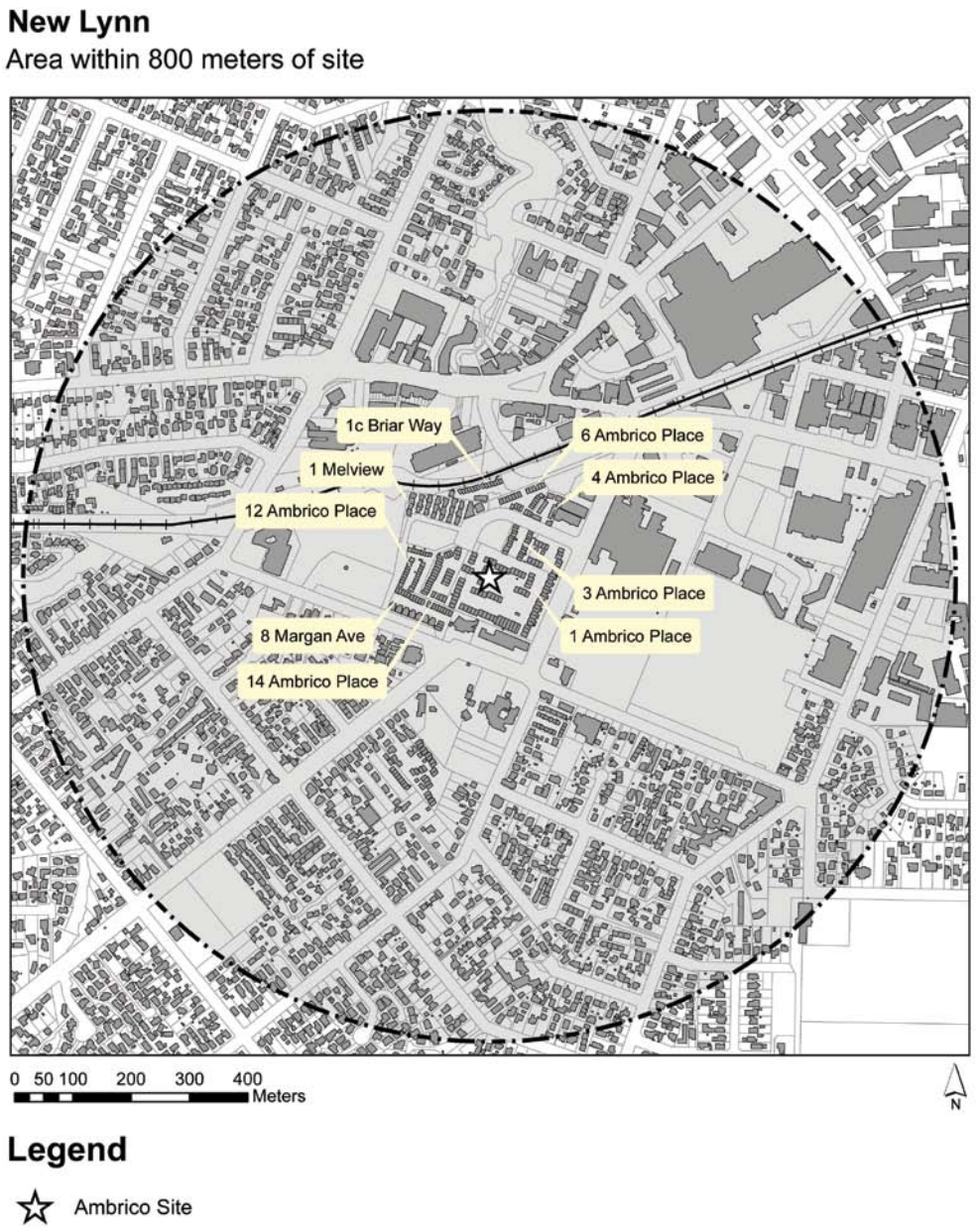


Figure 5.2: Ambrico Place- internal sub-markets

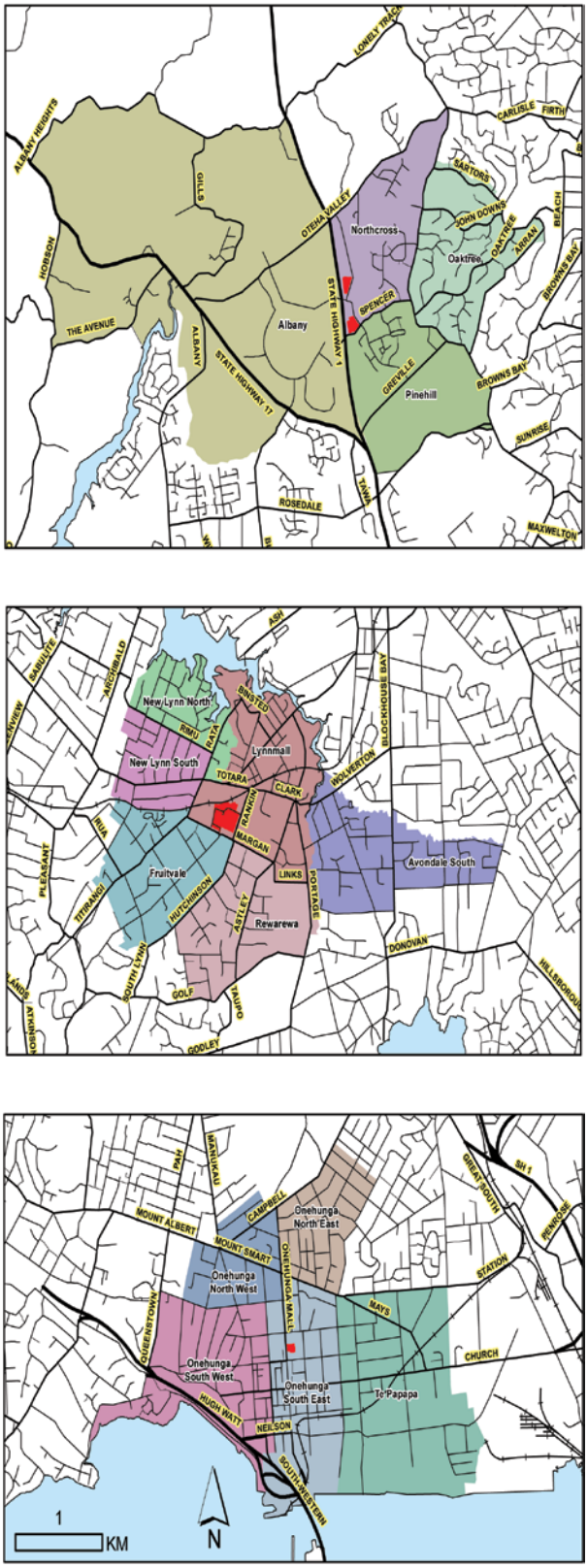


Figure 5.3 Maps of local sub-markets: Albany, New Lynn, and Onehunga.

	Sales	HH Income	Floor Area		Exterior Condition		
	N	Mean	Mean	Median	Good	Average	Fair/Poor
Albany Submarket	1,659	$61,659	113.4	118.0	97.0%	2.8%	0.2%
71 Spencer Rd	132	$75,300	59.6	64.0	100.0%	-	-
60 Masons Rd	106	$75,300	48.0	48.0	100.0%	-	-
New Lynn Submarket	1,768	$42,339	91.1	80.0	78.4%	20.0%	1.6%
1 Ambrico Pl	114	$45,600	142.6	130.0	100.0%	-	-
3 Ambrico Pl	46	$45,600	67.0	67.0	100.0%	-	-
4 Ambrico Pl	26	$48,600	105.4	110.0	100.0%	-	-
6 Ambrico Pl	46	$48,600	146.1	150.0	100.0%	-	-
12 Ambrico Pl	46	$48,600	100.0	100.0	100.0%	-	-
14 Ambrico Pl	48	$48,600	124.6	110.0	100.0%	-	-
8 Margan Ave	68	$45,600	113.8	112.0	100.0%	-	-
1 Melview Pl	30	$48,600	126.7	130.0	100.0%	-	-
1C Rankin Ave	42	$48,600	121.6	122.0	100.0%	-	-
Onehunga Submarket	2,328	$61,177	78.9	74.0	49.9%	47.1%	3.0%
287 Onehunga Mall	28		109.5	116	100.0%	-	-

Table 5.7 Submarkets' Housing and Socio-Economic Characteristics

Hedonic specification

Let P(X) = P(S, N, T, L) be a house price function that maps housing characteristics onto market value. This function maps the following structural characteristics: S (case study developments, floor area, site area, vintage, etc); neighbourhood characteristics, N (median household income); temporal, T (quarterly period when transaction occurred); and location, L (area units where the house is located).

Parameters of hedonic equations are frequently estimated by using a semi-logarithmic functional form to conform to rules of parametric tests. This specification regresses the natural log of net sales price on a linear combination of housing characteristics. The semi-log functional form is given by

$$P = e^{Xb+e}, \quad (1)$$

where P is the market value, X is a vector of housing characteristics, b is the vector of unknown hedonic coefficients, and e is the residual. Taking natural logs of Equation (1) yields the transformed equation:

$$Z = \ln P = Xb+e, \quad (2)$$

Interior Condition			Cladding	Vintage				
Good	Average	Poor	Mono	1960	1970	1980	1990	2000
2.8%	97.1%	0.2%	41.0%	-	15.8%	6.1%	31.4%	46.3%
-	100.0%	-	-	-	-	-	-	100.0%
-	100.0%	-	-	-	-	-	-	100.0%
0.5%	98.8%	0.8%	4.7%	10.6%	52.6%	8.2%	4.6%	20.0%
-	100.0%	-	100.0%	-	-	-	100.0%	-
-	100.0%	-	-	-	-	-	100.0%	-
-	100.0%	-	-	-	-	-	100.0%	-
-	100.0%	-	-	-	-	-	100.0%	-
-	100.0%	-	100.0%	-	-	-	100.0%	-
-	100.0%	-	100.0%	-	-	-	100.0%	-
-	100.0%	-	100.0%	-	-	-	100.0%	-
-	100.0%	-	100.0%	-	-	-	100.0%	-
-	100.0%	-	100.0%	-	-	-	-	100.0%
3.3%	96.3%	0.4%	8.3%	29.0%	42.0%	2.7%	4.5%	19.1%
-	100.0%	-	-	-	-	-	-	100.0%

The empirical hedonic specification for the analysis is

$$\ln(P_i) = b_0 + b_1(\text{Ambrico 1, Ambrico 3 etc}) + b_2(\text{Floor\_Area}) + b_3(\text{Floor\_Area}^2) + b_3(\text{Storeys}) + b_4(\text{Ext\_Wall\_Good}) + b_5(\text{Ext\_Wall\_Poor}) + b_6(\text{Interior\_Good}) + b_7(\text{Interior\_Poor}) + b_8(\text{Mono\_Before\_Hunn}) + b_9(\text{Mono\_after\_Hunn}) + b_{10}(\text{HH\_Income}) + b_{11\text{-}\ldots}(\text{V1990, etc}) + b_{12}(\text{Water\_view\_moderate}) + b(\text{Water\_view\_wide}) + b_{24}(\text{Sold\_in\_Q1, etc}) + b_{25\text{-}375}(\text{au505300, etc}) + e \quad (3)$$

where

P_i	=	net sales price of the *i*th property;
Ambrico 1, Ambrico 3 etc	=	Corresponding to case study developments in which the property is located with the default being multi-unit dwellings located outside of the case study areas
Floor_Area	=	property's total building floor area in square metres;
Floor_Area2	=	Floor_Area^2;
Storeys 2 etc	=	Dummy variable corresponding to the number of storeys the property has with the default being one storey.
Ext_Wall_Good	=	dummy variable for whether the property's exterior walls were coded by the appraiser as being in 'Good' condition with the default category being 'Average';

Ext_Wall_Poor	=	dummy variable for whether the property's exterior walls were coded by the appraiser as being in 'Poor' condition
Interior_Good	=	dummy variable for whether the property's interior fixtures and finishes were coded by the appraiser as being in 'Good' condition with the default category being 'Average';
Interior_Poor	=	dummy variable for whether the property's interior fixtures and finishes were coded by the appraiser as being in 'Poor' condition
Mono before Hunn	=	dummy variable for whether the property was entirely monolithic-clad (traditional stucco, EIFS, proprietary polymer-modified plaster system, or textured fibre cement sheet) and sold before 2003 (the Hunn report released 2002) with the default category being non-monolithic-clad sold before 2003
Mono after Hunn	=	dummy variable for whether the property was entirely monolithic-clad and sold from 2003 (after the release of the Hunn report)
Household_Income	=	median household income of the property's meshblock based on the nearest NZ Census;
V1990, V1980, etc	=	set of dummy variables corresponding to the vintage (decade) in which the house was built with the default category being 2000-2010
Water_View_Slight	=	Dummy variable for whether a property features a slight water view from the main living room with the default condition being no view
Water_View_Moderate	=	Dummy variable for moderate water view
Water_View_Wide	=	Dummy variable for wide water view
au505300, etc	=	set of dummy variables corresponding to the 2006 Area Unit in which the house is located;
Sold_1999_Q2, etc.	=	set of dummy variables corresponding to the quarterly-annual period in which the house was sold (default category Q4- 2010)
e	=	random error.

Using these parameters, eight models were generated at various spatial scales: 1) Auckland Region, 2) Three Cities (Auckland, North Shore, Waitakere), 3) North Shore City, 4) Waitakere City, 5) Auckland City, 6) Albany Submarket, 7) New Lynn Submarket and 8) Onehunga Submarket. These models provide the opportunity to compare the sales performance of units within the case study developments with the sale of multi-unit dwellings across the region as a whole, within the three case study cities and at the level of local submarkets.

Results: the eight models

A reduced form of the output tables (focusing on key variables) for each model is set out in Tables (5.8 – 5.15). The adjusted R square values across the eight models ranged from a low of .815 (New Lynn Submarket) to a high of .879 (North Shore and Albany Submarket). These values are acceptable and suggest that the models are appropriately specified.

Tables 5-8 to 5.15 set out the unstandardized coefficients of selected variables along with model summaries for each of the eight hedonic models. Omitted from the tables are the dummy variables corresponding to the Auckland Region's 350 Area Units represented in the sales data. These variables are incorporated into the model to control for differences across the region in terms of unmeasured neighbourhood quality such as proximity to employment, shopping and recreational venues, and access to public schools.

Auckland Region

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.913[a]	.833	.831	.17272

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4568.728	407	11.225	376.270	.000[b]
	Residual	912.660	30592	.030		
	Total	5481.388	30999			

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	11.176	.014		803.377	0.000
	Margan_8	.059	.027	.007	2.170	.030
	Ambrico_1	.054	.024	.008	2.269	.023
	Ambrico_3	.230	.031	.021	7.489	.000
	Ambrico_12	.067	.031	.006	2.177	.030
	Ambrico_14	.037	.030	.003	1.199	.230
	Melview_1	.034	.036	.003	.952	.341
	Ambrico_6	-.053	.031	-.005	-1.701	.089
	Ambrico_4	.066	.038	.005	1.740	.082
	Rankin_1	-.168	.032	-.015	-5.179	.000
	Onehunga_287	-.145	.035	-.010	-4.139	.000
	Spencer_71	.219	.017	.034	12.768	.000
	Masons_60	.305	.019	.042	16.277	.000
	Building_Floor_Area	.010	.000	1.091	94.046	0.000
	BFA2	-1.972E-05	.000	-.527	-48.529	0.000
	Stories_2	-.104	.003	-.114	-37.026	.000
	Stories_3	-.131	.005	-.078	-25.091	.000
	Stories_4	-.164	.015	-.028	-11.142	.000
	Exterior_Good	.028	.003	.030	9.121	.000
	Exterior_Fair_Poor	.003	.010	.001	.246	.806
	Interior_Good	.119	.005	.076	23.871	.000
	Interior_Poor	-.045	.011	-.010	-4.109	.000
	Mono_before_Hunn	.097	.007	.039	13.469	.000
	Mono_after_Hunn	-.028	.004	-.022	-7.232	.000
	MB_Med_HH_Inc_2006	1.895E-06	.000	.091	23.780	.000
	V1910	.035	.021	.004	1.656	.098
	V1920	-.023	.012	-.005	-1.854	.064
	V1930	.015	.011	.004	1.419	.156
	V1940	-.011	.011	-.003	-.994	.320
	V1950	-.087	.008	-.033	-11.438	.000
	V1960	-.133	.005	-.109	-25.348	.000
	V1970	-.124	.004	-.131	-27.683	.000
	V1980	-.070	.005	-.045	-13.627	.000
	V1990	-.105	.004	-.100	-28.437	.000
	Water_View_Slight	.078	.005	.039	14.958	.000
	Water_View_Moderate	.115	.008	.039	15.039	.000
	Water_View_Wide	.253	.008	.079	31.415	.000

Table 5.8: Auckland Region Regression Analysis Results: Selected Unstandardized Coefficients a. Dependent Variable: Log_Net_Price

Three City Model (Auckland, North Shore, Waitakere)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.915[a]	.837	.835	.17842

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3804.905	285	13.351	419.393	.000[b]
	Residual	741.741	23301	.032		
	Total	4546.645	23586			

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	11.151	.016		686.243	0.000
	Margan_8	.083	.028	.010	2.931	.003
	Ambrico_1	.054	.025	.009	2.177	.029
	Ambrico_3	.243	.032	.024	7.606	.000
	Ambrico_12	.094	.032	.009	2.926	.003
	Ambrico_14	.050	.032	.005	1.595	.111
	Melview_1	.053	.037	.004	1.413	.158
	Ambrico_6	-.077	.032	-.008	-2.393	.017
	Ambrico_4	.065	.039	.005	1.654	.098
	Rankin_1	-.148	.034	-.014	-4.372	.000
	Onehunga_287	-.152	.036	-.012	-4.192	.000
	Spencer_71	.231	.018	.039	12.870	.000
	Masons_60	.324	.020	.049	16.558	.000
	Building_Floor_Area	.011	.000	1.070	82.965	0.000
	BFA2	-2.024E-05	.000	-.484	-40.617	0.000
	Stories_2	-.111	.003	-.117	-33.766	.000
	Stories_3	-.134	.006	-.080	-22.157	.000
	Stories_4	-.159	.016	-.029	-10.125	.000
	Exterior_Good	.026	.004	.028	7.532	.000
	Exterior_Fair_Poor	.014	.012	.003	1.233	.217
	Interior_Good	.191	.007	.088	27.698	.000
	Interior_Poor	-.058	.016	-.010	-3.564	.000
	Mono_before_Hunn	.052	.009	.019	5.666	.000
	Mono_after_Hunn	-.050	.005	-.038	-10.772	.000
	MB_Med_HH_Inc_2006	1.836E-06	.000	.086	20.198	.000
	V1910	.070	.024	.008	2.964	.003
	V1920	-.011	.014	-.002	-.753	.452
	V1930	.030	.011	.008	2.617	.009
	V1940	.012	.013	.003	.950	.342
	V1950	-.084	.010	-.026	-8.329	.000
	V1960	-.123	.006	-.104	-20.117	.000
	V1970	-.121	.005	-.126	-22.693	.000
	V1980	-.057	.007	-.030	-8.462	.000
	V1990	-.112	.004	-.097	-25.716	.000
	Water_View_Slight	.079	.006	.041	13.714	.000
	Water_View_Moderate	.099	.009	.031	10.516	.000
	Water_View_Wide	.238	.009	.074	25.808	.000

Table 5.9: 'Three City Region' Regression Analysis Results: Selected Unstandardized Coefficients a. Dependent Variable: Log_Net_Price

North Shore City

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.939[a]	.881	.879	.14426

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1166.319	125	9.331	448.322	.000[b]
	Residual	157.215	7554	.021		
	Total	1323.535	7679			

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	11.729	.023		508.430	0.000
	Spencer_71	.128	.016	.040	8.046	.000
	Masons_60	.184	.017	.052	10.537	.000
	Building_Floor_Area	.008	.000	.844	38.595	.000
	BFA2	-1.277E-05	.000	-.364	-18.077	.000
	Stories_2	-.081	.005	-.096	-16.897	.000
	Stories_3	-.076	.009	-.048	-8.681	.000
	Stories_4	-.076	.021	-.017	-3.684	.000
	Exterior_Good	.020	.005	.020	3.855	.000
	Exterior_Fair_Poor	-.027	.037	-.003	-.728	.466
	Interior_Good	.187	.009	.110	19.799	.000
	Interior_Poor	-.036	.037	-.004	-.969	.333
	Mono_before_Hunn	.052	.009	.028	5.682	.000
	Mono_after_Hunn	-.052	.006	-.042	-8.306	.000
	MB_Med_HH_Inc_2006	1.941E-06	.000	.085	14.288	.000
	V1910	.178	.057	.013	3.123	.002
	V1920	-.027	.053	-.002	-.519	.604
	V1930	-.019	.038	-.002	-.504	.615
	V1940	.031	.025	.005	1.224	.221
	V1950	-.074	.017	-.020	-4.313	.000
	V1960	-.171	.010	-.143	-16.930	.000
	V1970	-.165	.008	-.189	-19.840	.000
	V1980	-.108	.010	-.067	-11.079	.000
	V1990	-.128	.006	-.119	-21.012	.000
	Water_View_Slight	.071	.006	.050	11.063	.000
	Water_View_Moderate	.145	.009	.078	16.971	.000
	Water_View_Wide	.334	.015	.099	22.756	.000

Table 5.10 North Shore City Regression Analysis Results: Selected Unstandardized Coefficients
a. Dependent Variable: Log_Net_Price

Waitakere City

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.906[a]	0.821	.816	.12504

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	307.407	127	2.421	154.820	.000[b]
	Residual	66.853	4276	.016		
	Total	374.260	4403			

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	11.499	.033		352.388	0.000
	Margan_8	.015	.023	.006	.663	.508
	Ambrico_1	.053	.022	.029	2.415	.016
	Ambrico_3	.088	.025	.031	3.564	.000
	Ambrico_12	-.011	.026	-.004	-.407	.684
	Ambrico_14	.006	.026	.002	.213	.831
	Melview_1	.023	.029	.006	.793	.428
	Ambrico_6	-.067	.026	-.024	-2.611	.009
	Ambrico_4	-.002	.029	-.001	-.067	.947
	Rankin_1	-.127	.026	-.042	-4.840	.000
	Building_Floor_Area	.006	.000	.578	14.917	.000
	BFA2	-7.995E-06	.000	-.180	-4.851	.000
	Stories_2	-.063	.006	-.107	-10.519	.000
	Stories_3	-.072	.010	-.081	-7.094	.000
	Stories_4	-.088	.040	-.015	-2.190	.029
	Exterior_Good	.040	.007	.047	5.429	.000
	Exterior_Fair_Poor	-.122	.036	-.027	-3.411	.001
	Interior_Good	.136	.023	.048	5.906	.000
	Interior_Poor	-.079	.028	-.020	-2.789	.005
	Mono_before_Hunn	.073	.013	.048	5.498	.000
	Mono_after_Hunn	-.043	.008	-.056	-5.169	.000
	MB_Med_HH_Inc_2006	1.004E-06	.000	.051	4.708	.000
	V1910	-.026	.074	-.002	-.358	.720
	V1920	.010	.089	.001	.117	.907
	V1930	.062	.081	.006	.759	.448
	V1940	-.024	.031	-.005	-.762	.446
	V1950	-.080	.021	-.027	-3.756	.000
	V1960	-.161	.014	-.110	-11.312	.000
	V1970	-.175	.009	-.273	-20.167	.000
	V1980	-.103	.011	-.086	-9.788	.000
	V1990	-.025	.011	-.031	-2.305	.021
	Water_View_Slight	.017	.014	.009	1.172	.241
	Water_View_Moderate	.075	.024	.023	3.153	.002
	Water_View_Wide	.187	.030	.048	6.313	.000

Table 5.11 Waitakere City Regression Analysis Results: Selected Unstandardized Coefficients

a. Dependent Variable: Log_Net_Price

Auckland City

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.909[a]	.826	.824	.19922

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2145.466	166	12.924	325.658	.000[b]
	Residual	450.530	11352	.040		
	Total	2595.996	11518			

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	10.959	.057		191.579	0.000
	Onehunga_287	-.139	.041	-.014	-3.377	.001
	Building_Floor_Area	.013	.000	1.152	67.325	0.000
	BFA2	-2.166E-05	.000	-.473	-29.314	.000
	Stories_2	-.109	.005	-.092	-20.943	.000
	Stories_3	-.194	.010	-.094	-19.369	.000
	Stories_4	-.254	.024	-.044	-10.486	.000
	Exterior_Good	.017	.005	.018	3.275	.001
	Exterior_Fair_Poor	.032	.014	.009	2.300	.021
	Interior_Good	.154	.011	.063	14.180	.000
	Interior_Poor	-.066	.022	-.012	-3.032	.002
	Mono_before_Hunn	.080	.096	.004	.841	.400
	Mono_after_Hunn	-.032	.008	-.021	-4.083	.000
	MB_Med_HH_Inc_2006	2.098E-06	.000	.099	15.771	.000
	V1910	.040	.030	.006	1.344	.179
	V1920	-.016	.016	-.004	-.986	.324
	V1930	.040	.014	.013	2.912	.004
	V1940	.009	.017	.002	.495	.620
	V1950	-.069	.014	-.023	-4.871	.000
	V1960	-.093	.009	-.082	-10.205	.000
	V1970	-.083	.009	-.077	-9.484	.000
	V1980	-.033	.012	-.014	-2.860	.004
	V1990	-.140	.007	-.114	-20.008	.000
	Water_View_Slight	.080	.011	.032	7.435	.000
	Water_View_Moderate	.043	.051	.003	.836	.403
	Water_View_Wide	.221	.013	.074	17.367	.000
	Water_View_Wide	.334	.015	.099	22.756	.000

Table 5.12 Auckland City Regression Analysis Results: Selected Unstandardized Coefficients

a. Dependent Variable: Log_Net_Price

Albany Submarket

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.935[a]	.874	.869	.11131

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	150.184	68	2.209	178.243	.000[b]
	Residual	21.709	1752	.012		
	Total	171.893	1820			

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	11.332	.036		313.405	0.000
	Spencer_71	.149	.015	.126	9.749	.000
	Masons_60	.242	.017	.184	13.972	.000
	Building_Floor_Area	.011	.000	1.457	24.173	.000
	BFA2	-2.598E-05	.000	-.805	-15.136	.000
	Stories_2	-.099	.010	-.159	-10.032	.000
	Stories_3	-.127	.015	-.106	-8.580	.000
	Exterior_Good	-.065	.019	-.035	-3.424	.001
	Exterior_Fair_Poor	-.085	.114	-.013	-.741	.459
	Interior_Good	.013	.019	.006	.652	.514
	Interior_Poor	.087	.132	.012	.658	.511
	Mono_before_Hunn	.011	.013	.011	.828	.408
	Mono_after_Hunn	-.020	.008	-.029	-2.513	.012
	MB_Med_HH_Inc_2006	2.986E-06	.000	.159	14.153	.000
	V1930	-.057	.087	-.006	-.651	.515
	V1950	-.164	.068	-.025	-2.422	.016
	V1970	-.051	.023	-.058	-2.253	.024
	V1980	-.017	.024	-.013	-.697	.486
	V1990	-.079	.008	-.116	-10.505	.000

Table 5.13 Albany Submarket Regression Analysis Results: Selected Unstandardized Coefficients
a. Dependent Variable: Log_Net_Price

New Lynn Submarket

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.913[a]	.834	.827	.12804

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	166.195	82	2.027	123.627	.000[b]
	Residual	33.034	2015	.016		
	Total	199.229	2097			

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	11.167	.034		326.309	0.000
	Margan_8	.062	.033	.035	1.858	.063
	Ambrico_1	.097	.034	.071	2.822	.005
	Ambrico_3	.094	.029	.045	3.291	.001
	Ambrico_12	.039	.038	.019	1.044	.297
	Ambrico_14	.041	.038	.020	1.087	.277
	Melview_1	.069	.036	.027	1.925	.054
	Ambrico_6	-.126	.034	-.060	-3.712	.000
	Ambrico_4	-.022	.033	-.008	-.661	.509
	Rankin_1	-.049	.035	-.022	-1.418	.156
	Building_Floor_Area	.011	.000	1.151	21.424	.000
	BFA2	-2.685E-05	.000	-.621	-12.462	.000
	Stories_2	-.071	.009	-.105	-8.218	.000
	Stories_3	-.056	.019	-.065	-2.859	.004
	Stories_4	-.062	.051	-.012	-1.214	.225
	Exterior_Good	.030	.009	.037	3.233	.001
	Exterior_Fair_Poor	-.093	.028	-.035	-3.327	.001
	Interior_Good	.059	.098	.006	.604	.546
	Interior_Poor	-.167	.038	-.044	-4.353	.000
	Mono_before_Hunn	-.013	.027	-.008	-.474	.635
	Mono_after_Hunn	-.142	.022	-.162	-6.485	.000
	MB_Med_HH_Inc_2006	1.365E-06	.000	.039	3.445	.001
	V1910	-.018	.068	-.003	-.272	.786
	V1920	-.024	.042	-.006	-.565	.572
	V1930	-.002	.063	.000	-.033	.974
	V1940	-.014	.039	-.004	-.350	.726
	V1950	.002	.029	.001	.079	.937
	V1960	-.095	.019	-.087	-4.980	.000
	V1970	-.117	.016	-.188	-7.105	.000
	V1980	-.045	.020	-.037	-2.298	.022
	V1990	.017	.023	.023	.752	.452

Table 5.14 New Lynn Submarket Regression Analysis Results: Selected Unstandardized Coefficients

a. Dependent Variable: Log_Net_Price

Onehunga

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.913[a]	.833	.824	.13145

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	97.832	64	1.529	88.471	.000[b]
	Residual	19.559	1132	.017		
	Total	117.391	1196			

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	11.443	.049		233.616	0.000
	Onehunga_287	-.070	.032	-.034	-2.207	.028
	Building_Floor_Area	.012	.001	.967	16.475	.000
	BFA2	-3.059E-05	.000	-.529	-9.188	.000
	Stories_2	-.057	.013	-.078	-4.350	.000
	Stories_3	-.057	.024	-.048	-2.437	.015
	Exterior_Good	.029	.009	.046	3.121	.002
	Exterior_Fair_Poor	.003	.025	.002	.125	.900
	Interior_Good	.149	.038	.055	3.893	.000
	Interior_Poor	-.096	.061	-.020	-1.580	.114
	Mono_before_Hunn	-.074	.151	-.007	-.486	.627
	Mono_after_Hunn	-.083	.018	-.086	-4.623	.000
	MB_Med_HH_Inc_2006	-8.735E-07	.000	-.042	-2.277	.023
	V1920	.046	.059	.010	.782	.434
	V1940	.096	.069	.020	1.379	.168
	V1950	-.093	.038	-.034	-2.431	.015
	V1960	-.070	.020	-.104	-3.595	.000
	V1970	-.012	.018	-.019	-.669	.504
	V1980	.044	.030	.021	1.462	.144
	V1990	-.075	.025	-.044	-2.974	.003

Table 5.15 Onehunga Submarket Regression Analysis Results: Selected Unstandardized Coefficients
a. Dependent Variable: Log_Net_Price

Overall, the results are largely as anticipated, with most of the variables significant at the .01 level and in the expected direction (see Sirmans et al., 2005 for a discussion on the composition of hedonic models and the expected signs of different variables). The chosen specification fits the data very well with coefficients of determination ranging from .81 to .87. Across the models the control variables are quite stable. For instance, floor area and floor area squared are significant and maintain the expected positive-negative signs, which conforms to the law of diminishing marginal utility whereby the sales price increases with floor area but does so at a diminishing rate. In terms of interior and exterior condition, units noted as being in 'good' condition generally commanded a price premium (positive sign) while properties categorised as 'poor' tended to be subject to price discounts (negative sign). As anticipated, the set of dummy variables controlling for differences in vintage show that a non-linear vintage effect exists with the earliest vintages generally selling at a premium over the more current vintage units. As expected, monolithic clad units sold prior to the release of the Hunn Report (Hunn, Bond & Kernohan, 2002) tended to command a price premium (positive sign) whereas monolithic clad units sold after the release of the Hunn Report were subject to price discounts (negative sign).

The set of dummy variables identifying the case study developments, which are the main variables of interest for this study, are quite stable and consistent across the models. With the default being multi-unit dwellings located outside of the case study areas (see model specification variable description for Ambrico 1 etc), it is possible to identify relative premiums and discounts that individual developments traded at. Holding all other things constant, The Ridge/Spencer and Masons developments commanded a price premium (positive sign) across each of the relevant models, whereas the Onehunga development was subject to a price discount (negative sign). Within the Ambrico Place development certain sub-areas commanded price premiums (1 Ambrico Place, 3 Ambrico Place, 12 Ambrico Place, 8 Margan Avenue) but others (6 Ambrico Place, 1c Rankin Avenue) sold at a discount.

Price premiums and discounts

The case study dummy variables can be interpreted further and used to estimate the magnitude of price premiums and discounts. In order to do this the coefficients associated with these variables must first be transformed. The required transformation involves taking the antilog of each dummy variable's estimated coefficient and subtracting one (for the interpretation of dummy variable coefficients see Halvorsen and Palmquist, 1980 and Rehm, 2009). This transformation produces an estimate of the percentage premium/discount in the price of the case study dummy variable compared with the default variable (i.e. multi-unit dwellings located outside of the case study areas).

Table 5.16 sets out the estimated price premiums/discounts for each of the developments across the four geographical market models. The identified premiums/discounts are consistent across the models and are, in some instances, substantial.

Submarket	Address	Estimated Price Premiums / Discounts			
		Region	Three Cities	City	Submarket
Albany	71 Spencer Rd	24.5%	25.9%	13.6%	16.1%
	60 Masons Rd	35.7%	38.3%	20.2%	27.4%
New Lynn	1 Ambrico Pl	5.6%	5.5%	5.5%	10.2%
	3 Ambrico Pl	25.9%	27.5%	9.2%	9.9%
	4 Ambrico Pl				
	6 Ambrico Pl		-7.4%	-6.5%	-11.8%
	12 Ambrico Pl	7.0%	9.9%		
	14 Ambrico Pl				
	8 Margan Ave	6.1%	8.7%		
	1 Melview Pl				
	1c Rankin Ave (1c Briar Way)	-15.4%	-13.7%	-11.9%	
Onehunga	287 Onehunga Mall	-13.5%	-14.1%	-12.9%	-6.8%

Table 5.16 Estimated Price Premiums and Discounts

Note: Premiums listed if significant at the 0.05 significance level

At the level of individual developments, The Ridge (Spencer) and Masons developments consistently command a price premium. Compared to other multi-unit developments within the region and the 'three cities', The Ridge development enjoyed an estimated price premium of 24.5 per cent and 25.9 per cent respectively, while the Masons development had premiums of 35.7 per cent and 38.3 per cent. Being located in North Shore City, the area that since the 1990s has had the highest average house prices in the region, one would expect that these developments would command a premium over properties located throughout the region. However, the size of these premiums suggests that these developments are distinct and this is evidenced by the fact that these developments commanded a premium compared to multi-unit prices in the North Shore (13.6 per cent) and within the local sub-market (16.1 per cent) (see Table 5.16). Whilst it is possible to identify the estimated price premiums associated with these developments it is difficult to identify the source of their price advantage. Physical attributes associated with the nature of construction and design, combined with issues relating to the on-going management and reputational characteristics of these developments, may explain why these developments have done so well. It should also be noted that the premiums that have been identified for these developments may reflect the initial prices achieved by these developments. Both of these developments have experienced significant nominal price declines up to 2011 (see earlier discussion on house price trends and see Figure 5.1).

In contrast to the Albany developments, units in the Atrium on Main development in Onehunga were sold at significant price discounts. In comparison to multi-unit developments in the 'region' and 'three cities' the Atrium on Main's discount was 13.5 per cent and 14.1 per cent. While Atrium on Main is located in Auckland City, an area with high average prices, it is arguable that Onehunga is not known for high-cost or high-quality units and this may explain some of the price discount. However, Atrium on Main, which included much larger units than the Albany developments or surrounding units in the local sub-market, had an estimated discount of 12.9 per cent compared with Auckland City multi-unit developments

and 6.8 per cent compared to units in its local submarket. The 'local' discount suggests that there were site-specific pricing issues at work in this development. The appointment of a liquidator may have had an impact on the prices achieved in this development.

Interpreting the implications of these price discounts is complex. Given that most of the units in Atrium on Main have only been sold once it is arguable that the any discount has been borne by the developer. The source of the discount may reflect the timing of the release of the units on to the market. The financial problems of the developer and the role of the liquidator may have meant that units were sold at a discount to generate cash revenues to meet debt obligations. For the owners of units in the Atrium on Main, two future scenarios can be imagined. First, if the market picks up and future sales are not forced, current owners may make a capital gain (i.e. the discount carried by the developer becomes an opportunity for the first owner to make a capital gain). However, if demand is low for higher-priced properties in this locality, the prices achieved by the developer will have set a 'price ceiling'. The discount will persist until market conditions improve.

Ambrico Place is the largest development in the study. It consists of nine sub-developments that have distinct architectural and physical characteristics. The heterogeneous nature of the development contrasts with the structural homogeneity of the other developments and thus price premiums and discounts were estimated for each sub-development (see Table 5. 16). Three sub-developments (1, 3, and 12 Ambrico Place) commanded price premiums. With respect to 3 Ambrico Place these premiums ranged from 27.5 per cent (Three city model) to 9.9 per cent (New Lynn submarket model); indeed, the sub-development commanded a price premium with reference to all four models. In contrast, prices in 6 Ambrico Place were discounted by 9.1 per cent (Waitakere City) and 12.7 per cent in the local sub-market and, 1C Rankin Avenue also recoded a price discount ranging from 14.9 per cent (Region) and 11.9 per cent (local submarket).

Developments within Ambrico Place have experienced leaky building syndrome and have undergone, or were undergoing, remediation processes during the study period. Both the identification and remediation of leaky building syndrome are likely to have significant negative impacts on prices. Rehm's (2009) study indicates that monolithic clad residential buildings are sold at a discount. Sub-developments within Ambrico Place were accordingly sold at discounted prices. Yet, given the prevalence of leaky building syndrome within the development, it is surprising that two sub-developments, 1 and 3 Ambrico Place, commanded price premiums.

1 Ambrico Place (Tuscany Towers) is a sub-development that has clear evidence of leaky building syndrome and was undergoing remediation processes at the time of the study. It is therefore surprising that this sub-development had a small premium in the larger models (approx. 5 per cent) and a 10 per cent premium at the submarket level. A number of variables not captured in this model may explain this result. The development boasts an entry barrier for vehicle access, has tennis courts, and some of the units have been specifically designed to 'work from home' with a separate public (off Rankin Avenue) and private entrance (off Ambrico Place).

Sales at 3 Ambrico Place recorded significant premiums compared with the regional (25.9 per cent) and three cities (27.5 per cent) models, and lower premiums compared with the Waitakere (9.2 per cent) and local submarket (9.9 per cent) models. Yet these units, with an average floor area of 67 sqm, are substantially smaller than other units in Ambrico Place and

within the New Lynn submarket. The average size of units at 3 Ambrico Place is comparable to the size of units in The Ridge (Spencer) development. Significantly, both of these developments command price premiums, indicating that some buyers are prepared to pay more for smaller units. It would seem that certain attributes of these units have been priced into the market for these units, or it could be that small units are scarce in the area. At a more general level, the differential price performance of 'sub-developments' within Ambrico Place highlights the importance of housing market micro-geographies.

CONCLUSIONS

Notions of affordability, value for money, and the potential for capital gains or losses shape owners' and investors' perceptions and understandings of the merit of this housing type and these experiences are incorporated into the popular discourses that surround medium density housing development. The success of these developments as homes and neighbourhoods is also affected by market outcomes. For property owners, the sale price of adjacent units may be interpreted as an external validation of their decision-making. Significantly, medium density housing developments often include more complex tenure structures compared to the mono-tenurial norm of older suburbs. Within bodies corporate, the expectations and experiences of owners and tenants may be a source of tension – see Chapter 4 for more information on this matter. This chapter has addressed the price characteristics and price dynamics of units within the case study sites. The analysis offers insights in to the micro-geographies of housing markets and provides market information that assists in interpreting the experiences of residents, as laid out in Chapters 4 and 6.

The case-study developments have varied sales and development histories. Using several datasets, an analysis of key attributes and price dynamics was undertaken. At a descriptive level Ambrico Place was the largest sub-development, had the longest sales history and the lowest average prices. In contrast, a significant number of units in Atrium on Main in Onehunga had no recorded sales data. Most of the sales recorded for this development were the first sale of the unit. While average prices in Atrium on Main and The Ridge (Spencer) were similar, The Ridge units were on average the smallest units in the study. Thus prices per sqm in The Ridge development were the highest within the case study developments. During the mid- 2000s, sale prices of all the developments rose but in line with the New Zealand market, average prices and sales volumes declined after 2008 and increased once again in 2011.

In order to examine the relative performance of prices within the case study areas, we constructed a series of hedonic price models at different geographical scales. Arising from this analysis a set of price premiums and discounts were calculated for each of the developments and for the sub-developments that comprise Ambrico Place.

The Ridge (Spencer) and associated Masons developments commanded substantial premiums within all of the models. Holding other variables constant, the units within The Ridge and Masons developments were sold at price premiums compared with multi-unit dwellings located in nearby suburbs, the North Shore and the Region. Significantly these units are, on average, smaller than other units in the case study areas and also multi-unit dwellings in the region. The price premium may arise from a combination of their small size, nature of development, and management, but this is conjecture. In addition, the premiums that these

developments commanded may have been 'frontloaded' and reflect the initial high average prices that they achieved. It is noteworthy that both The Ridge and Masons experienced significant nominal price declines up to 2011.

Despite the high average sale price of individual units (compared to the other developments in the study), the Atrium on Main in Onehunga nonetheless sold at a discount. These units are large in terms of the case study developments and larger than other units in the Onehunga submarket. The large number of units in the Atrium with no recorded sales suggests that there were issues with the release of these apartments on the market. It is unclear whether the discounts that have affected these units will be long lasting or are a reflection of the post-2008 property downturn and the financial problems encountered by the developer.

Within Ambrico Place, there were significant variations in the relative price performance of different units. The smallest units, at 3 Ambrico Place, sold at the highest price premiums; whilst 1 Ambrico Place, with private access and tennis courts, recorded small premiums. In contrast, 6 Ambrico Place and 1c Rankin Avenue recorded discounts. The variability in the price performance of units within Ambrico Place highlights the micro-local factors that influence the price of units.

At a general level, the sales data analysis offers some important insights. First, while the case study developments are representative of medium density housing located in proximity to town centres, and thus share broad amenity/environmental contexts, there is no single price trajectory for this dwelling type. In other words, medium density housing does not necessarily generate price premiums or discounts. Second, the price performance of individual housing developments is contingent on highly localised and specific issues including the development history, and the on-going management of, developments. This finding has important policy implications as it highlights the importance of 'on the ground' development/construction practices and experiences in shaping the relative price performance of individual medium density developments. In this context, micro-level property processes have a very strong impact on price dynamics and these processes may not align with planning policy objectives. Third, smaller sized units (The Ridge (Spencer) and 3 Ambrico Place) commanded price premiums compared to other multi-unit dwellings. It is possible that these premiums reflect property attributes that were not captured in our model or that they reflect specific sub-market demand and supply issues. Future research on medium density housing could focus on the demand issues surrounding smaller sized units.

6 FROM THEN TO NOW: AMBRICO PLACE REVISITED

INTRODUCTION

In 2001, a team of researchers from the University of Auckland and Massey University published an in-depth study of medium-density housing in Ambrico Place, New Lynn (Dixon, Dupuis & Lysnar, 2001). The research was funded by the Waitakere City Council (WCC) and supported by the Auckland Regional Council, the University of Auckland, and Massey University. Ambrico Place was the first large-scale, major housing initiative in Waitakere City, and while in 2001 it was still fairly new, the WCC had been promoting variants of the compact city and urban village approach since 1992. Given the Council's commitment to intensive housing, in the context of its broader eco-city principles and policies, it was important in the early stages of intensive housing, to find out how well this form of housing was working for both residents and local communities, particularly since Ambrico Place was a flagship intensive development for the WCC.

When the research project was completed, there was talk of a follow-up piece of research with Ambrico Place residents some years in the future. This did not eventuate, but in 2009 a subsequent piece of research was undertaken with residents living in the Crown Lynn Condominiums, the other large-scale intensive-housing development in Waitakere City (Dupuis, Dixon & Read, 2009). The research we report on here fulfils the original intention of following up with Ambrico Place residents. It offers a unique opportunity to compare the research findings of two separate studies of the same medium-density housing development carried out more than a decade apart. As far as possible, as we noted in Chapter 4, participants were asked the same (or similar) questions so that we could make comparisons with what the residents told us a decade ago.

Contextual changes

Since the 2000/2001 research was undertaken, a number of broader contextual changes have occurred: political changes; infrastructural changes; and various changes and developments within the Ambrico Place area itself.

In 2010, the Waitakere City Council was disestablished as part of the reorganisation of local governance in the Auckland region. However, the Waitakere City Plan remains operative until such time as the Auckland Council Unitary Plan is notified; from then it will take precedence over the legacy plans of the former City and District Councils. Also with regard to legislative change, the Unit Titles Act (1972) was reviewed and replaced by the Unit Titles Act (2010). The intent of the new Act is to provide owners with greater flexibility and certainty. Of particular importance for owners are the regulations making it easier to change body corporate rules and those requiring a compulsory maintenance fund for long-term repairs and maintenance.

Major infrastructural changes have occurred in New Lynn that have implications for Ambrico Place residents. Described by the Auckland Council as the country's largest-ever public transport infrastructure investment (Auckland Council, 2012), the major infrastructure project in the area comprised a kilometre-long underground trench for the railway corridor, double-tracking, and a new transport interchange. Roading developments include the Clark Street extension and the development of Totara Avenue's shared space. The redeveloped Todd Triangle has turned this area into a more pedestrian-friendly space and features five brick sculptures that commemorate New Lynn's past industrial history. Gardner Reserve, adjacent to a new bypass, has new seating, lighting, and landscaping, including a rain garden. The Auckland Council claims that these developments pave the way for the long-heralded revitalisation of the New Lynn Town Centre.

Since the research in 2001, a number of changes have taken place in and around the Ambrico Place developments, some of which have been documented in other parts of the report. In 2011, the New Lynn Kindergarten moved into new premises in Ambrico Place. In September 2012, the Education Review Office published an excellent review of the kindergarten. In addition, the Manawa Wetlands, which were in the early stages of development in 2001, are now a most attractive amenity, especially since the 2007 upgrade, at which time weeds were cleared and the health of the ponds restored.

The remainder of this Chapter provides data and discussion of key findings from both pieces of research. We begin by comparing the two participant samples; this is followed by a review of themes discussed in both projects such as sense of community, transport use, children living in Ambrico Place, the operation of bodies corporate, expectations, future housing intentions, and housing preferences.

Research participants: comparing the two samples

In 2001 interviews were held with residents from 51 Ambrico Place households. In 2012 we interviewed residents from 54 Ambrico Place households.

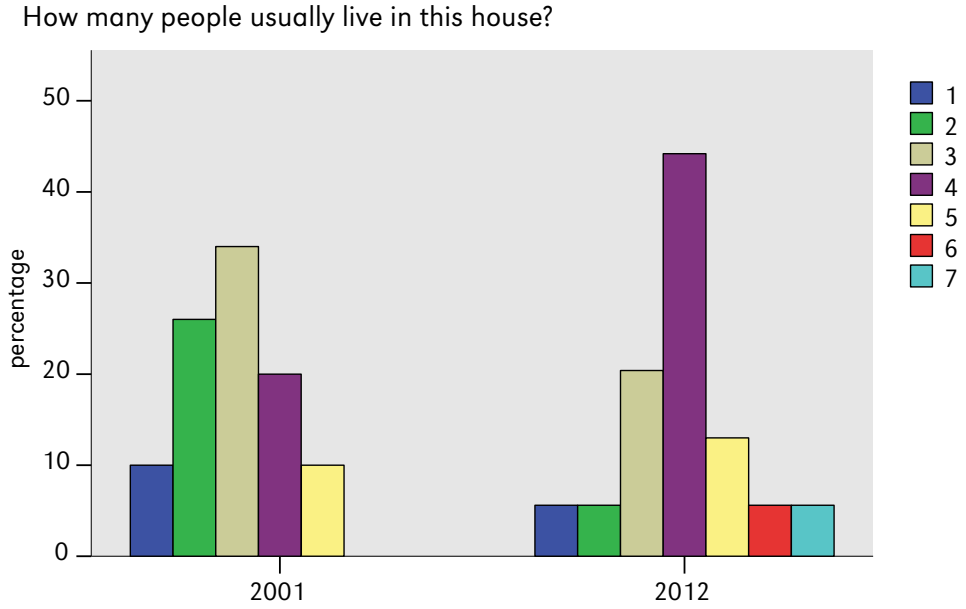


Figure 6.1: Usual household size

As Figure 6.1 shows, average household size was considerably larger in the 2012 sample. This could be explained by the high proportion of extended families in the Chinese sample interviewed.

Figures 6.2 and 6.3 show the proportion of adults in the sample and numbers of adults by sex.

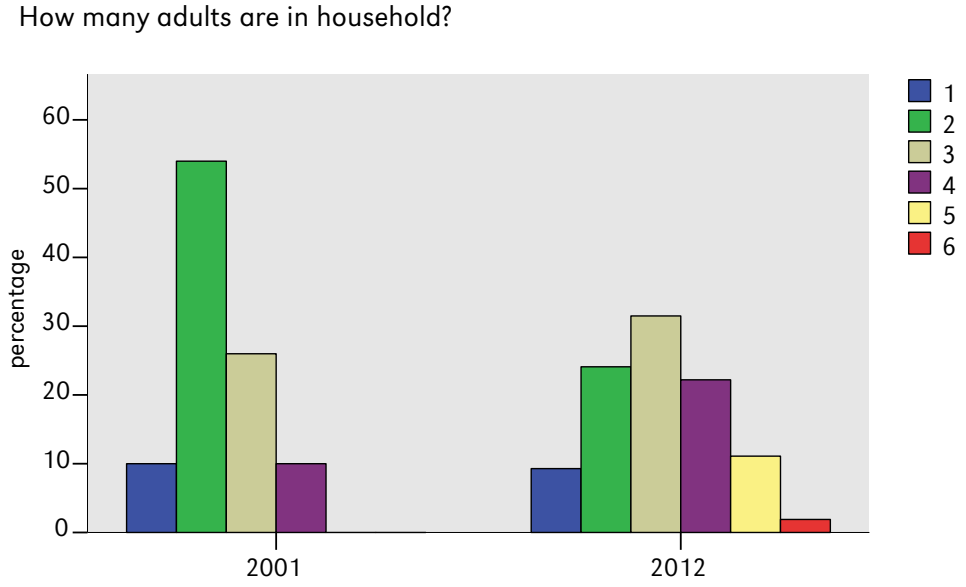


Figure 6.2: Adults in the sample households

How many adult females and adult males are in this household?

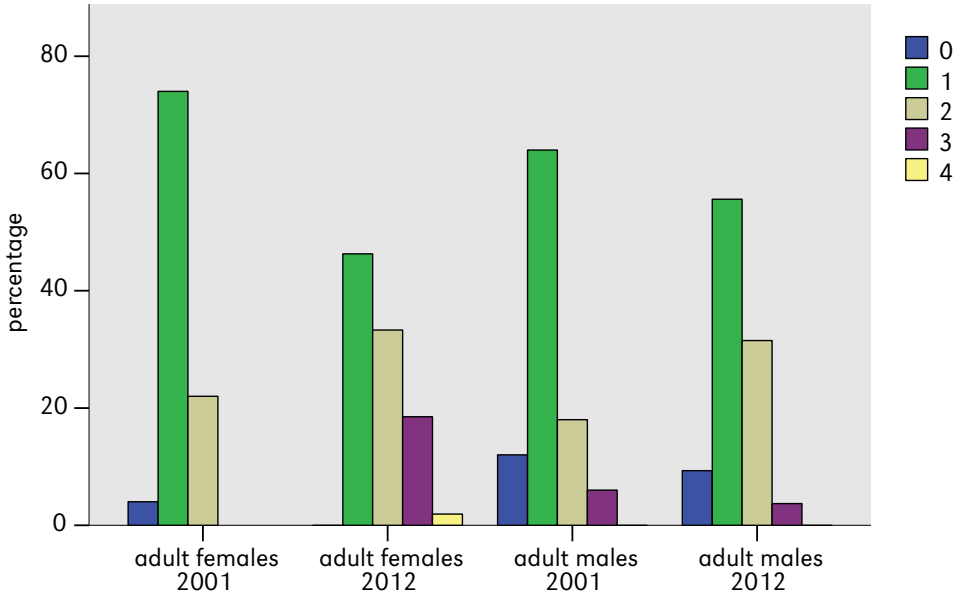


Figure 6.3: Adults by gender

Age range across households - Ambrico Place 2012

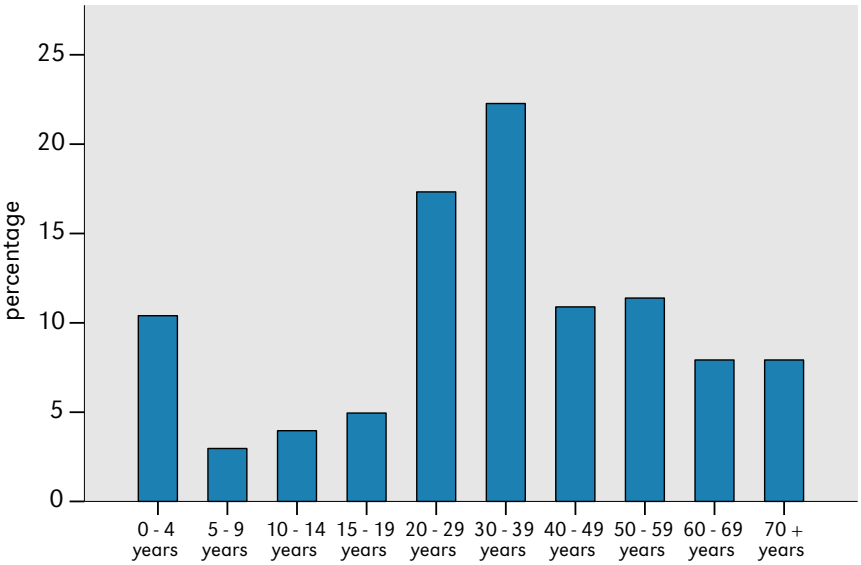


Figure 6.4: Age of residents, 2012

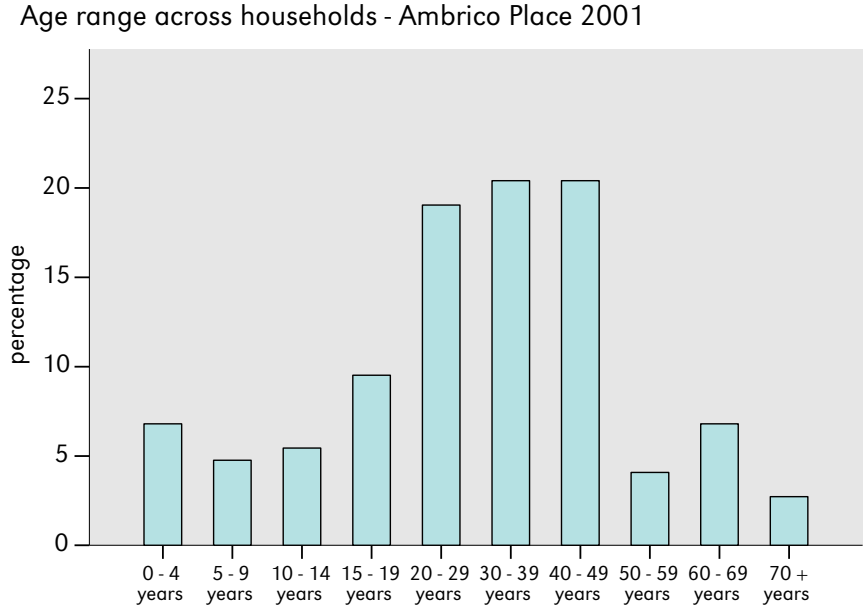


Figure 6.5: Age of residents, 2001

Figures 6.4 and 6.5 show a somewhat different age profile between the two samples, with a higher proportion of people in the older age groups in the 2012 sample. Again, this can be accounted for by Chinese parents living with their adult children.

With respect to ethnicity, both samples contained a high proportion of overseas born residents, a substantial proportion of whom were born in China. In the 2001 sample, 67 per cent of interviewees were overseas born. The percentage of overseas born had increased to 83 per cent for the 2012 sample. The ethnic concentration reflects 2006 Census data, which showed that a high proportion of people living in the LynnMall Census Area Unit (which encompasses the Ambrico Place site) described themselves as Asian (WCC, 2010, p. 23). In the same publication, it was suggested that, should the trend identified in the 2006 Census continue, New Lynn is likely to have the highest increase in Asian ethnicities in west Auckland. Our data bears this out.

Our earlier Ambrico Place research indicated that more than a quarter of the adults in our sample were adult students. In 2001, Ambrico Place was considered a suitable place to live, as it was located on good transport routes to tertiary institutions, in an area that was attracting Chinese businesses, including food and other retail services. This trend has continued and, in the 2012 research, many Chinese-born residents referred to the local amenities and facilities in very positive terms. New Lynn itself has now become the main west Auckland location for Asian festivals. The Community Centre is well used for Chinese cultural and arts events and meetings of the local Chinese community.

Community

As we expected, the 2012 question asking residents how long they had been living in Ambrico Place produced very different results from 2001, when Ambrico Place was still a relatively new development. The 2012 data show that Ambrico Place is becoming a relatively stable community, with nearly three-quarters of interviewees having lived there for three years or more. This finding is pertinent in the light of the Waitakere City Council's earlier concerns regarding the high level of transience and population churn in the wider New Lynn area, and the resultant difficulty of creating a stable community (WCC, 2010).

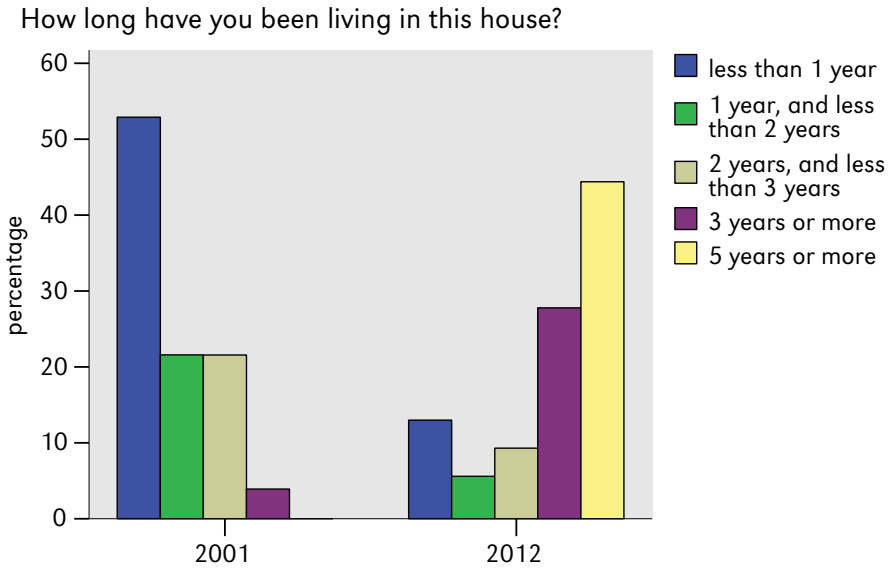


Figure 6.6: Length of residence

Further indication of the development of a stable community can be seen by the increase in home ownership in 2012. In 2001 we found that a few interviewees were involved in a rent to own scheme. There was no evidence such a scheme was still operating in 2012.

As mentioned elsewhere in this report, Ambrico Place residences have been seriously impacted by the leaky building syndrome. Our interview data show that this has been a disaster for the residents affected. It might also have meant that owner' plans to sell their properties and move on have been stalled until remediation has been completed.

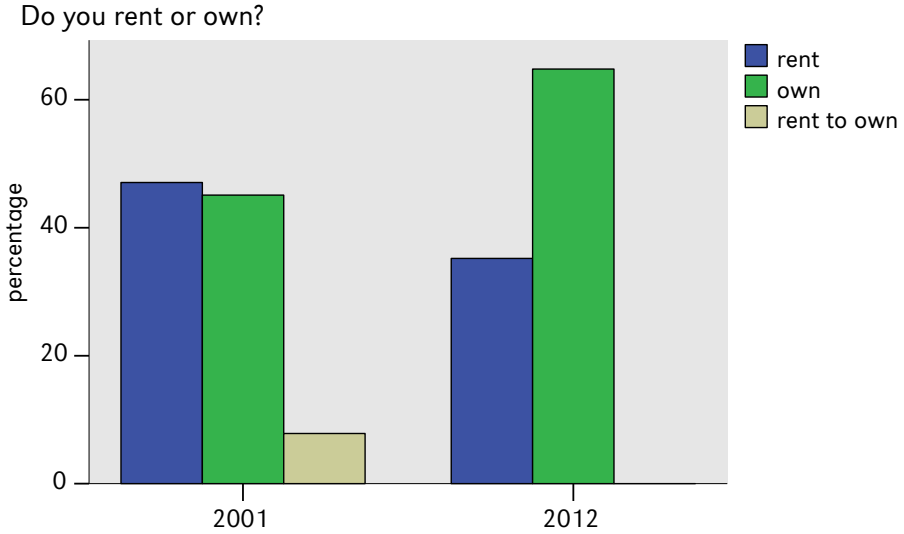


Figure 6.7: Tenure

Despite the data on length of residence and tenure, residents' intentions for living in Ambrico Place in the future somewhat muddy the views about stability, given the 40 per cent of 2012 residents who said they were not sure how long they will continue living in Ambrico Place (see Figure 6.8).

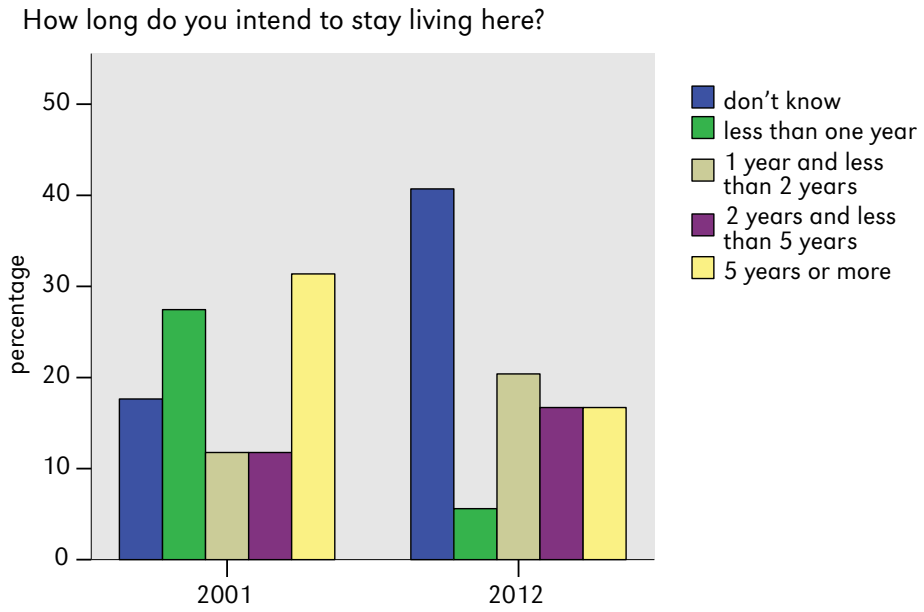


Figure 6.8: Residential intentions

We asked direct questions specific to residents' feelings about community in both 2001 and 2012 (Figures 6.9 and 6.10). In terms of the importance of community, slightly fewer of the 2012 interviewees indicated it was not important for them to feel part of a community; conversely, at least 20 per cent more respondents indicated that feeling part of a community was very important to them.

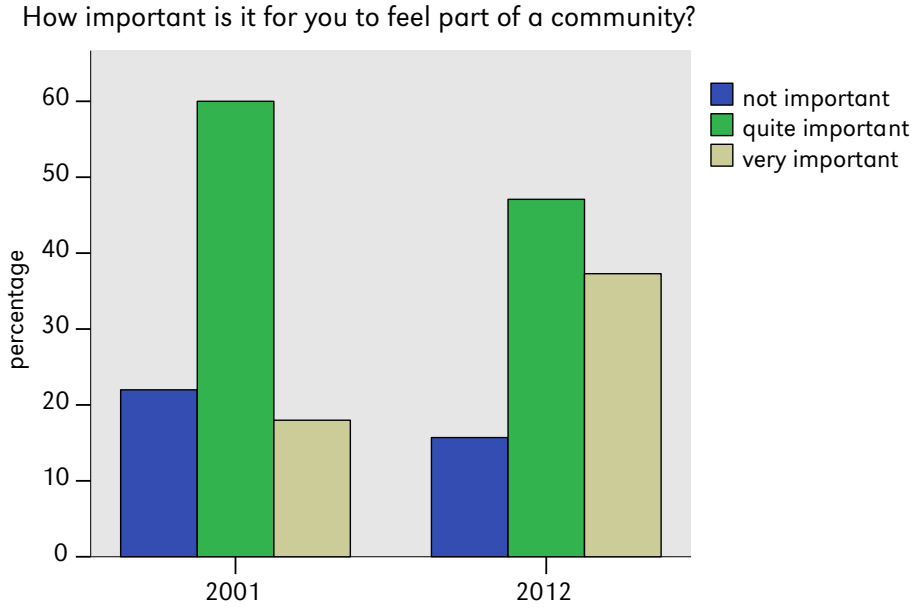


Figure 6.9: The importance of community

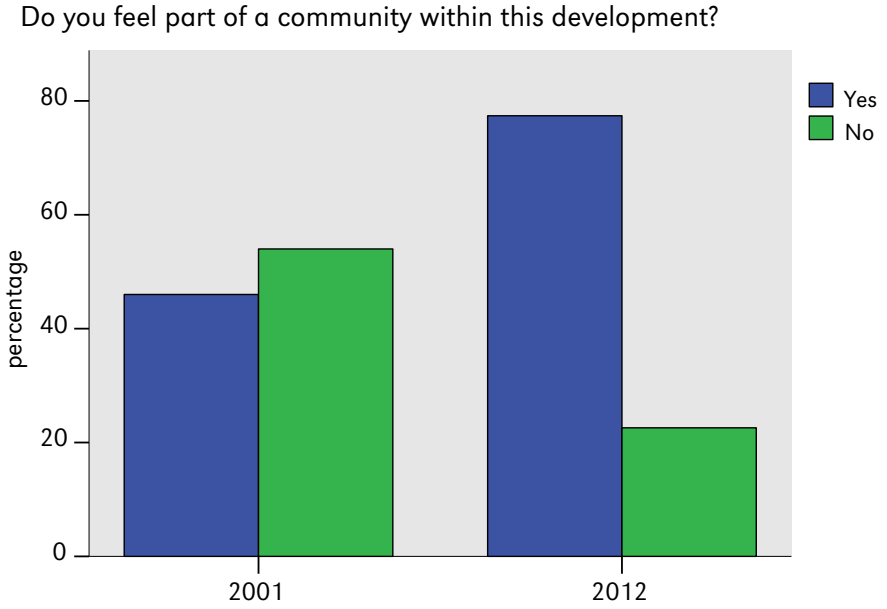


Figure 6.10: Feeling part of a community

Figure 6.10 shows a considerable increase in the proportion of interviewees who said they felt part of a community in their development. Again, these findings could indicate the increasingly strong bonds that are being forged within the Chinese community in Ambrico Place. They may also reflect the extent to which Chinese-born residents feel at home within the wider New Lynn community. The sense of community might also have been fostered by the collective action needed to achieve remediation in the developments affected by leaky building syndrome.

Transport

There was a considerable increase in the percentage of residents who said they used public transport over the decade, from 54 per cent in 2001 to nearly 82 per cent in 2012 (Figure 6.11).

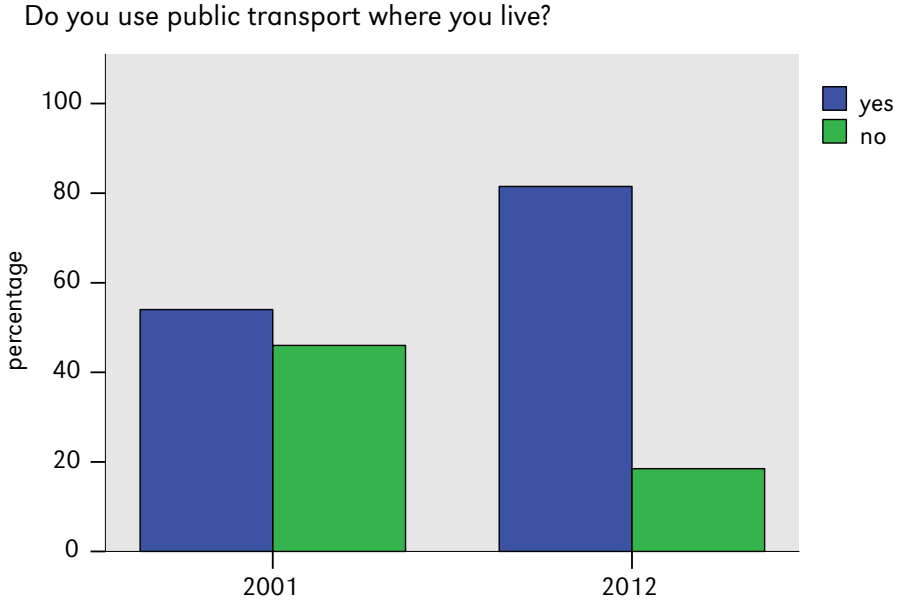


Figure 6.11: Public transport use

How often do you use public transport?

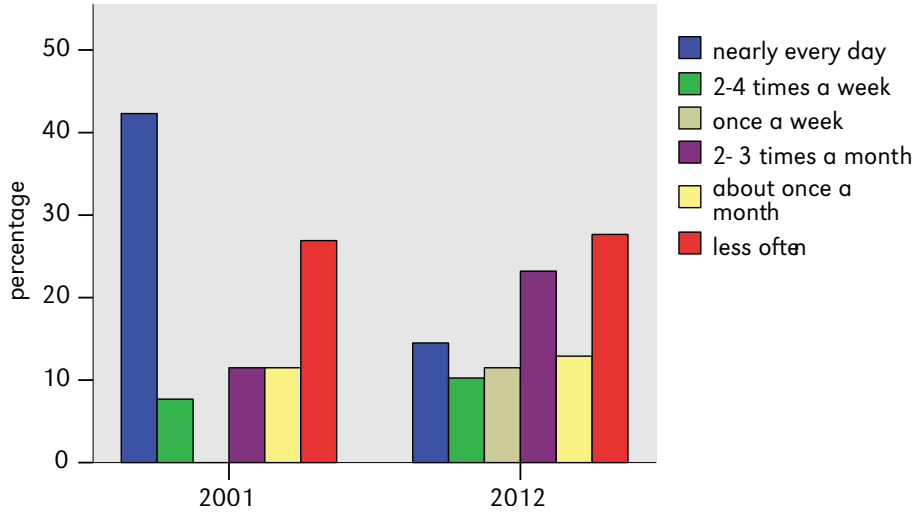


Figure 6.12: Frequency of public transport use

The more important question, however, is *how often* they use public transport. The Council might be disappointed by their responses. As Figure 6.12 reveals, although more people told us they use public transport, fewer are frequent users, despite the improvements made to public transport facilities and infrastructure in the area since 2001.

The number of cars per household also increased since 2001, largely explained by the increase in the number of adults living in the households in the sample. Whereas in 2001 the majority of those interviewed reported just one car (48 per cent) or no car (6 per cent) in their household, in our 2012 interviews two-car, three-car and four-car households comprised nearly 60 per cent of the sample (see Figure 4.64, Chapter 4). A slightly lower percentage of interviewees in 2012 indicated that parking was an issue (approximately 43 per cent compared with 46 per cent in 2001).

Children in Ambrico Place

The two research projects provide us with useful information regarding the suitability of intensive housing for children, especially given the future importance of intensive housing in accommodating families with children. Figure 6.13 shows the increased proportion of households in the respective samples which housed children.

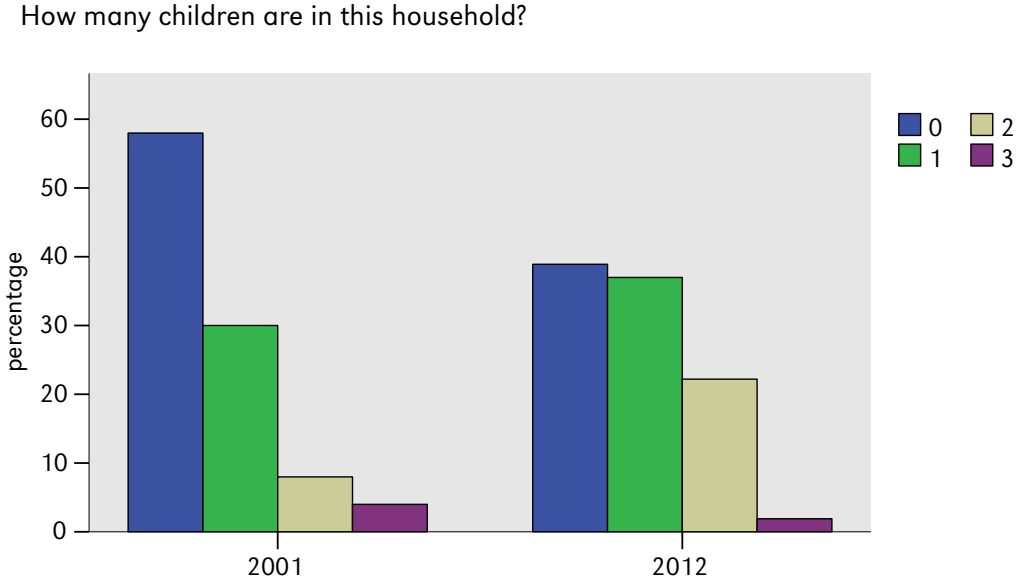


Figure 6.13: Children in Ambrico Place

Since 2001, there has been a considerable increase in the proportion of people who think Ambrico Place is a good place for children to live in (Figure 6.14). There are a number of possible explanations for this. First, Ambrico Place is considered to be reasonably safe with regard to traffic. Traffic moves slowly through the complex, not only because drivers are aware that children might be playing outside, but also because speed bumps ensure that their speed is restrained. In addition, the road that loops around the units is not a public road, so it is used only by residents and their visitors.

The interview data showed that the green area and playground were regarded as an excellent amenity by interviewees. The playground is centrally located and so is visible to many residents, increasing parents' sense of safety in that they know that they and others can observe their children playing. The playground is also something of a meeting-place for some of the local women with young children, highlighting the importance of having such an amenity as a community resource.

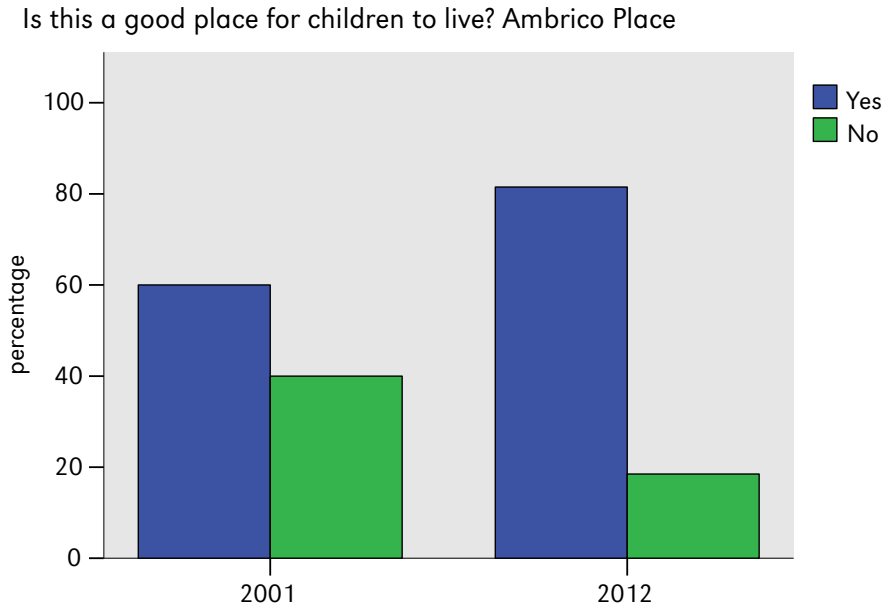


Figure 6.14: Is Ambrico Place suitable for children?

The local Kindergarten, now in premises at Ambrico Place, has fostered community links among families with young children. The Kindergarten runs parenting programmes and has made an effort to work with families in the area.

The Manawa Wetlands provide an attractive amenity for families with young children, especially 'feeding the ducks' – the activity that small children so appreciate.

Whilst some residents said that their units were not particularly spacious and therefore not as suitable for children as larger units, there was little indication that the units themselves were unsafe. This is a much more common finding in higher rise apartment blocks, where concerns are often voiced about children living in environments with balconies and sliding doors and the difficulties of keeping children safe in such environments.

Bodies Corporate

The 2001 research unearthed a number of issues at Ambrico Place concerning the function, structure, and operation of bodies corporate. These included:

- the difficulty for owners to change body corporate rules;
- poor communication between body corporate management companies and owners;
- communication issues between body corporate management companies and non-English speaking residents;
- the lack of communication between off-site owners and tenants;
- no live in on-site manager.

While the focus of issues might have changed a little over the intervening decade, it is still the case that bodies corporate do not run smoothly, despite the changes made to the Unit Titles Act in 2010. We found strong evidence that many participants in the 2012 research had major concerns about various body corporate issues. Some 80 per cent of owners said they did not have enough information about body corporate rules before they bought their homes, while over 60 per cent of the sample were either 'not very familiar with' or 'knew nothing about' body corporate rules.

Chinese-born residents were deeply concerned about the profound lack of communication between them and their body corporate management companies. Consequently, they felt that decisions were being made without their input, which left some owners feeling disenfranchised. They paid their body corporate fees but felt their concerns were not being taken into account. As in 2001, people still made reference to body corporate rules being unfair, especially those rules to do with pet ownership, parking, and laundry on balconies. There was, however, little other evidence that tenants and off-site owners had major communication difficulties with one another.

Expectations and the future

Despite a number of positive findings in the 2012 research, a significantly higher proportion of interviewees than in 2001 said that living in Ambrico Place had not met their expectations, or were equivocal in their response to the question (Figure 6.15).

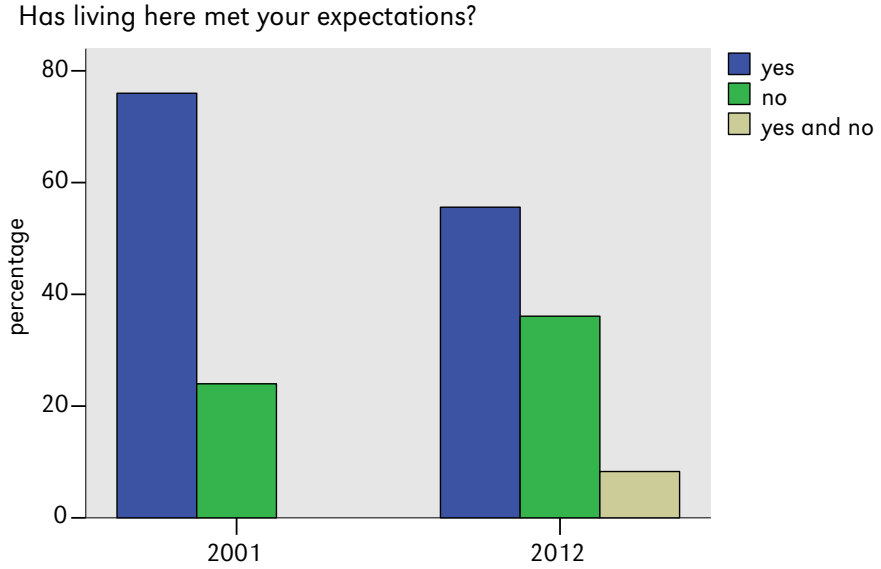


Figure 6.15: Living in Ambrico Place meets expectations

Living in an environment impacted by leaky building syndrome might explain this change. Perhaps, too, the fact that the developments were more than a decade older in 2012 meant that the glamour of living in a new unit had worn off somewhat.

In 2001, we did not ask participants about their future housing careers and preferences. However, a surprising finding from the 2012 research was the number of participants who think they will move to a stand-alone house when they move from Ambrico Place (not to mention those who think they will be living in a stand-alone house ten years from now, and those who in ideal circumstances would choose to live in a stand-alone house (Figures 6.16, 6.17 and 6.18).

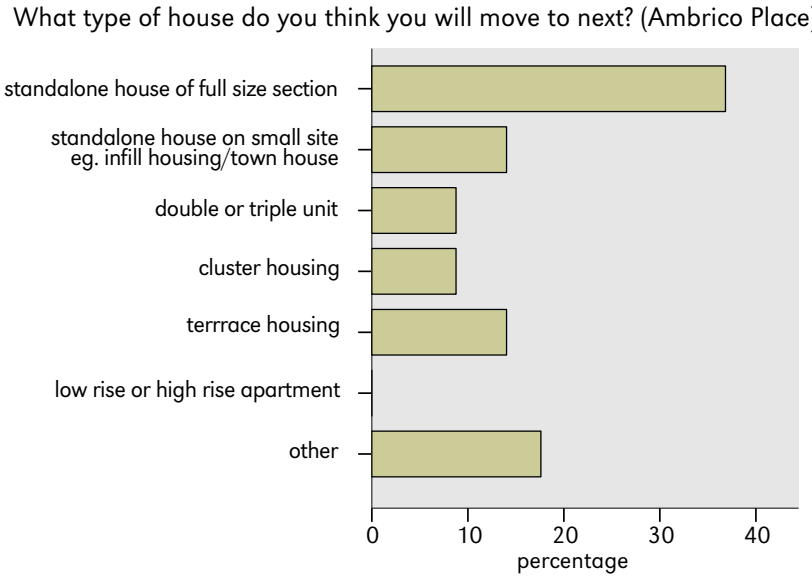


Figure 6.16: Next move - type of housing

What type of house do you think you will be living in ten years from now? (Ambrico Place)

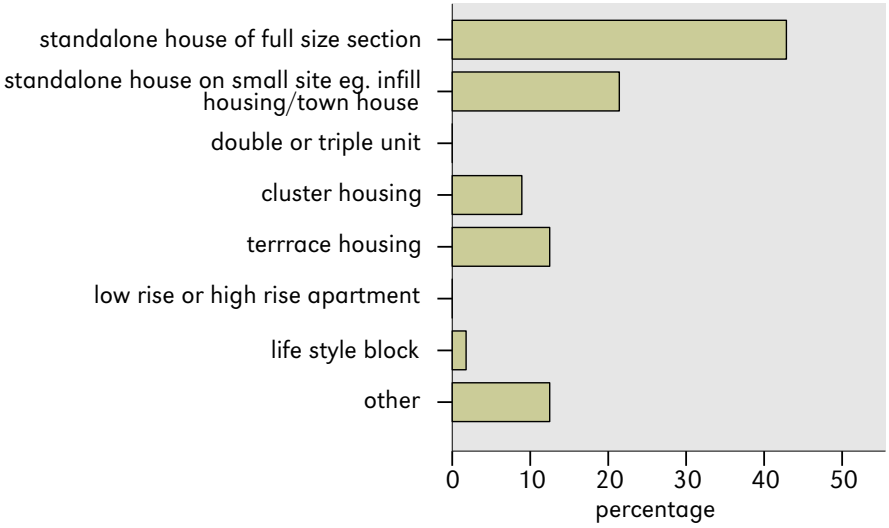


Figure 6.17: Ten years on – type of housing

In an ideal situation what type of housing would you like to live in? (Ambrico Place)

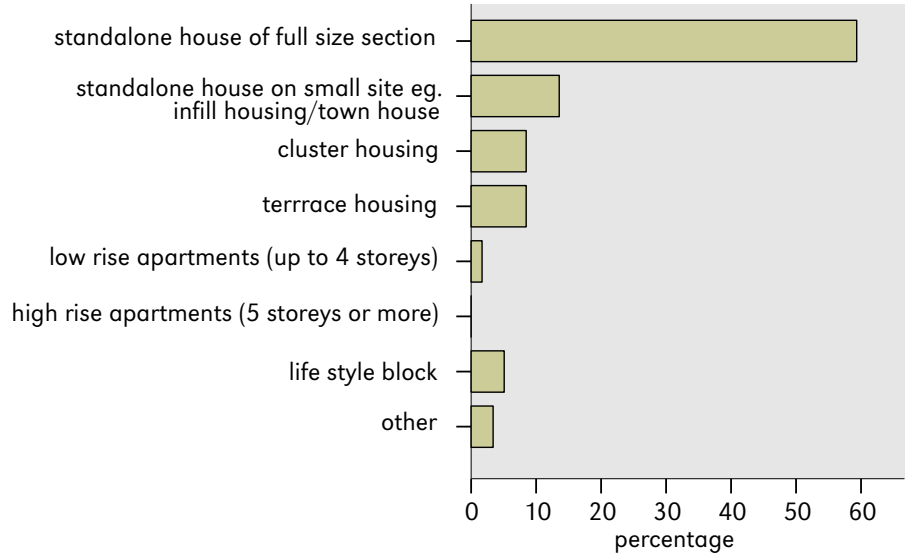


Figure 6.18: Ideal type of housing

CONCLUSION

As intensive housing has become more familiar, some of the heat has gone out of the criticisms levelled at these types of developments which are now commonplace in Auckland's built environment. Yet, as we have seen in Chapter 4, it is not yet regarded as a place to spend one's life in. Close to transport; suitable for children; able to accommodate the extended family; connected to the local community: intensive housing is all these things, but not the preferred housing style for its residents. Nor is it a place they want to remain in permanently. Their preference – and this was true in all the case-study sites, not just Ambrico Place – is to live in a stand-alone house, with a garden, in the suburbs. For a few, the dream was of a lifestyle block. Even in Ambrico Place, close to public transport, with good amenities and services for the local population, the stand-alone house – the Kiwi dream - is still the preferred choice for residents, including those born in China. This finding connects to points raised in Chapter 2, concerning the trade-offs involved in living in intensive housing, and the degree to which the success of intensive housing is dependent on the provision of sought after amenities in well-designed centres.

7 CONCLUSION

Urban growth management strategies in many cities around the world have sought to mitigate the consequences of uncontrolled, low-density urban sprawl, by encouraging and facilitating urban consolidation and housing intensification. The literature review in Chapter 2 provides an overview of international research aimed at evaluating these urban growth management approaches that seek to concentrate future population growth in, and around, defined 'urban centres'. A key consequence of this approach is to direct an increasing proportion of the future urban population, if not the majority of it, into higher density multi-unit, multi storey housing typologies. More recent research has tended to focus on the obstacles to achieving this aim. At least two key issues arise from the literature for cities like Auckland: will intensive housing forms meet the aspirations and needs of their future occupants when the traditional suburban family home is the current aspiration and norm for many; and will the market be prepared to invest in the necessary development providing the associated quality amenities and urban lifestyle that intensive development must offer in recompense for the suburban lifestyle? Whilst our research has not directly addressed these issues, our conclusions are able to offer useful comment and observations.

The interviews with residents in the three case study areas, frame what we believe are important considerations when promoting future housing intensification. With regard to the practical needs that housing fulfils, generally, respondents in the case study developments spoke positively about the location of their housing, and proximity to public transport, shops, schools, work and other facilities. Generally too, respondents also expressed that both their developments and units offered a sense of security and safety. In the case of Onehunga and Albany, this sense of security was extended to include the wider neighbourhood. New Lynn residents felt less safe in their neighbourhood at night.

A high proportion of respondents also expressed the view that their housing met their social needs. This view was strongest among respondents in Ambrico Place, where the agglomeration of residents with Chinese origins appears to have created a supportive environment, with easy access to services and products that met their cultural needs.

The interview data also indicated that living in medium density housing can cater well for people at various stages of their life-cycle. For example, it met the needs of students, single people, working couples, small families, and families and individuals living with elderly parents seeking affordable housing close to amenities. The case study developments offered these groups more flexibility and options compared to detached suburban houses, without the burden of property maintenance.

Each of the chosen case study developments demonstrated location specific characteristics. Ambrico Place, for example, was perceived to cater well for children and offer a safe environment supportive of families. The Albany developments, however, were reported to be far less amenable for families and children, given the poor outdoor facilities, domination of the green spaces by parking and the small size of the units and their bedrooms. These expressed

views concur with our own assessment of the developments, and the view that the Albany developments have significant design deficiencies. Nevertheless, the Albany developments met the needs of students and younger people. The development in Onehunga, on the other hand, was perceived by residents to have more of a cosmopolitan feel, with easy and safe access to a rich array of facilities, public transport, and close to the airport.

The findings on children living in our case study developments does not mean that higher density living is not conducive for bringing up families, a conclusion from the study of children living in apartments in central Auckland (Carroll, Witten and Kearns, 2011). Rather it suggests that better design can go some way to resolving this, along with a facility- rich and safe neighborhood. It also underscores the fact that this form of housing in different neighborhood locations is able to offer a far larger range of housing types, sizes and costs to meet the needs of a much wider spectrum of household types, when compared to detached suburban houses.

Importantly, the interview data illustrated a disjuncture between the planning visions and policies for compact development and the views and practices of residents. For example, while public transport usage is reported, and in the case of Ambrico Place, has increased over the past decade, it does not translate into regular use and respondents complained about high costs. While residents in Onehunga and New Lynn viewed the proximity to shops and services in their respective town centres in a positive light, this was not the case in Albany. Here, the designated metropolitan centre remains largely undeveloped, apart from the car-oriented shopping centre and other 'big-box' retail outlets, with poor pedestrian access.

Other aspects are revealed in the comparison between the 2001 and 2012 resident interviews in Ambrico Place. In these developments, reported home ownership rates have increased since 2001, occupants on average are older, and expressed general satisfaction with their accommodation. Yet they still see their medium density housing as a transition towards owning a suburban house. This underscores a real difficulty in promoting the vision of higher density housing where, for whatever reason, the aspiration towards detached suburban housing remains strong. However, the aspirations of both New Zealand-born and 'new' New Zealanders to live in a standalone home need to be understood in relation to the reasons given for living in their present accommodation: such as 'proximity/location' and 'affordability.' The suburban 'dream' might simply be unrealistic and unaffordable. Keeping in mind the low national median income of New Zealanders and Auckland's high house prices, it can be surmised there is a disjuncture between the desire and aspiration to live in a standalone home and affordability considerations. Nevertheless, this aspiration for suburbia (no matter how unrealistic) is a barrier to the promotion of visions for a compact city that needs to be better understood.

The financial analysis undertaken for this research reveals important dimensions. For example, ownership structures indicate that investors (rather than owners) are dominant in the Albany and Onehunga case studies. This presents a potential mismatch between what residents might prefer in their housing options, and what decisions developers and investors make with respect to multi-unit housing. This concurs with Randolph's (2006) study of housing intensification in Australia, that multi-unit housing tends to be shaped by the requirements and strategies of investors, rather than the needs of owner-occupiers, and that investors have a preference for smaller units.

The dominant position of investors and their demand for smaller units could have very significant consequences for the future of medium density developments in Auckland, especially for family households. It is unclear whether, as suggested by Randolph (2006), there will be an oversupply of smaller apartments resulting from a lack of demand from empty nesters, as smaller units might meet the needs of the single person, sole parent, young independent worker and student households. However, investor demands might result in the creation of a housing stock that is less attractive to owner-occupiers and might promote residential environments that are characterised by more transient communities. Moreover, the level of owner or tenant 'churn' within medium density developments could have significant implications for community development processes.

Our analysis of the price dynamics of the case study developments reveals other significant factors with regard to investment in medium density housing. It shows, for example, that the market has invested in these developments, but it also indicates that the Albany developments obtained a price premium especially during the pre-2008 period, even though these developments have a number of poor design elements identified, and difficult pedestrian connections to the Albany centre and bus station. This contrasts with the other case study areas where the prices did not command a premium, but where the relation to town centres is much stronger. This suggests that amenities may not have been the key to success for the developer, but rather timing was the key: developments were released at the right time. Thus while developers are willing to invest in medium density housing, this does not necessarily translate into appropriate high quality living environments over the long term. While recognising that price performance of individual housing developments is contingent on highly localised and specific issues, including the development's history and the success of on-going management, micro-level property processes have a very strong impact on price dynamics. Once again, this may not align with planning visions and policy objectives.

In the three case studies investigated for this research project, policies for quality development outcomes are embedded in the relevant district plans. We were also interested to know how effective these plans were and how well the associated processes operated in relation to the delivery of the outcomes anticipated. While noting that each of the district plans enables higher density development, and that this was reflected in the case studies, we concluded that the district plans had limited impact on influencing and directing the development process, especially in terms of achieving high quality medium density housing. While it could be inferred that both the Auckland and North Shore Cities Plans sought to provide for good quality medium density housing outcomes, they both had weak policy direction with respect to how these outcomes would be achieved, especially in the quality of the actual district plan drafting. In the case of the Auckland City Plan's Business 2 Zone, there was no policy direction for any other land use activities apart from business activities.

We found evidence of weak and unclear policy drafting within both district plans, where the objectives and policies (policy frameworks) failed to clearly articulate both district plans' intended outcomes, and how these could be achieved in practice. The objectives were typically too broad, loosely written, and unquantifiable, and often the policies failed to sufficiently support them. There was also a disconnection between the weak policy direction and methods in both district plans. The North Shore City Plan's failure to prioritise the relevant issues, including those within its assessments criteria, led towards rule-derived outcomes. The Albany developments were thus largely determined by the car parking and density controls, affecting provision of on-site amenities and the residential unit size. This is

not the design led, good quality outcome sought by the North Shore City Plan. This suggests that developers would prefer to minimise their risk, and therefore stick to district plan rules and avoid entering long discussions about urban design issues.

Our research addresses the complexities of urban planning for compact development. We have found that complex interactions between urban planners, developers and potential buyers (owner-occupiers and investors) profoundly influence the initial physical characteristics of medium density developments. These interactions produce a specific built form that may, or may not, exhibit good design elements and may, or may not, promote long term 'successful communities'.

There appears to be a misalignment between the planning visions for a dynamic compact city delivering both housing and high amenity in their associated neighborhoods and centres. Apartment owners and residents in our survey still aspired for a future life in a suburban house, rather than making a commitment to an urban lifestyle. To give full effect to the visions for a compact city aspirations will need to shift from living and investing in suburbia, towards better valuing higher density living. We need to better understand what the necessary 'trade-offs' are between the suburban lifestyle (whether affordable or not) and the urban lifestyle envisaged for a majority of future Aucklanders.

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APPENDIX ONE

DISTRICT PLAN POLICY INTENTION MAPPING REPORT

CONTENTS

EXECUTIVE SUMMARY

The purpose of this report is a thorough and robust analysis and interpretation of four district plans, their policy frameworks, their strengths and limitations, and the stated desired outcomes in relation to the study sites.

This report has been prepared in conjunction with a wider study of four medium density residential developments across Auckland. This part of the report serves as the district plan analysis of the relevant policy frameworks which were considered at the time of application and resource consent approval for the four study sites. The four selected development sites are:

- 71 McClymonts Road, Albany;
- 60 Masons Road, Albany; and
- 267 Onehunga Mall, Onehunga.

Given the varied geographical location of the study sites and the historical nature of the developments, Resource Consent Applications and Council officer decisions were obtained for each property. These provided the information necessary to determine which district plan and version was appropriate to analyse – the date in which these developments took place. The records provided detailed information regarding each site, the applicable resource consent applications and the council officer's decision reports including which plans and policy frameworks these applications were assessed against. This showed that,

- The relevant statuary frameworks pertaining to 71 McClymonts Road at the time of application was the North Shore District Plan (Proposed) 1994 version with Amendments up until 1998.
- The relevant statuary frameworks pertaining to 60 Masons Road at the time of application was the North Shore District Plan 2002.
- The relevant statuary frameworks pertaining to 267 Onehunga Mall at the time of application was the Auckland City District Plan – Isthmus Section 1999.

Copies of these district plans were obtained. An iterative process was then undertaken of analysing the entire district plans, extracting all the issues, goals, objectives, policies, expected environmental outcomes and methods pertaining to the study sites. A diagrammatic matrix was constructed for each district plan comprising the relevant statutory criteria and the linkages through the policy framework. This enabled the complex plans and the multiple interrelated parts to be presented in a simplified manner that summarised how the components of the policy frameworks were integrated. From this the issues, goals, objectives, policies, expected environmental outcomes and the methods were able to be linked to illustrate the policy frameworks of each plan in respect to the study sites i.e. the relevant the issues, goals, objectives, policies, expected environmental outcomes and the methods. The interpretation of these linkages was then undertaken.

The method of analysis is a two-part process. Initially, the objectives and policies were read and interpreted at 'face value'. A statement was then made as to what they communicated regarding a *'desired outcome'*. A similar evaluation was made regarding the district plan's statement of expected environmental results – *'intended outcome'*. This provided a baseline for comparison between what implied outcome of the policy framework was as opposed to what the stated intended outcome. The second phase of the evaluation comprised a critical analysis of each set of objectives and policies, and the expected environmental results. This discourse analysis focused on the wording, linkages, continuity and coherence of the policy frameworks.

The analysis and interpretation of the policy frameworks and the stated outcomes provide valuable insights into the robustness and integrity of these district plans. The conclusions are as follows:

1. Generally, the complexity of the district plans and their policy frameworks lead to a lack of clarity in the overall pursuit of the goals. As shown through the construction of the policy frameworks this lack of clarity derives largely from the limited application of the 'cascading approach' whereby the overarching goals are not consistently refined through the objectives, policies and expected environmental outcomes.

2. The policy frameworks lack sufficient rigor and implementation of the vision or overarching goals. The objectives are typically too broad, loosely written and un-quantifiable. Similarly the policies which support them often fail to sufficiently support them for similar reasons. Similarly, the policies tend to be loosely written, unquantifiable, sometimes written in the inverse to the objective, and fail to comprehensively support the intention of the objective.

3. In many case, the expected environmental results cannot be clearly interpreted as being the outcomes as implied by the wording of the objectives and policies. This ultimately results in the expected environmental results not supporting the objectives and policies and instead adding greater ambiguity to what is being sought by the district plan.

The policy frameworks therefore lack sufficient robustness to be a clear articulation of the planning vision for the respective district plan areas. This leads to uncertainty in providing assurances as to whether or not the study sites are a product of the plan or in fact other processes in the application process.

INTRODUCTION

The purpose of this report is to provide the background analysis required to undertake a detailed analysis of the relevant policy frameworks (objectives and policies) for the four case study areas within the three district plans evaluated. This enables an understanding of what these district plans were seeking to achieve and then to make a determination over the degree of influence these district plans have achieved on the built forms in practice. As discussed within Chapter Three of the main report, approach was undertaken at both the individual site level, but also how individual site related contextually to the wider urban environment.

This was achieved using the district plan policy intention mapping technique considered in the methodological section below, to determine the district plan's actual intended urban planning outcomes the case study areas. This analysis was only undertaken for the relevant parts of each district plan that directly affected case studies. This approach enabled the construction of a theoretical district plan urban planning policy framework map, outlining the district plan's intended urban planning outcomes for each of case study areas. The theoretical district plan urban planning policy framework map can then be compared with the achieved on the ground to determine the degree of influenced the district plan's policy approach have achieved in practice (Beattie, 2012)

This approach also enables detailed consideration of the quality of the relevant policy frameworks and their associated methods. This is considered relevant given the district plan plan-making model described under ss. 31, 32, 74 and 75 of the RMA. Where the RMA used an urban planning model based on both conformance and rational-adaptive principles (Laurian *et al*, 2004).

Under a conformance based urban planning system there is direct correlation between the plan's policy intentions and built outcomes achieved 'on the ground', opposed to a performance based planning approach; where the plan is seen more as a guide to the forms of the development activities that could occur (Oliveria & Pinho, 2010; Alexander, 2009; and Laurian *et al*, 2004).

In the RMA context these principles were reflected in the way district plans provide for a wide range of Permitted Activities, while similar land use activities require only minor resource consent approval (e.g. Controlled and Restricted Discretionary activities). These categories exist because the activities involved will meet the district plan's intended urban planning outcomes which are developed through the plan making process and then become agreed public planning policy (Beattie, 2012). That is, there is a clear intention and a demonstrated expression of that intention. Furthermore, that the intended outcome is expressed through policy which is presented in a plan of means or methods. Execution of the plan uses those means. The result should be the intended outcomes.

This is developed in practice through a 'cascade approach' to district plan development and review (ss 31 and 75, and the Act's first schedule), where objectives address issues, policies support objectives, rules and other urban planning methods give effect to the objectives and policies, and stated outcomes should address the issue.

In short, the Rational-Adaptive approach "*involves an iterative relationship between research and analysis on the one hand, and public consultation and participation on the other hand*" (Ericksen *et al*, 2003, p.31).

North Shore District Plan 2002

Urban Growth Strategy

Issues

Issues:

2. The effect of continued growth and change on the quality of the built environment

3. The effect of continued growth and change on the ease of movement

4. The effect of continued growth and change on the community's wellbeing

5. The effect of continued growth and change on economic and employment growth within the city

6. Change management is an essential component to managing the city's growth and change

Goals

6.3 Goals

- Built Environment: A city which provides a wide variety of housing forms which reflect the demands of its ageing population and increases the accessibility to employment and community facilities, while offering a range of affordable options. A city which encourages and celebrates quality design that enhances and reflects local character and the cultural and social needs of the community. A city which adequately services its built form in a way that ensures the protection of its highly valued natural environment
- Ease of Movement: A city which effectively integrates its land use pattern with transport, and encourages the development of an urban form which is less reliant on the private motor vehicle. A city which utilises the full range of modes of movement, particularly public transport while reducing the overall effects of transport on the environment
- Employment and Economic Growth: A city which is recognised as an ideal business location with access to a well educated and highly skilled workforce and supported by an infrastructure which allows employment and economic growth to be maximised. A city which focuses its businesses around the existing sub-regional, town and village centres while supporting its Wairau Valley and the North Harbour Industrial Estate employment areas, allowing for mixed use areas and working from home where the activities are compatible with the surrounding uses
- Managing Change: A city which effectively consults with and includes its community in decision making while co-operating with other authorities on regionally strategic policy. A city which manages development so that it matches the needs of the community, the capacity of the environment and infrastructure.

Desired Outcome of Goals:

On balance the above goals are seeking to achieve the following higher-order aspirations:

Built Environment

A wide variety of affordable housing forms, emphasis on ageing population and accessibility to employment and community facilities. Importance given to quality design enhancing which enhances local character and social needs of the community.

Ease of Movement

A land use pattern that is compatible with and integrated with transport. Urban form less reliant on private motor vehicle. Utilisation of all modes of movement, emphasis on public transport, reducing negative impact of transport on environment.

Employment and Economic Growth

City regarded as an ideal business location with access to highly educated and skilled workforce, Infrastructure to support this, allowing employment and economic growth to be maximised. Business focused around sub-regional, town and village centres, support given specifically to Wairau Valley and the North Harbour Industrial Estate employment areas. Allowing mixed use areas, working from home, activities compatible with surrounding uses.

Managing Change

Decision making via public participation and consultation with community, co-operation with other authorities on regional strategic policy. Development managed to match needs of community, capacity of environment and infrastructure.

Analysis of Goals

The goals are clearly stated. The first two are specific and clearly articulate a number of tangible measures for the built environment and ease of movement. The last two are however more theoretical and generalised. It could be argued that these later two policies will be hard to evaluate and verify the expected results. For example "ideal business location with access to highly educated and skilled workforce" is a worthwhile aspiration but 'ideal' is highly subjective.

Goal One states, 'quality design that enhances and reflects local character and the cultural and social needs of the community.' This is a very aspirational goal yet the linkages between quality design and the following characteristics, and how to achieve them need to be well supported by the corresponding policy frameworks. Again terms such as 'quality' design are subjective, with definitions that may vary across time, culture and physical context. In other words the challenge is to operationalise these terms to avoid ambiguity.

By contrast goal two, Ease of Movement, is clear and specific since it links the higher order aspiration to measurable and achievable steps. However the wording "less reliant on motor vehicle" being replaced with 'reduction in reliance on motor vehicle' reduces vagueness.

Goal three again depicts a very aspirational, high level goal which may or may not be clearly obtainable through the following policy frameworks.

Goal four is highly subjective and difficult to verify in terms of achievement. It could be suggested that the former part of goal four, 'A city which effectively consults with and includes its community in decision making while co-operating with other authorities on regionally strategic policy' could be seen as a 'given' process by which district plan makers and implementers follow as 'good practice'. This suggests little need for it to be stated. The latter part of the goal is relevant although redundant as this is a baseline for 'good planning' and mandatory under the RMA. The term "effective consultation" is again highly subjective.

Objectives & Policies

6.4 Urban Growth Strategy

Objective(s):

1. To effectively manage growth and change by:

- Ensuring the protection and enhancement of a high quality natural environment
- Achieving the maintenance and enhancement of a high quality built environment
- Enabling an ease of movement and accessibility that minimises the impact on the environment
- Fostering community well-being
- Achieving a buoyant local economy and employment growth
- Integrated planning.

2. To secure a prosperous city by the year 2020 that protects and enhances its natural environment while providing easy access to a range and abundance of opportunities to live, work, play and visit.

Analysis

The first six sub objectives under Effective Management of Growth and Change are clear and specific but are still reiterating high order aspirations similar to those specified in the RMA.

The above stated objective two is however broad and idealistic. Given its breadth it will require a large number of targeted policies to clearly articulate what is sort. The timeframe of '2020' does assist however means little given the timeframe of the plan is only 10 years.

Corresponding Policy(ies):

1. Development opportunities will be provided for in and around selected sub-regional, town and village centres to support the growth of employment and economic activity within these centres provided it demonstrates a high standard of design and compatibility with surrounding activities. This range of activities will facilitate an ease of access between housing, employment, shopping and community facilities.

2. To enable a wide choice of lifestyles, a range of types and affordability of housing and choice of employment opportunities should be investigated and provided where possible.

4. To foster and promote the city's sense of place and identity.

5. To provide for enhanced accessibility to recreation, community facilities, employment and the coastline by facilitating an effective and efficient transport system, ease of access to public transport, improving the walkability of our neighbourhoods and the provision of a Bus Rapid Transit system.

6. To integrate transport and land use planning in order to maintain and enhance accessibility.

9. Integrated planning of growth to match the needs of the community and the capacity of infrastructure needs to be used in a way that protects environmental values, and avoids the adverse effects of growth that will arise if land use, community and infrastructure planning is not co-ordinated and sequenced correctly.

11. Structure planning will be utilised as an effective technique for managing major areas of growth and redevelopment.

12. Through the approach of integrated planning Council will seek to influence the rate and form of development growth in order to avoid the adverse effects associated with ad-hoc development.

Desired Outcome

On balance the above objectives and policies are seeking to achieve:

Management of urban growth in a controlled and targeted manner which provides for a wide range of development opportunities which provides housing, employment, community amenities, and accessibility.

Analysis

Although the Urban Growth strategy issues directly relate to the goals, objectives and the policies, they are not connected in a logical clear manner thus resulting in unclear linkages between them. For example the first issue links to goal one, Built Environment. This then links to Objectives 1, (a) and (b). However Policy 1 relates to the second goal not the first. There are policies such as number 4, 'To foster and promote the city's sense of place and identity' which do not appear to link specifically to the goals or the objectives. The policies do not appear to fully support the objectives and the goals, for example Goal four 'Managing Change' is completely unsupported by the corresponding policies. Not only are there poor connections between the objectives and policies but although they are worthy aspirations they little more than theoretical best practice.

Expected Environmental Results

Corresponding Expected Environmental Results:

- Sub-regional, town and village centres effectively accommodating additional development of employment, residential and community facilities in a way that facilitates an ease of access to these activities.
- A diversity of housing type and affordability for city residents combined with a wide choice of lifestyles and employment opportunities.
- The protection of areas that are characterised by historic, ecological, landscape or cultural values. An attractive environment and high standard of design for walking within public spaces, village and town centres and within the reserve network.
- An ease of access for the city's residents to employment, recreation and community facilities throughout the city by a range of modes of movement and as a result of successfully integrating land use and transportation planning.
- Sustainable growth through the use of integrated planning and structure planning approaches which has effectively matched land-use planning and infrastructure provision. These approaches will result in development being located in and around selected sub-regional, town and village centres, along selected transportation corridors and within those other parts of the city where constraints on development can be managed effectively.
- A city which has enabled its residents and communities to provide for their social, economic and cultural well-being as a result of community and regional partnerships and the involvement of the community in decision making.

Intended Outcome

On balance the above Expected Environmental Results are seeking to achieve:

A city with sustainable growth and development achieving, employment, diversity of housing and lifestyle, an efficient transport network, whilst protecting the natural environment.

Analysis

A number of the above stated Expected Environmental Results are little more than a restatement of higher order goals. Some are unclear and it would be more appropriate to succinctly state what the desired outcome is. For example Expected Environmental Result would be better stated as, 'A diversity of housing type and affordability for city residents ~~combined with a wide choice of lifestyles and employment opportunities~~.' [Suggested deletion]

The third better stated as 'A network of reserves' and 'A schedule of protected areas according to historic, ecological, landscape and/or cultural values ' and 'pedestrian designated networks through public spaces, reserves and town centres'.

Similarly the fifth Expected Environmental Result simply states that is going to achieve 'sustainable growth' which is a non-specific broad term. However the methods for its attainment are clear enough at this level but barely accommodate the complexity of the term 'sustainable growth'.

The above stated Expected Environmental Results appear to read in part more like policies in some respects, due in part to the lack of specific tangible outcomes being articulated.

It appears throughout section 6.2 'Urban Growth and Development' that the goals, objectives, policies and results are difficult to link and often the objectives, policies and/or expected environmental results are interchangeable. There is no clear cascading system whereby key drivers (the main themes in the issues and goals) can be traced through the policy framework. This results in a poor vision of what is being sought, therefore limiting the efficacy of the plan.

Residential - General

Issues

Issues:

- How to achieve an efficient form of urban development both within existing and new developing areas which will maximise convenience for residents and reduce the cost associated with transport, energy use and the provision of services and infrastructure.
- How to accommodate new housing developments in both the developed and undeveloped parts of the city without compromising the environmental values of these areas
- How best to protect those parts of the residential area which have a special character arising from either the built or natural environment, while providing residents of those areas with reasonable development opportunities
- [added since 1994 version]
- How to ensure that environmental and landscape values are protected, especially from the impacts of new development
- [added since 1994 version]
- How to provide opportunities for innovation and flexibility to meet the demand for new and different housing solutions while ensuring that residential amenities and environmental values are protected
- [added since 1994 version]

Zones

Objectives & Policies

16.3.1 Zones

Objectives:

To protect the environmental and amenity values of residential areas.

Corresponding Policies:

1. By the use of zones to identify land having similar character, amenity and environmental values, within which appropriate development opportunities can be prescribed.

2. By ensuring that those areas having particular environmental and special built heritage values are the subject of special zones and/or development controls designed to maintain their particular qualities.

3. By recognising the existing differences in character and amenity within the main residential area when identifying zones for higher density and office-residential development.

Desired Outcome

On balance the above Objectives and Policies are seeking to achieve:

Controlling Development through the use of land use zones to protect the character and amenity and values of the particular residential area including the qualities of the natural environment.

Analysis

The policies are clear and unambiguous leaving no doubt that zoning will control development.

Expected Environmental Results – Zones

Corresponding Expected Environmental Results:

- Effects generating activities limited to specified locations, and impacts on residential zones avoided and/or mitigated, as measured by an annual assessment of Council's Complaints Register, an annual assessment of compliance with resource consent conditions, ongoing environmental quality surveys and a biennial noise survey
- Protection of heritage and special environmental areas, as measured by an annual assessment of Council's Complaints Register, an annual assessment of compliance with resource consent conditions, ongoing environmental quality surveys and a biennial noise survey
- Potential adverse effects of higher density residential and office development avoided and/or mitigated, as measured by an annual assessment of the Council's Complaints Register and biennial noise surveys.

Intended Outcome

On balance the above Expected Environmental Results are seeking to achieve:

Adverse effects of development, including high density residential and office activities are controlled whilst heritage and special environmental areas are protected.

Analysis

There is a strong connection between the objectives, policies and expected environmental results. This has been achieved through the effective application of a cascading approach. The policies directly support each objective and result. The result themes are present in each of the policies and objectives. The language used is clear, consistent and concise.

However a mismatch occurs between the policies and the Expected Environmental Results due to the breadth of the policies compared with that of the Expected Environmental Results. Hence, the Expected Environmental Results do not completely cover off what the policies are seeking to achieve. Furthermore 'ex-post' monitoring of complaints, while useful addition to zoning processes, should not be the only environmental result.

Objectives & Policies

16.3.2 Residential Activities *[no change from 1994 Plan]*

Objective(s):

To provide opportunities for the establishment of activities required by people and communities in a manner which is compatible with the maintenance and enhancement of amenity values.

Corresponding Policy(ies):

1. By including only those activities with little potential to adversely affect the character and amenity of adjoining sites or the neighbourhood as a whole as Permitted activities.

2. By requiring that those activities which have the potential to have a significant adverse effect upon the environment or on the amenities of adjoining properties or the neighbourhood, be the subject of a resource consent as either a Controlled or Discretionary activity.

3. By the Council assessing and imposing conditions on those activities which require a resource consent (such as larger groups of units) in order to minimise the impact on the character and amenities of the residential area. Those activities with significant adverse effects on the residential environment, which cannot be mitigated by conditions on a resource consent, will not be approved within the residential area.

4. By enabling the establishment of only those non-residential activities which will provide very positive benefits to individuals or local communities by serving their daily needs and which have minimal adverse effects on amenities of the residential area.

5. By limiting the range of activities permitted to establish in those zones with natural or heritage values (Residential 1-3 zones) to those which are compatible with the protection and enhancement of amenity values.

6. By the Council recognising that in certain circumstances a service station can be appropriately located within some residential areas, and by requiring that in these cases, service station activities be the subject of a resource consent as either a Discretionary or Non-Complying activity.

[added since 1994 version]

7. By the Council encouraging and facilitating the retention of the existing network of shops, schools and community facilities within existing residential areas.

[added since 1994 version]

Desired Outcome

On balance the above Objectives & Policies are seeking to achieve:

Activities are controlled so as to ensure the avoidance of adverse effects on all receiving environments.

Analysis

The objective is to 'provide opportunities'. However the policies relate to the 'control of activities' as opposed to the 'promotion of activities'. The policies are worded in the inverse of the objective, that is, as 'limiting the range of activities permitted' as opposed to promoting / providing activities / opportunities. It is also interesting that service stations are singled out for special attention.

This approach results in none of the policies directly stating how they will provide opportunities for the establishment of activities. Policies stated in the negative (i.e. limiting, controlling etc.) will not alone achieve the objective which is to provide opportunities.

The policies are also not written in a clear manner, for example policy one states that, 'By including only those activities with little potential to adversely affect...' This may be more comprehensively written 'To exclude any activity likely to adversely affect...'

Expected Environmental Results

Corresponding Expected Environmental Result:

- Community participation in decision making on the suitability of non-residential activities in residential neighbourhoods, as measured by a biennial assessment of resource consent submissions
- Protection of the character and amenity of residential neighbourhoods, as measured by an annual assessment of Council's Complaints Register, five-yearly resident surveys and an annual assessment of compliance with resource consent conditions
- Exclusion of activities with significant adverse effects from the residential zones, as measured by an annual assessment of Council's Complaints Register and a five yearly residential land use survey
- [amended wording since 1994 version]
- Protection of natural heritage values, as measured by a five-yearly residential land use survey and an annual assessment of compliance with resource consent conditions
- Retention of existing non-residential activities such as shops, schools and community facilities within the residential zones, as measured by a five-yearly residential zone land use survey
- [added since 1994 version]
- Establishment of non-residential activities where adverse effects can be avoided and/or mitigated, as measured by an annual assessment of Council's Complaints Register and a five-yearly residential zone land use survey.
- [added since 1994 version]

Intended Outcome

On balance the above Expected Environmental Results are seeking to achieve:

Suitability of activities to a residential zone avoiding the effects of reverse sensitivity and preserving compatible existing uses.

Analysis

The Expected Environmental Results stated directly relate to the issues, objectives and policies. However the list above instructs a **method** to ascertain the results not the required **result**. For example number two states both the desired result and how it is measured, perhaps part of the policy should be to, "assess and survey with a favourable outcome being linked to the expected result."

With the objective stating 'to provide opportunities' it could be assumed that the corresponding desired result should be an increase in potential activities in the area. This is mentioned in the last expected result stating 'establishment of non-residential activities'. As this is the key focus of the objective it would be more effective to have this as the first expected environmental result and have included it prior to the 2002 version of the plan.

Only Expected Environmental Result six directly covers the intention of the objective.

Some correlation exists between the Expected Environmental Results and policies but there is a lack of direct accountability for the objective throughout the policies and the Expected Environmental Results. The results added in 1994 better reflected the policies that the earlier four results which are largely 'methods'.

Development Controls

Objectives & Policies

16.3.3 Development Controls *[no change from 1994 Plan]*

Objective(s):

To control the form of development in order to achieve good standards of on-site and neighbourhood amenity, including the protection of the character of the streetscape.

Corresponding Policy(ies)

1. By requiring compliance with controls designed to maintain on-site and inter-site amenity values.

2. By providing for basic building controls to be varied through the Control Flexibility provisions, provided that the development will achieve the intent of the controls and will not adversely affect amenities.

3. By limiting the maximum height of buildings in all zones.

4. By providing in the Residential 6 zone opportunities for taller buildings to be established as a Controlled activity as a means of enabling the establishment of apartments, but only where the adverse effects on the neighbourhood are avoided, remedied or mitigated.

5. By controlling the height and bulk of buildings in relation to property boundaries.

6. By controlling the maximum building coverage and minimum permeable area.

7. By requiring buildings to be set back from the street frontage.

8. By controlling the siting of buildings in relation to side and rear boundaries.

9. By requiring the provision in association with every residential unit of an outdoor living space and service court of sufficient area and dimension, to meet residential requirements for leisure and service functions.

10. By imposing controls which are designed specifically to maintain a reasonable standard of privacy for main living rooms and their associated outdoor living spaces.

11. By encouraging infill building design to be compatible with existing buildings through the preparation of design guidelines.

12. By providing for infill development to occur (whether or not in association with subdivision) at a range of different development densities through the city, determined by having regard to the following:

- the availability of services
- the existence of natural environmental or built heritage values
- the need to protect amenities
- any density standards of the Transitional District Plan for the city which may still have effect
- the location of commercial nodes.

14. By requiring that all Controlled, Discretionary and Non-Complying activities comply with the development controls applying to Permitted activities, unless an alternative standard is required for the operation of the activity.

15. By the provision of detailed performance and assessment criteria in the Plan for Controlled and Discretionary activities which are designed to ensure such activities do not detract from the character and amenities of residential areas.

Desired Outcome

On balance the above Objectives & Policies are seeking to achieve:

Building controls are applied to achieve 'good standards' of neighbourhood amenity

Analysis

The objective is clear and concise.

The first 12 Policies appear to directly link to the objective. Wording such as 'Compliance with controls' and 'Controlling...' give clear indication as to the level of compliance sought. Policies 1 and 2 are more appropriately sub parts of the objective.

Ambiguous terms such as 'taller', 'reasonable' and 'good' do not improve the clarity of some of the policies.

The objective gives specific reference to 'streetscape' on the other hand the policies refer to more general / higher level building and design controls. There is no policy covering any other aspect of streetscape, thus the entire objective is not be achievable.

Policies 14 and 15 refer more to Objective 16.3.2 Residential Activities instead of 16.3.3 Development Controls.

Expected Environmental Results

Corresponding Expected Environmental Result *[changed from 1994 Plan]*

- Management of the effects of activities to avoid and/or mitigate any nuisance or distraction to residential amenity, as measured by five-yearly resident surveys, an annual assessment of compliance
- Provision of a range of housing opportunities, as measured by an annual assessment of building consents issued
- Protection of coastal and lakeside amenity, as measured by a five-yearly residential zone land use survey and an annual assessment of Council's Complaints Register
- Infill building design compatible with existing buildings, as measured by five-yearly resident surveys and an annual assessment of Council's Complaints Register
- Attractive streetscape, as measured by five-yearly resident surveys and an annual assessment of compliance with resource consent conditions
- The avoidance of tall buildings in the conventional residential neighbourhood which visually dominate the neighbourhood and block sunlight, daylight and views, as measured by annual resident surveys, an annual assessment of Council's Complaints Register and an annual assessment of compliance with resource consent conditions
- Sufficient on-site open space to contribute to the open character of the neighbourhood and provide an area of amenity for occupants, as measured by five-yearly resident surveys
- Maintenance of a reasonable standard of on-site privacy, as measured by an annual assessment of Council's Complaints Register and five-yearly resident surveys
- Infill development at a range of densities and locations throughout the city, as measured by a five-yearly residential zone land use survey
- Flexible development controls, as measured by an annual assessment of the type and number of resource consent applications.

Intended Outcome

On balance the above Expected Environmental Results are seeking to achieve:

Control of development to meet a range of varied outcomes.

Analysis

Result one relates to Objective 16.3.2 Residential Activities more closely than does Objective 16.3.3 Development Controls. Result two relates to Objective 16.3.5 Housing Choice. Result three directly relates to Objective 16.3.1 Zones.

The remaining Expected Environmental Results relate to the above stated policies and objectives. The wording used is consistent between the three tiers of the policy framework.

However the results, as elsewhere, include methods for evaluating / auditing the outcomes of the policies and objectives. It is suggested that those proposed here are poor indicators of the outcomes sought.

As a result, the above stated Expected Environmental Results appear vague and disconnected lacking correlation between the corresponding objectives and policies.

Housing Choice

Objectives & Policies

16.3.5 Housing Choice *[no change from 1994 Plan]*

Objective(s):

- To provide a diverse range of living environments and housing opportunities in order to meet the varied needs of the community, in a manner which is compatible with the maintenance and protection of residential amenity and environmental values.

Corresponding Policy(ies):

1. By seeking to ensure that a variety of living environments is available by applying, in those areas of special character (including heritage, environmental and amenity areas), special zones and/or development controls which foster and encourage their protection.

2. By providing opportunities in the main residential area for housing developments at a variety of densities which are compatible with the maintenance of local environmental values.

3. By providing opportunities for the establishment of a variety of housing forms throughout the residential zones, including houses, units, apartments and minor residential units, by the inclusion of such activities as Permitted, Controlled and Discretionary activities.

4. By enabling minor residential units to be established as a Permitted activity in all zones in order to facilitate the provision of accommodation for extended families and to increase the availability of small units, notwithstanding that such development has greater impact on residential amenities than the establishment of a single dwelling per site.

5. By the imposition of development controls which are designed to provide residents with choice in building form, while still providing a high degree of certainty for neighbours.

6. By providing opportunities for innovative forms of housing and for flexible controls where a' comprehensive approach to larger developments enables house design, site layout and subdivision design to be integrated to provide better on-site and neighbourhood amenity.

Desired Outcome

On balance the above Objectives & Policies are seeking to achieve:

A range of living environments and housing developments which do not impinge upon residential and environmental values.

Analysis

The above stated objective is clear.

The corresponding policies clearly meet the objective and set out how they aim to achieve it, for example via zoning development controls, density criteria, listed activities etc. Policy 5 is more appropriately a sub part to the objective.

Expected Environmental Results

Corresponding Expected Environmental Result

- Affordable housing opportunities in North Shore City, as measured by an annual assessment of Valuation NZ house sales and valuation statistics
- [added since 1994 version]
- Establishment of a range of care centres in residential neighbourhoods, as measured by an annual assessment of the type and number of resource consent applications
- [added since 1994 version]
- A range of housing densities and forms, as measured by a five-yearly residential zone land use survey, an annual assessment of building consents issued and an annual assessment of subdivisions approved
- Establishment of minor residential units for extended family members, as measured by an annual assessment of building consents issued
- [added since 1994 version]
- Innovative housing forms and comprehensive and integrated site design, as measured by a five-yearly residential zone land use survey
- [amended wording since 1994 version]

Intended Outcome

On balance the above Expected Environmental Results are seeking to achieve:

A range of housing opportunities provided throughout the community.

Analysis

The Expected Environmental Results stated above directly relate to the objectives and policies. However where surveys are to be utilized it is unclear how this will robustly demonstrate the attainment of the objectives and policies.

Simply stating, "Choice of building form, as measured by a five-yearly architects/developers survey" does not adequately allude to what is being sought.

Result six has already in part been stated in result three.

None of the Expected Environmental Results cover, "protection residential amenity and environmental values" as stated in the objective. The housing choice objective should be confined to that issue.

Land Development

Objectives & Policies

16.3.6 Land Development *[no change from 1994 Plan]*

Objective(s):

To ensure that provisions relating to land development in residential areas are integrated with, and give effect to, residential and environmental objectives and policies, especially to those relating to individual residential zones.

Corresponding Policy(ies):

1. By the inclusion of subdivisional requirements in the District Plan which have been determined by reference to the following criteria:

a) The need to maintain adequate standards of site and neighbourhood amenity while allowing maximum design flexibility.

b) The need to conserve areas of special character, created by either the natural or built environment, within the residential areas.

c) The need to minimise earthworks in order to maximise the amenity and character arising from the natural landscape and protect environmental and archaeological values.

d) The availability and capacity of reticulated water and sewage disposal systems.

e) The need to provide a variety of housing opportunities and living environments.

f) The need to create new residential areas with a sense of identity.

g) The need to ensure adequate public open space for recreation and environmental protection.

h) The need to ensure that on every residential site it is possible to erect a complying building.

i) The need to encourage and facilitate energy-efficient subdivision and roading design, including:

- provision for safe and convenient pedestrian and cycle access
- provision for convenient public transport access
- convenient access for vehicles to areas within and adjoining the development
- having regard to the need for sunlight access in lot layout
- the need to create safe and attractive neighbourhoods.

2. By seeking to ensure that every subdivision is designed to create a safe and attractive residential neighbourhood where, as far as is practical and reasonable, the natural character and form of the landscape and significant archaeological sites are retained. In particular every plan of subdivision should be designed to:

a) Maximise the amenity and character created by the natural landscape features including, wherever practical and reasonable, the retention of existing contours, vegetation and streams.

b) Utilise landscaping and design to integrate landform, roading, parking, pathways, reserves and residential development.

c) Use a roading hierarchy incorporating variations of width and location of carriageway and footpaths, and innovative design, including street furniture, to create varied, safe and attractive neighbourhoods.

d) Rear lots should, wherever possible, be served by common access lots or right of ways designed to create an attractive entry.

3. By requiring larger sites where land is not served by reticulated sewerage or has high amenity values.

4. By providing opportunities for innovative forms of housing development in new residential areas, and on large sites within the established residential area, with the requirements relating to lot sizes and roading designed to facilitate alternative forms of residential development.

Desired Outcome

On balance the above Objectives & Policies are seeking to achieve:

A range of development controls relating to land development in residential areas integrating with residential and environmental policies.

Analysis

The above stated objective is poorly worded and therefore may lead to misinterpretation of what is being intended. The assumed outcome is an integrated policy framework.

Alternative wording is; *'To ensure that land development provisions are integrated with residential and environmental objectives and policies with particular regard to individual residential zones.'*

Policy 1 (e) is a direct duplicate from 16.3.5 Housing Choice. This may be appropriate but uncertain as to the need to replicate it.

Policy 1 (f) refers to the term 'a sense of identity'. This is an ambiguous and an unquantifiable goal to achieve. Any urban or rural environment comprises a sense of identity. The sense of identity is derived from inherent physical and social elements that make up that locality and is highly subjective.

Policies two and three are clear and concise with an aim and a method of how to achieve them. Policy four is unclear on how it relates to the objective and is not clear – it may be missing the wording 'subdivision'.

Expected Environmental Results

Corresponding Expected Environmental Result:

- Maintenance of on-site and neighbourhood amenity, as measured by five-yearly resident surveys and an annual assessment of Council's Complaints Register.
- Conservation of the special character of the natural and built residential environment, as measured by five-yearly resident surveys and ongoing natural environment surveys.
- Minimal subdivision earthworks, as measured by an annual assessment of approved subdivisions.
- Safe and attractive residential neighbourhoods, as measured by five-yearly resident surveys.
- Establishment of innovative housing design, as measured by a five-yearly residential zone land use survey. *[added since 1994 Plan]*

Intended Outcome

On balance the above Expected Environmental Results are seeking to achieve:

Innovative development whilst conserving natural and built environment to maintain amenity.

Analysis

Surveys and assessment of complaints as methods of measuring Expected Environmental Results are viewed as poor indicators of the attainment of District Plan objectives and policies, especially when these are carried out in relation to amenity. Amenity is a highly subjective and personal and will vary between demographics, cultures and the way in which individuals utilize the spaces. Furthermore surveys can be a very onerous, expensive and time consuming task for local authorities to undertake. There is likely to be a long time-lag between a development, a negative survey result and then remedial action.

The expected results appear light on content. The results don not specify how the land development provisions are integrated with the residential and environmental objectives and policies.

In regards to 'safe and attractive residential neighbourhoods' as stated under Expected Environmental Result four, the objective does not refer to anything associated with safety.

Objectives & Policies

16.3.8 Intensive Residential Development *[added post 1994 plan]*

Objective(s):

To ensure that intensive residential developments are designed to a high standard, integrate well with their neighbourhood, are located where the physical and social infrastructure support them, and any adverse environmental effects will be avoided, remedied or mitigated.

Corresponding Policies

1. Intensive residential developments should be located within easy walking distance of and promote safe pedestrian access to all of the following:

- Existing or proposed shops offering a wide range of convenience goods and services
- An existing or programmed public transport service involving at least four trips per hour during peak periods
- A substantial public reserve (or reserves) that provide a range of recreational opportunities.

2. Intensive residential developments should be sited in locations that are, or will be in a short timeframe (1-3 years), well served by all of the following:

- Roads capable of handling increased traffic
- Road frontage or nearby kerbside areas having adequate visitor parking spaces
- Community facilities
- Essential urban (public) services such as sewerage, refuse collection and stormwater management.

3. Intensive residential developments should be designed to achieve all of the following:

- Integrate well with the immediate locality
- Contribute positively to the street scene
- Be of a high standard of architectural quality
- Provide for occupants to enjoy a reasonable outlook and useful outdoor space
- Provide for the aural and visual privacy of occupants and neighbours
- Effectively incorporate existing significant vegetation and landforms, and landscaping
- Effectively and efficiently cater for traffic, parking and servicing
- Avoid or mitigate any reverse sensitivity effects arising from the proximity of non-residential activities in the vicinity
- Incorporate suitable crime prevention through environmental design techniques in their layout and methods of access

- Incorporate low impact stormwater design methods including source control in the site design, layout and landscaping.

4. Intensive residential developments should be on sites that meet all of the following:

- Have suitable shape and size, and natural and other characteristics that facilitate the achievement of policies 1 to 3 above
- Enable, as far as practicable, all residential units to face or relate closely to public streets

Desired Outcome

On balance the above Objectives & Policies are seeking to achieve:

Intensive residential development which provides the highest level of amenity and quality possible located where the physical and social infrastructure is present

Analysis

The above stated Objective is clear however its content is more appropriate as a policy than an objective. As the subject encompasses a broad spectrum there needs to be a breadth of policies to ensure the strength of the policy framework and the attainment of the objective.

The above stated policies directly support the objective. The policies are broad and cover the objectives intentions. They are clear and quantifiable. In some parts there are terms that need clarification, for example 'high' standards, but the policies are otherwise very detailed.

Expected Environmental Results

Corresponding Expected Environmental Result

- Intensive residential developments located within close proximity of community facilities, public transport and in areas with appropriate infrastructure capacity as measured by land use surveys
- Intensive residential developments designed in a manner that integrates well with surrounding development as measured by recognised urban design guidelines and site specific urban design assessments
- Intensive residential developments that exhibit a high standard of on-site amenity as measured by urban design assessments and resident perception surveys.

Intended Outcome

On balance the above Expected Environmental Results are seeking to achieve:

Intensive residential development located close to necessary infrastructure including public transport and exhibiting a high standard of on-site amenity as defined by architectural quality, streetscape, privacy etc.

Analysis

The Expected Environmental Results relate directly to and support the above stated objectives and policies. They are clear and quantified, although appear somewhat limited – the policy framework may be made stronger through the provision of more expansive Expected Environmental Results.

The objective specifies a high standard of design and avoiding negative environmental effects. These issues have not been specifically addressed in the expected results.

Urban Expansion

Issues

- How to ensure that at a macro level an effective framework for development is provided for areas which are to be urbanised, with comprehensive and integrated planning of the location and provision of elements such as main roads, schools, major reserves, community focal points, utility services and bush protection
- How to ensure that new residential development proceeds only when provision has been made for utility services in a cost effective and environmentally acceptable manner
- How to ensure that land is set aside for the provision of schools and other services and activities required by the community, in order to achieve the cost-effective provision of these facilities, while also ensuring good access to them for the community
- How to protect environmental, landscape and cultural values in newly developing areas
- How to ensure that development reflects the capacity of the existing landform without the need for significant modification
- How to ensure the locational integration of all activities in a manner which will facilitate and encourage convenient and safe access between major activities such as housing areas, local shops, schools and recreational facilities by pedestrians, cyclists and public transport, as well as by private motorists
- How to ensure that development facilitates the creation of a sense of community
- How to ensure that development is planned, not on the basis of existing lot boundaries, but with regard to all other land which logically forms part of the same topographic/ catchment unit
- How to ensure that the future development options for land located adjacent to the Albany Centre and Albany Village are not inappropriately compromised.

Development Control

Objectives & Policies

17.3.1 Development Control

Objective(s):

To ensure that activities and development within the zones do not compromise future urban development or detract from the environmental, landscape, cultural or general amenity values activities within the area.

Corresponding Policy(ies):

2. By allowing some additional activities to be established provided that the activity:

i. Will not compromise the logical and efficient development of the future urban area;

ii. Will be compatible with future urban development having particular regard to factors such as appearance and generated effects;

iii. Will not, in its establishment or operation, significantly detract from environmental landscape or amenity values; and

iv. Is located where satisfactory effluent disposal can be provided.

3. By imposing building development controls which will maintain the spacious rural character, ensure that the natural environment rather than the built form is dominant, and protect neighbours' privacy.

Desired Outcome

On balance the above Objectives & Policies are seeking to achieve:

Development and the associated activities controlled so as to not to compromise future development, environmental, landscape and amenity values.

Analysis

The above stated objective is clear and concise, though in part not quantifiable since it is not possible to know what future urban development will occur therefore it is not possible to definitively ensure you have not 'compromised future urban development'. It is therefore extremely difficult to manage current growth in a way which does not preclude unknown future developments.

The Policies do not support the objective. Policy two is unclear, 'By allowing some additional activities to be established provided that the activity'. Alternative wording could be phrased, 'By controlling additional activities and requiring that they…' This would be a more focused wording choice which may provide greater clarity and control around what is seeking to be achieved.

The continuity of wording is lacking thus leading to a disconnection between the various levels of the policy framework. For example the objective is referring to detracting from amenity values, Policy 1 (ii) 'appearance and generated effects'.

Policy three appears to relate to rural not urban development controls, and maintaining spacious rural character conflicts with the purpose of urban expansion.

Expected Environmental Results – Development Control

Corresponding Expected Environmental Results:

- Protection of the intrinsic environmental and landscape values associated with undeveloped areas, as measured by a five-yearly Urban Expansion zone land use survey
- Retention of these areas as attractive semi-rural lifestyle environments during the interim stage prior to development, as measured by a five-yearly Urban Expansion zone land use survey
- Establishment of interim activities that will not compromise future urban development opportunities, as measured by a five-yearly Urban Expansion zone land use survey.

Intended Outcome

On balance the above Expected Environmental Results are seeking to achieve:

Un-developed areas protected as semi-rural lifestyle environments with only activities which do not compromise their future urban development potential being carried out upon them.

Analysis

There is no consistency of word choices between the objectives and the first result. The objective relates to 'future urban development' the results start with 'undeveloped areas'. There could be an assumption made that undeveloped areas are going to maintain their 'intrinsic environmental and landscape values associated' for the very reason that they are undeveloped. The objective refers to 'amenity values' the result 'intrinsic values'.

The lack of consistency leads to a disconnect between the objective and the expected results. The third result is unclear as it is not possible to definitively know what will compromise future urban development. A better wording may include "planned expansion in a staged development" to communicate the intended environmental result which is to have urban expansion that is efficient with regard to infrastructure provision and rural character.

Residential Expansion Zone

Objectives & Policies

17.4.1 Residential Expansion Zone

Objective(s):

To enable the extension of the urban area to occur in a manner that responds to the environmental constraints and opportunities associated with the land and enables the efficient use of natural and physical resources.

Corresponding Policy(ies)

4. By the Council, or a developer in conjunction with the Council, preparing a Structure Plan formulated with detailed consultation with landowners, the public and interested or affected organisations which:

a) Will provide a comprehensive framework for development recognising existing environmental, landscape, cultural and general amenity values.

b) Will facilitate the development of convenient and safe neighbourhoods for future residents.

c) Will facilitate the creation of residential neighbourhoods with distinct identities which are designed to meet residents' requirements, particularly for attractive, convenient and safe neighbourhoods.

d) Recognises that development should reflect the capacity of the existing landform without the need for significant modification.

Desired Outcome

On balance the above Objectives & Policies are seeking to achieve:

New development using a structure plan, formulated in collaboration with key stakeholders, which recognises environmental constraints and opportunities of the existing landform.

Analysis

The objective refers to 'environmental constraints and opportunities associated with the land and enables the efficient use of natural and physical resources'. The policies, specifically under (a) refer to 'landscape, cultural and general amenity values'. It is suggested that if there was greater consistency between the wording of the objective and the wording of the corresponding policy that the attainment of the objective may be more likely to occur through the Structure Planning process. Specifically:

- Policy 4 (a) better supports 17.3.1 Development Control's objective.
- Policy 4 (b) Doesn't appear to relate to this objective.
- Policy 4 (d) better relates to the wording of this objective in relation to 'capacity' versus 'constraint'.

If the wording in the policies more closely reflected the objectives than a tighter objective / policy framework would be created.

Expected Environmental Results

Corresponding Expected Environmental Results

- Maintenance of large lot subdivision pattern enabling good opportunities in the future for the development of an efficient pattern of residential development, as measured by a five-yearly Residential Expansion land use survey
- New residential neighbourhoods with distinct character and amenity, as measured by a biennial assessment of compliance with Structure Plans and by five-yearly resident surveys
- Maintenance of physical, cultural, environmental and landscape features, as measured by five-yearly Urban Expansion zone land use surveys
- Convenient and safe locations for community facilities within neighbourhoods, as measured by five-yearly resident surveys and five-yearly Urban Expansion zone land use surveys
- Opportunities for the Council and any network utility operators to anticipate and plan for servicing requirements in a cost-effective manner, as measured by five-yearly assessment of consultation with network utility operators and Council staff
- Opportunities for the establishment of support facilities such as schools, shopping centres, health services and public transport in conjunction with residential development, as measured by five-yearly Urban Expansion zone land use surveys
- Variety of development densities within new areas, as measured by five-yearly Urban Expansion zone land use surveys
- Children able to independently travel safely and easily to major destinations such as schools and recreation areas, as measured by five-yearly resident surveys.

Intended Outcome

On balance the above Expected Environmental Results are seeking to achieve:

A well planned and safe community.

Analysis

The above stated Expected Environmental Results all relate to the overarching urban expansion theme. However in relation to the above stated objective their relationship is less strong. For example it could be argued that the first result relates more directly to 17.3.1 Development Control. The objective refers to enabling the extension of the urban area with regard to environmental constraints and opportunities whilst also enabling the efficient use of natural and physical resources. The majority of the Expected Environmental Results are not directly related to this. For example result five "Convenient and safe locations for community facilities within neighbourhoods" and results regarding safety of the children travelling independently to major destinations.

The nature of Expected Environmental Results may in part be a reflection of the Policy to develop a structure plan to meet the objective i.e. the strength of the structure planning exercise is weak comparative to plan changes / zones under the district plan. The certainty afforded to stated outcomes under structure planning exercises are limited. As a result the Expected Environmental Results can only be 'opportunities' unless they are referring to the structure planning process itself.

Albany Centre Expansion Zone

Objectives & Policies

17.4.2.2 Urban Layout

Objective(s):

To provide for an orderly and logical transition of this land to its final and most appropriate form of development as determined by the environmental characteristics of the land and the advantages of its location.

Corresponding Policy(ies):

1. By requiring that an Urban Development Plan be prepared and approved for this land and that it provide for special types of activities which benefit from the good highway visibility and accessibility of the land and its proximity to the Albany Centre, Massey University and the North Shore Domain Sports Stadium prior to any rezoning of the land.

2. By using the preparation of an Urban Development Plan to ensure that comprehensive, environmentally responsive urban development is achieved.

3. By ensuring that any Urban Development Plan for the land in the northeastern quadrant of the Albany Centre:

i. Gives effect to the Albany Centre Structure Plan and Design Requirements and associated objectives and policies.

ii. Results in a roading network which will facilitate an efficient flow of traffic and in particular avoids any factors that would impede traffic flow to or from the Oteha Valley Road intersection with the Northern Motorway and ensures that major traffic generating activities are well served by the intended roading network.

Desired Outcome

On balance the above Objectives & Policies are seeking to achieve:

The use of an urban development plan for determining the most appropriate form of development.

Analysis

The above stated objective is clear, and concise. The policies directly relate to the objective. They clearly state how the objective can be achieved and are specific. However Policy 1 has multiple aspects which should be separated; those relating to special types of activities and times of re-zoning would be better as parts (iii) and (iv) of Policy 3.

Expected Environmental Results

Corresponding Expected Environmental Results

- A pattern of development which reflects the values, characteristics and advantages associated with this land, as measured by five yearly Albany Centre Expansion zone land use surveys.

Intended Outcome

On balance the above Expected Environmental Results are seeking to achieve:

A pattern of development which reflects the values, characteristics and advantages associated with this land.

Analysis

The Expected Environmental Result is clear, direct and represents a logical outcome of the objectives and policies combined.

Although, given the extent of the policies a more comprehensive outcome could have been stated which may more fully support the objectives and policies for example; special activities that benefit from highway visibility and accessibility can be provided for without re-zoning additional land.

Albany and Greenhithe Structure Plans

Residential Development

Objectives & Policies

17 A.2.3 Residential Development

Objective(s):

To enable the land to be developed for residential purposes having regard to the environmental capacity of the land.

Corresponding Policy(ies):

17A.2.3.2.1 Albany Structure Plans:

1. By using the environmental constraints and opportunities identified as being inherent in the land as the basis for determining the type and intensity of development in different parts of the area.

2. By enabling areas without significant environmental constraints to be developed for higher intensity residential development.

3. By requiring that the provision of infrastructure for individual subdivisions is planned in a manner which takes account of the servicing and roading of the locality.

Desired Outcome

On balance the above Objectives & Policies are seeking to achieve:

Residential development which is sympathetic to environmental capacity and / or constraints.

Analysis

The above stated objectives and policies are clear. However Policy three does not directly relate to 'environmental capacity of the land'. Furthermore the statement relating to ensuring that infrastructure for individual subdivisions 'takes account of the servicing and roading of the locality' lacks practical implementation (Note: It should be specified what infrastructure is being referred to).

Design and Mobility

Objectives & Policies

17 A.2.4 Design and Mobility

Objective(s):

To achieve a form and standard of design which will promote community safety and wellbeing, and choices for residents in respect of mobility.

Corresponding Policy(ies):

17 A.2.4.2.1 Albany Structure Plans:

1. By planning for a roading pattern which facilitates the servicing of the area by public transport with good linkage to the North Shore busway.

17A.2.4.2.3 General:

1. By identifying traffic routes for which the traffic function is paramount, and for which a range of restrictions relating to access to residential lots will be required, in contrast to residential streets, whose major function is providing access to residential lots.

2. By enhancing the viability of public transport through the opportunity for higher density housing and mixed activity nodes on more accessible land within residential areas.

3. By discouraging the movement of through traffic from outside the area on all residential streets, while achieving a high degree of connectivity and access to community facilities for internal traffic.

4. By requiring that the residential street network, as a whole is designed to achieve low traffic volumes and speeds so that pedestrians and cyclists may enjoy safe and convenient movement through the area.

5. By ensuring that pedestrian and cycle linkages are provided primarily on the road network, supported by additional recreational linkages based on destinations' analysis, recreational opportunities and ensuring maximum exposure to public view for personal safety reasons.

6. By avoiding the potential for residential units to locate on land defined as being within any 100- year flood plain.

Desired Outcome

On balance the above Objectives & Policies are seeking to achieve:

Development promoting community safety and wellbeing in relation to mobility with avoidance of developments located within any 100 year flood plain.

Analysis

The objective is clear in terms of linking form and standard of design with community safety and wellbeing, choices of mobility being the priorities.

The policies largely seem to relate to mobility, with the exception of Policy six "100 year flood plain" which appears out of place. The policies only cover mobility whereas the objective clearly states that 'a form and standard of design which will promote community safety and wellbeing' along with mobility. More policies need to be added to support the intention of the objective relating to the design aspect. Policy 17A 2.4.2.3 number 1 and number 4 could be improved by adding 'vehicular traffic'.

Residential Amenity

Objectives & Policies

17 A.2.5 Residential Amenity

Objective(s):

To ensure a high level of residential amenity.

Corresponding Policy(ies):

17 A.2.S.2

1. By ensuring that the layout and design of residential lots and buildings achieve a high standard of security, visual and aural privacy, and usable public and private open space, particularly in the case of higher intensity development.

2. By enhancing the amenity values of arterial and collector routes through appropriate street planting.

Desired Outcome

On balance the above Objectives & Policies are seeking to achieve:

A high level of residential amenity throughout both the public and private realm.

Analysis

The above stated objective is vague and unspecific.

The two supporting policies support the objective and provide a clear policy framework. Ideally further policies are required and ones which go beyond simply imposing 'appropriate' street planting to arterial and collector roads to 'ensure a high level of residential amenity'. However there are some examples stated of aspects that can contribute to 'amenity'.

Transportation

Issues

Issues:

The adverse effects that both the infrastructure that supports the transport network and transport activity itself have on the natural and built environment of the city. Such effects include traffic noise, exhaust emissions, contamination of storm water runoff from roads, severance of communities by major roads and degradation of urban landscape amenity values.

- That an increasing number of people commuting in private motor vehicles create adverse affects on urban amenity values, particularly for local residents and businesses.
- That the nature and timing of financial investment in the transport network may result in inappropriate development, causing adverse environmental effects such as excessive noise, exhaust emissions, reduced access or decreased urban amenity values.
- That an imbalance in the city's transport network between its traffic carrying capacity and its traffic generating capacity and overflow of transport related activities from individual sites may adversely affect the safe and efficient movement of people, goods and services and in particular the amenity values of the city's business and residential streets.

Transport System Effectiveness and Safety

Objectives & Policies

12.3.1 Transport System Effectiveness and Safety

Objective(s):

To enable a transport system that avoids, remedies or mitigates the adverse effects of transport activity on the natural and physical environment and protects the amenity value of open spaces and streets, while maintaining the health and safety and the economic, social and cultural well-being of the people and community of North Shore City. These adverse effects include noise, stormwater contamination of receiving waters and air quality degradation.

Corresponding Policy(ies):

1. By reducing the need for travel by private motor vehicle within the city.

2. To encourage the most efficient and safe use of transportation infrastructure within the city.

3. To maintain a balance between changes in activities and the transportation system from the sub-regional through to the local level, so that there is a reasonable match between the trip generating capacity of the pattern of activities and trip carrying capacity of the transportation system.

8. To encourage the use of fuel-efficient and less polluting modes of travel, particularly passenger transport, cycling and walking.

Desired Outcome

On balance the above Objectives & Policies are seeking to achieve:

The provision of a safe and effective transport system avoiding adverse effects.

Analysis

The objective is clearly stated and specific examples of adverse effects "These adverse effects include noise, stormwater contamination of receiving waters and air quality degradation." This is a positive attribute to this objective.

The policies are relevant to the attainment of the objective. However none of the policies address the fact that the effectiveness of the transport system is related to the level of dependence on the system and the system capacity. A more integrated framework may include a policy which addresses the relationship of land use density and transport networks. The policies are generic which do little more than re-state the objective.

Expected Environmental Results

Corresponding Expected Environmental Results:

- A reduction in the rate of growth of demand for private vehicle travel to work, as measured by a 5-yearly assessment of Statistics New Zealand data on City residents place of work and City workers place of residence
- Achieving a more effective overall use of the arterial roading network in terms of both under and over-utilised capacity, as measured by a 5-yearly assessment of changing patterns of traffic flows, 5-yearly land use surveys and 5-yearly resident surveys
- Achieving a more effective overall use of the passenger transport system (by land and water), as measured by a 5-yearly assessment of Statistics New Zealand journey to work data
- An increase in cycling and walking to work, as measured by a 5-yearly assessment of Statistics New Zealand journey to work data
- Achieving an improved safety record on the city's roads, as measured by 5-yearly review of Land Transport Safety Authority accident statistics

Intended Outcome

On balance the above Expected Environmental Results are seeking to achieve:

A more efficient and safe transport network which spreads demand across various modes.

Analysis

The above stated Expected Environmental Results are clear and quantifiable. They directly relate to the objective, they clearly state the result of the objective. The objective stated a reduction in adverse effects such as contaminated stormwater and air quality; a direct result would be a reduction in the contamination of stormwater and in increase in air quality which is not specified in the Expected Environmental Results.

Passenger Transport

Objectives & Policies

12.3.2 Passenger Transport

Objective(s):

To mitigate the adverse effects of transport activity (including noise, emission of atmospheric pollutants, contamination of receiving waters from roadway stormwater runoff) and promote more efficient use of transport fuels by supporting a satisfactory alternative to the use of the private motorcar through fostering an effective passenger transport system.

Corresponding Polices

5. To consider land use issues and to evolve an urban form more supportive of the provision of effective passenger transport services.

Desired Outcome

On balance the above Objectives & Policies are seeking to achieve:

Land use issues considered to mitigate adverse effects from transport activity. Efficient use of transport fuels promoted.

Analysis

The objective is unnecessarily wordy, improved wording may read as follows,

"To mitigate the adverse effects of transport activity (including noise, emission of atmospheric pollutants, contamination of receiving waters from roadway stormwater runoff) ~~and promote more efficient use of transport fuels by supporting a satisfactory alternative to the use of the private motorcar~~ through fostering an effective passenger transport system."

The policy is vague and non-specific and therefore does not support the objective well. An alternative may read,

"To Plan the urban form so it supports effective passenger transport services."

Hence adverse effects associated with the high levels of usage of private motor vehicles would be minimised.

Expected Environmental Results

Corresponding Environmental Results:

- A slower growth rate of the adverse effects resulting from motor vehicle use, as indicated by greater use of the passenger transport system, as measured by a 5- yearly assessment of Statistics New Zealand journey to work data.

Intended Outcome

On balance the above Expected Environmental Results are seeking to achieve:

A reduction in adverse effects from motor vehicle use.

Analysis

The Expected Environmental Result is specific. However the value of it to the policy framework is contestable. There is a weak link between the objective stating 'to mitigate the adverse effects of transport activity' and the use of Statistics New Zealand 5 yearly of journey to work data. More quantifiable outcomes are required taking into account the policy may include 'up zoning' around transport nodes and uptake of the development potential combined with a reduction in travel times and trips made.

Car Parking

Objectives & Policies

12.3.4 Car parking

Objective(s):

To ensure that adequate and efficient provision is made for on-site car parking for all activities.

Corresponding Policy(ies):

2. By recognising the need to protect features of the natural and built environment in the provision of parking spaces.

7. By ensuring that car parks are screened from adjacent sites and larger car parks are landscaped.

9. By requiring parking areas to be properly located, designed, formed, screened and landscaped.

Desired Outcome

On balance the above Objectives & Policies are seeking to achieve:

Provision of car parking with high amenity value.

Analysis

The objective is clear and concise.

Policy two states 'protect features of the natural environment' which does not directly relate to the objective. Policy seven is concerned with the aesthetic implications of the car parking again not directly relating to the objective and its wording. Policy nine supports the objective to a greater extent than the other policy as it refers to 'requiring parking areas'. Policy 7 and 9 are repetitive. None of the policies state how adequate provision is to be determined.

Expected Environmental Results

Corresponding Expected Environmental Results

- Achieving an effective provision for car parking, as measured by a five-yearly assessment of the adequacy of parking provision at the main commercial centres, business parks and general business areas.

Intended Outcome

On balance the above Expected Environmental Results are seeking to achieve:

The effective provision of car parking.

Analysis

The Expected Environmental Results directly relate to the objective which the policies do not. The result is measured by a five yearly assessment – perhaps a more frequent monitoring would be more effective in pre-empting problems given the speed at which developments can happen and consumer habits can change. Inadequate provision of parking is a very tangible outcome and intensifying land use activity and therefore demands clear specificities of what is meant by effective provision.

NORTH SHORE DISTRICT PLAN (PROPOSED) 1994 WITH AMENDMENTS UP UNTIL 1998

Issues

Issues:

1. The extent to which urban growth should be provided for and the ways in which growth should occur whilst ensuring the protection of valued environmental features

7. Whether the existing standard of residential amenity is appropriate, and how important it is to maintain or improve it.

10. the extent to which development needs to be managed for the sake of efficiency

Goals

Goals:

Urban Growth:

to enable urban growth in an integrated manner which promotes sustainable development and efficiency in use of scarce land resources

Efficiency:

To co-ordinate decisions on the pattern of urban development with those on transportation and utility services, and to promote the efficient use of land and buildings.

Diversity:

to manage resources in a manner which enables diversity and choice in residential, business and leisure environments within the district, to accommodate a wide range of needs and values, and to take account of changing economic, social and cultural conditions.

Residential Amenity:

to maintain and enhance residential amenity on the north shore in a manner which reinforces the diverse character of different localities, and manages adverse effects

Analysis

The above four goals contribute strongly towards the type and manner in which the plan seeks to deliver the built form environment for the city.

There is a relatively strong correlation and relationship between the above stated goals and the issues outlined above. As strategic vision-type statements there are appropriate but do little more than re-state the RMA (1991).

Urban Form

Issues

6.2 Urban Form Issues:

1. Should urban growth on the North Shore be discontinued?

2. Should Urban form reflect current commitment and expectations?

3. How to address residential amenity concerns while providing for urban growth?

5. How to provide for urban growth while containing the demand for commuter travel across the harbour bridge

6. how to ensure that urban form provides for the efficient use of resources

7. how to provide for choice and adaptability to changing circumstances within a planned urban form

Urban Growth

Objectives & Policies

Objectives

To manage the effects of urban growth in a manner which:

- maintains or enhances amenity for the existing built-up area
- reduces dependency on the motor vehicle for travel
- constrains traffic congestion, particularly on the harbour bridge in the peak direction

Corresponding Policies:

1. By enabling urban growth to occur through the consolidation of development in built up areas and new development on the periphery while establishing a long term boundary to development that separates the city from the Hibiscus Coast

2. By enabling a differentiated pattern of residential development to emerge in built-up areas, ranging from higher density intensive housing adjacent to commercial centres to lower density housing in areas of high natural and built amenity value

3. By enabling a differentiated pattern of residential development to emerge on the periphery that minimizes impacts on environmentally sensitive landscapes and coastal estuaries and occurs in an orderly manner so that is assists the provision of community focal points and the efficient extension or upgrading of roads and utility services

4. By enabling the development of business activities in a wide range of locations, with a particular focus on Albany as a potential area for business development

5. By enabling the establishment of two sub-regional centres in North Shore City, one existing at Takapuna and one proposed at Albany, where a wide range of commercial activity is likely to occur

6. By concentrating retail and related business activity in cohesive centres located adjacent to main roads, to promote the efficient use of passenger transport

Desired Outcome

On balance the above Objectives & Policies are seeking to achieve:

Management of urban growth outcomes for a variety of activities across the city.

Analysis

The above mentioned objective is clear in its aims for coherent and efficient growth assisted by the second tier points outlining what it is seeking to achieve.

Policy one appears to try and achieve all three growth outcomes (which are varied in nature) within the one policy. For example consolidated urban development is very different to green field development on the periphery. Accordingly the methods and outcomes sought for the two will also require a level of differentiation from one another If they are to be achieved.

Policy two is clear in what it seeks to achieve and is logical. However its relationship to its corresponding objective could be stronger because simply locating higher density residential development adjacent to commercial centres will not guarantee a drop in motor dependency nor will it ensure high amenity unless it has sufficient controls to support these outcomes.

Policy three states that it seeks to achieve a 'differentiated pattern of residential development'. This is an ambiguous term and may mean a range of development patterns – some desirable and some undesirable.

Policy four is clear and concise but may lead to reverse sensitivity issues on other land uses and activities if supporting objectives, policies and rules are not put in place to appropriately manage the business activities and their locations.

Policy five is clear with what it seeks to achieve and meets the corresponding objective.

Policy six is clear with what it seeks to achieve and meets the corresponding objective.

Overall the policies have not supported the entire urban growth objectives specifically in reference to enhancing amenity, reducing motor vehicle use including, traffic congestion, particularly on the harbour bridge. The policies all support urban growth however they need to be expanded to cover what is sought in the objective given its scope.

Expected Environmental Outcomes

Corresponding Expected Environmental Results:

- future population growth accommodated within the city, as measures by indicators specified in Sections 16 and 17
- A range of housing choice options for city residents as measured by indicators specific in section 16
- business growth within the city as measured by indicators specific in section 15
- development of Albany as a focus of business activity as measured by indicators specified in section 15
- increased patronage of passenger transport as measured by indicators specified in section 12
- improved opportunities for residents to walk or cycle to work and shops as measured by indicators specific in section 12

Intended Outcome

On balance the above Expected Environmental Results are seeking to achieve:

Development providing a range of housing choice and business growth (in Albany) also providing varied transport options within the city for the future population.

Analysis

The Expected Environmental Results stated above relate poorly to the objective and the policy direction set out.

There is no mention of Takapuna becoming a sub-regional centre within the Expected Environmental Outcomes despite its presence under policy 5.

The Expected Environmental Outcome of 'future population growth accommodated within the city' contravenes policy one and three which refer to expansion occurring on the city's periphery.

Policy six states that, "...main roads, to promote the efficient use of passenger transport". This holds a weak linkage to the ambition for residents to walk or cycle to work particularly when taking into account policies 2 and 3. Policies two and three refer to lower density developments occurring in less built up areas at lower densities.

It can be suggested that the suite of policies and Expected Environmental Outcomes lack specificity, coherence and depth. Certain parts of the policies are in conflict with the Expected Environmental Outcomes and vice versa. This does not suggest a clear vision of what is sought to be achieved under the objective of managing urban growth.

Subdivision and Development

Issues

Issues:

- how to facilitate the growth and expansion of the city while maintaining and enhancing the natural and physical environment
- the need to recognize and provide for the problems associated with developing difficult land in a built up environment
- how to minimize the impact of development on the city's coastline and waterways
- how to ensure potential natural and physical constraints such as flooding , subsidence, erosion, and infrastructure capacity are recognized and taken account of in the subdivision and development of land
- how to ensure new development contributes towards the cost of providing necessary services and other infrastructure

Objectives & Policies

Objective(s):

9.3.1 Design and form of development in the city

- to provide for the subdivision and development of land in a manner which recognizes and is appropriate to the natural form and environmental characteristics of the city and which will encourage the orderly and efficient use of land

Corresponding Policy(ies):

By managing the future subdivision and development of land in a manner that will ensure the orderly use of land and promote the cost-effective provision of facilities and services

By regulating the types and intensity of development in any locality by applying a range of zones, including deferred development zones which effect the natural and physical capabilities of the land

Desired Outcome

On balance the above Objectives & Policies are seeking to achieve:

Management of subdivision and development ensuring appropriate use of natural form and environmental characteristics.

Analysis

The objective appears to be too broad – it might be better to simply seek to achieve the *'orderly and efficient use of the land used for subdivision'* and then have the former part of the objective expressed in the corresponding policies.

The use of the word 'appropriate' in the objective relies upon interpretation of what is deemed to be appropriate as opposed to qualifying and prescribing a certain level of attainment relating to the objective overall.

Policy one in many respects is simply re stating the objective.

Policy two is clear, concise and attainable and hence it strongly supports the above stated objective.

Expected Environmental Outcomes

Corresponding Expected Environmental Results:

- innovative forms of subdivision as measured by an annual assessment of approved subdivisions
- progressive development of the city in an ordered manner to ensure efficiency of resource use and servicing as measured by 5-yearly land use surveys

Intended Outcome

On balance the above Objectives & Policies are seeking to achieve:

Innovative and progressive development and subdivision.

Analysis

'Innovative' – meaning new forms of subdivisions may not always be the most practicable solution and alone may not deliver the outcomes sought.

'Progressive development' is a very broad, vague and an unquantifiable term. As a result a higher level of interpretation will be required and standardisation of what is deemed 'progressive' could be problematic.

Objectives & Policies

9.3.2 Protection of the environment from the effects of site works or subdivision

- to manage the generated effects of any site works or subdivisions on the surrounding environment particularly in areas susceptible to flooding, erosion or other natural hazards

Corresponding Policy(ies):

3. by regulating the minimum site sizes on subdivision within each zone to take account of the characteristics and capabilities of the land

4. by limiting or strictly controlling the type, location and intensity of development on any site in accordance with the inherent characteristics of the site and surrounding land

9. by ensuring a clear link between the capacity of the infrastructure and the development potential provided by the zoning of the land

Desired Outcome

On balance the above Objectives & Policies are seeking to achieve:

Controls used to protect the environment from the adverse effects from site works and subdivision.

Analysis

The above stated objective clearly sets out what it is seeking to achieve. However the word 'particularly' may suggest that areas which are less 'susceptible to flooding, erosion or other natural hazards' do not need to be managed.

The three policies which support this objective are clear and achievable. The objective may be better met through the support of a fourth objective which looks solely at the management of site works as opposed to the finished subdivision itself – it is felt that the second policy labelled (4) is more about the design of the development as opposed to the development process itself.

Policy 9 refers to the capacity of the infrastructure relative to the zoning and the development potential of the land. This bears limited relationship to the above stated objective.

Expected Environmental Outcomes

Corresponding Expected Environmental Results:

- cost effective provision of services and facilities as measured by an annual assessment of Council infrastructure service and facility costs
- increased public awareness of the consequences of development and subdivision on the environment as measured by a 5-yearly resident survey
- protections of natural environmental features and qualities as measured by indicators specified in the Expected Environmental results of Natural Environmental Section
- Reduced risk of the natural environment being adversely affected by flooding, erosion, and other natural hazards as measured by a 5-yearly analysis of the occurrence of hazardous events and their impact on the natural environment

Intended Outcome

On balance the above Expected Environmental Results are seeking to achieve:

Protection of the natural environment specifically from natural hazards. Increased public awareness of adverse effects of development and subdivision. Cost effective services and facilities.

Analysis

The Expected Environmental Outcomes are set out to encompass a broad range of objectives and policies which are not relevant to this study. Accordingly there seems to be a lack of rigor.

The stated Expected Environmental Outcomes themselves are relevant. However it is thought that there must be more breadth in the range of Expected Environmental Outcomes to adequately meet what has been identified in the issues aimed for in the objectives and addressed in the policies.

Residential

Issues

Issues:

- how to ensure that the high standard of amenity which characterizes the existing residential area is maintained and in developing areas created
- how best to protect those parts of the residential area which have a special character arising from either the built or natural environment while providing residents of those areas with reasonable development opportunities
- how to ensure that environmental and landscape values are protected, especially from the impacts of new development
- how to provide opportunities for innovation and flexibility to meet the demand for new and different housing solutions while ensuring that residential amenities and environmental values are protected

Objectives & Policies

Objective(s):

- to protect the environmental and amenity values of residential areas

Corresponding Policy(ies):

1. by including those activities with little potential to adversely affect the character and amenity of adjoining sites or the neighbourhood as a whole as permitted activities

Desired Outcome

On balance the above Objectives & Policies are seeking to achieve:

Character and amenity values of residential areas protected.

Analysis

The above stated objective is clear in what it is seeking to achieve.

The corresponding policy supports the objective however in an inverse manner. This results in the policy framework being weak in relation to **protecting** 'the environmental and amenity values of residential areas'. For example a policy could be that noted,

"to identify those functions that have environmental and amenity value in residential areas"

In this way, what is being protected is declared.

Expected Environmental Results

Corresponding Expected Environmental Results:

Effects generating activities limited to specified locations and impacts on residential zones avoided and/or mitigated as measured by an annual assessment of Council's Complaints Register, and annual assessment of compliance with resource consent conditions, on-going environmental quality surveys and biennial noise survey

Intended Outcome

On balance the above Expected Environmental Results are seeking to achieve:

Activities which cause adverse effect on residential zones limited to specific locations.

Analysis

The Expected Environmental Result differs from what is sought by the objective and the corresponding policy. The Expected Environmental Result introduces 'Effects generating activities limited to specified locations'. Conversely the objective clearly states 'to protect the environmental and amenity values of residential areas'.

The policy, despite its inverse wording, suggests activities with little potential to adversely affect will be permitted implying that those which have potential to adversely effect will be more stringently avoided remedied and/or mitigated not simply 'limited to specified locations' in the residential zones.

The way in which the outcomes will be measured, as stated above, although lengthy are likely not to clearly indicate whether or not the protection of 'the environmental and amenity values of residential areas' has been met. Surveys are not satisfactory indicators.

Transportation

Issues

Issues:

- How to find new ways of dealing with commuter travel demand
- the likely role of passenger transport in the transportation system
- how to ensure that investment in the transport network are consistent with and promote the development of desired urban form on the North Shore
- how to provide a transport network that enable people goods, and services, to over about the City in a safe and efficient manner
- how to minimize the adverse effects of transport activities and infrastructure on the natural environment

Objectives & Policies

Objective(s):

to provide for a transportation system in a manner that supports the urban growth strategy whilst meeting the accessibility needs of all groups in the community promoting the efficient movement of people, goods, and services, and improving road safety

Corresponding Policy(ies):

1. by reducing growth in travel demand through:

- promoting an improved relationship between residence, work, shopping and other activities, and in particular
- providing for a range of business activities throughout the north shore, with a focusing of business growth in Albany
- grouping retail and related activities in commercial centres
- grouping other business activities with linkages and common needs in business areas
- providing for people to work from home
- enabling intensification of residential development around commercial centres

5. by concentrating retail and related business activity in cohesive centres located adjacent to main roads

Desired Outcome

On balance the above Objectives & Policies are seeking to achieve:

Urban growth strategy supported by an effective and efficient transport system meeting the accessibility needs of all groups in the community.

Analysis

The above stated issues and objectives are generally clear and concise identifying elements that contributed to travel demand.

The policies above work to achieve the objectives in an effective, consistent and constructive manner.

However, policy one's first sub policy 'promoting an improved relationship between residence, work, shopping and other activities' is vague and hard to measure / quantify. Presumably it is inferring that activities are located closer to one another and / or better linked via transport networks but this is not clear.

Expected Environmental Results

Corresponding Expected Environmental Results:

- a reduction in the demand for vehicle travel to work as measured by the a 5-yealry assessment of Statistics New Zealand data on city resident place of work and City workers place of residence
- priority given to roading projects enhancing access to Albany, as measured by a 5-yealry review of major roading projects
- an increase in the number of businesses starting up and moving into the city as measured by an annual assessment of Statistics new Zealand and Business Directory Data
- Achieving a more effective overall use of the arterial roading network in terms of both under and over-utilized capacity , as measured by a 5-yealry assessment of changing patterns of traffic flows 5-yealry land use surveys and 5-yealry resident surveys
- achieving more effective overall use of the passenger transport system (by road and water) in terms of the frequency, coverage and integration of services, as measure by a survey of existing and potential users, including the special needs of the transport disadvantaged, prior to the commencement of the Auckland Regional Council re-tendering process
- an increase in cycling and walking to work, as measured by a 5-yealry assessment of Statistic new Zealand journey work data
- Achieving an improved safety record on the city's roads, as measured by 5-yearly reviews of Land transport Safety Authority Accident Statistics
- A more effective overall use of the passenger transport system as measured by a 5-yearly assessment of statistics New Zealand journey to work data.

Intended Outcome

On balance the above Expected Environmental Results are seeking to achieve:

Effective and efficient transport system.

Analysis

The above stated Expected Environmental Results directly link into the issues, objectives and policies stated above. However, the way they are written is not concise and is more detailed than the policies themselves.

The issue of 'minimising the effects of transport activities and infrastructure on the natural environment has not been mentioned' in the Expected Environmental Results.

The use of surveys as a method to measure the success of the policies (with the desired result being a favourable response illustrating the attainment of the objective) is a weak indicator.

While it may be desirable to give priority to Albany roading projects it is unrealistic to expect this as a desired outcome to be delivered through the district plan.

Passenger Transport

Objectives & Policies

Objective(s):

to support the provision of an effective passenger transport system

Corresponding Policy(ies):

1. by the use of zones to identify land having similar character, amenity and environmental values within which appropriate development opportunities can be prescribed

2. by ensuring that those areas having particular environmental and special built heritage values are the subject of special zones and/or development controls designed to maintain their particular qualities

3. By recognizing the existing differences in character and amenity within the main residential area when identifying zones for higher density and office-residential development

Desired Outcome

On balance the above Objectives & Policies are seeking to achieve:

The application of zones by which to control and identify land use types for the provision of and effective passenger transport system.

Analysis

The above stated policies bare a weak relationship with the above stated objective. Both the objective and policies must be closer aligned both in what they are seeking and the language being used.

AUCKLAND CITY DISTRICT PLAN – ISTHMUS 1999

Issues

Issues:

Auckland is a dynamic and evolving city. It faces a number of issues which the Plan must address:

- The need to accommodate ongoing change within the urban area while maintaining and enhancing the quality of the present environment.
- The need to recognise that the Isthmus is part of the wider Auckland Region. In this context unchecked urban sprawl can no longer be allowed. Instead a policy of planned growth and urban consolidation must be pursued.
- The need to encourage intensification of use within the Isthmus while recognising the pressure on existing infrastructure, transportation and utility services that such intensification brings.
- The need to integrate land use and transport to avoid adverse effects on the environment.
- The need to manage the physical growth of Isthmus in a way which recognises the value of the existing built resource while providing the flexibility to meet a variety of community aspirations.

Objectives & Policies

2.3.3 Community

Objective(s):

- To allow maximum flexibility for individual site development without adversely impacting on neighbouring activities.
- To encourage compact residential and mixed use developments within specified growth areas.

Desired Outcome

On balance the above Objectives are seeking to achieve:

Compact residential and mixed use development encouraged with maximum flexibility with regard to individual site whilst avoiding reverse sensitivity issues.

2.3.5 Urban Growth

Objective(s):

To manage urban growth and development in a manner that:

(a) supports compact town centres, passenger transport and business areas

(b) facilitates integrated transport management and a multi-modal transport network

(c) Integrates land transport and land use provisions to support a quality, compact sustainable and contained urban form

(d) encourages higher density residential and commercial activity as a priority in and around specific high density town centres and sub-regional centres (urban living communities), and enables such activities in intensive corridors (which should have good access to passenger transport, a variety of housing types, jobs, services, recreational, cultural, entertainment and other activities) and in other locations (having regard to Policies 2.6.5.9 and 2.6.5.11 of the Regional Policy Statement).

(e) recognises that some commercial and retail activities which are ill-suited to locating in high density centres and intensive corridors, because of their form , scale or customer base, can be enabled in appropriate business (and Mixed Use) zones provided that they will not compromise the achievement of 2.6.5 Strategic Policies Urban Structure of the Auckland Regional Policy Statement.

(f) promotes high standards for urban amenity, form and design which are applied appropriately to the circumstances to facilitate a range of quality environments around town centres, transport nodes and growth areas.

(g) avoids or mitigates conflicts or incompatibility (including reverse sensitivity effects) between new land uses and both existing and planned future regionally significant infrastructure. For the purpose of this Objective "planned future regionally significant infrastructure" is regionally significant infrastructure which is the subject of a Notice of Requirement, designation or resource consent, or which otherwise has statutory planning approval.

(h) To enhance the visual amenity and urban identity and character of identified growth areas, by encouraging well designed buildings, lively streetscapes, safe and attractive public spaces, convenient pedestrian linkages and good access to transport facilities.

Desired Outcome

On balance the above Objectives & Policies are seeking to achieve:

Urban growth with strong integration between transport and land use delivering high standards of built form amenity and design situated in areas which are use specific.

Expected Environmental Outcomes

Corresponding Expected Environmental Outcomes:

The intention of this Plan is to present a clear vision and direction for the future integrated management of the physical and natural resources of the City in a manner which is in keeping with the long term aspirations of the community. The Council has taken these community values and aspirations and developed them into objectives, policies and rules.

It is expected that the Plan's resource management strategy will lead to an urban environment where the community makes its decisions on growth and development based on the effects such activity will have on the district's natural and physical resources. The significant and unique features of the City and its location will be conserved and protected. The community will enjoy flexibility and choice in locations for work, leisure and living, secure in the knowledge the certain levels of amenity will be attained. Overall the strategy will benefit the wider community and will leave a suitable legacy for future generations.

Intended Outcome

On balance the above Expected Environmental Results are seeking to achieve:

Collaborative integrated management of the physical and natural resources of the city resulting in high levels of amenity and benefits to the wider community.

Analysis

The above related issues and objectives are strongly related and mutually supportive of one another. The wording used to describe what is sought under the objectives is clear.

One weakness is the use of the words such as: 'supports', 'facilitates', 'encourages', 'promotes' etc. The use of these words, suggest a less strict requirement to meet these objectives and to enforce the policies themselves. The Expected Environmental Results reflect this in part. They lack a clear and enunciated outcome for what these objectives will achieve for the plan's jurisdictional area.

The Expected Environmental Outcomes are verbose leaving interpretation of the specific nuances of the outcomes open for debate.

As the Expected Environmental Outcomes are non-specific they are unquantifiable as to their results.

Business: General

Objectives & Policies

Objective 8.3.1

Objective(s):

To foster the service, employment and productive potential of business activity while ensuring the sustainable management of the natural and physical resources of the City.

Corresponding Policy(ies):

- By providing flexibility for businesses through the establishment of a comprehensive range of business zones which allow a wide range of business and other activities.
- By providing and maintaining different standards of amenity for business activity throughout the City.
- By restricting new development to that which can demonstrate an efficient and appropriate use of existing infrastructure or which can provide for its own infrastructural needs.
- By requiring new development over a certain scale to undertake an environmental assessment of the likely effects of the proposed development in terms of the Schedule of Effects described in PART 4 – GENERAL PROVISIONS AND PROCEDURES.
- By providing information and regularly monitoring business controls to ensure they continue to achieve their stated purpose.
- By offering incentives for the comprehensive redevelopment of large, vacant, under-utilised or derelict industrial sites within the Isthmus.
- By recognising the valuable physical resources, in terms of infrastructure and commercial and community facilities and services as a whole, within the City's existing commercial centres.

Desired Outcome

On balance the above Objectives & Policies are seeking to achieve:

Offering a wide range of zones which allow a wide range of business activities to take place within them in an efficient manner. Business activity will not compromise the natural and physical resources of the city.

Analysis

Objective 8.3.1 is twofold. On the one hand it is looking to promote business activity in the city but secondly it is looking to achieve the sustainable management of the natural and physical resources of the city.

There is a lack of rigor in the objective due to the vagueness around the use of words 'foster' and 'potential'. The act of 'fostering potential' is unclear and unquantifiable. Whilst fostering potential the objective also seeks to ensure sustainable management. Stronger wording instead of 'ensuring the sustainable management' might be *'ensuring the protection'* or *'ensuring the preservation'* of 'the natural and physical resources of the City.'

The policies on the other hand appear clear and direct for example 'by restricting new development'. The use of the word 'restricting' is definitive.

None of the policies deal with 'sustainable management' nor the 'natural resources of the city'.

Objective 8.3.2

Objective(s):

To ensure that any adverse effect of business activity on the environment is avoided or reduced to an acceptable level.

Corresponding Policy(ies):

- By applying controls which protect and enhance environmental values, public safety and amenity values.
- By applying controls which impose limitations on the use, storage and handling of hazardous substances for environmental and safety reasons.
- By applying measures to all business zones in order to avoid or minimise air, water and soil pollution.

Desired Outcome

On balance the above Objectives & Policies are seeking to achieve:

Controls for business activities are applied to mitigate any adverse effects of business activity on the environment.

Analysis

Objective 8.3.2 and the corresponding policies are clear and concise. They clearly state how they will meet the objective stated, 'by applying controls'.

Objective 8.3.3

Objective(s):

To ensure that community values are recognised and balanced against the maintenance of public and private interests.

Corresponding Policy(ies):

- By encouraging community involvement in the development of individualised Centre Plans or Growth Area Structure Plans for existing commercial centres, which identify and foster the special characteristics of these centres and provide for parking and amenity improvement programmes.
- By requiring new development over a certain scale to undertake an environmental assessment of the likely effects of the proposed development in terms of the Schedule of Effects described in PART 4 – GENERAL PROVISIONS AND PROCEDURES.
- By recognising the valuable physical resources, in terms of infrastructure and commercial and community facilities and services as a whole, within the City's existing commercial centres.
- By applying urban design rules, criteria and guidelines to development within specified town centres and in Intensive Corridors in order to encourage quality retail, employment, and mixed use environments.

Desired Outcome

On balance the above Objectives & Policies are seeking to achieve:

Collaborative planning exercises are applied to enable the community interests to be recognised. Effects of proposed developments will undertake an assessment of environmental effects. Physical resources of the city will be recognised. Quality growth encouraged through urban design requirements.

Analysis

This is a difficult objective to meet and very hard to quantify its results. The wording is convoluted. Community values are inherently 'public interests'. Furthermore it could be assumed that the overarching purpose of the plan is to balance competing interests and meet the purpose of the RMA (1991) therefore leaving this objective and associated policies redundant.

Policy one does support the objective but it provides specific emphasis to parking and amenity provisions. If the suite of policies supporting the objective were broader this policy would suffice. However as it is standalone supporting the objective the particular wording regarding parking and amenity infers that these may be the key attributes to be given particular regard to in the Centre Plans or Growth Area Structure Plans process.

The remaining three policies do not appear to support the objective.

Policy two requires the undertaking of an Assessment of Environmental Effects which is triggered by any activity which is not permitted as of right under the district plan.

Policy four refers to urban design controls. This will not directly stimulate development or growth. Development and growth by may be a bi-product of a high quality urban environment however this is only one catalyst for such a process.

Objective 8.3.4

Objective(s):

To provide for the safe, economic and convenient movement of people and goods within the business zones.

Corresponding Policy(ies):

- By requiring adequate off-street parking and loading facilities to ensure that the capacity of the roading system is not unduly reduced, and that activities are sufficiently accessible to ensure their operation.
- By requiring new development over a certain scale to undertake an environmental assessment of the likely effects of the proposed development in terms of the Schedule of Effects described in PART 4 - GENERAL PROVISIONS AND PROCEDURES.
- By requiring financial contributions in accordance with PART 4B - FINANCIAL CONTRIBUTIONS.

Desired Outcome

On balance the above Objectives & Policies are seeking to achieve:

Provision of efficient, safe and economic transport system within the business zones for the transportation of goods and people.

Analysis

Objective 8.3.4 is a clearly stated objective. However it may be strengthened through the addition of the word 'efficient'.

The policies only support two aspects of the objective and therefore are unlikely to achieve the desired outcome of the objective. The objective seeks the safe, economic, and convenient movement of people and goods. The policy only address off street parking and loading facilities.

Policies two and three are statutory requirements if the proposed activity within the business zone is not permitted; therefore there is little need to re-state them here. Policies two and three do not themselves support the objective.

Further policies such as requiring, "high traffic creating activities in the business zone be located in areas within 'x' proximity to an arterial route or equivalent" may assist in meeting this objective.

Expected Environmental Outcomes

The business zones are based on different levels of development intensity rather than on different types of activity. The intensity levels for permitted activities in each zone have been determined having regard to:

- the built and natural environment;
- the existing public infrastructure;
- the activities occurring in adjacent zones;
- the function of the particular area.

Beyond these levels some activities within a particular zone may generate a range of effects that cannot be easily dealt with by standard zone provisions. A resource consent will be required in these cases. Applications will be considered against criteria that reflect the environmental and amenity concerns of the particular business zone.

The provision of attractive and efficient locations for business activity is essential to the encouragement of business growth. Therefore areas of different amenity are identified in the Plan. Generally, a high level of amenity is encouraged within the business zones. However, because not all business operations need such amenity, limited provision is made for areas of lower amenity throughout the district. The level of amenity within an area is determined by its particular physical and natural qualities and characteristics that contribute to the community's appreciation of the area's pleasantness, aesthetic coherence, cultural and recreational attributes. This may include the visual appearance and the spatial extent of the built environment; the provision or lack of landscaping and open space; the existence of pedestrian amenity; and the provision and ease of vehicle access and circulation.

Intended Outcome

On balance the above Expected Environmental Results are seeking to achieve:

Business zones are based on development intensity as opposed to types of activity.

Environment, infrastructure, zones and function determine the ability for activities to situate in certain zones. Certain activities will fall outside of the district plans scope. These will be addressed by undertaking an Assessment of Environmental Effects.

High level of amenity across all business zones is achieved apart from in zones where it is deemed not needed.

Analysis

The Expected Environmental Outcomes for the business zones in general clearly state the range of variables which the zones are therefore tasked with accommodating. This flexibility is in part reflected in the objectives and policies stated above. However little emphasis is placed on the specific envisaged outcomes that the stated objectives and policies will deliver.

Some of what is stated above is contradictory such as amenity in business zones. For example, 'a high level of amenity is encouraged within the business zones' at the same time as saying 'not all business operations need such amenity'.

Aspects such as requiring an Assessment of Environmental Effects for those activities which are not permitted by the plan and fall outside of its scope is a given.

Specific results / outcomes have not been stated. The Expected Environmental Outcomes are unclear as to the exact outcomes which are being sought by the policy framework.

Business: Mixed Use Zone

Objectives & Policies

Objective 8.6.2.1

Objective(s):

(a) To provide for retailing, office and commercial service activity at a medium intensity suburban level.

Corresponding Policy(ies):

- By recognising through zoning, existing suburban retail and business centres.
- By permitting a wide range of business and non-business activities within these centres.

Desired Outcome

On balance the above Objectives & Policies are seeking to achieve:

Through the use of zoning permitting a wide range of business and non-business activities a medium intensity suburban level.

Analysis

The objective clearly states the types of activities which are allowed for in the zone at a medium intensity suburban level. However it does not state that residential activities are provided for.

The policies support in part the objectives. The second policy does not state how it will be achieved. The first policy states that the objective will be met through zoning. Furthermore the second policy simply states that 'a wide range of business and non-business activities' will be allowed for in the centres whereas the objective itself is much more specific.

The policies do not mention service activity pertaining to retailing and office activity and how the policy framework intends to support such an activity.

Objective:

(b) To recognise the importance of the main retail frontage in maintaining the pedestrian amenity of these areas.

Corresponding Policy(ies):

- By identifying the main retail frontage of centres and applying measures which seek to reinforce it.
- By requiring the provision of verandahs.
- By providing bonuses in floor area for new developments, where specified pedestrian facilities are provided

Desired Outcome

On balance the above Objectives & Policies are seeking to achieve:

Pedestrian amenity through retail frontage verandas and incentives developers.

Analysis

Objective (b) is clearly stated. The supporting policies do give effect to the intention of the objective. However the breadth of the policies fail to adequately meet the objective.

Objective(s):

(c) To encourage business and community groups to become actively involved in identifying the specific character of individual centres and the future direction of them.

Corresponding Policy(ies):

- By introducing the concept of Centre Plans for individual centres where sufficient interest and support is given by the business sector and the community.

Desired Outcome

On balance the above Objectives & Policies are seeking to achieve:

Collaborative planning exercises – Centre Plans will assist in identifying specific character and the future direction of the individual centres.

Analysis

The intentions of the objective is clearly outlined.

The sole supporting policy does not adequately meet the objective as it places the onus on the community engaging with the planning process and not the planning process engaging with the community. It suggests that if businesses and community groups wish to be involved they will be allowed but if not it will be left up to the council and planning processes. The word 'encourage' may be replaced by 'allow' in light of the supporting policy.

Objective(s):

(d) To acknowledge the role of suburban centres as a focal point for community interests and activities

Corresponding Policy(ies):

- By providing for the establishment of community uses and support services.
- By recognising that the physical resources of existing viable centres are an important resource in the City.

Desired Outcome

On balance the above Objectives & Policies are seeking to achieve:

Suburban centres will be the focal point for the delivery of community interests and activity and take into account existing resources in light of this.

Analysis

The above stated objective (d) suggests that council does not yet acknowledge that suburban centres are the focal point of community interests and activities. 'Acknowledge' would be better replaced by the word *'support'*. This would enable the objective to better integrate with the first supporting policy of establishing 'community uses and support services'.

The second supporting policy does not link with the corresponding objective. The objective refers to 'suburban centres' and the policy refers to 'viable centres'. This suggests that only the physical resources of 'viable centres are important resource to the City'. Furthermore, the contribution the second policy makes towards achieving the objective is vague as 'recognising' does not suggest anything will be done or change.

Objective(s):

(e) To ensure that any adverse environmental or amenity impact of business activity on adjacent residential or open space zones is prevented or reduced to an acceptable level.

Corresponding Policy(ies):

- By adopting controls which limit the intensity and scale of development to a level appropriate to the zone's proximity to residential zoned properties and open space areas.
- By requiring acceptable noise levels at the interface between residential zones and business zones.
- By adopting controls which seek to protect residential zones' privacy and amenity.
- By adopting parking and traffic measures, which seek to avoid congestion and parking problems.

Desired Outcome

On balance the above Objectives & Policies are seeking to achieve:

Reverse sensitivity of business activity in residential and open space zones is managed through the adoption of controls.

Analysis

The above stated objective is clear and understandable. However the second part of the objective is unclear. 'Prevented' or 'reduced' are two very different degrees of control. Also, if it is reduced what and who determines 'an acceptable level'. If 'an acceptable level' is not met is the activity prevented?

Policy one and two are clear and supports the objective however there is a high level of uncertainty around what is deemed to be an appropriate or acceptable level and who deems this.

Policy three and four are clear and concise and support the above stated objective.

There is no recognition here that residential activity is permitted under the Mixed Use Business Zone. The objective only protects against adverse effects on adjoining residential zones not adjoining residential activities – a vital difference. Therefore no protection for residential activities in business zones is afforded from the impacts of other activities which may be permitted within these zones.

Objective(s):

(f) To ensure that residential activity and parking areas are located appropriately so as to maintain the retail / commercial character of town / suburban centres.

Corresponding Policy(ies):

- By adopting controls which require the location of residential units and parking areas away from street frontages at ground level.

Desired Outcome

On balance the above Objectives & Policies are seeking to achieve:

Control of the location of residential units and parking areas away from street frontages at ground level will maintain retail / commercial character of town / suburban centres.

Analysis

The above stated objective (f) is clear in its intentions. There is no need to state 'appropriately' as this only allows room for conjecture as to what is deemed to be 'appropriate' or not. The objective does not take into account that the character of town / suburban centres may be created through the composition of more than solely retail and commercial activity.

The supporting policy only restricts residential activities on street frontages at ground floors. This policy is better suited to an objective seeking to maintain and enhance active frontages.

The location of parking areas is not referred to as those which are solely related to the residential activity. In effect this objective and policy is banning all parking spaces in town and suburban centres on ground level at street frontages in Mixed Use Business Zones. It is uncertain as to if this is what the policy and objective was intending to achieve here.

Objective(s):

(g) To ensure that residential activity is established in such a manner so as to minimise potential adverse effects on residents and commercial tenants.

Corresponding Policy(ies):

- By adopting controls which achieve an acceptable noise level within residential units and require minimum standards of daylight admission, visual privacy and private open space provision.

Desired Outcome

On balance the above Objectives & Policies are seeking to achieve:

Controls adopted to ensure residential activities are established with minimum adverse effects on residents and commercial tenants.

Analysis

The objective is ambiguous in what it is seeking to achieve. It is unclear whether or not it is seeking to achieve a horizontal separation of uses between sites or control architectural design so as to achieve a vertical mix of residential and commercial uses which minimises adverse effects of the residents on the commercial users.

The related policy supports the objective in part although the connection between 'daylight admission, visual privacy and private open space provision' will assist in reducing the adverse effects on commercial tenants from residential tenants as opposed to simply improving the built form amenity for residential tenants.

The use of the wording 'acceptable noise' level raises concerns over what is an acceptable noise level for residential activities in business zones. Furthermore, relating to the above stated objective, why would commercial tenants be concerned by the residential noise levels – it could be argued that it would be the reverse.

A second policy stating the requirement for controls relating to the configuration of mixed use developments would greatly strengthen and allude to what the objective is seeking to achieve.

Expected Environmental Outcome

The centres to which this zone is applied are expected to be subjected to considerable change in the future. As with the centres within the Business 1 zone, there is a need for these centres to find a particular niche in the market and to capitalise on specific characteristics. The Plan's objective of providing flexibility in location, tempered by a need to prevent any significant adverse effects on the existing physical resources of established commercial centres, will see some centres consolidate and flourish. Other less viable centres will need to redefine their role or face increased competition. Those centres where community and business concerns are strong, will adopt Centre Plans which will identify and attempt to manage the specific resource management issues of the centre. It is expected that these Centre Plans will be important planning tools - reflecting community concerns, and coping with issues such as parking and traffic matters and the provision of amenity improvements. The development controls for the zone are expected to maintain or improve the amenity of these centres, over time, especially the pedestrian environment of retail dominant areas.

Intended Outcome

On balance the above Expected Environmental Results are seeking to achieve:

Flexibility provided in locations of centres to accommodate future development and prevent adverse effects on physical resources. Each centre will adopt its own specific market environment based on it characteristics. This will be achieved through the development and adoption of Centre Plans. Development controls will be applied to maintain and improve amenity of the centres especially the pedestrian environmental of retail dominant areas.

Analysis

The expected environmental outcomes stated above are a poor reflection on what the previously stated objectives are seeking to achieve. They do not strengthen the vision or aspiration of what the plan is seeking to achieve in the Mixed Use Business Zones.

The expected environmental outcomes clearly state that Centre Plans will be the vehicle by which to address resource management issues. This is essentially suggesting that little weight be afforded to the above stated objectives and policies determining the future outcomes of the general Business zones and more specifically the mixed use zones. To add to this the expected environmental outcomes states that the development controls (i.e. not the policies or objectives for the zone), will dictate the amenity of these areas.

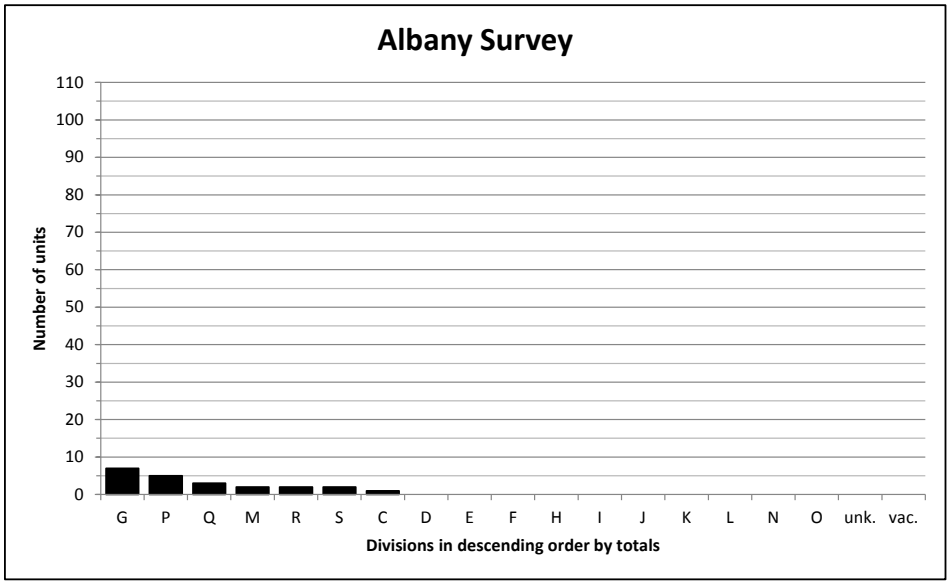
APPENDIX TWO

Local Service & Amenity Assessment

Albany Report

by Division

Division				
	C	*Manufacturing*		*1*
	D	*Electricity, Gas, Water & Waste Services*		*0*
	E	*Construction Services*		*0*
	F	*Wholesale Trade*		*0*
	G	*Retail Trade*		*7*
	H	*Accommodation & Food Services*		*0*
	I	*Transport, Postal & Warehousing*		*0*
	J	*Information Media & Telecommunications*		*0*
	K	*Financial & Insurance Services*		*0*
	L	*Rental, Hiring & Real Estate Services*		*0*
	M	*Professional, Scientific & Tech. Services*		*2*
	N	*Administrative & Support Services*		*0*
	O	*Public Administration & Safety*		*0*
	P	*Education & Training*		*5*
	Q	*Health Care & Social Assistance*		*3*
	R	*Arts & Recreation Services*		*2*
	S	*Other Services*		*2*
	unk.	*Unknown Use/Activity*		*0*
	vac.	*Vacant/For Lease*		*0*
			Total	***22***



Albany Report

by Subdivision

Division	C	Manufacturing	Total	1
Subdivision				
	11	Food Product Manufacturing		1
			Total	1

Division	G	Retail Trade	Total	7
Subdivision				
	40	Fuel Retailing		3
	41	Food Retailing		4
			Total	7

Division	M	Professional, Scientific & Technical Services	Total	2
Subdivision				
	69	Professional, Scientific & Technical Services		2
			Total	2

Division	P	Education	Total	5
Subdivision				
	80	Pre-school & School Education		5
			Total	5

Division	Q	Health Care & Social Assistance	Total	3
Subdivision				
	85	Medical & Other Health Care Services		1
	86	Residential Care Services		1
	87	Social Assistance		1
			Total	3

Division	R	Arts & Recreation Services	Total	2
Subdivision				
	91	Sports & Recreation Activities		2
			Total	2

Division	S	Other Services	Total	2
Subdivision				
	95	Personal & Other Services		2
			Total	2

Albany Report

by Class

Division	C	Manufacturing	Total	1
Class				
	1174	Bakery Product Manufacturing (Non-factory based)		1
			Total	1

Division	G	Retail Trade	Total	7
Class				
	4000	Fuel Retailing		3
	4110	Supermarket & Grocery Stores		1
	4121	Fresh Meat, Fish & Poultry Retailing		2
	4122	Fruit & Vegetable Retailing		1
			Total	7

Division	M	Professional, Scientific & Technical Services	Total	2
Class				
	6921	Architectural Services		1
	6970	Veterinary Services		1
			Total	2

Division	P	Education	Total	5
Class				
	8010	Preschool Education		3
	8021	Primary Education		2
			Total	5

Division	Q	Health Care & Social Assistance	Total	3
Class				
	8531	Dental Services		1
	8601	Age Care Residential Services		1
	8710	Child Care Services		1
			Total	3

Division	R	Arts & Recreation Services	Total	2
Class				
	9113	Sports & Physical Recreation Venues, Grounds & Facilities Operation		1
	9131	Amusement Parks and Centres Operation		1
			Total	2

Division	S	Other Services	Total	2
Class				
	9540	Religious Services		2
			Total	2

Albany Report

by Group

Division	C	Manufacturing	Total	1
Group				
	117	Bakery Product Manufacturing		1
			Total	1

Division	G	Retail Trade	Total	7
Group				
	400	Fuel Retailing		3
	411	Supermarket & Grocery Stores		1
	412	Specialised Food Retailing		3
			Total	7

Division	M	Professional, Scientific & Technical Services	Total	2
Group				
	692	Architectural, Engineering & Technical Services		1
	697	Veterinary Services		1
			Total	2

Division	P	Education	Total	5
Group				
	801	Preschool Education		3
	802	School Education		2
			Total	5

Division	Q	Health Care & Social Assistance	Total	3
Group				
	853	Allied Health Services		1
	860	Residential Care Services		1
	871	Child Care Services		1
			Total	3

Division	R	Arts & Recreation Services	Total	2
Group				
	911	Sports & Physical Recreation Activities		1
	913	Amusement & Other Recreation Activities		1
			Total	2

Division	S	Other Services	Total	2
Group				
	954	Religious Services		2
			Total	2

Division	Q	Health Care & Social Assistance	Total	23
Subdivision				
	85	Medical & Other Health Care Services		13
	86	Residential Care Services		1
	87	Social Assistance Services		9
			Total	23

Division	R	Arts & Recreation Services	Total	12
Subdivision				
	91	Sports & Recreation Activities		11
	92	Gambling Activities		1
			Total	12

Division	S	Other Services	Total	75
Subdivision				
	94	Repair & Maintenance		39
	95	Personal & Other Services		35
	96	Personal & Other Services		1
			Total	75

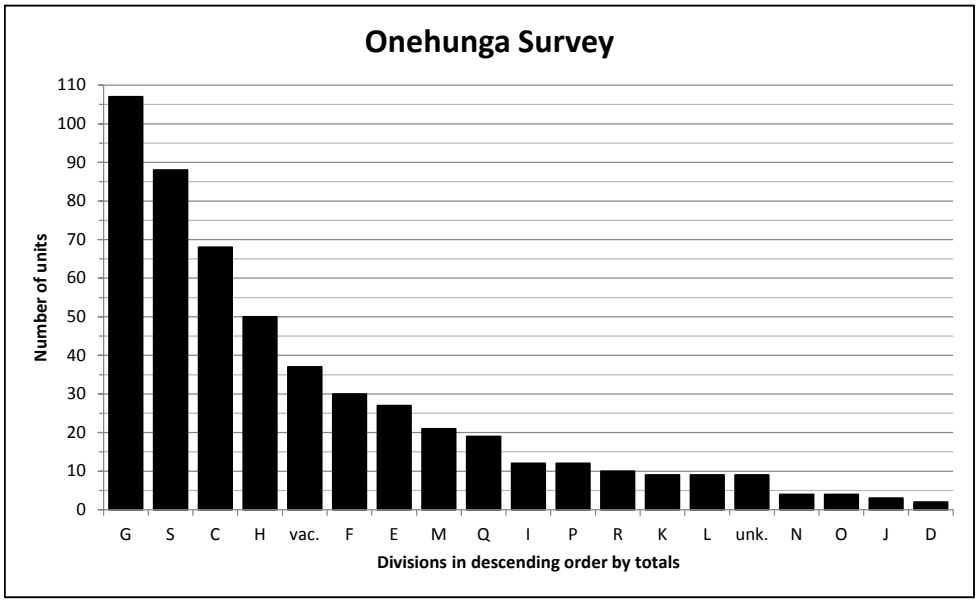
Division	unk.	Unknown Use/Activity	Total	3
Subdivision				
	unk.	UNKNOWN - NOT VACANT		3
			Total	3

Division	vac.	Vacant/For Lease	Total	42
Subdivision				
	vac.	VACANT		42
			Total	42

Onehunga Report

by Division

Division				
	C	*Manufacturing*		*68*
	D	*Electricity, Gas, Water & Waste Services*		*2*
	E	*Construction Services*		*27*
	F	*Wholesale Trade*		*30*
	G	*Retail Trade*		*107*
	H	*Accommodation & Food Services*		*50*
	I	*Transport, Postal & Warehousing*		*12*
	J	*Information Media & Telecommunications*		*3*
	K	*Financial & Insurance Services*		*9*
	L	*Rental, Hiring & Real Estate Services*		*9*
	M	*Professional, Scientific & Tech. Services*		*21*
	N	*Administrative & Support Services*		*4*
	O	*Public Administration & Safety*		*4*
	P	*Education & Training*		*12*
	Q	*Health Care & Social Assistance*		*19*
	R	*Arts & Recreation Services*		*10*
	S	*Other Services*		*88*
	unk.	*Unknown Use/Activity*		*9*
	vac.	*Vacant/For Lease*		*37*
			Total	***521***



Onehunga Report

by Subdivision

Division	C	Manufacturing	Total	68
Subdivision				
	11	Food Product Manufacturing		2
	13	Textile, Leather, Clothing & Footwear Manufacturing		5
	14	Wood Product Manufacturing		10
	16	Printing (including the Reproduction of Recorded Media)		7
	18	Basic Chemical & Chemical Product Manufacturing		4
	19	Polymer Product & Rubber Product Manufacturing		4
	20	Non-Metallic Mineral Product Manufacturing		4
	22	Fabricated Metal Product Manufacturing		13
	23	Transport Equipment Manufacturing		3
	24	Machinery & Equipment Manufacturing		9
	25	Furniture & Other Manufacturing		7
			Total	68

Division	D	Electricity, Gas, Water & Waste Services	Total	2
Subdivision				
	28	Water Supply, Sewerage & Drainage Services		1
	29	Waste Collection, Treatment & Disposal Services		1
			Total	2

Division	E	Construction Services	Total	27
Subdivision				
	30	Building Construction		4
	31	Heavy & Civil Engineering Construction		3
	32	Construction Services		20
			Total	27

Division	F	Wholesale Trade	Total	30
Subdivision				
	33	Basic Material Wholesaling		9
	34	Machinery & Equipment Wholesaling		10
	36	Grocery, Liquor & Tobacco Product Wholesaling		3
	37	Other Goods Wholesaling		6
	38	Commission-Based Wholesaling		2
			Total	30

Division	G	Retail Trade	Total	107
Subdivision				
	39	Motor Veh. & Motor Veh. Parts Retailing		8
	40	Fuel Retailing		1
	41	Food Retailing		23
	42	Other Store-Based Retailing		75
			Total	107

Division	H	Accommodation & Food Services	Total	50
Subdivision				
	45	Food & Beverage Services		50
			Total	50

Division	I	Transport, Postal & Warehousing	Total	12
Subdivision				
	46	Road Transport		6
	47	Rail Transport		1
	51	Postal & Courier Pick-up & Delivery Services		2
	53	Warehousing & Storage Services		3
			Total	6

Division	J	Information Media & Telecommunications	Total	3
Subdivision				
	55	Motion Picture & Sound Recording Activities		1
	59	Internet Providers, Web Search Portals & Data Processing Services		1
	60	Libraries & Other Information Services		1
			Total	3

Division	K	Financial & Insurance Services	Total	9
Subdivision				
	62	Finance		8
	64	Auxiliary Finance & Insurance Services		1
			Total	9

Division	L	Rental, Hiring & Real Estate Services	Total	9
Subdivision				
	66	Rental & Hiring Services		4
	67	Property Operators & Real Estate Services		5
			Total	9

Division	M	Professional, Scientific & Tech. Services	Total	21
Subdivision				
	69	Professional, Scientific & Tech. Services		21
			Total	21

Division	N	Administrative & Support Services	Total	4
Subdivision				
	72	Administrative Services		3
	73	Building Cleaning, Pest Control & Other Support Services		1
			Total	1

Division	O	Public Administration & Safety	Total	4
Subdivision				
	77	Public Order & Safety Services		4
			Total	4

Division	P	Education & Training	Total	12
Subdivision				
	80	Preschool & School Education		4
	82	Adult, Community & Other Education		8
			Total	8

Division	Q	Health Care & Social Assistance	Total	19
Subdivision				
	85	Medical & Other Health Care Services		12
	86	Residential Care Services		1
	87	Social Assistance Services		6
			Total	19

Division	R	Arts & Recreation Services	Total	10
Subdivision				
	90	Creative & Performing Arts Activities		1
	91	Sports & Recreation Activities		4
	92	Gambling Activities		5
			Total	10

Division	S	Other Services	Total	88
Subdivision				
	94	Repair & Maintenance		50
	95	Personal & Other Services		37
	96	Personal & Other Services		1
			Total	88

Division	unk.	Unknown Use/Activity	Total	9
Subdivision				
	unk.	UNKNOWN - NOT VACANT		9
			Total	9

Division	vac.	Vacant/For Lease	Total	37
Subdivision				
	vac.	VACANT		37
			Total	37

Onehunga Report

by Group

Division	C	Manufacturing	Total	68
Group				
	117	Bakery Product Manufacturing		2
	133	Textile Product Manuf.		5
	149	Other Wood Product Manufacturing		10
	161	Printing & Printing Support Services		7
	182	Basic Polymer Manufacturing		2
	185	Cleaning Compound & Toiletry Prep. Manuf.		1
	189	Other Basic Chemical Product Manuf.		1
	191	Polymer Product Manufacturing		4
	203	Cement, Lime, Plaster & Concrete Product Manuf.		2
	209	Other Non-Metallic Mineral Product Manuf.		2
	221	Iron & Steel Forging		1
	222	Structural Metal Product Manuf.		4
	223	Metal Container Manuf.		1
	224	Sheet Metal Product Manuf.		3
	229	Other Fabricated Metal Product Manuf.		4
	231	Motor Veh. & Motor Veh. Part Manuf.		1
	239	Other Transport Equip. Manuf.		2
	241	Professional & Scientific Equip. Manuf.		2
	243	Electrical Equipment Manuf.		1
	246	Specialised Machinery & Equip. Manuf.		6
	251	Furniture Manufacturing		4
	259	Other Manufacturing		3
			Total	68

Division	D	Electricity, Gas, Water & Waste Services	Total	2
Group				
	281	Water Supply, Sewerage & Drainage Services		1
	292	Waste Treatment, Disposal & Remediation Services		1
			Total	2

Division	E	Construction Services	Total	27
Group				
	301	Residential Building Construction		1
	302	Non-Residential Building Construction		3
	310	Heavy & Civil Engineering Construction		3
	323	Building Installation Services		10
	329	Other Construction Services		10
			Total	27

Division	F	Wholesale Trade	Total	30
Group				
	331	Agricultural Product Wholesaling		1
	332	Mineral, Metal & Chemical Wholesaling		1
	333	Timber & Hardware Goods Wholesaling		7
	341	Specialised Machinery & Equip. Wholesaling		2
	349	Other Machinery & Equip. Wholesaling		8

Group (Division F Cont.)				
	360	Grocery, Liquor & Tobacco Product Wholesaling		3
	371	Textile, Clothing & Footwear Wholesaling		1
	372	Pharmaceutical & Toiletry Goods Wholesaling		1
	373	Furniture, Floor Covering & Other Goods Wholesaling		4
	380	Commission-Based Wholesaling		2
			Total	30

Division	**G**	**Retail Trade**	**Total**	**107**
Group				
	392	Motor Veh. Parts & Tyre Retailing		8
	400	Fuel Retailing		1
	411	Supermarket & Grocery Stores		13
	412	Specialized Food Retailing		10
	421	Furniture, Floor Coverings, Housewares & Textile Goods Retailing		6
	422	Electrical & Electronic Goods Retailing		5
	423	Hardware, Building & Garden Supplies Retailing		3
	424	Recreational Goods Retailing		7
	425	Clothing, Footwear & Personal Accessory Retailing		19
	426	Department Stores		8
	427	Pharmaceutical & Other Store-Based Retailing		27
			Total	107

Division	**H**	**Accommodation & Food Services**	**Total**	**50**
Group				
	451	Cafes, Restaurants & Takeaway Food Services		45
	452	Pubs, Taverns & Bars		3
	453	Clubs (Hospitality)		2
			Total	50

Division	**I**	**Transport, Postal & Warehousing**	**Total**	**12**
Group				
	461	Road Freight Transport		5
	462	Road Passenger Transport		1
	472	Rail Passenger Transport		1
	510	Postal & Courier Pick-up & Delivery Services		2
	530	Warehousing & Storage Services		3
			Total	12

Division	**J**	**Information Media & Telecommunications**	**Total**	**3**
Group				
	551	Motion Picture & Video Activities		1
	591	Internet Service Providers & Web Search Portals		1
	601	Libraries & Archives		1
			Total	3

Division	**K**	**Financial & Insurance Services**	**Total**	**9**
Group				
	622	Depository Financial Intermediation		8
	641	Auxiliary Finance & Investment Services		1
			Total	9

Division	L	Rental, Hiring & Real Estate Services	Total	9
Group				
	661	Motor Veh. & Transport Equip. Rental & Hiring		2
	663	Other Goods & Equip. Rental & Hiring		2
	671	Property Operators		2
	672	Real Estate Services		3
			Total	9

Division	M	Professional, Scientific & Tech. Services	Total	21
Group				
	692	Architectural, Engineering & Tech. Services		8
	693	Legal & Accounting Services		5
	694	Advertising Services		1
	696	Management & Related Consulting Services		5
	697	Veterinary Services		1
	699	Other Professional, Scientific & Tech. Services		1
			Total	21

Division	N	Administrative & Support Services	Total	4
Group				
	721	Employment Services		1
	722	Travel Agency & Tour Arrangement Services		2
	732	Packaging Services		1
			Total	4

Division	O	Public Administration & Safety	Total	4
Group				
	771	Public Order & Safety Services		4
			Total	4

Division	P	Education & Training	Total	12
Group				
	801	Preschool Education		1
	802	School Education		3
	821	Adult, Community & Other Education		8
			Total	12

Division	Q	Health Care & Social Assistance	Total	19
Group				
	851	Medical Services		3
	853	Allied Health Services		9
	860	Residential Care Services		1
	871	Child Care Services		1
	879	Other Social Assistance Services		5
			Total	19

Division	R	Arts & Recreation Services	Total	10
Group				
	900	Creative & Performing Arts Activities		1
	911	Sports & Physical Recreation Activities		4
	920	Gambling Activities		5
			Total	10

Division	S	Other Services	Total	88
Group				
	941	Automotive Repair & Maintenance		44
	942	Machinery & Equip. Repair & Maintenance		4
	949	Other Repair & Maintenance		2
	951	Personal Care Services		15
	952	Funeral, Crematorium & Cemetery Services		1
	953	Other Personal Services		7
	954	Religious Services		11
	955	Civic, Professional & Other Interest Group Services		4
			Total	88

Division	unk.	Unknown Use/Activity	Total	9
Group				
	unk.	UNKNOWN - NOT VACANT		9
			Total	9

Division	vac.	Vacant/For Lease	Total	37
Group				
	vac.	VACANT		37
			Total	37

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by Class

Division	C	Manufacturing	Total	68
Class				
	1174	Bakery Product Manuf. (non-factory based)		2
	1334	Textile Finishing & Other Textile Product Manuf.		2
	1331	Textile Floor Covering Manuf.		2
	1333	Cut & Sewn Textile Product Manuf.		1
	1492	Wooden Structural Fitting & Component Manuf.		7
	1499	Other Wood Product Manufacturing n.e.c.		3
	1611	Printing		7
	1821	Synthetic Resin & Synthetic Rubber Manuf.		2
	1851	Cleaning Compound Product Manuf.		1
	1899	Other Basic Chemical Product Manuf. n.e.c.		1
	1912	Rigid & Semi-Rigid Polymer Product Manuf.		4
	2033	Ready-Mix Concrete Manufacturing		1
	2032	Plaster Product Manufacturing		1
	2090	Other Non-Metallic Mineral Product Manuf.		2
	2210	Iron & Steel Forging		1
	2223	Architectural Aluminium Product Manuf.		4
	2231	Boiler, Tank & Other Metal Container Manuf.		1
	2240	Sheet Metal Product Manuf.		3
	2293	Metal Coating & Finishing		4
	2319	Other Motor Veh. Parts Manuf.		1
	2392	Boatbuilding & Repair Services		1
	2399	Other Transport Equip. Manuf. n.e.c.		1
	2419	Other Professional & Scientific Equip. Manuf.		1
	2412	Medical & Surgical Equip. Manuf.		1
	2432	Electric Lighting Equip. Manuf.		1
	2469	Other Specialised Machinery & Equip. Manuf.		6
	2511	Wooden Furniture & Upholstered Seat Manuf.		3
	2512	Metal Furniture Manuf.		1
	2599	Other Manufacturing n.e.c.		3
			Total	68

Division	D	Electricity, Gas, Water & Waste Services	Total	2
Class				
	2811	Water Supply		1
	2922	Waste Remediation & Materials Recovery Services		1
			Total	2

Division	E	Construction Services	Total	27
Class				
	3011	House Construction		1
	3020	Non-Residential Building Construction		3
	3109	Road & Bridge Construction		2
	3101	Other Heavy & Civil Engineering Construction		1
	3231	Plumbing Services		6
	3232	Electrical Services		1

Class (Division E Cont.)				
	3233	Air Conditioning & Heating Services		1
	3234	Fire & Security Alarm Installation Services		2
	3299	Other Construction Services n.e.c.		10
			Total	27

Division	F	Wholesale Trade	Total	30
Class				
	3319	Other Agricultural Product Wholesaling		1
	3323	Industrial & Agricultural Chemical Product Wholesaling		1
	3339	Other Hardware Goods Wholesaling		7
	3411	Agricultural & Construction Machinery Wholesaling		2
	3491	Professional & Scientific Goods Wholesaling		1
	3492	Computer & Computer Peripheral Wholesaling		1
	3494	Other Electrical & Electronic Goods Wholesaling		2
	3499	Other Machinery and Equipment Wholesaling n.e.c.		4
	3601	General Line Grocery Wholesaling		1
	3604	Fish & Seafood Wholesaling		1
	3609	Other Grocery Wholesaling		1
	3711	Textile Product Wholesaling		1
	3720	Pharmaceutical & Toiletry Goods Wholesaling		1
	3731	Furniture & Floor Covering Wholesaling		2
	3739	Other Goods Wholesaling n.e.c.		2
	3800	Commission-Based Wholesaling		2
			Total	30

Division	G	Retail Trade	Total	107
Class				
	3921	Motor Veh. Parts Retailing		4
	3922	Tyre Retailing		4
	4000	Fuel Retailing		1
	4110	Supermarket & Grocery Stores		13
	4121	Fresh Meat, Fish & Poultry Retailing		3
	4122	Fruit & Vegetable Retailing		2
	4123	Liquor Retailing		4
	4129	Other Specialised Food Retailing		1
	4211	Furniture Retailing		3
	4214	Manchester and Other Textile Goods Retailing		3
	4221	Electrical, Electronic & Gas Appliance Retailing		3
	4222	Computer & Computer Peripheral Retailing		2
	4231	Hardware & Building Supplies Retailing		3
	4241	Sport & Camping Equip. Retailing		4
	4243	Toy & Game Retailing		1
	4244	Newspaper & Book Retailing		2
	4251	Clothing Retailing		11
	4252	Footwear Retailing		2
	4253	Watch & Jewellery Retailing		6
	4260	Department Stores		8
	4271	Pharmaceutical, Cosmetic & Toiletry Goods Retailing		8
	4272	Stationery Goods Retailing		1

Class (Division G Cont.)				
	4273	Antique & Used Goods Retailing		12
	4274	Flower Retailing		1
	4279	Other Store-Based Retailing n.e.c.		5
			Total	107

Division	**H**	**Accommodation & Food Services**	**Total**	**50**
Class				
	4511	Cafes & Restaurants		19
	4512	Takeaway Food Services		26
	4520	Pubs, Taverns & Bars		3
	4530	Clubs (Hospitality)		2
			Total	50

Division	**I**	**Transport, Postal & Warehousing**	**Total**	**12**
Class				
	4610	Road Freight Transport		5
	4621	Interurban & Rural Bus Transport		1
	4720	Rail Passenger Transport		1
	5101	Postal Services		1
	5102	Courier Pick-up & Delivery Services		1
	5309	Other Warehousing & Storage Services		3
			Total	12

Division	**J**	**Information Media & Telecommunications**	**Total**	**3**
Class				
	5511	Motion Picture & Video Production		1
	5910	Internet Service Providers & Web Search Portals		1
	6010	Libraries & Archives		1
			Total	3

Division	**K**	**Financial & Insurance Services**	**Total**	**9**
Class				
	6221	Banking		6
	6229	Other Depository Financial Intermediation		2
	6419	Other Auxiliary Finance & Investment Services		1
			Total	9

Division	**L**	**Rental, Hiring & Real Estate Services**	**Total**	**9**
Class				
	6611	Passenger Car Rental & Hiring		2
	6639	Other Goods & Equip. Rental & Hiring n.e.c.		2
	6711	Residential Property Operators		1
	6712	Non-Residential Property Operators		1
	6270	Real Estate Services		3
			Total	9

Division	**M**	**Professional, Scientific & Tech. Services**	**Total**	**21**
Class				
	6921	Architectural Services		2
	6923	Engineering Design & Engineering Consulting Services		5
	6924	Other Specialised Design Services		1

Class (Division M Cont.)				
	6931	Legal Services		2
	6932	Accounting Services		3
	6940	Advertising Services		1
	6961	Corporate Head Office Management Services		1
	6962	Management Advice & Related Consulting Services		4
	6970	Veterinary Services		1
	6991	Professional Photographic Services		1
			Total	21

Division	**N**	**Administrative & Support Services**	**Total**	**4**
Class				
	7211	Employment Placement & Recruitment Services		1
	7220	Travel Agency & Tour Arrangement Services		2
	7320	Packaging Services		1
			Total	4

Division	**O**	**Public Administration & Safety**	**Total**	**4**
Class				
	7711	Police Services		1
	7712	Investigation & Security Services		2
	7713	Fire Protection & Other Emergency Services		1
			Total	4

Division	**P**	**Education & Training**	**Total**	**12**
Class				
	8010	Preschool Education		1
	8021	Primary Education		3
	8211	Sports & Physical Recreation Instruction		2
	8212	Arts Education		1
	8219	Adult, Community & Other Education n.e.c.		5
			Total	12

Division	**Q**	**Health Care & Social Assistance**	**Total**	**19**
Class				
	8511	General Practice Medical Services		3
	8531	Dental Services		2
	8532	Optometry & Optical Dispensing		3
	8533	Physiotherapy Services		3
	8539	Other Allied Health Services		1
	8601	Age Care Residential Services		1
	8710	Child Care Services		1
	8790	Other Social Assistance Services		5
			Total	19

Division	**R**	**Arts & Recreation Services**	**Total**	**10**
Class				
	9001	Performing Arts Operation		1
	9111	Health & Fitness Centres & Gymnasia Operation		1
	9113	Sports & Physical Recreation Venues, Grounds & Facilities Operation		2
	9131	Amusement Parks & Centres Operation		1

Class (Division R Cont.)				
	9202	Lotto Operation		2
	9209	Other Gambling Activities		3
			Total	10

Division	S	Other Services	Total	88
Class				
	9411	Automotive Electrical Services		2
	9412	Automotive Body, Paint & Interior Repair		19
	9413	Other Automotive Repair & Maintenance		23
	9421	Domestic Appliance Repair & Maintenance		2
	9422	Electronic & Precision Equipment Repair & Maintenance		1
	9429	Other Machinery & Equipment Repair & Maintenance		1
	9499	Other Repair & Maintenance n.e.c.		2
	9511	Hairdressing & Beauty Services		15
	9520	Funeral, Crematorium & Cemetery Services		1
	9531	Laundry & Dry-Cleaning Services		6
	9532	Laundry & Dry-Cleaning Services		1
	9540	Religious Services		11
	9552	Labour Association Services		1
	9559	Other Interest Group Services n.e.c.		3
			Total	88

Division	unk.	Unknown Use/Activity	Total	9
Class				
	unk.	UNKNOWN - NOT VACANT		9
			Total	9

Division	vac.	Vacant/For Lease	Total	37
Class				
	vac.	VACANT		37
			Total	37