

Improving the Design, Quality and Affordability of Residential Intensification in New Zealand

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Key Points

This study addresses the market demand for medium density housing, focussing on what would make it more attractive to more people. It points to a complex market of diverse segments making complex trade-offs made within affordability and geographic constraints.

It is important to understand the nature of this demand, though, as adoption of medium density housing has not matched expectations. This may reflect:

- The limited market for centralised, multi-medium density housing;
- A mismatch between where plans are directing housing and where the market lies;
- Supply difficulties with recent development that feed negative market perceptions.

The resistance to medium density housing observed is consistent with overseas experience. New Zealanders' long-standing cultural preference for detached housing on individual sections has been reinforced by the leaky homes episode and failures in the developer driven, retail investor apartment market. Rejectors see medium density housing as inferior: *characterless, drab, monotonous, cramped, leaky, subject to the complications of bodies corporate, lacking privacy, noisy, insecure, lacking an outlook, lacking hobby and storage space, having parking problems, not allowing pets, and with poor prospects for capital gains.*

Despite this, the residents of low rise apartments, terrace development, and high density detached housing interviewed were generally happy with them. (This may be coloured by the relatively new state and quality of case studies developments. No apartments above four storeys were covered).

Consequently, changing tastes and experience could lift long-term acceptability of residential intensification, with apparently low adoption to date a sign of over-optimism in forecasts and policies regarding the rate at which this might happen.

The influences on choice can be organised across three levels spatial resolution:

1. *accessibility* to activities at the *city or sector-wide level*, including how easy it is to get to jobs, higher order services and retailing, formal recreation and cultural activities, and the like. In some respects this can be treated as a necessary condition, although the level of accessibility required will vary according to household characteristics;
2. *domain*, which encompasses the *area over which day-to-day social relations* are formed and regular or lower order transactions take place. This corresponds broadly with suburb or neighbourhood, and may include elements of the medium density complex itself; and
3. *sanctuary*, which refers to the *dwelling*, and may be influenced by the relationship of the dwelling to the complex and the immediate neighbourhood.

The *must-have* parameters people look for in their *sanctuary* are much the same in medium density as in conventional housing: a safe and secure environment, privacy; space, light, and warmth; and flexibility in how it may be used;

The discretionary things that add to the sense of sanctuary include privacy, ventilation; storage and parking space, good indoor-outdoor flow; contemporary design and modern fittings; areas for hobbies (workshop, garden); and the capacity to personalise the dwelling.

Domain preferences are influenced by lifestage:

- Younger people (usually in non-family households) at the beginning of their working careers, housing ladder, and relationships tend to favour central city locations;

- Most groups, especially young families, tend to favour familiar neighbourhoods;
- Family households tend to favour suburbs and town centres (this covers a variety of environments and implies greater flexibility than in the central city);
- Older families and post-family households tend to remain in their established neighbourhood, suburb, or sector of the city.

The resolution of preferences around sanctuary and domain will influence where and what style of housing is generally favoured according to lifestage segment, with the actual choice conditioned by limits of affordability, usually confined to geographic submarkets.

The association between type and location of medium density housing and lifestage and socio-economic characteristics will not be consistent, though, as lifestyle preferences cut across any orderly demographic or socio-economic segmentation of households.

Given that qualification, it is significant that future demand for new housing will be driven increasingly by the preferences of empty nester and retirement households, many of which own their dwellings. This gives them the capacity to purchase well-appointed medium density housing that satisfies their expectations for domain and sanctuary. They are less likely to favour small, centralised apartments than younger households and are more likely to have a commitment to particular residential submarkets, built on a stronger sense of domain.

Consequently, residential intensification is more likely to be achieved with plans allowing for diversity of locality and form. This, in turn, means meeting supply challenges in suburban environments where land is more fragmented and there are fewer brownfield opportunities than associated with the centralised developments of the recent past. Intensification in suburban areas also raises a greater risk of resistance to spill-over effects from established households. It calls for a flexible approach to the location and form of medium density housing and a public commitment to maintaining the quality of the wider domain.

The report draws on buyers' preferences and residents' experiences to identify design and quality features that might improve the medium density housing offering. Diversity of demand and diversity of potential settings mean that it is difficult to set strict guidelines, the study offers a series of principles that might be applied to individual developments. It distinguishes attributes of neighbourhood and the wider development (domain) from those relating to dwellings (sanctuary). It highlights the importance of accessibility, safety and security, and privacy, and identifies a range of other matters which will influence the acceptability to a greater or lesser extent dependent on market and geographic setting..

The report also offers three general recommendations:

Affordability: Planning and policy should provide for a wider distribution, greater diversity, and greater flexibility of medium density housing than has prevailed in the recent past.

Supply: A more integrated, consumer-centric, and collaborative approach to policy, planning, design and development should offer cost and supply benefits.

Ownership: Attention should be redirected from centralised apartment buildings to styles and standards of medium density housing that will appeal to established, owner occupiers.

One outcome of the third recommendation may be to free up the market for existing houses, increasing the options for first home buyers, including the rapidly expanding intermediate housing market segment (two incomes, cannot afford a house) and young families.

Executive Summary

Study Objective

This research was for the Centre for Housing Research Aotearoa New Zealand. Its aim was to:

Identify those features of residential intensification that need to be addressed to make high(er) density housing a relatively more attractive option for an increased number of New Zealanders.

Four working papers underpin this research. They are attached as appendices in Volume 2 to this report. They:

1. Review the New Zealand and international literature;
2. Evaluate the information base informing policy expectations for increased demand for higher density housing in new Zealand;
3. Report on focus group research into the attitudes and preferences of people currently or recently active in the Auckland housing market;
4. Consider the experience of residents of five medium-density developments, in Auckland, Tauranga, and Wellington.

The study focuses on consumer experience and attitudes to identify attributes of medium density housing that might increase its market appeal and uptake. It also raises related matters that will influence the market. These include changing home tenure (more rentals), governance matters (the role of the body corporate), and barriers to supply. The study covers these matters to the extent that they may influence market acceptance.

The Policy Setting

Higher densities are achieved by increasing the number of dwellings in a neighbourhood either by increasing the land available to housing or by lifting the share of multi-unit dwellings, or both, to achieve a lift in population or households per unit area.

“Medium density” is used as a shorthand term for higher than traditional residential densities in this study.

Over the past 30 years a number of reasons have been advanced for lifting densities. They have included responding to the needs of smaller households, protecting productive rural land, containing infrastructure costs, increasing the efficiency of public services, reducing environmental impacts, enhancing urban design, boosting housing choice and affordability, improving accessibility, and promoting a greater sense of community.

The needs of the consumers of housing do not feature directly or even high on this list.

Policies pursuing residential intensification have moved to the fore on the planning agenda since the 1980s when the Auckland Regional Authority wrote it into the Auckland Regional Planning Scheme (1988), shifting from promoting growth across the region to focus on higher densities around centres within the built up area. Other cities have followed this lead (Tauranga, Hamilton, Wellington, and Christchurch). Despite big differences in size and circumstance, the common objective has been a more compact city.

Progress to Date

A review of the Auckland Regional Growth Strategy in 2005 noted

“that intensified housing is associated with poor quality design and low amenity. ... poor quality construction; concern about long-term maintenance; poor layout; insufficient space; and lack of integration with surroundings” (Syme et al, 2005).

Resistance to high density living was confirmed in a 2007 update of the Auckland Regional Growth Strategy. Limited progress may be based on: long-standing cultural preferences; the association of higher density with inferior housing, transiency, poverty, and criminality; difficulty delivering intensive housing that can compete on cost grounds with more favoured detached dwellings; concerns over the operations of bodies corporate; the impact on existing neighbourhoods and residents, and a dislike of housing in mixed use areas.

Resistance to Medium Density Housing

Research in New Zealand confirms resistance in the population at large and demonstrates that the increased densities that have been achieved have been driven by a distinctive group that favours inner city apartments: young people, in education or early career stage, singles and couples and non-family households, and frequent movers. Continuing growth in demand for central apartments will depend on just how much this group expands.

Medium density developments based on terrace, semi-detached, or detached housing better reflect the mixed age nature of suburbs, including young families and older households. Young families value the space, security, and amenity of the suburbs. Older households may be in no hurry to move out of the family home with its space and flexibility, and when they do tend to be committed to their current neighbourhood.

One driver of the shift into medium density housing has been declining home ownership. The emergence of a large intermediate market of working households, often with two incomes, that cannot afford to buy into even low priced housing is the most obvious manifestation of this. Nevertheless, renters still aspire to ownership.

The international literature confirms this aspiration and a long-standing and widespread resistance to increased housing densities that frustrates compact city policies in Australia, the USA, and the United Kingdom. The discord between what people state apparently favouring intensification in surveys or in response to discussion documents and their actual decisions has been noted in these markets.

Understanding Housing Choice

Understanding motivations in the housing market means understanding the values associated with housing in general. The key attributes people seek almost universally as they move up the housing ladder – safety, security, space, and ambience – can be encapsulated in the notion of *domain*. This sense of domain is likely to be weaker among young people and others living in central apartments, many rented. It is likely to be stronger in suburbs where the networks of relationships formed around the nuclear or extended family and higher levels of owner occupancy create a stronger sense of attachment.

Potential Demand

Policies for residential intensification rely on Statistics New Zealand (SNZ) sub-national demographic projections. Future housing demand is estimated by extrapolating household types by age cohort, or applying changes in average household size to projected population.

One such analysis was published by the Building Research Association of New Zealand (BRANZ) in 2007. It projected 26,950 additional dwelling units needed a year nationally (medium projection) for the ten years to 2016, and 28,860 a year from 2016 to 2026.

Multi-unit dwellings were projected to reach 38% of new houses nationally, compared with 25% between 1996 and 2006. In Auckland they were projected to jump from 36% of new dwellings between 1996 and 2006 to 66% between 2016 and 2026. This implies a substantial shift in the character of new housing. At the same time, ownership rates were projected to decline from 67% in 2006 to 58% in 2026 and to 54% in Auckland.

The BRANZ projections at the national and regional level are broadly consistent with those provided in similar reports.

Comparing Expectations with Outcomes

However, at the start of the 2006 to 2026 period multi-unit construction fell well short of the average projected. Nationally, it accounted for 24% of all houses consented over the 15 years 1996 to 2010, but fell to 21% over 1996 to 2010 (the first four years of the projection period), and just 17% in 2010. In Auckland the number of multi-unit consents from 2006 to 2010 (7,160) was just over a third of the figure for the previous five years (20,830). Consents averaging 1,430 dwellings per year compared with a projection for Auckland of 4,560 per year between 2006 and 2016, a 69% shortfall.

Under conditions of recession multi-unit consents have fallen much more rapidly than consents for detached housing. Even if the current shortfall is just a cyclical movement or one-off response to the global financial crisis it is unlikely that movement back towards the long-term projections (to 2016 or even 2026) can be achieved.

The Private Rental Market

In 2006 renters accounted for 26% of detached housing in Auckland, but 61% of multi-unit dwellings. Only 27% of residents of inner city and 32% in outer city apartments in the three metropolitan centres owned their homes, compared with 65% nationally.

Growing dependence on rental tenure is expected to support the growth of multi-unit dwellings. However, the shift to multi-unit dwellings has not kept pace with the growth of the rental sector. For example, while Auckland added 44,300 private rental households between 1996 and 2006 (DTZ New Zealand, 2008) it added 10,000 fewer multi-unit dwellings (34,360), many of which would be owner-occupied in any case.

Institutional Constraints

The residential development sector virtually collapsed in second part of the 2000s, leaving a significant gap to be filled if the rental market is to expand through comprehensive, medium density development. A Boffa Miskell (2009) report flagged the following supply problems:

1. Undue delays in consenting add to development cost and risk, leading to conservative designs or discouraging investment altogether;
2. Development contributions levied by councils are a deterrent to investing in residential development, especially given that areas for intensification often have poor infrastructure and the costs of upgrading fall on developers and, through them, prospective residents;
3. Poor financial practices have contributed to development company failures and a lack of confidence in the sector by debt and equity investors;
4. Banks resist the downward revaluation of overvalued vacant sites that might otherwise make them attractive to develop.

Council-related issues include planning and consent delays, under-capacity in infrastructure, and expectation of large development contributions to address this.

Residential Submarkets

The propensity to move is spatially constrained: the majority of households move within a sub-market that may be defined by neighbourhood or geographical sector (north, west, central or south). Expectations that higher densities will be achieved largely by increasing apartment living, brownfield redevelopment, and consolidation around centres and the CBD need to be qualified by an understanding of these submarkets. Dispersed household growth and containment of future demand within submarkets mean that the stock of multi-unit housing needs to be increased substantially outside the CBD if the adoption of medium density housing is to increase.

Composition of Demand

Indicative SNZ projections of household composition and age structure indicate the demographic drivers of the shift towards smaller households, the main one being an increase in single and two person households. Most people driving small household growth from 2006 to 2031 will be empty nesters (aged about 50 to 64 years) and early or active retirees (aged about 65 to 79 years). Together they account for 64% of projected growth in smaller households, and older retirees another 21%. Analysis of apartment dwellers in 2006 suggests these groups are unlikely to favour living in central apartments.

The historical drivers of apartment living, young adults (20-29), are projected to account for only 11% of national growth in the small household category, although 18% in Auckland.

What Buyers Think

Three focus groups were conducted among people active in the middle or lower price tiers of the Auckland private housing market. They were grouped around whether or not they were receptive to the idea of medium density housing. Overall, their top of mind responses to medium density housing tended to be strongly negative. Medium density housing was seen as characterless, drab, monotonous, cramped, leaky, subject to the complications of bodies corporate, lacking privacy, noisy, insecure, lacking an outlook, lacking hobby and storage space, having parking problems, not allowing pets, and with poor prospects for capital gains. The association with a high share of rentals was also negative.

Housing location preferences common to all participants include proximity to family, access to motorways and public transport, safety and security, and areas of like-minded people.

Off-street parking and garage space are desired. An indoor-outdoor design with an external area for relaxation, entertainment, and children and pets to play in is a common wish.

There were some variations in what groups wanted. Renters want stable, long-term affordable leases. Home buyers want sections for children, a spacious 3-4 bedroom home, and good insulation. Their choice is financially constrained, but influenced by school needs, family responsibilities, and a desire for stability.

Settled couples buying a first home favour suburbs they are familiar with and proximity to family, stand alone houses with a section, a garage, and minimal maintenance. Single women living alone cover all ages (and may have children). Because of their financial circumstances apartments are a serious option for them, especially if they offer safety, good internal access, and “nice neighbours”.

Despite their preferences, a tight market is making it hard for people to achieve them, and pushing them to consider the medium density option. Consequently, focus group participants were able to identify what could make medium density housing work for them.

Attributes of sanctuary that might lead to greater acceptance of medium density dwellings include:

1. Physical separation from neighbours;
2. Private outdoor space;
3. Large garages connected to the dwelling;
4. Open plan design and a feeling of spaciousness;
5. A modern, light home with a sunny aspect;
6. Quality materials and architect-standard design.

Attributes of domain that might lead to greater acceptance of medium density neighbourhoods include:

1. A mix of housing styles, ideally with nothing over two storeys;
2. Some shared leisure facilities;
3. Nearby parks, playgrounds, and safe places for children to play;
4. A sense of security built into access and design;
5. Cul de sac layouts, perhaps creating distinctive small neighbourhoods;
6. Quality controls by means of covenant;
7. On and off-street parking.

What Residents Think

Residents in five medium density developments were interviewed. These covered the city edge (apartments in Grey Lynn in Auckland and Mt Cook in Wellington), inner and outer suburbs (a terrace house development, Tuscany Towers, in New Lynn), intensive housing (Addison, Takanini in Auckland) and one secondary city (small detached sections and houses at Urban Ridge on the edge of Tauranga).

The location of developments is important. Different styles of neighbourhood attract broadly different types of people. CBD fringe neighbourhoods attract younger households with higher disposable incomes, focussed more on work and recreation opportunities. New Lynn is a suburban centre in a lower income area with greater attraction to families. Medium density housing in suburban localities tends to house more families and older people.

Connectivity is important regardless of location because travel linkages for work, study or social purposes while quite widely distributed, are mostly within a 20-30 minute envelope. Even with good public transport most non-local trips rely on private vehicles, primarily cars.

Although the attributes of a particular complex might be oriented towards the preferences of a specific segment, this does not prevent households from quite different segments from purchasing or renting in that complex.

Generally interviewees were satisfied with their medium density dwellings and could indicate what was important to them at neighbourhood and community level, and with the complex itself (based on shared spaces), the exterior, the dwellings, and their attributes (Table One).

Table One: Desirable Attributes Identified by Medium Density Housing Residents

Domain	Sanctuary
Recreation facilities, including parks. Scale: the number of households in the development Community interaction: networks and strength of ties Ethnic diversity and predominant nationalities Household types and sizes Quiet or noisy surroundings Price range Standard of maintenance Tenure mix Crime levels.	Quality: A new dwelling Modern and contemporary decor; design features that add value (e.g. high stud) Quality of fixtures and fittings (e.g. appliances, carpets, tap ware, bench tops) Good condition; clean and tidy Low maintenance; less housework
The Complex	Capacity: Number of bathrooms Cupboard space in kitchen and bathroom Size of rooms and a sense of space, especially living rooms; open plan with balconies/decks/gardens helps Storage space; especially when trading down from bigger home Garage; often used for storage
Good stairwells and lift spaces in apartments Visitor parking spaces Safe access roads Adequate reserves Appropriate trees in appropriate places Tidy gardens	Comfort: Natural light in all habitable rooms Access to sunshine Well insulated and warm Quiet; can't hear neighbours Separate laundry (to contain the noise of the washing machine) Outside window in bathroom.
The Exterior	Connection with the outside Privacy; rooms not overlooked Outlook; views or landscape rather than of a building or fence Storage space Size of garage Adequate car parking for residents and visitors
Visual appeal Quality construction Good maintenance Security and safety Well designed parking areas Low maintenance A sitting out area, which may be a balcony or a small garden The particular style of a dwelling; apartment, terrace, or town house	

Most attributes identified are widely sought after. Some vary among segments. The number of bedrooms obviously varies according to household composition. Older households tend to favour single level units and a greater sense of spaciousness and privacy. Flat mates

look at the quality of personal space within and between bedrooms. Some households look for more storage room than others, additional parking space, and so forth.

Shared space is an area of divergent needs and views. A key to how it is developed and used is who pays, especially with recreational facilities. Outside the most expensive developments, residents may resist the high fees involved in providing such facilities on site.

Unit title ownership is an increasingly common form of ownership for medium density housing. While not all residents are happy with the rules around bodies corporate, there is usually acceptance that, if effective, it makes life in the development better and protects the value of individual properties.

There appears to be recognition that working through a body corporate is all part of the package. There is acceptance that it is important to have a common understanding of what is and is not acceptable. In this way the chances of disharmony resulting from the behaviour of others is diminished. The activities of the Body Corporate (through the property manager) can contribute to a pleasant living environment

Choices and Trade Offs

The options from which households choose are usually limited, with tradeoffs taking place within a price envelope and geographically constrained market. Ownership can complicate trade-offs. Unit titles are viewed as a benefit if shared spaces are well maintained and where an effective body corporate is seen as an assurance that property value will be maintained. Others may see the fees and the rules as a negative.

The nature and range of facilities within easy reach also enter the trade-off, including shops, schools, banks, and public transport, although they may be less important to car dependent households than for those for whom the capacity to walk to services is important.

There are clear differences in trade-offs made between apartment dwellers and others. Apartments (particularly small apartments) close to the CBD or major centres have the most obvious target in the young professional singles and couples segments. Yet this does not stop a diverse range of household types also occupying them.

This suggests that the way through the diversity of segmentation and the complexity of trade-offs may be to ensure flexibility in multiunit design and operation regardless of setting.

Increasing rental tenure is reflected in some innovation and flexibility in supply already. Additional forms include renting parts of another house with or without its own entrance, sleep-outs, garages, attic or loft space. The housing choices made by renters are influenced by circumstance, from looking for long term security through to renting between house purchases. Some choose to rent in a development where they are considering buying to get a better idea of the area and the housing. This may be more practical in today's tight market in which people who cannot sell are choosing to rent their dwellings after they move on. It also applies to new housing which cannot find a ready market of buyers at the desired price.

In choosing medium density housing the buyers and renters interviewed had effectively rejected the traditional detached house and large section (possibly not by choice if affordability had determined the choice). Private space within the sanctuary had effectively been traded off for public outside in the domain, either in the immediate vicinity or in the

wider area. Such a trade-off might be more likely at some lifestages compared with others, with households with children most likely to resist it.

The quality associated with the “new and modern” also plays an important part. Quality gains can compensate for loss of indoor and outdoor space, again within financial and geographic constraints and the willingness to make the trade-off influenced by lifestage.

Dispersed Medium Density Housing and Spill-over Effects

One implication of diverse markets, housing motivations, and choices is that policies directed at compact cities need to allow for the differentiation of demand and supply. One way is to allow for medium density housing across a range of localities within geographic submarkets.

Under these circumstances medium density housing can range from traditional detached houses on small sections, through semi-detached housing, terraces and units, to medium (walk-up) and high rise apartment blocks, with design variants within these broad types. The resistance of residents in traditional suburbs to medium density housing suggests that this variety might be exploited to enhance compatibility with existing development. Intensification of suburbs may be made more acceptable by such measures as creating public green space, expanding community amenities, and implementing traffic management measures.

Market Segmentation

The fundamental driver of housing demand is **life-stage**, which broadly influences the main transitions across the housing ladder (Table Two). Within a lifestage, segments’ **socio-economic** circumstances will influence housing expectations and the capacity to pay for different forms and standards. Jointly, life-stage and socio-economic status will influence attachment to a particular locality as well as shaping needs and preferences for different forms of development and styles of housing. Even within similar demographic and socio-economic categories households may choose quite different housing types, however, based on their **lifestyle** tastes and requirements, creating a whole lot more potential segments.

It is the way in which lifestage, socio-economic status, and lifestyle combine preferences that will define the most meaningful housing demand segments. However, the potentially large number of segments resulting complicates forecasting the composition of the housing market and prescribing design and quality in any detail. Predictability is also limited by a tendency for households to make housing transitions at different ages (especially over succeeding generations) and to move across socio-economic and lifestyle categories.

The solution to this complexity is to focus on commonly desired attributes initially, and to try to design flexibility into development within these parameters. Flexibility is one of the key attributes of detached housing that would increase the attractiveness of multi-unit dwellings if it can be built into their design.

Table Two: Segmentation Schema

Segmentation Type:	Life stage	Socio-economic Status	Lifestyle
Defined by:	Age, family status	Education, income, wealth	Personality, values, attitudes, opinions, interests, activities
Relevance to housing choice:	Stages & transitions determine housing needs	Status defines expectations & capacity to meet them	Impact on preferences within & across lifestage & socio-economic groups
Examples of Indicators:	Independence Non-family relationships Family formation Childbearing and raising Maturing Family Separation Empty nester Early retirement Later retirement	Occupation Income Housing Tenure Location Quality of housing Expectations of sanctuary	Work status and style Social & leisure activities Function of housing: asset, expression of personality, etc Location Expectations of domain

Principles as Guidelines

This study has combined secondary sources with qualitative market research to identify a range of attributes that should be considered in the policy, planning, and development of medium density housing. One way to consolidate these findings from diverse sources is to use them to develop guidelines that might to inform stakeholders across the housing “supply and production chain”.

Guidelines to medium density housing used in New Zealand and elsewhere tend to focus on type of structure and building form, reflecting the input and perhaps even the preferences of designers rather than residents. They present a professional rather than market-oriented view of the qualities that contribute to desirable – or acceptable – dwellings of different densities. Yet it is the needs, expectations, and preferences (and trade-offs) of households, the focus of the original research reported here, that will influence the rate of adoption. It is difficult to see how the parsimony and simplification associated with most guidelines might align with the needs of particular segments in particular localities. As they stand, guidelines tend to be limited to the presentation of exemplars of different types of structure.

Given the complexity and dynamics of the market in terms of potential range of segments and the ways in which households might transition among them, this may be the best that can be done, with a limit to the extent to which the interaction of preferred attributes in buyers’ minds might be built into prescription.

For this reason, guidelines are presented below as a series of principles that might be applied to policies, plans, designs, and developments in different settings and for different segments. Underlying all of these is the need for flexibility to reflect contrasting contexts, diverse segments, and changing lifestages, socio-economic circumstances, and lifestyles.

The Must Haves

Priorities among attributes will differ by segment. Some attributes, though, may be sought after by all segments. These are the “must haves”, the features necessary, if not sufficient, to ensure the marketability of medium density housing. These are summarised below.

(1) Accessibility

The key message is that a combination of proximity to local amenities and the ability to move easily to other localities including the CBD will provide the accessibility people expect from medium density development.

Principle *Medium density housing requires locations which provide a high level of access to local services and good connectivity to other parts of the city.*

(2) Safety and Security

Primary among the must-haves are security and safety at the level of domain (the neighbourhood and development) and at the level of sanctuary (the development and the dwelling).

Principle: *Treat safety and security as drivers behind the design of the complex as a whole, its relationship with the neighbourhood, and individual spaces and dwellings within it.*

Attributes of Domain

(3) Distribution and Diversity

The dominant location preference among established and older households is to stay more or less in existing neighbourhoods or in submarkets defined at a sub-regional level. This means that to encourage a greater variety of households to move to higher density accommodation it is important to provide for opportunities to be widely distributed. This will be supported by a wide range of medium density housing types.

Principle: *Recognise in planning the desirability of introducing a variety of medium density options (by way of housing types) across a range of locations.*

(4) Neighbourhood Amenities

Neighbourhood amenities are important to residents of medium density housing. The value of different amenities will vary by segment. Schools, parks and playgrounds are important to families for example. Local shops and cafes are likely to be more important to non family segments. Parks and reserves are important to residents in the suburban developments.

Principle: *Medium density development should be favoured in areas with a range of nearby community and commercial amenities; or developed in areas where there is a commitment to the provision of such amenities.*

(5) Urban Landscape

Neighbourhood appearance has a bearing on housing choice. The preferred urban landscape has greenery and open space. Even with apartment dwellers there is some concern over the impact of continuing intensification on the character of the neighbourhood.

Principle: *The focus of urban design for medium density housing development should be on the character and quality of residences, green spaces and the associated urban landscape; where development takes place in a mixed use area the impact of unrelated uses should be mitigated by appropriate design or planning measures.*

(6) Scale of Development

Residents of apartments or comprehensive developments, like their counterparts in predominantly single house suburbs, tend to resist further “massing” of the urban landscape around them, the cumulative impact on character, and associated crowding. A preference for smaller scale developments also reflects the perceived higher amenity levels associated with walk-up apartments

Principle: *Avoiding spill over effects and encouraging uptake of medium density housing will be achieved by limiting the scale of individual developments (a maximum of three or four storeys) and the local density of multiple developments.*

Attributes of Sanctuary

(7) Dwelling Site and Layout

There is a wide range of attributes to be considered that will reinforce the sense of sanctuary for residents of medium density dwelling, thereby improving its market place appeal. These include spaciousness, privacy and private spaces, and security. Other attributes will enable people to personalise their dwellings, including garden areas or balconies.

Principle: *Medium density housing should be modern in design, with a layout that allows for some personalisation supported by private outdoor space*

(8) Capacity

Capacity can be provided by ample size of rooms, providing for flexibility in their use, and by allowing for moveable partitions. It is also about the lifestyle a dwelling affords, reflected storage space, space for hobbies, crafts, and work or study, and avoidance of visual intrusion that might cut down the freedom or flexibility of use.

Principle: *Medium density dwellings should be of sufficient size and capacity as to provide adequate space, including storage space, and allow for flexibility, which may entail multiple uses of rooms without visual intrusion.*

(9) Comfort

Comfort is influenced by layout and capacity. It is also influenced by the quality of materials and fit out to the extent that they influence how easily people live “within the walls”.

Principle: *Internal layout and treatment of external walls and windows and materials should contribute to adequate natural internal light, ventilation, and good thermal and aural insulation to enhance the liveability of dwellings.*

(10) Quality

An assurance of structural integrity and the durability of materials have become “must haves” as a result of the leaky building experience. Beyond that, an important appeal of medium density living for many residents and potential buyers is the quality associated with a modern or new dwelling.

Principle: *The integrity of structure and materials is important to the market while quality fittings will increase the attractiveness of medium density housing.*

Recommendations

The preceding principles should foster flexibility, diversity, and innovation in location and design that will broaden the appeal of medium density housing.

The following recommendations relate to wider issues that have emerged in the course of the study which can influence the progress made in increasing medium density housing. They relate to affordability, ownership, and implementation.

Affordability

Dwelling prices and rentals have for some time increased faster than incomes. The difficulty of assembling the land necessary for the comprehensive development necessary to achieve lower building costs in medium density housing means there is an insufficient price differential between multi-unit housing and detached dwellings to encourage a shift from the latter to the former.

The affordability barrier to private housing might be best addressed by redirecting medium density housing options to current owner occupiers, thereby freeing up second-hand stock in areas and at prices that might enable the growing numbers in the intermediate housing market and young family segments greater ownership opportunities.

More options for medium density housing in more parts of the city could reduce investment and development thresholds also, increasing the capacity of the market to supply through a proliferation of diverse, quality small and medium developments.

This implies a significant shift, though, from the sort of apartment stock that has dominated the growth of the medium density market over the past decade, and far greater provision for and encouragement of diversity in type, style, and location.

Recommendation: *Review current plans and regulations affecting the construction of multi-unit development with a view to increasing flexibility to promote diversity and innovation in*

new medium density housing throughout urban areas, including inner and outer suburbs, and encourage a more flexible and active second hand home market.

Ownership

The report has also highlighted issues around growing rental tenure, and the potentially negative impact of a high share of renters on the sense of community for owner occupiers and on property values. As the intermediate housing market expands and housing stress increases, this division is likely to increase, together with the spatial segregation effect of multi-unit dwelling, especially if dominated by small units in apartment blocks in central areas.

Given a long-standing cultural, economic, and social commitment to owner occupancy in New Zealand, though, its association with family and social stability and economic progress, the aspirations of the population, and especially expectations associated with a maturing population, maximising ownership should remain a priority in policies directed at medium density housing. Ownership will be achieved more readily in settings which provide for diverse household types, design and location. While policies directed at affordability should ensure that rental levels remain reasonable, it can be argued that their objective should remain facilitating the transition to ownership.

Recommendation: *Recognise the social, cultural, and economic importance of home ownership to the majority of New Zealand households and provide for the diversity of housing development, including medium density dwellings that will help to meet those aspirations while ensuring the operation of unit title arrangements helps to sustain the quality and value of private housing in them.*

Implementation

There is significant potential for multi-unit housing to play a bigger role in the future. The report has indicated what may work by way of design and quality, and proposed principles and recommendations that should help in this. However, the experiences of residents and other stakeholders suggest supply problems associated with lack of a coordinated approach to development. Despite a public policy commitment to creating more capacity for smaller households in smaller dwellings there are inconsistencies among and within agencies and a lack of trust between the public and private sector parties involved.

The opportunity for intensification in suburban areas, which may call for a greater variety of outcomes and rely on small scale initiatives, can be frustrated often by zoning regulations. Attempts to achieve higher density living in greenfield sites may be frustrated by rigidity around urban limits. The local public amenities that might increase the appeal of higher density developments in more centralised areas may be lacking and councils slow in progressing community facilities that might compensate residents for reduced private space and reluctant to take on maintenance responsibilities after construction.

Without alignment of objectives among the various stakeholders, it is unlikely that the sorts of increase in density that plans currently call for will be achieved in a satisfactory manner.

This may call for institutional as well as procedural changes that commit the key players to collaborating through the course of planning, design, and implementation, and for better engagement with the market from the outset.

Recommendation: *Policy makers should identify how the policies, plans and targets intended to increase housing densities will be implemented, including the role that planners, infrastructure providers, other government agencies, private developers and investors are expected to play; and consider alternative institutional frameworks for promoting integrated planning, design, and development that is responsive to market needs and preferences.*

1 Introduction

1.1 Study Goal

Urban planning in New Zealand today emphasises the consolidation of urban areas in the interests of accommodating the growth of our cities in a more sustainable manner.

A key policy in this quest is housing more people in less space by increasing residential densities. This is consistent with international initiatives promoting smart urban growth and the design principles of new urbanism, especially with reference to increasing densities (www.newurbanism.org). But, as discovered overseas, the adoption of higher residential densities in New Zealand has not been as rapid or widespread as expected or intended by planners and policy makers.

While land supply, cost, and regulatory constraints to intensification have been scrutinised, less attention has been paid to consumer resistance. It can be argued that the focus of policy analysis to date has only been on the supply side of the demand and supply equation.

The research reported here was undertaken by CityScope Consultants for the Centre for Housing Research Aotearoa New Zealand (CHRANZ), and focuses on household demand for medium density housing. The goal is to:

Identify those features of residential intensification that need to be addressed to make high(er) density housing a relatively more attractive option for an increased number of New Zealanders.

Ideally, the results will contribute to the design, quality, and affordability of residential intensification, making it a more attractive option to New Zealanders. In addition, it is intended to provide a basis for quantifying the relative importance of different features of medium density housing to the wider market through a subsequent quantitative survey.

1.2 Research Objectives

Several objectives were identified in the CHRANZ research contract:

1. Identify and undertake case studies that evaluate the provision of rental and owner occupied residential intensification in a range of examples from urban and provincial New Zealand;
2. Investigate internal and external design, quality, and affordability issues, spill over effects, and post construction governance and management using the case studies;
3. Investigate the ways and degrees to which residential intensification has fostered meeting people's needs for work, play, schooling, transport and amenity, privacy and safety in the case study areas;
4. Identify ways in which the interests of the community, developers, land owners, and potential new occupants of more intensive housing can be reconciled through better communication, design, and closer attention to spill over, third party effects.

The brief called for the development of practical guidelines based on the findings that might assist in reconciling the interests of the local community, developers, land owners, local authorities, businesses, and potential occupants of more intensive housing.

1.3 Research Method

These objectives and questions have been addressed using several different methods. Detailed discussion and supporting material are contained in a series of working papers. These are contained in Volume 2 of the study.

The first working paper reviewed the international and New Zealand literature on higher density housing. It covers policy expectations, the nature of housing markets, constraints on choice, housing preferences, and consumers' views of higher density housing. Working Paper 1 highlights generally negative attitudes towards higher density housing.

The second working paper reviews the information base informing policy expectations for increased demand for higher density housing, and how that compares with recent residential activity. It suggests that projected growth in demand for multi-unit dwellings may have been premature. It also appears that the parallel focus on intensification within the central city may not be as appropriate in the future. There are nevertheless grounds to expect that the rate of adoption will pick up, although not necessarily in the localities anticipated in plans to date.

The third working paper involved focus group research with current or recent buyers or renters in Auckland. The results reflected and confirmed the sources of resistance identified in the literature review. Exercises undertaken by participants also began to identify the attributes of neighbourhood, housing complex, and dwelling style that might make higher density housing more appealing.

The fourth working paper reports on case study research with residents and other stakeholders from five different medium-density developments. Three of these were located in Auckland, one in Tauranga, and the other in Wellington. These indicate reasonable levels of satisfaction among residents with their dwellings and lifestyles which help to highlight attributes of dwellings, developments, and neighbourhoods that might add to their appeal.

This report consolidates the information gathered, examines areas of convergence and divergence from the different sources, and draws general conclusions. It reports the findings in a consolidated manner with the aim of informing the various parties in the supply chain – planners, designer, developers, and builders – seeking to increase the attractiveness and uptake of higher density housing.

Section 2 outlines the results of the underlying secondary and original research presented in more detail in the working papers. Section 3 draws together the key findings about the market and its composition. Section 4 focuses on the implications of these findings to generate a series of principles and recommendations that might be applied to the design and quality specifications of medium density housing within affordability parameters. They also cover related matters around housing tenure and project implementation.

2 Attitudes, Preferences, and Behaviour

This section summarises a review of the literature relating to the nature of higher density housing, the rationale for its promotion, impediments to its adoption, and responses of the market. It draws on international and New Zealand sources. The full review is contained in Working Paper 1, *Policy and Practice Literature Review*.

2.1 Higher Density Housing: The Literature

Intensification is a response to the challenges that increasing urbanisation places on the resources consumed in urban areas and the competitiveness of cities. Promoting higher residential densities is one part of the package of measures favoured to help achieve this.

Higher densities can be pursued by a range of policies. These include limiting the outward expansion of cities, creating zones allowing or promoting multi-unit development, redeveloping brownfield sites, providing for mixed use (encouraging housing, commercial, and service activities to locate close together), infilling underdeveloped sites, promoting increased inner city living, and redeveloping town centres.

2.1.1 What is Residential Intensification?

2.1.1.1 Housing Density

Housing, dwelling, or residential density is usually measured as dwelling units per hectare. However, the nature of density is not straightforward.

Perceived density is based on individuals' estimates of people in a given area and the organisation of the space available. Crowding occurs when this perception is negative (Rapoport, 1975). The same density can be evaluated differently under different circumstances, by different people, and in different cultures (Churchman, 1999).

The denominator in the density equation, the *area of land*, may be defined by site, street, suburb, or city. It may exclude non-residential land uses, although this is inconsistent with promoting mixed use where the presence, style, and condition of non-residential buildings will influence perceived density. The tendency is to use gross densities.

Density may also be measured in terms of habitable rooms per hectare (RPH), often used as a technical indicator of crowding (Forsythe, 2003) or people per hectare (PPH). DPH may increase more rapidly than PPH. In an ageing population falling household sizes in fact mean more dwellings are required to house the same population. In particular, infill development through the subdivision of sections and the addition of one or more dwellings may contribute to only a slight increase in densities without necessarily bring about a significant change in population (Bray Sharpin, 2006; Whitehead, 2008).

Housing density may be divided into *low, medium, and high categories* to set policy targets. These terms, which are context specific, can be associated with different building styles. Intensification is then promoted by promoting these housing styles, from detached through semi-detached and terrace housing, to apartment buildings of varying mass.

As an example, the *Auckland Housing Choices* poster suggested 25 DPH¹ as the boundary between low and medium density and 50 DPH as the boundary between medium and high (Regional Growth Forum, 2003). The typology also indicated the potential for transitions in tenure types between different levels, from predominantly fee simple title for detached housing, through fee simple cross lease or unit title for town house and terrace styles, through to body corporate governance for apartment buildings.

For present purposes, we suggest a multi-layered definition of housing density that embodies the drive for intensification, without referring to the higher order policy objectives or precise targets:

Higher residential densities are achieved by increasing the number of dwellings in a given neighbourhood through increasing the land available to housing and/or lifting the share of multi-unit dwellings in a manner that encourages an increase in the population and thereby contributes to more intensive land use across the city as a whole.

In practice, as indicated in the market research undertaken for this study (see Section 2.2), “medium density” is a useful shorthand term for higher than traditional densities. That convention has been adopted for this report.

2.1.1.2 Quality

Housing quality at the national level is perceived in terms of “*health and safety, amenity, functionality and efficiency*” and therefore can be aligned to a considerable extent to the age of existing stock. Modernisation is therefore seen as an important part of improving quality (Housing NZ Corporation, 2005).

Quality at the individual or household level is more subjective and closely related to design. Design, in turn, will influence costs and therefore affordability. Dwelling quality is likely to refer to the scale and arrangement of internal space (functionality), appearance (aesthetics), integrity of materials; the standard of design and construction; arrangement of the site, relationship with other structures, and relationship with the street.

Although relating to materials, building form and site layout, quality is both subjective and relative, qualified by the capacity to pay (affordability).

Quality is also associated with urban design. This may cover the arrangement of dwellings on their sites, and relationships between sites, structures, streets, and neighbours. At a higher level again, quality can be defined relative to neighbourhood settings, including the arrangement of public and private space. In each case, the nature of materials employed, the capacity of roads, other infrastructure, amenity and facilities are means by which design influences the perception (and reality) of residential quality.

2.1.1.3 Affordability

Housing affordability is generally treated in the literature as a collective term relating median incomes to house prices (e.g., Darroch, 2010). While there are variants on this, defining affordability to reflect the relationship between household earnings and the cost of ownership

¹ Gross neighbourhood density including all land uses

treats housing as a social good. This may not help in the more limited analysis of the role of affordability in the uptake of higher density housing, where the trade-offs available to households between different housing attributes and the capacity to pay may be critical.

Ideally, the present research will inform housing policies that go beyond simple target setting in terms of the size and character of dwellings, gross densities, and affordability and provide insight into the aspirations, preferences, and constraints facing households when they move and how any housing stock might be developed to better meet them.

2.1.1.4 The Nature of Housing Markets

Consideration has to be given to how markets operate to understand demand. It is generally accepted that participants are neither fully informed nor necessarily rational in housing markets. In addition, the mechanisms through which supply is lifted may be complex, contested, and prolonged. Fragmented demand and differentiated and often constrained supply make it difficult to define markets or for them to work efficiently (Meen, 2001).

Economic models treat space as limiting information and thereby confining the bulk of transactions to relatively localised neighbourhoods. Distance effectively limits consumers' search behaviour to geographical submarkets. These submarkets tend to be the main focus of empirical analysis (Jones and Watkins, 2009).

Housing markets are also usually subject to close regulation. Largely technical regulations aim to ensure the integrity and safety of structures. Planning controls are more concerned with avoiding or managing externalities and rely on rules and regulations to influence the supply and location of new housing land.

2.1.1.5 Demand

In the long-run, home ownership is a function of income growth and the accumulation of wealth. Tenure (rental versus ownership) may reflect the distribution of wealth, stage of development, community stability, and the rate of growth.

Price as the mediating influence between demand and supply is influenced by the fact that housing is a large capital expense, often funded through long-term borrowing. In addition to house prices, the cost of capital, current interest rates and expectations, their movement in the future, and transaction costs all influence housing demand especially in the short-term.

Diversity of demand is typically described in terms of lifecycle groups and housing careers based, in the first instance, on demographic cohorts (Kendig, 2005; Beer and Faulkner, 2007, 2009). Markets may be better seen as fragmented and complex with a variety of potential paths forward (and backward) through a housing "career" or "ladder".

2.1.2 Higher Density Housing in New Zealand

2.1.2.1 A History of Detached Housing

A preference for detached housing established in the European settler community in New Zealand was sustained through the 19th and 20th centuries. Even public housing provided through state programmes to cope with rapid growth or meet social needs has long favoured single-unit homes and diverse design.

In some instances, local governments provide social housing. Councils, more than central government, have favoured multi-unit apartment buildings as an efficient way of doing this.

Either by design or accident the state housing sector has reinforced the sense of entitlement to single unit housing in the public mind. Its forays into multi-unit housing have not been well received. Through them it has created a generally negative association between multi-unit housing, low incomes, social deprivation, and rental tenancies.

The Push for Higher Density Cities in New Zealand

Central government began to promote higher density housing in the 1970s and 1980s, mainly in recognition of the demographic promise of smaller households as the population ages (Ministry of Works and Development, 1979, 1984). This shift in thinking was picked up by the Auckland Regional Council (Grant, 1987, Auckland Regional Council, 1988).

In a 1998 review the Parliamentary Commissioner for the Environment promoted medium and high density housing to reduce car dependence and associated fuel consumption and emissions. In 2002 the Ministry for the Environment looked at growth management incorporating residential containment in the United States and advanced the view that it should take place at a metropolitan-wide level on a comprehensive basis. The Ministry took the lead by developing an urban design guide and protocol. These highlighted the need to design for medium and higher density housing and greater residential densities as part of good urban design practice (Ministry for the Environment, 2005; 2007).

A review of the history suggests that the reasons for lifting residential densities have shifted and multiplied over time. The advantages and objectives have progressed from responding to the needs of smaller households, through containing infrastructure costs, protecting productive rural land, increasing household densities to lift infrastructure efficiency, reducing environmental impacts, enhancing urban design, boosting housing choice and affordability, and improving movement and accessibility, to promoting a greater sense of community.

Auckland

During the 1980s the Auckland Regional Council shifted from promoting growth across the region and investigating satellite settlement to focus on higher densities within the existing built up area. This led to the formalisation of Metropolitan Urban Limits as a method of containing growth and a commitment to the intensification of selected commercial centres, including the CBD (Auckland Regional Council, 1988; 1999).

Other cities followed the Auckland lead, although the scale of the development challenge is generally much less. The Western Bay of Plenty and Tauranga combined to develop an urban development strategy based on increasing the density of housing in Tauranga (Tauranga City Council et al., 2004). The Greater Wellington Council (2007) promoted higher residential densities as part of its broader economic development strategy. The Waikato Regional Council and Hamilton City in the North Island (2009) and the Canterbury Regional Council, Waimakariri and Selwyn Districts, and Christchurch City (2007) in the South Island each combined to promote urban limits and intensification.

In each case, the rationale is presented in terms of reducing the impacts of urbanisation by promoting high rather than low density development, the latter seen to consume more land

and transport resources than the former. The promotion of multi-unit housing close to commercial centres, including the CBD, is also seen as increasing housing choice.

2.1.3 The Auckland Experience

The Auckland Regional Growth Strategy (ARGS) suggested that over the 50 years from 1996 more than 50% of population growth (465,000 people) should be accommodated in multi-unit housing. This represents a significant broadening of total housing stock.

However, subsequent surveys suggested that planning procedures and development costs hinder intensification. Also, the apparently poor quality of much multi-unit accommodation developed since then has impacted badly on the perception of medium density housing.

The push for residential intensification continued through two collaborative projects over the decade, including the Auckland Sustainable Cities programme, involving central and local government, and the Sustainable Auckland Region programme involving just local councils.

Despite this policy activity, a review in 2005 noted

“that intensified housing is associated with poor quality design and low amenity. ... specific issues raised include poor quality construction; concern about long-term maintenance; poor layout; insufficient space; and lack of integration with surroundings” (Syme et al, 2005).

A key finding was the strength of community resistance to intensification, and a fear that intensive housing projects would become *“the slums of the future”*. The authors concluded that sound decision-making, adaptability, and flexibility were important if intensification was to win acceptance. This conclusion was later moderated by recognition that demand was strong for well appointed apartments relative to supply in coastal or inner city areas. In lower value suburban locations the perception of higher density housing as an inferior product relative to detached housing underlay greater resistance (Mead and McGregor, 2007).

Resistance to high density living, especially away from the city centre, was confirmed in a 2007 update report (Auckland Regional Growth Forum, 2007). Among other things it called for a better understanding of what motivates the market, clarification of the benefits of intensive housing, and a focus by developers on appealing to end users – residents – rather than investors. The review also acknowledged consumer concerns over the indifferent quality of the urban environment associated with intensification and the apparently poor design of the multi- unit dwellings.

In the face of barriers to medium density housing the Auckland Regional Council committed a website to making the case for higher densities and providing guidance on purchasing multi-unit housing and on bodies corporate. The review of the Growth Strategy also recommended reinforcing regulations to elicit intensification of town centres and improve the environment for higher density living.

Despite such initiatives, the tendency has been to identify the suppliers, developers, as “the market” rather than the consumers, or residents. This focuses on physical parameters and regulations rather than on housing preferences. Another characteristic of planning for higher density housing has been the assumption that demographic change can be used to estimate future housing need and provide sufficient insight into the nature of demand to support

predictions of housing uptake by type and locality. Changing household character and taste is recognised only by reference to providing more varied housing styles.

Market Perspectives

The lag in the expected uptake of higher density housing suggests that these proxies for market analysis have been inadequate for policy or plan making, overestimating the appetite for smaller dwellings and underestimating resistance to greater densities.

There has been some research in New Zealand into residential housing preferences that can inform policies directed at intensification, often of an academic nature. For example, one national survey suggested that 80% of respondents favoured a detached house and just 4% an apartment (Preval et al, 2010).

A survey of apartment buyers in central **Wellington** indicated that they valued much the same attributes in their dwellings as their suburban counterparts (sun, space, and style), but were more prepared to make trade-offs of these attributes against the benefits of greater proximity to work (and, to a lesser extent, entertainment, restaurants and the like; Morrison and McMurray, 1999). However, inner city residents were distinctive for their youthfulness, non-family households, and limited commitment to remaining at their current location.

Research in **Christchurch** highlighted strong resistance to infill housing among residents, and the way it was seen to contradict the “garden city” heritage and undermine an established and valued way of suburban life intimately linked with family and social relations (Vallance et al., 2005).

Inner city residents of medium density housing in Christchurch were similarly concerned about the intrusive nature of any further increase in densities and the lower quality of development and standards of living they are associated with.

Increased density was seen as actually lowering the social sustainability of housing; intensification of inner city sites saw the displacement of lower income households from the ageing housing stock in which they had enjoyed accessibility benefits by more prosperous residents in modern, well appointed units (Ancell and Fawcett Thompson, 2007).

A similar process was observed in inner **Auckland**. Here rapid growth in apartments was achieved in large part by gentrification. The result was the emergence of distinct submarkets contrasting “*high rise and poorly designed apartments in the CBD with low-rise, high quality developments near the waterfront*” (Murphy, 2008). While inner city living was promoted to reduce journey to work times, the higher quality apartments have a high proportion of second home owners in them, while the balance are marked by a large number of non-family households, students, and young people (Friesen, 2009).

A Statistics New Zealand (SNZ, 2010) analysis of the attributes of apartment dwellers across all three metropolitan centres illustrated how distinct a group they are, with further differences between inner and outer city occupants. They are relatively youthful, especially in the inner city, have low levels of household formation, and high levels of transiency or mobility. Many have come from overseas (36% of the total in 2006). Only 27% of people in inner city apartments actually owned them (36% in apartments outside the CBD compared with 67% nationally).

The results suggest that the increase in housing densities experienced over the last decade has been driven by a distinctive cohort. Continuing to achieve increasing densities based on expanding apartment numbers in and around the central city will depend on just how much that cohort continues to expand in the future.

Auckland City Council conducted its own research among residents of higher density housing in central Auckland. It noted the youthful age bias and large number of single person households. It also noted a reduction in people's sense of security in the inner city apartment housing environment. Other sources of dissatisfaction were noise, small units, lack of outdoor living spaces, and lack of a sense of community (No Doubt Research, 2003).

The distinctive nature of communities in higher density housing is not confined to the inner city. Research into Ambrico Place 15km from the CBD, for example, highlighted the very high level of Asian households in terrace development there, as well as high levels of tertiary qualification, relatively high personal incomes, and high rental tenure (Waitakere City Council, 2001). Despite generally positive responses to low-rise apartment living by the residents, casting the net wider raised some issues around the loss of amenity for existing residents and differences in views over the quality of the development (Dixon et al., 2002).

Surveys of the recently established Flat Bush community of largely detached housing on small sections 25km from the CBD indicate that people were attracted there mainly by the capacity to trade up to a detached house with more room (Hand Consultants, 2008; Gravitas Research, 2008). Residents enjoyed the sense of community but had misgivings over the prospect of higher density development in the next stage of development. Apartments were associated with crowding, loss of the sense of neighbourhood, and the increased insecurity which comes from seeing more people on the street, and knowing fewer of them.

2.1.4 Pulling it All Together

To develop projections of future residential demand (see Section 2.2, below) the Building Research Association of New Zealand reported on *Changing Housing Need* (BRANZ, 2007). From a review of earlier work it outlined a view of market dynamics, noting:

1. Declining levels of home ownership, suggesting that the assumption of a linear housing "career" associated with life stage is breaking down (DTZ New Zealand, 2004);
2. The continuing strength of aspirations of ownership: most renters aspire to ownership but face affordability problems;
3. Older people believe younger people have higher aspirations for housing quality than they did;
4. The quality and location of housing that younger people aspire to makes ownership more difficult for them to achieve;
5. Families in rental accommodation prefer to rent in their preferred suburbs than move to owner-occupied housing in "cheaper suburbs";
6. Younger family households aspire to villa housing close to good schools;
7. Older homeowners have generally acquired the home they want to occupy for the rest of their lives, even if it is larger than they need;

8. Mainly economic and political factors underlie the decline in home ownership (DTZ New Zealand, 2005);
9. The options for housing the elderly are to upgrade or modify existing housing stock to facilitate ageing in place, cater for special needs as necessary, and provide housing for those who have never owned a home or may otherwise be unable to afford a move into housing appropriate to their needs (NZIER, 2004).

The BRANZ report also reviewed studies dealing with shortcomings in housing supply, particularly the impact of the Metropolitan Urban Limit (MUL) in Auckland, concentrated (greenfield) land ownership, and fragmented (brownfield) ownership (Motu, 2007). These factors are reflected in lower levels of ownership and higher housing stress, and a growing intermediate market of working households that cannot afford to buy even lower quartile priced housing. These trends were expected to boost the need for rental units, which led to a call for an increase in institutional investment in the sector (DTZ New Zealand, 2007).

The international research reviewed by BRANZ generally confirmed the conservatism that influences the housing market, with a preference for home ownership prevailing; an increase in rental tenure despite this; limited support for movement into higher density, multi-unit housing; and an expectation of ageing in place, or at least for people to remain within their established mixed-age communities as they get older (BRANZ, 2007, 5-9).

BRANZ undertook its own survey of housing preferences and aspirations and reported that;

1. Affordability is the major factor in choice of location, followed by views and suburb status;
2. Double garaging stood out among preferred design features;
3. House size stood out among those design features that influence the purchase of new and used homes, followed by quality kitchen and bathroom fittings. A garden and a low maintenance structure were also important in choice of existing and new housing;
4. For renters, house size, quality bathroom and kitchen fittings, and garaging were also important.

For renters (63% were under 41 years) the main priorities were work and career, saving for a home, lifestyle purchases, and funding children's education. For owners the priorities were career followed by travel, retirement savings, and paying off the mortgage.

2.1.5 Governance Issues

The roles of bodies corporate appear to add to the negative connotations of intensive housing. There are several dimensions around this issue.

Traditionally, New Zealanders have favoured independent property ownership through fee simple title. Fee simple title vests in the owner the widest rights of use, modification (subject to the provisions of the local district plan) and sale available through law. When such title is held free of any mortgage encumbrances the property becomes freehold, although it may be subject to restrictive covenants placed on the title by previous owners.

With the advent of multi-unit dwellings alternative forms of tenure – cross leasing or unit titles – are required to recognise the loss of autonomy associated with shared ownership and common responsibilities. The Unit Titles Act, enacted in 1972 and revised in 2010, sets out the roles and responsibilities of owners individually and as members of the body corporate.

The 2010 revision recognises the increasing diversity and ad hoc nature of arrangements associated with more, large-scale developments.

Through it, ownership of multi-unit complexes is divided among individual dwellings and common property, the unit title conferring on the dwelling most of the rights of sale, lease and transfer associated with fee simple titles. The relative value of the individual units determines their entitlements (by way of voting rights, for example) and responsibilities, by way of shares of common expenses.

The body corporate takes responsibility for maintenance, insurance, and record keeping relating to common property. It is generally governed by an owners' committee which engages others to undertake maintenance and associated tasks. Most often it will appoint a management company or agency to perform the day-to-day tasks, keep the records, convene annual meetings, and prepare the accounts. Where the scale justifies it the owners' committee or management company may appoint an on-site manager.

Issues have arisen as the result of the relative inflexibility of the rules set at the time of body corporate formation (by the developers) and as a result of the often long term contracts held by management companies (Dupuis and Dixon, 2010). Dupuis and Dixon suggest that through the rules initiated by the developer and its initial contract with a management company, it can maintain control well past the development and initial sale period.

Difficulties with bodies corporate may reflect communication issues among members and differences over the rules and regulations that pertain to public areas and their maintenance, concerns over the role, performance, and communications of management. Problems may be exacerbated by the relatively high rate of turnover of units and the continuously changing nature of the body corporate itself as a result. There is a question as to how far these issues undermine the appeal of multi-unit housing.

A more general issue is how far these forms of governance impinge on public life, creating a form of public body that operates at a level below local councils. With a shift into multi-unit housing, bodies corporate are responsible for an increasing volume of repairs and maintenance, and the management of shared space. How well this is done impacts on both people's dwellings and their immediate neighbourhood. The operation of owners' agencies has a potentially significant impact on the quality of residential intensification and consequently the quality of the urban realm (Easthope and Randolph, 2009).

Moreover, the ways in which bodies corporate and in particular owners' committees operate can have a significant impact on relationships within a complex, as well as on the capacity of owners to achieve their aspirations, including on-selling when they wish. With the increasing diversity of communities within apartments, the prospect of disenfranchisement of particular groups and internal division can be a serious one, impacting on how well the shared space is managed, and how the quality of housing is maintained.

2.1.6 Overview: New Zealand Experience

Residential intensification has been promoted nationally as a means of reducing the environmental impact of urban development. The benefits cited have progressed from accommodating increased household numbers through achieving enhanced resource

management, reducing reliance on private cars, boosting public transport, promoting quality urban design, increasing housing choice, and nurturing a sense of community.

Perhaps the main rationale for lifting residential densities is a commitment to compact cities. The secondary evidence reviewed here, though, suggests limited progress because of:

1. Entrenched market resistance to multi-unit housing associated with long-standing cultural preferences and historical experience;
2. A long-standing association of multi-unit developments with inferior housing and a negative social association associated with transiency, poverty, and criminality;
3. The difficulty of delivering intensive housing that can compete with detached dwellings in suburban environments where multi-unit housing is seen as an inferior good;
4. Concerns over bodies corporate and the implications of gated communities;
5. The impact of changes to the neighbourhood environment on existing residents and a resistance to housing in mixed use (commercial or light industrial) areas.

Much of this may simply be a common and instinctive resistance to change which, with the appropriate policies and changing lifestyles might be expected to diminish over time. This makes it important, though, to ensure that future higher density living is not contaminated by perceptions of poor design, poor quality, poor value and poor governance in medium density developments today.

Another reason for limited progress may be the strength of resistance from existing residents faced with a transformation of their current environment and their expectations for its preservation. This resistance may be most effective in the long-established medium to high income suburbs with high levels of amenity, suburbs attractive for intensification because they are often relatively close to and well connected with the central city (e.g., Perkins, 1988; Vallance et al., 2005). Successfully introducing medium density housing into these settings potentially requires even higher qualities of specification than sought by potential residents.

Contrasting the market resistance reported, there does appear to be demand for quality, inner city and coastal apartments. There are issues of supply in these submarkets, though, and they are likely to be limited in size and impact by being confined to the high priced end of the market. They sit outside the primary research described in the balance of this report, although they offer lessons in terms of both the potential for adoption of medium density housing, and the qualities necessary to fully realise that potential

The fact that the market for intensification outside the most desirable environments appears limited has led to several responses: a search for better (or stronger) regulations; educating developers and consumers about the merits of intensification; and encouraging developers to upgrade a product currently viewed as inferior, without reducing affordability. These responses, though, may not address what the market wants.

2.1.7 A Market Perspective

This section reviews international literature dealing with the apparent conflict between the policy preference for high density housing and a consumer preference for lower densities.

2.1.7.1 Most People Don't Want Higher Density Housing

The international literature reveals long-standing and widespread resistance to increased housing densities, frustrating the proponents of compact cities in Australia, the USA, and the UK. The discord between stated preferences – especially collective preferences – and actual decisions (or revealed preferences) has been noted widely in these markets. The review led to the conclusion that: *there is a long-standing and wide-spread majority preference for detached housing and resistance to increasing densities* (e.g., Reiner, 1963; Audirac et al., Senior et al., 2004; Bruegmann, 2005; Howley, 2009). This is not absolute, though, with a significant minority apparently preferring inner city, higher density housing; and it could change in the future.

An apparently slow rate of adoption of higher density housing to date may be a response to structural factors or misplaced market expectations, especially where experience of it is limited. Structural constraints occur when the location and character of new housing is out of kilter with market needs. Misplaced market expectations occur when policy objectives or regulations do not accord with market preferences. Even when the public at large expresses a preference for density through submissions on planning documents, apparently endorsing compact cities, this does not necessarily flow through into individual household preferences (Downs, 2005).

There is also evidence that the way in which higher density living is presented, both the attributes emphasised and the language used, can influence stated preferences (Lewis and Baldassre, 2010). A focus on sustainability, for example, may elicit different responses from a focus on lifestyles. What people say in response to formal surveys or submission-seeking based on *societal outcomes* may well be contrary to the core values that inform *individual preferences* and households' choice of lower rather than higher densities. Consequently people believe in their behaviour what they apparently support in principle.

2.1.7.2 Focusing on Transitional Behaviour

Resistance to residential intensification is not absolute. Drawing on the range of New Zealand and overseas research suggests where “target segments” for density might be best drawn from today:

1. Young single adults or couples who value a location in and around the CBD;
2. Disadvantaged minorities, including migrants, needing low cost, social housing;
3. Older singles or couples, including empty nesters, with the means to purchase the qualities they value in their established lifestyles in a multi-unit setting.

Of these, only the first group may have a significant underlying preference for centralised housing. The second group may occupy inner city housing to the extent that it is influenced by the distribution of low cost or public stock. The third group may accept centralised housing providing it is of sufficient quality. Older people, though, are more likely to stay in the neighbourhood they are familiar with, perhaps moving into a well appointed, managed, suburban complex (which may be a retirement village) if the opportunity is there.

Families appear to be largely “off the radar” for higher density living at the moment, unless they are “in transition” (most often recent migrants) or fall into the social housing category.

Encouraging the uptake of multi-unit housing in the short-term may be more about influencing decisions at the margin – within particular segments -- than seeking to engender a wholesale change in the values associated with housing. This puts the focus on both younger and older people, and on how to satisfy their housing preferences and expectations in a medium density environment.

In the longer-term what may be required is a form and location of medium density housing that encourages more people who have traditionally made a transition to less centralised locations and larger houses on individual sites to consider multi-unit options as an ongoing option through their various housing transitions.

2.1.7.3 Motivation and Values

Understanding the motivations of people in the housing market means understanding the values associated with housing in general. The collection of key attributes –safety, security, space, and ambience – which people seek, especially as they move through family formation and raising children, can be encapsulated in the notion of *domain*. This incorporates ownership (security), control (privacy), a distinct physical entity (a detached house and yard), aesthetics (garden, views, open spaces), and a place in the local community (belonging).

As domain strengthens, people are less likely to move out of their current neighbourhood or beyond nearby neighbourhoods even when they do shift.

The attributes of domain will differ among groups: young families and older families; young single people or couples; and migrants. Adopting this view of the meaning of housing, though, suggests that apartments in inner city locations are more significant in terms of change and transience in living arrangements, career commencement and progress, and personal relationships, than in terms of attachment to place. As a living arrangement, they are intrinsically unstable. In a sense, one's domain is not fully formed in inner-city (or town centre) high density housing. It may be this sense of impermanence that colours judgements of multi-unit living by other, more settled groups.²

These conclusions are consistent with the finding that ageing alone is not sufficient to trigger a reduction in house size and a shift towards the “amenity-rich” city and town centres. The assumption that falling household size would be accompanied by relocation into centres might explain why multi-unit living has not yet been taken up as much as anticipated.

Broadening the appeal of multi-unit or high density housing may mean ensuring that it can create the same sense of domain that households achieve from suburban living. This may be unaffordable for the majority of households in central localities because it calls for high quality apartments in favoured localities. However, it may be more easily achieved in the suburban neighbourhoods that the majority of people are familiar with.

Incidentally, this approach is consistent with the location of private sector retirement villages, many of which reproduce the attributes of domain (open space, security, diversity of

² This ignores the top end of the market, however, where high net worth individuals can purchase a quality apartments and recreate their sense of domain in favoured, usually waterside apartments in the inner city, even if those apartments second homes

structures, the capacity to create an individual identity around a courtyard or garden) while maintaining reasonable proximity to services and amenities in a suburban environment.

2.2 Potential Demand for Higher Density Housing: the Market

This section summarises an assessment of the demand projections that inform policies promoting medium density housing in New Zealand (Working Paper 2: *Scoping the Market*).

Many reports have published housing demand forecasts, most relying on SNZ sub-national demographic projections or variants thereof. These comprise age-specific projections based on forecasts of birth and death rates and migration. They estimate future need based on the distribution of household types by age cohort, or simply through extrapolating changes in predicted household size onto a projected population.

2.2.1 Projected Demand

The BRANZ (2007) estimates of new housing requirements by region are the basis for discussion here. They use SNZ sub-national projections and allow for demolitions of existing dwellings. The BRANZ projections also drew on DTZ New Zealand's 2007 analysis of estimated shifts in household composition. These projected declining home ownership rates, from 67% in 2006 to 58% in 2026, and falling to 54% in Auckland. BRANZ also assumed a decline in the share of detached houses given that the increase in households will be dominated by couples and single persons.

The result is projected annual average demand for 26,950 additional dwelling units for the ten years to 2016, increasing to 28,860 over the ten years to 2026. These figures compare with 25,030 a year recorded over the ten years to 2006. Multi-unit dwellings are projected to reach 38% of new houses nationally, compared with 25% between 1996 and 2006 (Table 1).

Table 1. Projected New Dwellings Per Year, 2006-2026

	10 years ending	Detached	Terraces (Horizontal)	Apartments (Vertical)	All Dwellings	Multi Unit Dwellings Total	Share
New Zealand Actual	2006	18,820	2,170	4,040	25,030	6,210	25%
Projected	2016	18,580	3,610	4,760	26,950	8,380	31%
Projected	2026	17,760	5,190	5,910	28,860	11,100	38%
Auckland Actual	2006	6,130	790	2,650	9,570	3,440	36%
Projected	2016	4,400	1,630	2,930	8,960	4,560	51%
Projected	2026	3,180	2,630	3,520	9,330	6,140	66%
Wellington Actual	2006	1,280	300	590	2,170	890	41%
Projected	2016	1,050	310	590	1,950	900	46%
Projected	2026	1,140	410	770	2,320	1,180	51%
Canterbury Actual	2006	2,700	500	210	3,410	710	21%
Projected	2016	3,000	670	370	4,040	1,040	26%
Projected	2026	3,000	810	530	4,340	1,340	31%
Waikato Actual	2006	2,400	150	170	2,720	330	12%
Projected	2016	3,030	270	260	3,560	530	15%
Projected	2026	2,930	340	300	3,570	640	18%
Bay of Plenty Actual	2006	1,920	70	120	2,110	190	9%
Projected	2016	1,260	80	100	1,440	180	13%
Projected	2026	1,250	110	120	1,480	230	16%

Notes: 2006 figures Statistics New Zealand; 2016 and 2026 BRANZ forecasts

Source: BRANZ (2007), Table 5, p24

Auckland dominates, accounting for 38% of all new dwellings between 1996 and 2006; 36% of horizontally attached terrace style; and 66% of vertically attached (apartment style) units.

Multi-unit dwellings were projected to jump from 36% of new Auckland dwellings between 1996 and 2006 to two thirds between 2016 and 2026. While the city was projected to account for a third of all new dwellings nationally, it was projected to account for 55% of all multi-unit dwellings. Canterbury was projected to account for just 12% and Wellington 11%.

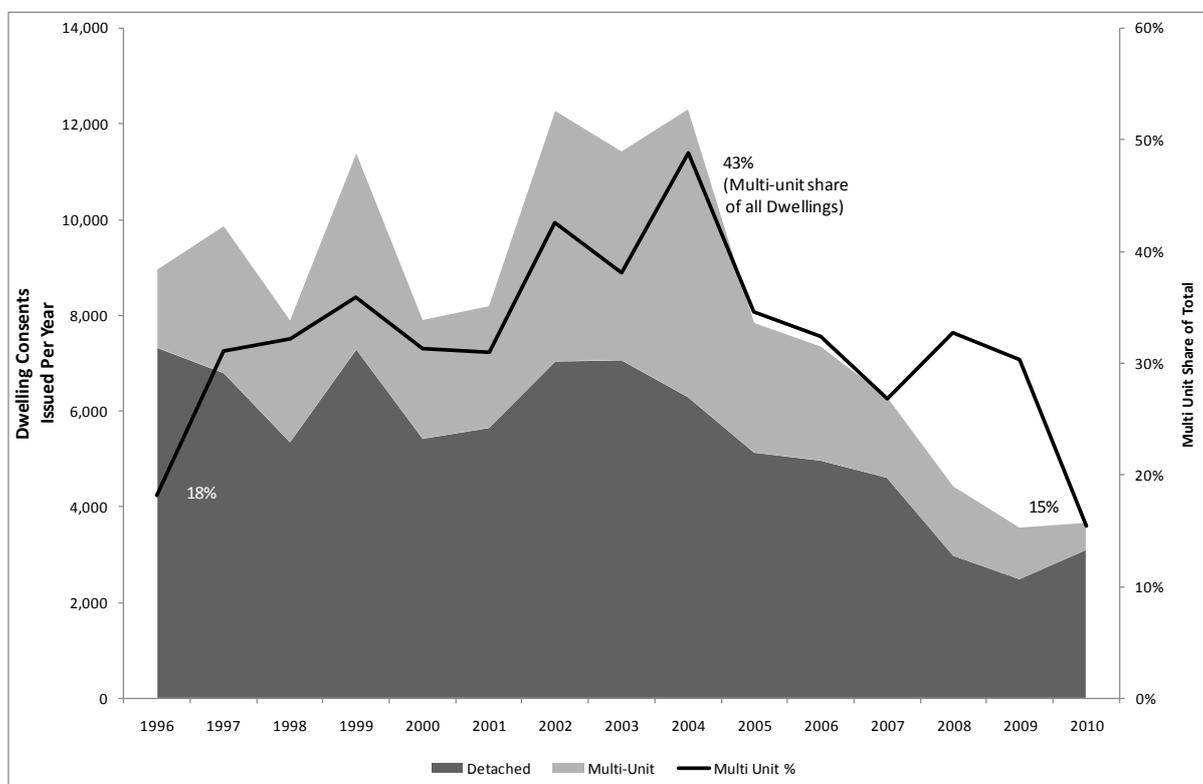
2.2.2 Comparing Expectations with Outcomes

According to this assessment, the share of multi-unit dwellings in the national housing stock would increase by over 70% in 20 years, from around 253,000 to 434,000 dwellings (allowing for demolitions), and from 17% to over 22% of total stock. This represents a significant change “at the margin”: where 17% of households occupied multi-unit dwellings in 2006, 38% of additional households are projected to do so.

In fact, multi-unit developments fell short of the implied path early in the projection period. While they accounted for 24% of all house building consents over the 14 years from 1996 to 2010, they were down to 21% over the five years to 2010, and just 17% in 2010. Rather than rising in both absolute and relative terms, they have fallen sharply.

The difference between what was expected and what has happened appears related to medium term market volatility. In Auckland, for example, multi-unit development has accounted for a greater share of new dwellings in buoyant years (Figure 1). Over the ten years up to 2006, 45% of the additional 34,600 consents for units were issued in just three years, 2002 to 2004. Over the five years 2006 to 2010 the number of multi-unit consents issued (7,160) was down to 34% of the number issued over the previous five years (20,830).

Figure 1 Dwelling Building Consents Issued, New Zealand 1996-2010



Source: Statistics New Zealand (Calendar Years)

There may be several factors behind lower-than-expected growth in multi-unit housing. Slowing income growth and higher housing costs constrain affordability and depress new dwelling numbers. However, the numbers to date do not provide grounds to expect multi-unit housing to fill the affordability gap that lies behind this.

2.2.3 The Private Rental Market

Another factor may be the move towards increased rental tenure rather than ownership by groups other than those dependent on social housing. However, this raises a conundrum; increased rental demand should see increased multi-unit dwellings relative to detached homes. Put another way, rentals have in the past been a strong component of the multi-unit market as they provide a reasonable opportunity for small scale retail investment and, in the past at least, have provided a cheaper rental option than detached housing. In addition, many renters are young, living in non-family households, and move frequently.

The greater historical orientation of the rental market towards medium density housing is illustrated by Auckland in 2006. According to the Census, renters accounted for 26% of detached, but 61% of multi-unit dwellings (Darroch, 2010). Of households renting, 43% were housed in multi-unit dwellings, compared with just 15% of owner occupiers.

According to a SNA (2010) analysis only 27% of residents of inner apartments in the three metropolitan centres, Auckland Wellington and Christchurch, own them and 32% in outer city apartments, compared with 65% owner occupancy nationally.

Yet the substantial growth in the rental market, especially apparently since 2006, does not appear to have been reflected in the same rate of growth of multi-unit housing. Based on analysis of census data, Morrison (2008) suggested that delayed purchase by younger households lies behind falling home ownership. This does not necessarily mean that the rental market is expanding correspondingly. One response to delayed purchasing is an increase in household size, either through adult children remaining at home or greater pressure on occupancy of rental accommodation. This might include larger non family households or an increase in extended family households.

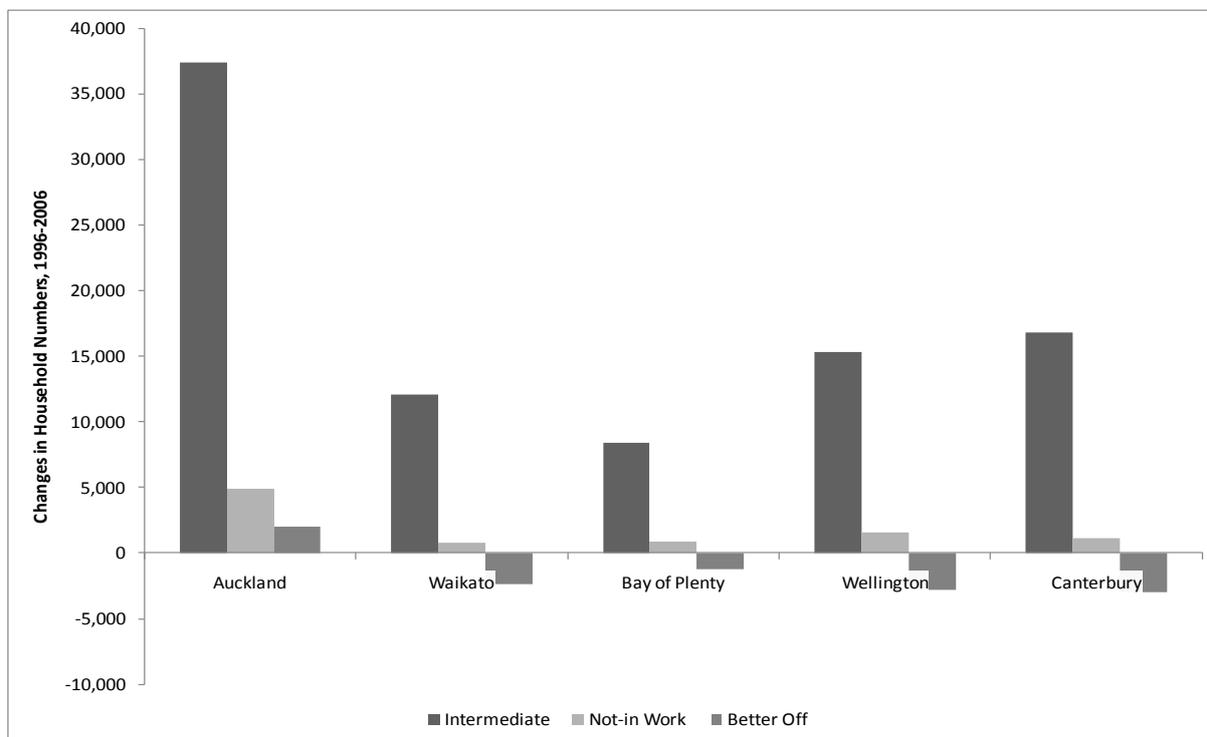
Morrison also suggested that there may be a shift in purchasing behaviour towards housing as an asset rather than as a lifestyle choice. Preferences weighted to investment as much as lifestyle benefits could support units ahead of detached houses. Investing in a rental unit, for example, may be an alternative to purchasing one's own home. Such a tendency does nothing, however, to strengthen the institutional foundations of the rental market (see below) creating the prospect of a supply-side deficiency.

A distinctive recent feature of growing demand in the rental market is the emergence of a new housing market segment. This comprises groups traditionally active in the market that can no longer afford to purchase. This is especially relevant to households with moderate incomes which aspire to ownership, but cannot achieve it. The growth of this segment was spectacular over the decade to 2006, when it grew by 166%, while the rest of the rental market (divided between the out of work and better off categories) contracted by 1%.

Auckland dominated private rental growth (Figure 2), adding 44,300 households between 1996 and 2006, 84% in the housing market segment (DTZ New Zealand, 2008). Wellington

added a net 14,100 rental households and Canterbury 14,900, all of them in the intermediate segment and, in both cases, saw a reduction in the numbers in the “better off” category.

Figure 2 Changes in the Structure of Regional Rental Market, 1996-2006



Source: DTZ New Zealand, 2008

That the emergence of a significant rental market does not appear to have accelerated a long-term (structural) shift towards multi-unit dwellings raises a number of issues:

1. The weakness of the private investor sector.

The diversion of household savings or (increase in household debt) into the housing rental market over the past decade made it over-dependent on an unsophisticated and fragile retail investor sector. Recent financial difficulties have presumably undermined this source of investment. The requirement may be for a stronger institutionally-based private housing rental sector to sustain its growth and stability through economic cycles.

The rental sector expanded on the back of speculative funding as developers sought to on-sell apartments of often indifferent quality to private investors. This resulted in low returns or losses and the failure of development and funding companies. This, in turn, has undermined confidence in the sector, something reflected in the lower attractiveness of debt funding of rental properties to mainstream banks. It has also made banks less likely to underwrite institutional investment or purpose-built rental stock without government safeguards to minimise the risk, or reduce it to a reasonable level.

2. The capacity or willingness to build multi-unit dwellings of the requisite standard in desirable localities.

An emerging intermediate market means that housing preferences may be changing from those associated with traditional renters, to a greater emphasis on family values

and needs. This may reduce the association between the rental market and central city apartments (although the latter will still to be characterised by a large share of renters).

The investment sector may need to respond by providing reasonable quality, well located, medium density rental accommodation outside the central city. It may also need to address urban design issues to satisfy the amenity, security, and community needs of families in central and suburban sites. Again, there is a question mark over whether the sector as a whole is sufficiently well organised to operate at the necessary scale.

3. Limited appeal and constrained economics

The quality of inner city medium rise apartments may have been constrained by site and cost issues, potentially lowering their appeal to renters. At the same time, the financial vulnerability and failure of some developers, prompted in part by the cost of assembling and holding land through a protracted consent process, has reduced their appeal to investors. The capacity to assemble large tracts of suitable land in favoured locations and deliver a product to compete with traditional detached housing has proven difficult.

4. Limited availability of suitable sites

Any large scale movement into quality rental accommodation requires sites of sufficient size to enable good levels of amenity to be designed into them and to justify the sort of institutional investment that might bring greater stability to the market. Even brownfield sites within inner city areas have been limited in availability, and face high costs of assembly, remediation, and infrastructure upgrading. As a result, apartment developments are subject to high floor area ratios, small individual apartment sizes, and limited community amenities. In any case, reliance on brownfield sites in cities where they are relatively scarce runs into business land policies that also favour expansion by brownfield redevelopment or intensifying employment on existing sites.

5. Lack of stability of tenure

The short-term nature of leases in New Zealand means that rental conditions are not oriented to families' needs for stability of tenure, something which may reinforce aspirations for home ownership. It is difficult to see the conditions under which longer term leasing arrangements might prevail in New Zealand without a much stronger institutional sector supplying and managing rental accommodation.

These possible reasons for a short-fall in multi-unit housing relative to expectations are inter-related: given the capacity to assemble substantial land holdings in suitable localities, it is likely that major investment vehicles could deliver the quality of dwellings, amenities, and design, and the security of tenure that might make renting a more desirable tenure option.

2.2.4 Institutional Constraints

Whether or not such vehicles exist or could emerge within the New Zealand market remains questionable. A recent report of ten case studies prepared for the Department of Building and Housing (Boffa Miskell, 2009) provides useful insights into the difficulties in the development sector.

In particular, it includes a commentary on the development industry by Auckland property investor and advisor, Chris Aitken. He focused on what might be learnt from the collapse of the residential development industry, concluding that:

To deliver the future requirement of a supply of quality, affordable housing a vibrant multi-participant private development sector is required. It requires the best practice from a correctly supervised finance and development sector. The current regulatory, finance sector, urban planning framework and incentives are working against this objective.

The issues Aitken raised include:

Timeliness: the time required for consenting the complex urban development projects that might bring about residential intensification now spans more than one property cycle, adding to development cost and risk. Early input from senior planners could ensure that developers do not meet unexpected opposition further into the consent process. Urban Design Panels could also play a role. Currently designs have to be conservative to facilitate consenting.

Costs: Apart from time-related costs, development contributions are a deterrent. Areas suited to intensification often have poor infrastructure and the full costs of upgrading is levied on developers, often well before returns are realised.

Financial sector regulation: The finance sector, not just the development industry, requires attention. Poor financial practices have contributed to development company failures. Improved regulation of both the development and finance sector is required to protect retail investors in particular and help return some confidence to the market.

Debt stacks: Some apparently suitable development sites remain vacant because they are associated with substantial debts and have book values in excess of their true market value. Banks may resist the downward revaluation that might make them attractive to develop to protect their own balance sheets.

In a 2005 survey of private sector stakeholders in the Auckland housing market, Motu (2007) identified land supply and council-related issues as the main themes around housing supply constrains. The restrictions placed on expansion outside the MUL provide a few owners of significant holdings of greenfield land within it strong if not excessive market powers. On the other hand, brownfield land is fragmented and makes purchasing blocks of a viable size and quality for development difficult.

Council-related issues were two-fold. Planning uncertainties and consent delays raise the margin required to cover holding costs. One way of avoiding these is to avoid notification by working within the envelope of permitted uses, something which limits intensification and innovation. Under-capacity in infrastructure, especially drainage and water supply, led to concerns over provision among councils, and concerns over the magnitude of development contributions by developers. Even if measures were adopted to reduce demands on infrastructure through innovative design measures, these costs were not seen to be reduced, again lowering the incentive for innovative or progressive design.

While a more generic study undertaken several years earlier, the Motu report (2005) highlighted even then the tight and costly nature of the Auckland housing market, features which appear to have contributed to continuing cost escalation and tightening supply since.

2.2.5 Projecting Rental Demand in Auckland

In 2010 Darroch Limited undertook a comprehensive assessment of the Auckland regional housing market, working within 14 sub-regional spatial submarkets. It found that

1. The region has significant rental affordability issues, with 40% of rental households paying more than 30% of gross incomes on housing (49% in the private renter market);
2. The capacity of renters to shift into ownership has fallen over the decade, with the intermediate rental market increasing from 39,700 households to 77,110 (63% of private renter households);
3. Between 2006 and 2026 forecast demand is for close to 170,000 new dwellings (8,500 per year), with around 74,000 new units for owner occupiers and 96,000 for renters;
4. Households aged over 50 years are expected to account for 63% of this growth, couples for 33%, and single person households for 29%, although growth will take place over all age groups and will be stronger among non-European ethnic groups;
5. Demand is forecast to be strongest in the Auckland CBD and in greenfield sites in other housing markets;
6. Financially stressed renter households are forecast to increase by around 40,000, with households where the reference person is over 50 years accounting for around half of that increase, suggesting a disproportionate impact on younger age groups.

On an annual basis the apparently conservative Darroch projection (8,500 new dwellings a year) was well ahead of recent market performance of 5,060 new consents a year from 2006 to 2010. Of those 28% were multi-units. In other words, new housing over the first five years of the projection period has been running at 58% of the projected figure, lagging by around 17,000 dwelling units at the end of 2010. To achieve the projected 2026 figure now requires over 1,100 more units a year. This is a 13% increase on the existing projection and a 90% increase on what has been achieved over the past five years.

The Darroch projections provide for a substantial share of growth going to the rental market, 57% across the region, and as much as 81% in the CBD. There were an estimated 151,180 households in rental accommodation in Auckland in 2006, or 25% of the total market (Darroch, 2010, 195). While it is not possible to identify the share of rental units in the past five years, the relatively low share of multi-unit apartments suggests that any projections for rental accommodation based on an expectation of more medium density housing are falling even further behind. The very low number of consents issued in 2010 and the low share in the multi-unit categories suggests that this is likely to be an issue for the foreseeable future.

2.2.6 The Significance of Residential Submarkets

While underlying demographic shifts, housing supply, and macro economic conditions influence demand for and construction of additional dwellings, the rate at which households relocate is also important in determining when and where new stock might best be built. Relocation affords new households the opportunity to move into existing stock and existing households to adapt to their changing needs by progressing through the “housing ladder”.

The propensity to move is spatially constrained: the majority of households move within a defined sub-market. This may be defined by neighbourhood or by geographical sector (north, west, central or south) within a metropolitan area. Census tables identifying where individuals lived five years earlier confirm a strong propensity to move locally within Auckland. Between 2001 and 2006 42% of the region’s residents had moved (Table 2), although this share is inflated by the number who may have moved more than once.

Defining the former territorial council areas as submarkets, 61% of the city's residents moved locally; a figure that was a high 69% in Manukau and low 50% in Papakura. However, given the small size of Papakura and its integration into a south Auckland submarket -- Darroch links it with Manurewa -- this figure is artificially deflated relative to the others.

Table 2. Residential Relocation, Auckland Region 2001-2006

Movement from:	Usually Resident 2001	Within District	Moved Elsewhere Auckland	Moved outside Auckland	Total Movement	% People Moving	% Local	% Elsewhere in region
Rodney	76,200	18,400	7,800	2,100	28,300	37%	65%	28%
North Shore	184,800	51,300	17,600	13,700	82,600	45%	62%	21%
Waitakere	168,800	41,400	19,100	8,300	68,800	41%	60%	28%
Auckland	367,700	92,200	43,400	29,200	164,800	45%	56%	26%
Manukau	283,200	80,300	25,100	10,900	116,300	41%	69%	22%
Papakura	40,700	8,100	7,100	900	16,100	40%	50%	44%
Franklin	51,700	12,300	4,900	1,100	18,300	35%	67%	27%
TOTAL	1,173,100	304,000	125,000	66,200	495,200	42%	61%	25%
Movement to:	Usually Resident 2006	Within District	From Elsewhere in Region	From Outside Region	Total Movers	% People Moving	% Local	% Elsewhere in region
Rodney	89,600	18,400	15,700	11,500	45,600	51%	40%	34%
North Shore	205,600	51,300	15,800	41,500	108,600	53%	47%	15%
Waitakere	186,400	41,400	19,900	25,900	87,200	47%	47%	23%
Auckland	404,700	92,200	30,700	87,400	210,300	52%	44%	15%
Manukau	329,000	80,300	25,800	51,300	157,400	48%	51%	16%
Papakura	45,200	8,100	8,700	5,200	22,000	49%	37%	40%
Franklin	58,900	12,300	8,300	6,400	27,000	46%	46%	31%
TOTAL	1,319,400	304,000	124,900	229,200	658,100	50%	46%	19%

Source: Statistics New Zealand Residence 5 Years Ago

Expectations that higher densities will be achieved mainly by increasing apartment living, brownfield redevelopment, and consolidation around centres and the CBD needs to be tempered by an understanding of submarkets. For example, the dispersed nature of household growth and the containment of much future demand within submarkets mean that the stock of multi-unit housing should be increased substantially outside the CBD in order to increase regional uptake. At the moment, multi-unit dwellings are heavily concentrated within the former Auckland City (51% in 2006, Table 3), although the share of growth there has been much more modest (28% of the regional gain between 1996 and 2006).

Table 3. Distribution of Multi-Unit Housing, Auckland 1996-2006

	Private Occupied Dwellings			Shift 1996-2006		Multi-Unit dwellings		
	1996	2006	Share	Number	Share	Number	Regional Share	Share of Dwellings
Rodney	24,320	33,340	8%	9,020	11%	3,580	4%	11%
North Shore	60,500	72,650	16%	12,150	15%	16,480	17%	23%
Waitakere	50,200	62,270	14%	12,070	14%	8,840	9%	14%
Auckland	121,820	145,020	33%	23,200	28%	50,790	51%	35%
Manukau	74,360	94,950	21%	20,590	25%	15,490	16%	16%
Papakura	12,770	14,910	3%	2,140	3%	2,000	2%	13%
Franklin	15,780	20,380	5%	4,600	5%	1,470	1%	7%
Total	359,750	443,520	100%	83,770	100%	98,650	100%	22%

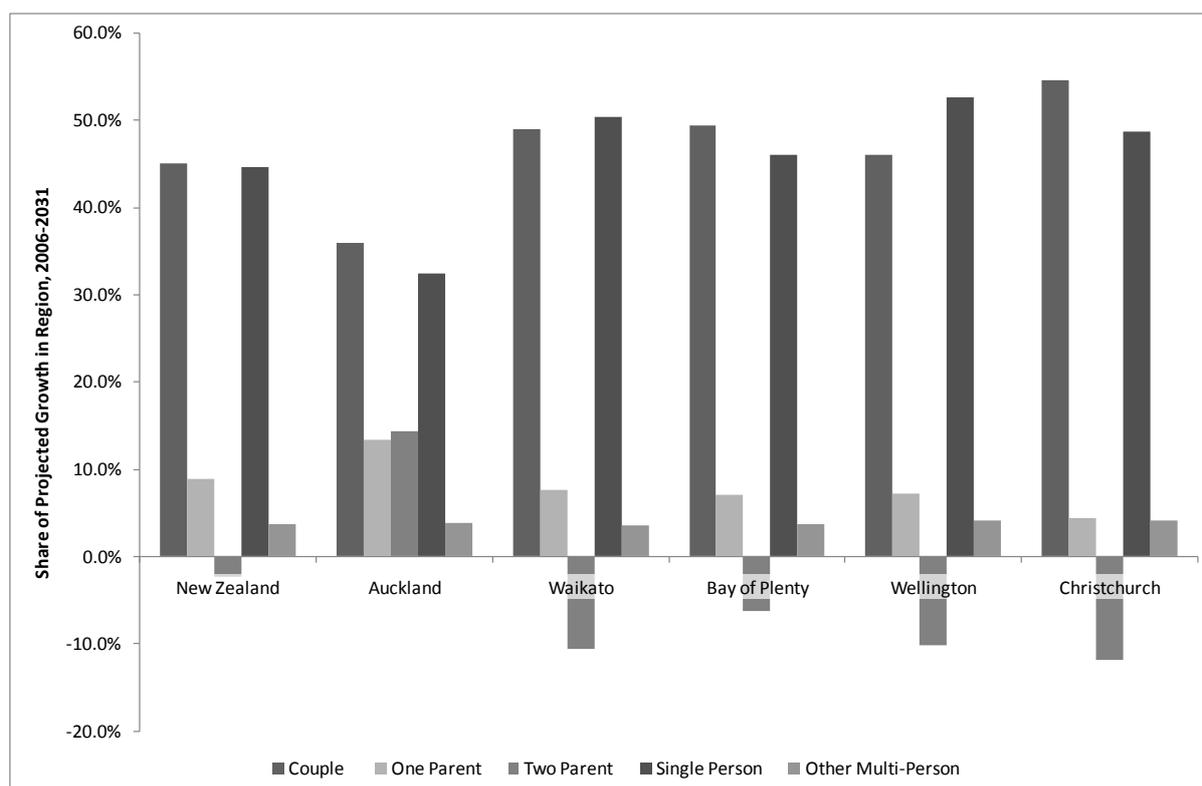
Note: Total includes all of Franklin District

Source: Statistics New Zealand Census of Population

2.2.7 Composition of Demand

SNZ projections of household composition and age structure indicate the demographic drivers of the shift towards smaller households, the main one being an increase in couple and single person households over the 25 years from 2006 to 2031. This compared with modest growth in two parent families and a likely contraction in single parent families a pattern most pronounced in Christchurch and most balanced in Auckland (Figure 3).

Figure 3 Changing Household Composition, 2006-2031



Source: Statistics New Zealand

The resulting fall in average household size is what informs projections of the potential for higher residential densities, both as a result of the general tendency towards smaller households and because families with children are becoming a smaller component of the long-term housing profile. This expectation is moderated for Auckland, where past migration gains and ethnic diversity have maintained a younger age profile.

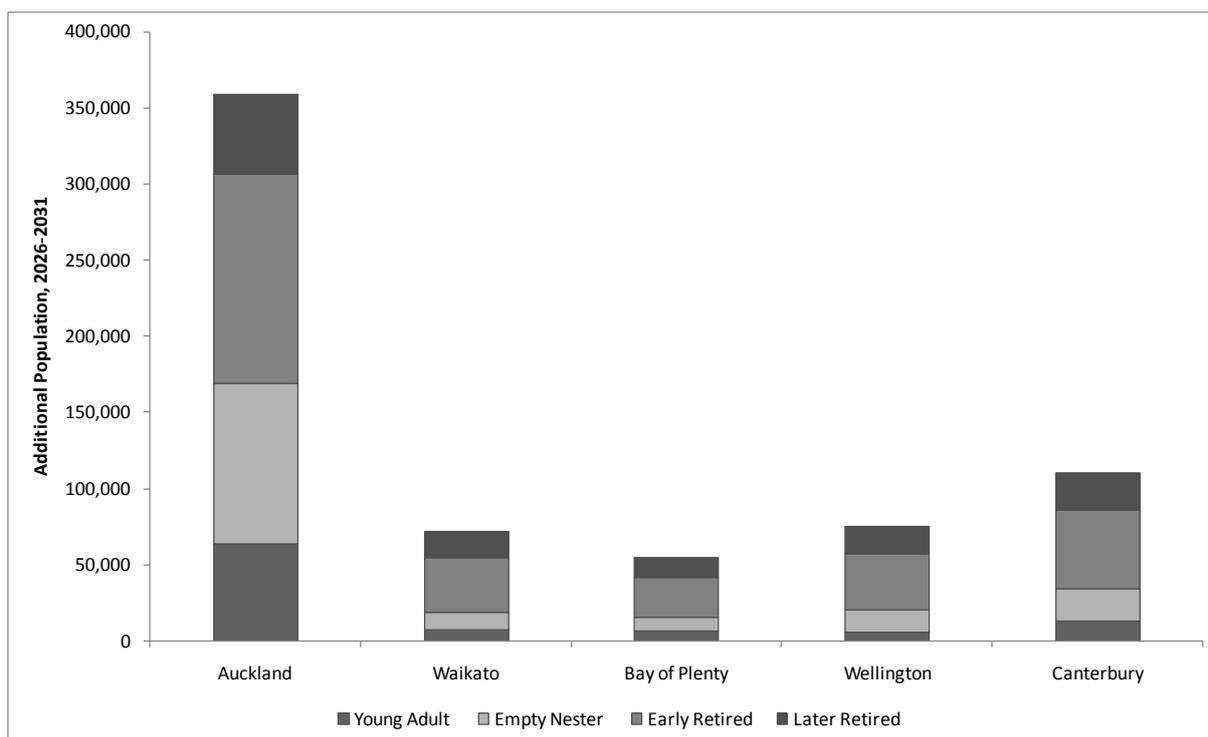
It is important to recognise that these significant shifts occur at the margin, based on projection of *additional* households. The overall picture is not one of such radical change.

In 2006, families with children accounted for 53% of New Zealand households, and couples in a relationship another 23%. According to SNZ projections these shares could decline to 43% for families with children and increase to 28% for couples in a relationship by 2031. Single person households will increase by 4% from 20% to 24% of the total. This means that moderate changes in the behaviour of any of the cohorts could lead to significant departures and unpredictable shift in the profile of the total housing market. For example, a diminishing propensity to move, changes in the age and rate of household formation and

dissolution, an increase or fall in non-family households, even shifts in fertility or mortality rates are all societal shifts which might reshape the market for new housing.

Analysis of SNZ age-specific projections casts some light on the possible consequences of the overall changes portrayed in Figure 3. By far the bulk of people driving future growth in single and two person households are empty nesters (represented by people aged between 50 to 64 years for present purposes) and early or active retirees (represented by people aged 65 to 79 years; Figure 4). Together they account for 74% of the projected growth in smaller households. Analysis of apartment dwellers in 2006 suggests that currently these groups are not likely to reside in apartments, particularly in the central of city.

Figure 4 Projected Distribution of Younger and Older Adults, 2006-2031



Source: Statistics New Zealand

The SNZ (2010) survey of apartment dwellers in Auckland Wellington, and Christchurch in 2006 indicated that 49% of inner city apartment dwellers were aged between 20 and 29 years, and 24% of non inner city dwellers. These figures were well ahead of a 13% share of the national population. By contrast, only around 15% of people living in inner city and 25% in outer city apartments were aged over 50 years, compared with a 29% share of the total population.

The young adults who have dominated the expansion of inner city apartment living form only 18% of the gain projected in the small household group in Auckland (and just 10% of total projected population gain), 11% in Canterbury, and just 8% in Wellington. Their declining share of the market raises questions over how far the momentum they have provided for apartment dwelling in central city locations will be sustained.

By contrast, the empty nester group accounts for 38% of the expansion among the couples and single-dominated age cohorts in Auckland, 49% in Wellington, and 47% in Christchurch. These people are more important early in the period, but the weight swings progressively to

the early retired cohort later (after 2021 in Auckland's case). In fact, people aged over 50 years account for around 55% of all projected population growth in Auckland, 52% in Wellington, and 53% in Christchurch.

While the projections are indicative only, the strong inference is that the projected growth in demand for smaller houses is shifting from the young adults and non-family households with whom they have been associated to a fast expanding empty nester segment and increasingly the early retirement segment.

This may even help explain an apparently slow uptake of medium density housing: the literature reviewed (Section 2.1.7 above and Sections 2.3 and 2.4 below) suggests that older couples do not necessarily downsize their housing, at least not until well after the children have left home. Many also favour remaining in familiar neighbourhoods when they do downsize. The assumption that a growing number of smaller households will lift demand for centralised, multi-unit and multi-storey housing may be a misreading of current market preferences among those cohorts which are now behind the increase in smaller households.

2.3 What the Market Thinks: the Buyers

This section outlines an exploratory analysis of buyers' attitudes to medium density housing. Three focus groups were conducted among people who had been recently active, or still were, in the housing rental and or purchase markets.³ The design and results of this research are described in Working Paper 3: *Buyers talk about Medium Density Housing*. The aim was to understand the processes and thinking behind the search behaviour of people in the market and how that might affect the choice between detached or multi-unit housing.

Given the decision to omit both social housing and the upper end of the market (e.g., harbourside apartments) from the analysis and the significance of a growing intermediate rental market, the research was directed towards people in the mid to lower end most likely to be looking at suburban rather than CBD housing. Participants were recruited to cover:

1. Rejecters: people who had moved into their current home within the last six to twelve months, who had never considered an intensive housing option or who did so but then decided against it;
2. Open-minded buyers who seriously considered an intensive housing rental or purchase but who could not find what they wanted, but still remain open to the option;
3. Those actively looking at properties with a view to shifting in the near future.

They included a mix of life-stage and household type, renters and owner occupiers, with representation from North Shore, west, east, and south Auckland, inner and outer suburbs.

2.3.1 Focus Groups: Key Conclusions

The three general themes that stood out across the groups:

³ This research was undertaken by Curious Research. The researchers prepared an independent presentation which is appended to Working Paper 3.

1. Strongly negative “top of mind” associations around the idea of (medium) “density housing”. The researchers concluded that a lot of work is needed to change negative perceptions and help drive greater consumer affinity with the offering.
2. The housing cost problems that potential purchasers are currently experiencing make it hard for them to achieve their housing ambitions, whether renting or buying. This is a potential push factor in favour of higher density housing, as people are well aware of the high cost of land in Auckland.
3. Two strong patterns are evident in terms of ideal medium density housing, both designed to deliver privacy and meet lifestyle needs. (The expectation of construction with quality materials almost goes without saying as an underlying condition). First, most prefer a *standalone house on a small section*. Second, a few want (or would accept) *well designed apartments*.

2.3.2 What do Households Want?

All participants saw proximity to family, access to motorways and public transport, safety (away from busy roads for children and pets), and security as important to their housing choice. They also favour locating in areas of like-minded people.

Off-street parking and particularly garage space were stressed as desirable attributes of properties, the garage for storage and as a workshop. An indoor-outdoor design with an external area for relaxation and entertainment and for children and pets was a common wish. Pets play an important role for some, creating a need for fenced sections and properties. The capacity to keep pets was also important to renters or unit title purchasers.

Differences in what focus group participants wanted can be described across five segments.

1. **Profit Driven Buyers** tend to be young and aim to buy a property offering the prospect of capital gains. This leads to a preference for a large section (within their suburb of choice) and the capacity to make improvements.

Their housing choice will reflect their motivations. Profit driven buyers do their research, look for opportunities, and buy where they see value. Consequently, they are less emotional in their decisions than others.

2. For **Low Income Young Families** location is critical, influenced by a commitment to staying within their current school zone or making sure that any move is to a good zone. Affordability is important as this group tends to be financially constrained. While motivated, they face a hard time saving the deposit for a house.

The renters among them want stable, long-and term affordable leases. Home buyers want sections for the children, a spacious 3-4 bedroom home, and good insulation. Their location choice is financially constrained, but influenced by school needs, family responsibilities, and a desire for stability.

3. **First Nesters** tend to be settled couples buying a first home, most likely triggered by the arrival – or pending arrival – of children. They favour suburbs they are familiar with, perhaps where they grew up, and proximity to family. They like stand alone houses, with a section, a garage, and minimal maintenance. They are likely to see their first home as a step on the path to a better property.

4. **Single Women** living alone are typically on low incomes and have trouble saving. They cover all age groups and include solo mothers. They are interested in buying a house but realistic in what they can achieve. Apartments are an option for them, especially if they offer safety, good internal access, and “*nice neighbours*”.
5. **Young Renters** are in their early 20s and live in non-family households or with a partner. They typically seek reasonable rents in a safe place close to public transport. They like good sized rooms. Localities that provide good access either to work or to leisure and friends are favoured.

2.3.3 Perceptions of Medium-Density: What We Don't Like

Medium density housing was consistently seen in negative terms: lacking character, drab, monotonous, cramped, leaky, and subject to the complications of bodies corporate. Consequently, for most people – other than young renters and single women – medium density options were low on their preferences, especially large apartment complexes.

Medium density housing is associated with a lack of privacy, excessive noise, insecurity, lack of an outlook, parking issues, absence of hobby space (in a garage, for example), lack of pets, and poor prospects for capital gains. Bodies corporate were a negative mainly because of their perceived costs. It was also hard for respondents to identify with residents in medium density housing as they saw them – young “party people” and Asian migrants.

Among people seeking to purchase a home, there was resistance to the greater presence of rental properties in medium density developments, confirming a tendency observed in the literature towards increased social segregation as a result of residential intensification.

2.3.4 Perceptions of Medium-Density Housing: the Trade-offs

The major element that could accelerate the uptake of medium density living is affordability in a market where there is an undersupply of detached housing relative to prevailing aspirations. Despite the low preference for apartment living, it might be the only option for many. Even this runs into affordability problems in Auckland, though, with its tight rental market, and participants' perception that well located and well appointed apartments are out of the financial reach of many.

Consequently, people are faced with hard choices. That might mean staying put in housing that does not reflect their life stage or aspirations. It might mean accepting lower than desired quality, size or appointment of a residence, or a less favoured location. Or, it may mean living with parents or others in an extended family situation.

Others have to accept fewer bedrooms and smaller sections than they aspire to. Or, they may be prepared to go into multi-unit housing as long as there is reasonable separation between units. Participants did express limits to this compromise, though.

Trade-offs among localities are also constrained, confirming the operation of geographic submarkets. Living close to families is an important driver of choice of locality. However, some would move out in a sector to achieve their wants, especially those after capital gains.

2.3.5 Perceptions of Medium-Density Housing: What we Could Live With

Attributes that might lead to greater market acceptance of medium density dwellings include:

1. Detached or semi-detached dwellings separated from neighbours;
2. Private outdoor space;
3. Large garages connected to the dwelling;
4. Use of open plan design to achieve a feeling of spaciousness;
5. A modern, light home with a sunny aspect;
6. Quality materials and architect-standard design.

Attributes that might lead to greater acceptance of medium density neighbourhoods include:

1. A mix of housing styles, ideally with nothing over two storeys;
2. Some shared leisure facilities;
3. Parks, playgrounds, and safe places for children to play;
4. A sense of security built into access and design;
5. Cul de sac layouts, perhaps creating distinctive small neighbourhoods that residents could identify with even within larger, comprehensive developments;
6. Quality controls by means of covenant;
7. On and off-street parking.

Medium density developments should also provide opportunities for people to remain in their “home suburbs” as they progress through their life-stages. This raises challenges of its own, especially from resistance among residents to changes in the character of existing suburbs.

2.3.6 The Big Challenge: Protecting the Dream

The focus groups raised other challenges. The first is the challenge of **bodies corporate**, which participants saw mainly as imposing costs. The response might simply be to ensure that people see the benefits, such as reduced maintenance and other outgoings relative to independently-owned, detached housing. At the same time, the literature review suggested that attention needs to be given to associated governance matters.

The traditional importance of **home ownership** is also a challenge to increasing the uptake of medium-density housing. The market perceives medium density housing which is associated with unit titles as undermining opportunities for ownership. That, and the higher presence of renters, is seen as reducing the commitment of residents to neighbourhood and community values. One response may be to wait until attitudes towards renting change as more households accept – willingly or not – renting as their best option in a tight market. Promoting longer term lease agreements may also help, diminishing the sense of impermanence and increasing local and community commitment among rental households, in turn reducing the divergence of interests between owner and rental occupiers.

The third challenge arises from the perception that medium density housing is **simply inferior**. Apartments are seen as noisy and leaky, subject to crime and anti-social behaviour. This is associated with a heritage of social housing and with the performance of

recent medium density housing in Auckland. For participants in the market, the perception is what informs their preferences.

The challenge is to present medium density housing as offering something different and something of quality. Where people see modern detached houses, even on very small sections, they are attracted to them. They also acknowledge the quality of well-appointed and well-located apartments. For many of the people in the market today, however, apartments that might work are aspirational rather than a realistic option.

The fourth challenge is the perception that apartments entail **living too close** to other people, particularly people “not like us” (youth and immigrants). This may be the downside of diversity; for example, aligning policies that promote medium density housing with policies that promote immigration, and leading inadvertently to increasing social segregation.

One response may be to try to reconcile the need for privacy and community by design, the latter through provision of well-placed and appointed communal resources: places for relaxation, meeting places, and places for recreation. In this respect, the challenge is little different from the challenge of community development in traditional suburbs.

2.4 What the Market Thinks: the Residents

Working Paper 4 reports on research into the attitudes and experiences of residents in five medium density developments, covering the city edge (Grey Lynn in Auckland and Mt Cook in Wellington), inner and outer suburbs (New Lynn and Papakura in Auckland) and one secondary city (Urban Ridge on the western edge of Tauranga).

The case studies were chosen in consultation with the client and with local planners. Interviews were conducted in the homes of ten residents from each development and covered respondents’ choices of housing from the inside out, considering the elements of choice at each level – dwelling, community, neighbourhood, and connections beyond, covering the benefits and disadvantages of intensive housing from residents’ points of view.

2.4.1 Findings

Dwelling choice is based on tradeoffs made between these different drivers. The boundaries on the range of options considered by individual households, though, will be constrained by budget (affordability). For example, the ideal of buying a new or near new (low maintenance) four bedroom house with a double garage and a private section, close to a town centre, and close to family and friends is beyond the budget of many young families. The alternatives may involve dropping to three bedrooms, buying an older house, moving further out, Taking on a border or flatmate or two to share the cost, or some combination of these. It may also mean renting instead of buying, deferring an expectation of or aspiration to home ownership.

Differences in sets of favoured attributes are apparent both among different segments and between different housing developments. The implication that there is a degree of alignment between development styles and market segments is by no means absolute, though: the diversity of households within any one complex is a key observation from the case studies.

Although the attributes of a particular development might be strongly oriented towards the preferences of a specific segment, this does not prevent households from quite different segments from purchasing or renting in that complex. This may reflect the absence of

affordable alternatives, especially in a tight market like Auckland. It may also reflect the fact that for many people living in medium density housing and especially apartments is still seen as transitional, a step on the housing ladder. Or it may reflect the outcome of trade-offs made. For example, while a dwelling may not be the ideal or a particular complex may not align with a given household's lifestyle preferences, it may be drawn to it by a commitment to the location or simply because the unit in question is the best relative to its aspirations that the household can afford.

2.4.2 The Case Studies

Five case studies of medium density developments were undertaken by way of interviews of residents and other stakeholders (developers, managers where appropriate). The case studies were selected to cover a range of localities and dwelling styles. They covered the city edge (apartments in Grey Lynn in Auckland and Mt Cook in Wellington), inner and outer suburbs (a terrace house development, Tuscany Towers, in New Lynn) and intensive housing (Addison, Takanini in Auckland) and one secondary city (small detached sections and houses at Urban Ridge on the edge of Tauranga).

They are described in full in Working Paper 4. The main findings are described below.

2.4.2.1 Tuscany Towers

Some 25 kilometres west of the Auckland CBD Tuscany Towers, New Lynn, is the first in a series of medium density developments in a former industrial and mixed use long-established suburb. It is located on Auckland's western railway and major arterial Great North Road. It comprises a series of low rise terraces of 2 and 3 storeys occupied by around 100 households.

It is a quiet community where greetings and brief conversations are the norm for social interaction within the complex, although longer established residents have developed stronger friendships. The owners' committee, and its rolling membership, is a network which is seen to contribute to the sense of community;

The population of Tuscany Towers is ethnically diverse but with a predominance of Chinese. There is a wide range of household structures and sizes, including several young families, extended families, older single person households, couples and flatting households;

Purchasers are attracted by the style of housing, location close to New Lynn town centre, and connectivity with the wider Auckland area. The development generally offers a low maintenance lifestyle and a potential sense of security and community

Unfortunately, leaky house syndrome destroyed property values although re-cladding due to commence soon may correct this. Many owners have now moved out, though, so around 50% of the properties are rented. The rents are considered good value for money by tenants, even though they do not appear to have fallen as much as house values.

What was once a relatively homogenous and upmarket community of owner occupiers with secure investments has changed as a result of the difficulties associated with leaky home problems, among other things.

Today Tuscan Towers has an active group of owner occupiers who work with the body corporate management company and on-site manager to make the best of what has been a difficult situation. Rules are communicated to new tenants (subject to language difficulties) and enforced by the manager. While rules can be a source of annoyance for the restrictions placed on personal freedom they are generally accepted for the benefit of keeping the place safe and looking good.

2.4.2.2 The Aston, Grey Lynn

The Aston is around 3.5km from the CBD in Auckland, with good access by car or bus. Shops and cafes are generally within a short walk or drive (for supermarkets). The development comprises commercial space on the Great North Road frontage, two detached villas, ten single storey two-bedroom and 22 double storey three-bedroom apartments.

The Aston is occupied mainly by professional singles and couples in their 30s and 40s, but with some retired people and families. Approximately 60% of apartments are owner occupied, and 40% rented. The Aston is considered a good development with quality construction, design and specifications, with good access to afternoon sun.

Buyers of apartments at the Aston were attracted primarily by the location. The apartments themselves are of a good size, warm and dry. Renters were attracted by the same features plus the separation of bedrooms (not sharing a common wall) and separate bathrooms.

Residents were generally happy with their choice of dwelling. Traffic noise is a concern for those fronting onto Great North Road. Some residents would like a greater sense of community; and others are disappointed that the commercial uses on the ground floor are not more successful, which is seen to deny the development a "sense of place". It also means residents have to use the car for convenience shopping.

2.4.2.3 Hanson Street, Mount Cook

The medium rise (four storey plus 2 lower level car parking floors) apartment block at 1 Hanson St, Newtown, comprises 34 single level one and two bedroom apartments. It is located in an area of mainly pre-war villas interspersed with several recent apartment blocks where sites have been consolidated. The development is approximately 50m from Adelaide Rd, a main thoroughfare from nearby Newtown to the Wellington CBD.

There is a range of residents; working people, students, and retirees. Occupants are mainly European but include Maori, Indian and Chinese ethnicities. Households are generally singles and couples, although there are some families with teenagers or small children.

Around two thirds are rented, some of which, particularly those on the ground floor, turn over quickly. However, a close community has developed among body corporate members;

Many residents keep to themselves, but established communication channels (a newsletter, notice-board and Facebook page) mean that they feel informed. An annual barbecue provides opportunities for people to meet other residents in an organised social setting;

2.4.2.4 Addison, Takanini

Addison is located 25km south of the CBD, 2.5 km from Papakura town centre, 2km from Takanini railway station, and 3km from the motorway. It comprises mainly detached

housing, semi-detached, and terraced housing. Currently a community of around 400 households, planned to grow to around 1,500. New Zealand European, Maori and Pacific Island peoples are well represented, and there is a growing Chinese population in Stage 3;

There is a wide range of household structures from single peoples and couples, through to large households renting together and extended families. Around half the houses are rented.

Addison is a quiet community; people tend to keep to themselves. However, the committee run residents' society and its social subcommittee are valued. Among other things, it arranges occasional community events, particularly directed at the children.

Purchasers are attracted by the housing style, choices, and quality; the safe and secure environment; the promise of a sense of community; and good prospects for property values. Many have moved from nearby suburbs to a "better neighbourhood" and to improve their standard of housing. For many this was an upward progression on the housing ladder. The low maintenance lifestyle frees residents for other things; from sustaining busy family lives through to the ability to enjoy "lock up and leave" travel.

2.4.2.5 Urban Ridge, Tauranga

Urban Ridge is located between the suburban centres of Brookfields and Bethlehem and about 6km from the CBD. Stage 1 comprises 25 homes at a density of 15 dwellings per hectare. Stage 2 is under development and will be at a greater density.

Unlike the other case studies, its two to three bedroom homes are detached on freehold sections. Section sizes are small, though, from 230m² to 440m². Access is via a private road owned collectively by residents.

Residents are predominantly over 50 years, singles and couples approaching retirement or already retired. There are some families with small children or teenagers though. The population is mainly European but does include Maori, Chinese and Indian residents.

Urban Ridge is a friendly community of like-minded people, all of whom are owner occupiers. They tend to value a tidy well maintained street; informal social networks have been established between some residents, while others prefer to keep themselves to themselves;

2.4.3 Design Considerations

This section summarises design features raised in interviews across all five developments. The following features of individual dwellings were important to almost all interviewees:

Quality:

1. A new dwelling;
2. Modern and contemporary decor; design features that add value (e.g. high stud);
3. Quality of fixtures and fittings (e.g. appliances, carpets, tap ware, bench tops);
4. Good condition; clean and tidy;
5. Low maintenance; less housework.

Capacity:

1. Number of bathrooms
2. Storage space; especially when trading down from bigger home;

3. Size of rooms and a sense of space, especially living rooms; open plan with balconies/decks/gardens helps;
4. Cupboard space in kitchen and bathroom;
5. Garage; often used for storage.

Comfort:

1. Natural light in all habitable rooms;
2. Access to sunshine;
3. Well insulated and warm;
4. Quiet; can't hear neighbours;
5. Separate laundry (to contain the noise of the washing machine);
6. Outside window in bathroom.

Connection with the outside

1. Privacy; rooms not overlooked
2. Outlook; views or landscape rather than of a building or fence

Beyond these commonly desired attributes, individual segments have specific needs. For example, space requirements such as the number of bedrooms are likely to vary according to household composition. Older households tend to favour single level units for practical reasons of access and mobility, but also for a greater sense of spaciousness and privacy. Flat mates in apartments may look to layout in terms of space within and between bedrooms given that personal space in a shared dwelling is usually confined to the bedroom.

2.4.3.1 Exteriors

Again, attributes can be divided among requirements or expectations mentioned almost universally and those that apply to specific segments. Widely favoured features include:

1. Visual appeal;
2. Quality construction;
3. Good maintenance;
4. Security and safety (of the dwelling and the total development);
5. Well designed parking areas (apartments);
6. Low maintenance;
7. A sitting out area, which may be a balcony or a small garden.

Among the features favoured by particular groups are:

1. The particular style of a dwelling; apartment, terrace, or town house;
2. Storage space;
3. Size of garage;
4. Adequate car parking for residents and visitors.

2.4.3.2 Shared Spaces

Shared spaces may vary from small areas inside apartment buildings (lobby and stairs or lift area for example) through to roads, footpaths, reserves and recreation areas. The following features of shared space are valued differently by different segments:

1. Good stairwells and lift spaces in apartments;

2. Visitor parking spaces;
3. Safe access roads;
4. Adequate reserves, particularly for families although the nature of reserve favoured will differ between young (playgrounds and playgrounds close to home) and older families (bigger parks for more energetic pursuits);
5. Appropriate trees in appropriate places;
6. Tidy gardens;
7. Recreation facilities, including but not limited to parks.

Central to how shared space is developed and used is the question of who pays. It is especially relevant to recreational facilities and their use. Some residents will be prepared to pay for facilities as part of the complex but these will be a minority. Outside the most expensive developments, residents may resist the high fees that may be involved. In terms of recreational facilities, at least, it may be more straightforward to ensure that developments are in easy reach of stand-alone facilities.

2.4.3.3 The Setting

2.4.3.4 Community Characteristics

The demographic character of a community can influence potential residents. People favour a tidy, friendly and welcoming community where they can feel safe and make friends, although this seemed less important for people living in apartments. The appearance of a development is an important cue for buyers about the nature of the resident community. This can reflect resistance to diversity, with people most comfortable around others with similar characteristics and values to themselves.

The following characteristics of community appear to be considered the most when assessing the character of a community in a medium density residential development.

1. Scale: the number of households in the development;
2. Community interaction: networks and strength of ties;
3. Ethnic diversity and predominant nationalities;
4. Household types and sizes;
5. Quiet or noisy surroundings;
6. Price range;
7. Standard of maintenance;
8. Tenure mix;
9. Crime levels.

2.4.3.5 Neighbourhood characteristics

What residents of medium density housing like about their neighbourhood is most likely similar to what owners of detached houses like. Nearby town centre neighbourhoods with a good range of facilities attract people. Tuscan Towers, The Aston and Hanson Street in Wellington were all popular in part because of their proximity to particular town centres; New Lynn, Kingsland/Grey Lynn/Ponsonby, and Wellington City /Newtown respectively. The ability to walk to nearby facilities is an important attribute and is particularly valued in the Wellington and New Lynn case studies.

Different styles of neighbourhood attract different types of people. The CBD fringe neighbourhoods attract younger households with higher disposable incomes, focussed more on work and recreation opportunities. New Lynn is a suburban centre in a lower income area with greater attraction to families.

Urban Ridge is a little more removed from commercial activity, around 800m by foot from Brookfield Centre and 3km to Bethlehem. Similarly, Addison has limited commercial amenities in the immediate neighbourhood, being about 3km from Papakura town centre and 1km from the Southgate shopping centre on the Great South Road. Both these developments resemble traditional suburban settings, albeit with more limited private land and greater uniformity of housing styles.

2.4.3.6 Connectivity

Connectivity refers to transport links to the wider city or region. This is important because travel linkages for work, study or visiting friends and families in some cases, may be quite widely distributed, although mostly within a 20-30 minute travel time envelope. In Auckland, train was used for some CBD journeys where available. However, the bulk of non-local trips still rely on private vehicles, primarily cars.

Car ownership (and usage) was particularly high in suburban areas and in households with extended families. In addition, work and education journeys are usually widely dispersed and public transport is not often a practical option. Consequently, connectivity may be defined as much by motorway or arterial road access as by access to public transport.

The importance of car parking, including space for visitors, was a common theme in all developments. Not surprisingly larger households and families generated greater demands for parking on a day to day basis.

2.4.4 Tenure and ownership type

This section discusses the significance of differences in ownership options.

2.4.4.1 Freehold Tenure

Under freehold tenure with no shared ownership owners have total freedom to personalise their property (within the laws and bylaws pertaining to the area) and to determine how well their property is maintained. The fact that none of our case studies fell into this category reflects the need for shared management of the common or public environment when people are living in close proximity to one another.

The issue of freehold was raised only implicitly as an issue, to the extent that peoples' freedoms were seen by a few respondents to be curtailed by the operation of bodies corporate and the regulations they oversee. Although none of our case studies fell into this category, there is no obvious reason why small sections with freehold title should not be more widely recognised as encouraging intensification.

2.4.4.2 Unit Title

Unit titles are an increasingly common form of ownership, especially for apartments. By definition, unit title owners have some private property relating to their particular premises

and some shared ownership of common space and facilities, managed by a body corporate. This generally includes the exterior of the building or buildings.

The body corporate is usually managed by a professional property management company appointed initially by the developer (in the capacity of owner) and subsequently by an owners' committee. Between the owners' committee and the body corporate a set of rules and responsibilities is established and a schedule of charges (fees) developed to fund the responsibilities set out. These responsibilities may range from maintaining the exterior of the property through to landscape work and road maintenance in larger properties. There may also be a set of rules for residents to abide by which will curtail their freedom to individualise their properties and may also place some restrictions on behaviour.

The body corporate may also appoint an on-site manager to maintain property and help enforce some of the rules. Rules may cover parking restrictions, television aerials, where washing may be hung, fireworks, and additions or alterations to the exterior of a property among others.

While not everyone is always happy with these rules, or the activities of the Body Corp, there is usually acceptance that an effective body corporate makes life in the development better and preserves the value of the properties. Given the secondary evidence about disputes and related issues and the recent revision of the Unit Titles Act 2010, this may reflect the quality of local management and the relatively recent construction of the developments used as case studies.

Within them there appears to be recognition that working through a body corporate is all part of the package. There is acceptance that it is important to have a common understanding of what is and is not acceptable. In this way the chances of disharmony resulting from the behaviour of others is diminished. The activities of the body corporate are seen as contributing to a pleasant living environment

The Hanson St case study demonstrated how a body corporate can operate effectively beyond the remit of rules and maintenance, with the owners' committee creating an atmosphere where residents feel informed and able to easily contact it should issues arise. The committee is seen as progressive, promoting good ideas for the complex such as an edible garden. Communications do not just focus on "do's and don'ts" but provide information relevant to residents. Rules and regulations have been converted to user friendly language and are posted on the notice-board. Signage provides effective guidance on issues that might otherwise create communication challenges. Members have formed a close community, providing opportunities through the body corporate for all residents to meet one another through an annual event.

At Tuscany Towers the body corporate has appointed an on-site manager responsible for communicating with new residents, explaining rules and enforcing them as best he can. There are some difficulties with new migrants around their understanding the nature of the body corporate and cultural differences in the approach to authority.

2.4.4.3 Freehold with Some Shared responsibility

There are medium density developments in which dwellings are held by owner occupiers, with or without a mortgage, with shared ownership of common property (by way of an incorporated society, for example) with or without formal management organisations.

The difference between those with and those without a formal manager relates to risk and autonomy. An incorporated society, for example, may act as a body corporate and charge fees for landscaping, road maintenance and enforcing rules of behaviour. While this restricts individual freedom some see it as beneficial for maintaining neighbourhood standards and property values.

Urban Ridge owners have shared ownership of a private road but have established no formal management organisation. The owners will need to agree on when repairs need to be done and are confident they will be able to work through these needs informally when the time comes with no need for any permanent structures in the meantime.

In contrast, Addison has an incorporated Residents' Society. This is managed by Addison Developments who charge a fee for landscape and roads maintenance and to enforce rules. These rules relate, for example, to the ability to park cars behind garage doors to preserve the thoroughfare, parking on grass verges, and altering the exterior appearances of the houses.

One problem at Addison is that not all residents are members of the Society and therefore do not all pay fees. Membership became compulsory with stage 2 so that Stage 1 owners who opt not to pay can enjoy the benefits of the services funded by Stage 2 owners. Some of the latter reportedly default on their payments as well, an additional source of resentment.

The main concern at Addison, however, is the increasing proportion of rented properties, a trend perceived to impact negatively on property values. Renters are thought to take less care of the properties and contribute to a general deterioration of the development. Several respondents felt that Addison Developments should be able to prevent this trend.

Further concerns are expressed about the Stage 3 development with smaller homes planned, higher proportions of renters, and a growing Chinese population. Rumours are circulating of sales to Housing New Zealand which is seen by some to be the ultimate threat to property values.

These concerns (also evident in Tuscany Towers) highlight the difficulty of maintaining expectations of the initial owners long after the development is complete. Although the body corporate has some responsibility in these matters the initial developer is also held responsible by purchasers (at least in their minds) for any failure to meet their initial expectations.

2.4.4.4 Community title

The Australian Community Title is an alternative to Unit Titles and Residents' Societies where provision needs to be made for shared ownership and maintenance of landscaping and recreational facilities. The provisions appear to combine the best of both worlds, making greater certainty for joint owners and greater flexibility of application.

2.4.4.5 Cross lease

This type of ownership is common for "half sections" where the front or back has been sold off for a second dwelling on one section. Each owner has exclusive right to their half share but share ownership of the total section. There is often a shared driveway which requires

cooperation for maintenance work. Cross-leasing was not a feature of the case studies covered in this study.

2.4.4.6 Renters

The rights and responsibilities of renters differ markedly from owners who have different levels of understanding about the rules and responsibilities associated with bodies corporate. It appears that these rules and regulations are not always communicated well to tenants by owners. Most tenants interviewed appeared keen to understand and follow them, although there are exceptions which cause difficulties. Landlords who are based overseas and tenants for whom English is a second language contribute to communication and apprehension problems around the operation of bodies corporate and their responsibilities.

There was no evidence that renters were influenced towards one or other type of ownership, as they are bound most immediately in their behaviour by the relationship with the landlord. Nor was there evidence that their experience might influence their attitudes if and when they make the transition to ownership themselves. . The main issue associated with rental tenure arises from the proliferation of rental dwellings because owner occupiers perceive a loss of value from the lack of long-term commitment or responsibility towards the property by tenants. At the same time, absentee owners may be less responsive to maintenance needs and payment for body corporate services.

The link between the proportion of renters and possible adverse effects on property values is likely to be particularly strong in the current property market where owners are concerned about property prices.

In some cases, tenure is mixed within dwellings, especially in Tuscan Towers and Addison. Here owners may have tenants or extended family members living with them to help meet mortgage payments. The prevalence of extended family living is likely to increase on cultural grounds as the Asian population increases. There may also be a shift towards extended family and mixed tenure occupation in response to housing affordability difficulties and, in Auckland, a shortage of rental accommodation.

2.4.5 Tradeoffs in Dwelling Selection

2.4.5.1 Outer Bounds

The options from which households can choose are usually limited, with tradeoffs taking place within a price envelope. Some flexibility may come from a willingness to share accommodation with other family members or friends. Young single people traditionally share accommodation but the case studies indicate that Maori, Pacific Peoples, Chinese, Indian are quite also happy to do so with other family members. A willingness to share can significantly lift the affordability bounds to housing choice as well as the population density.

The other limiting factor is geography. Most people like to choose within an easy 30 minute drive of family, friends, work, and other networks.

2.4.5.2 House Choice

The style of house is likely to be a major factor in choice. Choices referred to included:

- Retirement villages;

- Apartments (low rise);
- Apartments (high rise);
- Traditional 2,3 or 4 bedroom houses on 500-1,000 m² sections;
- Town houses, units, terraces, etc. (medium density housing).

Within each there are possible variations in size, modernity, design, and quality, which can influence the extent to which they may substitute for one another. In the cases of Addison, Tuscany Towers, and Urban Ridge most people were moving into the area from traditional houses. Moves were often prompted by changing household structure (kids leaving home, changes in relationships, etc.) and a lower commitment to house and garden maintenance. At Tuscany Towers several residents had moved from other multi-unit housing, often of an inferior quality.

2.4.5.3 The Setting

The selection of the dwelling type is made in conjunction with appraising the neighbourhood and street. Most importantly, people look for:

- Tidy area;
- A safe environment (from crime and dangerous traffic);
- Quiet; and
- Private.

For families with children safety extends to areas to play, ride bikes, kick a ball, use a skateboard, and so forth, depending on children's' ages. For adults it means somewhere safe to walk or cycle around for exercise.

Appraisal of locality also relates to the security of the investment by purchasing in a "good area" for both personal comfort and a secure investment. The trade-off is made on a continuum between the "good house-bad street" and the "bad house-good street".

Complicating the trade-off will be the form of ownership: e.g. a body corporate (unit title) situation or a traditional freehold. A unit title may be viewed as a benefit where shared spaces are valued by the purchaser and where the body corporate is seen as an assurance that the property is well maintained. Others may see the fees and the rules as a negative. The case studies have shown a range of potential problems arising from body corporate or similar management arrangements. Moreover, it may difficult for a new buyer to evaluate the quality of management.

2.4.5.4 Accessibility

Finally, the nature and range of facilities within easy reach enter the trade-off, including shops, schools, banks, and public transport. They may be less important to car dependent households than for those for whom the capacity to walk to services is important. For the latter, the range of services in the local environment could be a determining factor in choice.

There is no obvious distribution of trade-offs across household segments. The difference between apartment dwellers and others is perhaps the most pronounced. Apartments (particularly small apartments) close to the CBD or major centres probably have the most obvious target in the young professional singles and couples segment, with its preference

for accessibility and low commitment to a particular place or style of housing. Yet this does not stop a diverse range of household types also occupying apartments close to the CBD.

This suggests that the way through the diversity of segmentation and the complexity of trade-offs may be to ensure flexibility in multiunit design and operations regardless of setting.

Given sufficient flexibility, housing stock in the CBD, for example, can appeal to a number of segments, and rather than being identified exclusively with any particular demographic, cultural or social group. Flexibility in unit design and presentation also reduces risk to developers and investors.

2.4.5.5 Renter Households

Like purchasers, renters have limited options, but they make choices nevertheless. Within the constraints of renting, they have choice of tenure, for example. They may choose to live with families (contributing to housing costs), share an apartment with friends, board, rent a room, or rent a dwelling in their own name.

Increasing rental tenure is reflected in some innovation and flexibility in supply. Additional forms include renting parts of another house with or without its own entrance, sleep-outs, garages, attic or loft space. Households at Addison, for example, rent out lofts above the garages. There are even reports of people living in garages there.

The housing choices made by renters are influenced by circumstance, from looking for long term security through to renting between house purchases. Some choose to rent in a development where they are considering buying to get a better idea of the area and the housing. This is most likely in new styles of housing where there is some uncertainty.

Recent migrants may be quite transient, while young people often move house.

Renters' concerns about the form of ownership are muted. Often, they have nothing to do with the body corporate, except if a copy of the rules is provided by landlord or manager. In Hanson St, however, tenants are invited to attend the body corporate meetings and included in the social media events. This may be recognition of the potential role of the body corporate in fostering a sense of community within the complex.

2.4.6 Development Challenges

The case studies identified several development difficulties which reflect supply-side issues.

2.4.6.1 Cost

Most of the issues, including those discussed separately below impact on cost. More generally, costs have increased in real terms partly as a result of differential inflation affecting the construction sector. While cyclical movements can increase competition and put downward pressure on prices from time to time, when these become too pronounced, as in the late 1980s and in the course of the current downturn, this can lead to a hollowing out of the sector as trades-people move to Australia and local suppliers cut back or close down. In addition, competition from the civil sector can maintain upward pressure on costs even during downturns.

While the 2008 Parliamentary Inquiry into Housing Affordability suggested a multiplicity of factors influencing house prices, Motu (2006) demonstrated the significant role played by land costs: Between 1981 and 2004, the real (CPI-adjusted) price of vacant residential sections rose by 286% on average across New Zealand. The increase in Auckland City was almost 700%; in Manukau, North Shore and Rodney increases were around 460%. High land prices can constrain demand in two ways, first by suppressing supply and second by directly through the impact on house prices.

Between 1996 and 2010 average house construction costs, according to consents data, increased by 56% nationally in real terms. A significant share of this increment was due to a progressive increase in average dwelling size (up 16%), the balance presumably attributable to real cost increases in the construction sector. Some of these would be attributable to the transaction costs associated with assembling land for larger scale development in a move away from detached housing, planning requirements, and funding costs.

2.4.6.2 Planning Delays

A recurring theme is the slow processing of consents. This can increase cost of assembling and holding property, planning, development, and construction. The result can be to reduce the range of developers in the market, driving smaller and more highly geared suppliers out of the market. While this may favour those with sufficient financial backing, the potential reduction in returns and increase in risk associated with delay reduces the attractiveness of large scale housing development as an equity investment.

The recent property market crash has highlighted this sensitivity to delays and the consequences of a loss of momentum and capacity in the housing sector. One possible response to planning delays is to promote smaller developments. These are not necessarily attractive to large scale developers, however. Unfortunately, small scale developers, with their higher gearing and dependence on pre-sales off plans are unlikely to fill the gap left by withdrawal of large scale corporate investment for the foreseeable future.

Process delays may reflect limited understanding of the market for medium and high density housing in planning and policy circles, and a focus instead on gross density targets in plans. The prescriptive nature of District Plan rules can deter innovation in medium-density housing design as well as pushing up the costs of execution. Developers report that designs may simply be modified to meet planners' requirements to avoid delays. Where expediency has ruled, there is a tendency to do the minimum by way of design and to minimise costs to reduce exposure. .

Despite the impact on costs, planning regulations do not appear to enhance the quality of developments. Apart from discouraging innovation and potentially cutting down discretionary funding for common space, aesthetics, and amenities, they do not obviously reduce externalities, especially those any resulting from massing development in a limited area.

Hence, examples or problems arising from District Plan rules identified included:

- Road widths being too narrow;
- Shading from neighbouring buildings;
- Inappropriate location of garages;
- Proximity of houses to public road;
- Excessive traffic and street noise in the vicinity of developments.

Other issues concerned the location of retail centres, drainage engineering issues, and infrastructure provision. There is a question, also, of how far planning for the public realm – by way of parks and reserves, quality of street frontages, parking provisions, and the like – has responded to the private investment encouraged by policy in medium density housing.

Experience at Ambrico Place where Tuscany Towers is sited suggests a need for design guidelines for medium density housing. The problem arises when these guidelines become rules and thereby destroy the design flexibility and quality they were intended to encourage.

2.4.6.3 Fees

In addition to costs imposed by delays, developers face high consent fees and development contributions. These have increase noticeably in recent years. Examples include:

- A developer having to purchase adjoining properties to overcome objections from neighbours;
- A requirement to install infrastructure well beyond the boundary of the property;
- Funding for consultants to help resolve neighbourhood engineering and retail issues;
- Funding for a project manager within the local authority due to a shortage of resources.

2.4.6.4 Development finance

Medium density housing today faces significant funding challenges. While there are no hard and fast rules the two banks interviewed suggested similar lending criteria would apply across developments. A maximum of 65% of the completed value would be available for the developer if a market for the finished product could be demonstrated. This provision leaves around 10% of the cost to be found from equity investors or mezzanine finance, both of which are in short supply at present.

These conditions tend to favour smaller scale and terrace or town house style developments rather than apartments. The problem with apartments (especially large scale ones) is that once started, the development must be completed. There is no flexibility to pause if the market pauses for some reason.

Another factor working against apartments is the retail lending threshold. Banks are less willing to lend over 65% on an apartment, a considerably lower threshold than for houses implying a more conservative approach to the potential for capital gains or losses.

2.4.6.5 Public Education

The different forms of medium density housing are not always well understood by the house buying public, by planners and by politicians. Even real estate agents are sometimes reported to be unsure about its merits.

Some developers feel there is a need to actively promote different housing styles and communicate the benefits to residents and the wider community. Given the emphasis on public benefits of the compact city, some developers feel the public sector (local council or central government) should take a lead in promoting such developments. The Auckland Regional Council did respond to this by developing guidelines on purchasing an apartment and on the ownership issues associated with bodies corporate.

2.4.6.6 Possible Solutions

Given the potential shared public and private benefits of compact living and the difficulties experienced by developers, it may make sense for the public and private sectors to jointly approach the implementation of more intensive housing developments.

Many of the characteristics that make medium density living attractive are based on the connectivity and amenity of the adjoining locality. The meaning of amenity can be broad, ranging from good public transport, through good local parks and open spaces, shopping, cafés and bars, to access to work. The public sector can encourage more intensive housing by financing some of these amenities or encouraging developers to consider development where these amenities already exist. . This is particularly important in the case of affordable housing given that any additional costs borne by the developer are passed on to the house buyer or tenant.

Mechanisms whereby this can occur can be informal; such as joint planning exercises, or formal, such as public private sector partnerships (PPPs) where public and private sectors take financial stakes in the development vehicle. The scale and location of development may determine the appropriate structure and scope of such cooperation.

There are barriers in understanding and in levels of trust between stakeholders which also need to be addressed. One stakeholder suggested a planners' charter that addresses the most common areas of misunderstanding and provides guidelines for dealing with conflicts. Such a charter would acknowledge the various interests of both parties (e.g. returns on investment, continuity of work, efficient investment in infrastructure, the provision of affordable housing, community development, and good resource and environmental management) and commit to jointly acceptable solutions. A charter would also address the needs and rights of the public (the house buyers and existing residents and businesses, among others) to have their views taken into account.

Early consultation between stakeholders and the sharing of information can help to avoid later roadblocks. One small example of how this can progress is through the "pre-application meetings" held by resource consent planners and other interested parties. This process can help identify any potential problems and help ensure that delays are kept to a minimum.

2.4.7 Conclusions

The case studies have illustrated the satisfaction that residents feel about their medium density housing in quite different settings. This positive outcome may be influenced in part by the fact that the complexes examined were all relatively new, something that has been part of their appeal to purchasers or renters.

The developments considered have appealed to broadly different groups, though, partly reflecting location and style. Hanson Street and the Aston appeal to young professionals who value access to work in the central city (by foot, car or public transport) and the ability to enjoy the social networking and ambience associated with the inner city "cafe culture".

Tuscany Towers is occupied by a wide range of household types, its population much more diverse than more central apartments. This may be because it comprises a more traditional form of housing in the form of terrace dwellings. It is also older and so has been subject to more on-selling. Other than the problems and uncertainty associated with leaking, the

complex appears to work well for residents, in large part because of its accessible location and because of nearby amenities, shopping and services, and a large park.

Addison has a similar household structure but without the same immigrant influence. Many Addison residents have “traded up” to a modern, well specified residence. While this may be smaller than their previous home, a contemporary design, low maintenance, and a relatively close community cater for a desired change in lifestyle.

Urban Ridge is not dissimilar, with a predominance of retired or near retired people who have bought into a house that may be smaller than they have been used to, but which offers a higher level of appointment, less maintenance, and greater security. Again, the motive may be a change in lifestyle, including the capacity to “lock up and leave”.

In both Addison and Urban Ridge, buyers responded positively to exposure to a new form of dwelling with which they were not previously familiar. Because in most cases it is “close to home”, they have been able to meet their changed housing aspirations without locating away from familiar surroundings.

In making these choices in favour of medium density housing the buyers and renters have rejected traditional housing with detached houses and large(r) sections. The space inside the traditional property has been traded off for space outside, either in the immediate vicinity (Addison) or the wider area (Hansen Street and the Aston).

The people we interviewed have been able to find something that met their needs which included a medium density housing option. There will be many others who did not find such a solution.

The question this raises is how many of those who have not found a medium density solution may have done so if more choices were available in their search areas or design features and prices that meet their needs?

3 Key Findings

3.1 The Significance of Market Segmentation

This study has focused on the demand side of the medium density housing equation, addressing what might be done by way of design, quality and affordability to make it more attractive. The main lesson may be that the key to increasing the uptake of medium density housing is to avoid treating either the market or the product as homogenous. This is illustrated by the differences in attitudes between buyers participating in the focus groups and those interviewed who actually live in medium density housing.

Understanding diversity of circumstance and attitude may be a first step in dealing with demand heterogeneity. Hence, the findings outlined below draw across the full range of secondary and primary research reported in the working papers and summarised in the preceding section of this report.

One high level implication of the diversity of markets, housing motivations, and choices is that policies directed at compact cities may have not provided sufficiently for the differentiation of demand or supply. The underlying urban policy may reflect an expectation that medium density housing is best suited to the CBD and CBD fringe, or sites around large commercial centres. This assumes that (1) the number of households that might favour housing in such localities will grow in absolute and relative terms; and that (2) this will lead to a shift in housing preferences on the back of declining average household size.

This policy expectation also implies that people will be obliged and willing to change their lifestyles in response to the increasing resource constraints (reflected in high transport and land costs) associated with urbanisation. The view that more people will live in higher densities in central areas is reinforced by the greater visibility of “cosmopolitan” lifestyles. These include an increase in passive leisure activities, attending artistic, cultural and other events, socialising in public places, including bars and cafes, and socialised recreation.

More recently, policy analyses suggest an increase in higher density living in response to the diminishing affordability of detached housing.

Yet there has been a slower than expected uptake of medium density housing. There is widespread evidence that the multi-unit housing by which densities can be increased is not the first preference for the majority of households. In order to design measures to lift adoption, therefore, we need to understand the nature of demand influencing this resistance. For this reason, the focus in this study has been on understanding potential barriers to or likely drivers of demand for medium density living among households rather than relying on population and household size projections to inform expectations about future demand.

Even with wide-spread resistance to medium density housing there is significant minority demand, and the research described has documented the satisfaction with the resulting lifestyle among residents of multi-unit dwellings.

While generally associated with smaller households, the nature and extent of this support is reasonably diverse and penetrates different market segments. This does not mean that what makes medium density housing attractive to one segment is necessarily what makes it attractive to another. Measures to increase its appeal and uptake need to be sensitive to the

different drivers of preferences among segments, and the likelihood that the trade-offs households make when considering different forms of housing also vary.

3.1.1 Dispersed Medium Density Housing and Spill-over Effects

Consideration of what households are seeking in their housing, and where, suggests that one key to providing for differentiated demand is to allow for medium density housing across a range of localities within geographic submarkets. This raises the issue of resistance by the residents of existing low density suburbs to the prospect of medium density housing being introduced. Like the differentiation of potential demand, however, this may simply highlight the need for greater variety and innovation of medium density housing form.

Medium density housing can be diverse, and can range from traditional detached houses on small sections, through semi-detached housing, terraces and units, to medium (walk-up) and high rise apartment blocks. And within those categories there may be significant design variants that make it possible to provide different forms to relate with sympathy to existing neighbourhood character.

The intensification of built form as a result of introducing medium density housing in a suburb may be compensated by such measures as creating public green space, expanding community amenities, and implementing traffic management measures. Perceptions of increased crowding can be addressed also by urban design techniques. Indeed, urban design might play as important a part in the acceptability of medium density housing as good architecture. One implication of a design response at the neighbourhood or street level is that the public sector may have a significant role to play in lifting local levels of urban design and amenity, especially given the public benefits attributed to intensification.

3.1.2 Defining Segments

The research indicates several different ways of segmenting the market. The relationships among different schema mean there are potentially many diverse segments (Table 4).

The fundamental driver of housing demand is **life-stage**, reflecting the progression of individuals and households through the transitions that influence changing housing need. These are: attaining independence and leaving the parental household; household formation; childbirth and raising a family; empty nesting and retirement; and the increasing dependence of old age. It does not follow, though, that people transition at the same biological age, or that future generations in a particular age cohort will behave in the same manner as their parents before them.

Within a lifestage typology **socio-economic** circumstances will influence housing expectations and the capacity to pay for different forms and standards of dwelling. Socio-economic segments are defined usually by qualifications, vocation, and employment sector and status. These markers may be modified or conditioned by less tangible factors such as social status, cultural practices, family circumstance, and social networks.

Jointly, life-stage and socio-economic status influence attachment to a particular locality. They are also reflected in a household's capacity to invest in the quality, style and features of dwellings.

Even within similar demographic and socio-economic categories households may choose quite different housing types based on **lifestyle** requirements. For example, a retired couple with an interest in travel may have quite different needs from a retired couple more interested in hobbies and socialising. Hence, lifestyle segments may be reflected in choice of neighbourhood as much as housing. Some households opt for an inner city cosmopolitan lifestyle, others prefer the social, recreational and family amenities of suburban life, and yet others prefer the lower densities and natural character of small town, rural, or coastal living.

Table 4. A Typology of Housing Demand Segments

Segmentation Type:	Life stage	Socio-economic Status	Lifestyle
Defined by:	Age, family status	Education, income, wealth	Personality, values, attitudes, opinions, interests, activities
Relevance to housing choice:	Stages & transitions determine housing needs	Status defines expectations & capacity to meet them	Impact on preferences within & across lifestage & socio-economic groups
Examples of Indicators:	Independence Non-family relationships Family formation Childbearing and raising Maturing Family Separation Empty nester Early retirement Later retirement	Occupation Income Housing Tenure Location Quality of housing Expectations of sanctuary	Work status and style Social & leisure activities Function of housing: asset, expression of personality, etc Location Expectations of domain

The potential range of groups and behaviours across and within lifestage categories limits the predictability of either the behaviour of individual households or the collective behaviour of a given population, even within the same age cohorts. The lifestyle preferences of today's retirees, for example, may be quite different from those of their parents. Similarly, the housing choices of adults with children may be different from those of their own parents.

Predictability is also limited by a tendency for households to move across categories. This is obvious in lifestage segmentation, although the ages at which particular transitions take place will vary across generations and among households. Socio-economic segments may also change as a result of income, employment, and social mobility and, over the period of long-term projections, changes in the conditions of society generally.

Hence, as societies become more prosperous there has been a tendency for the materially successful among them to expect and seek larger dwellings. Similarly, lifestyle preferences may change over time as a result of exposure to different opportunities, the impact of previous experience, and changes in societal values and attitudes.

3.1.3 Geographic Submarkets

In addition, there are distinct housing submarkets. If the policy objective is to achieve city-wide intensification by increasing the adoption of medium density housing, how geographic submarkets are treated will impact on achieving it.

Geographic submarkets reflect two dimensions. The first is sector within the city. In Auckland natural north, west, central, east and south divisions have been reinforced by identity associated with the former administrative divisions of Rodney, North Shore, Waitakere, Auckland, Manukau, Papakura and Franklin. The second is defined more or less by distance from the CBD (or other major centres). Geographic submarkets will themselves be internally differentiated along demographic, socio-economic, and lifestyle lines.

3.2 The Proposed Segmentation

The complexity associated with the wide range of potential market segments across submarkets makes it difficult to prepare guidelines for medium density housing that might match refined supply profiles with detailed design preferences. The market is so diverse and the relationship between demand and supply potentially so complex that guidelines can become simply too prescriptive. On the one hand, it is important not to treat the market as if it is undifferentiated. On the other hand, generating guidelines that seek to cater to all the expectations or preferences is likely to be self-defeating.

A more pragmatic approach may define segments appropriate to the task in hand. At the most obvious and basic level the differentiation can be made between those who are active in the market and those who are not, trying to reflect what has prompted people to move and what they are seeking from a new dwelling. At this level, Census statistics suggest a high mobility within the New Zealand population. This is confirmed by other surveys which touch on when people last moved and when they expect to do so. An even higher level of transience is also evident in the apartment populations covered in the case studies.

Several segmentations have been adopted. Based on the review of the international and domestic literature and housing projections prepared for New Zealand (Working Paper 2, Section 4), four categories were proposed to differentiate the key lifestage transitions driving expectations for greater demand based on diminishing household size:

1. Young adults (aged 20 to 29);
2. Empty Nesters (aged 50 to 64)
3. Early Retired (65-79)
4. Later retired (79 years plus).

SNZ projections suggest the middle cohorts in the above list (50 to 79 years) will be the key demand drivers for medium density housing over the next twenty years. Policies to lift the uptake of medium density housing should emphasise their preferences of these people. Our case studies suggest that these are likely to be different from the preferences of the cohorts that have shaped recent demand for inner city apartments.

The “families with children” segment is a limited prospect. The 30 to 49 year age group is growing only slowly, and has perhaps the strongest commitment to detached houses with yards. That is not to say that more families will not move into medium density housing.

Apart from social housing, family households, particularly younger families, are more likely to be found in small site detached, semi-detached, and terraced housing developments.

3.2.1 Buyers

Focus group research conducted with people active in the market explored attitudes towards medium density housing, including those of people who had rejected the option. This suggests that young people, especially renters, are open to higher density living, even though this segment's growth will be more constrained. It highlights the likely emergence of single women, including solo mothers, as a significant segment cutting across age groups.

The family segments are likely to be the most resistant to intensification. However, more flexibility in the design and location of medium density housing might still see an increased uptake among young families. The design attributes which might improve the appeal of medium density to families with children are not significantly different to those for older households, including flexibility and space, privacy and security.

3.2.2 Residents

The case studies suggest using segmentation based on the benefits people gain from alternative forms of medium density housing in different locations. They tend to reflect combinations of lifestage and lifestyle. Hence, apartment blocks in the inner city appeal mainly to young people with active work and social lives and limited family commitments.

Development further from the centre with larger dwellings appeals to older people, including those entering their post-family years looking for comfort, security, and limited maintenance compared with their former detached home. Such options are also closer to young family preferences, especially if location or budget constraints limit their lower density options.

The longer-established inner suburban complex, Tuscany Towers, accommodated a mix of families and people who tend to be transient – migrants and students – taking advantage of local amenities, good sub-regional connectivity, and reasonably appointed dwellings.

3.2.3 Matching Segments and Housing

The main typologies for segmenting the housing market identified in this research, and how the people interviewed evaluate medium density housing leads to very broadly defined categories combining lifestage and lifestyle within specific geographic submarkets.

If certain “must have” attributes can be provided without unduly undermining affordability and allowing a degree of flexibility in design then medium density developments across a variety of localities are likely to appeal across segments, even if they are more strongly suited to and favoured by just one or two.

The location of the housing will reflect and influence its position relative to socio-economic differences. Much the same design principles and styles, however, might be applied to different neighbourhoods of different social or socio-economic status. The differences are most likely to lie in the specifications and capacity that can be sustained by different markets in different areas.

4 Conclusions and Guidelines

One method of consolidating the findings from this study is to incorporate them into guidelines that might inform stakeholders in the development of medium density housing, providing consistent information regarding the measures that might increase the uptake of medium density housing. The limitation of the analysis to qualitative research covering residents of medium density developments and participants in the market limits guidelines to enunciating principles that might be drawn from the observations made.

4.1 The Nature of Guidelines

Preparing and disseminating guidelines is a technique used widely to encourage the adoption of new and better practice in urban planning and design. There appears to be a large number committed to encouraging good design for medium density housing. By and large, such guidelines sit outside any regulatory framework. However, they may reinforce it by indicating how the outcomes sought by particular plans and regulations might be achieved “on the ground”. In this way, there is always a risk that guidelines become rules in planning documents, or interpreted as rules in their implementation.

Published guidelines aimed at encouraging more intensive residential development focus on design and quality issues. They tend to be design- rather than demand-centric, and cover the arrangement and aesthetics of development and the design of housing rather than reflecting housing needs and expectations. Hence, guidelines to medium density housing used in New Zealand and elsewhere tend to focus on type of structure and building form, reflecting the input and perhaps even the preferences of designers rather than residents. They present a professional rather than market-oriented view of the qualities that contribute to desirable – or acceptable – dwellings of different densities.

For example, New South Wales government-owned Landcom explains its “*design and planning principles for housing on compact lots*” as follows:

“This Housing Diversity Guide outlines key design and planning principles for small lots and dwellings. The principles were developed after examining current best practice of developers and builders around Australia. As well as looking at built form (the supply side) we did a detailed assessment of planning codes around Australia (in particular the Development Control Plans in areas where Landcom operates) to see how local planning frameworks may be affecting supply” (emphasis added).

The guide is based on case studies assessed against “*draft design and planning principles*” and an assessment of four house types against “*builder pricing, lot price and town planning/development code compliance*”. The result was the identification of “*key urban design principles for the preparation and assessment of master plans, which facilitate the delivery of diverse housing types*” (Landcom, 2011, 6). The market, in such an exercise, however, is at best represented by the suppliers, Landcom itself, and architecture and housing companies.

Most guidelines of this nature are presented to promote a larger strategy (such as the Auckland Regional Growth strategy, the London Plan, Melbourne 2030, and the Metro Plan for Sydney 2036). Guidelines prepared for medium density housing in the UK by the Commission for Architecture and the Built Environment (CABE) differed insofar as they were

intended to have general applicability rather than being directed at a single strategy or region (CABE, 2008).

Either way, guidelines may be of limited value if they are founded on a limited evidential base with respect market behaviour. As they stand, guidelines tend to be limited to the presentation of exemplars of different types of structure. Yet it is the needs, expectations, and preferences (and trade-offs) of households, the focus of the original research reported here, that will influence the rate of adoption of medium density housing. It is difficult to see how the parsimony and simplification associated with most guidelines might align with the needs of particular segments in particular localities

Given the complexity and dynamics of the market in terms of potential range of segments and the ways in which households might transition among them, this may be the best that can be done, with a limit to the extent to which the interaction of preferred attributes in buyers' minds might be built into prescription.

The current study suggests that location and affordability and not just design or aesthetics are instrumental in the uptake of medium density housing. The challenge this raises is how far design –and design-oriented guidelines – might contribute to enhancing sanctuary (focused on the dwelling) and domain (dealing with the neighbourhood setting), and maintain affordability.

A study of medium density developments in Melbourne (Alves, 2006) also demonstrated how the planning process impedes uptake, introducing another dimension that needs to be included in any guide to good practice guidance. The issue is not just about introducing an explicit market perspective to what needs to be done, but also addressing how it is done.

The aim is to ensure that the views of the public – residents of neighbourhoods intended for intensification as well as potential occupants of medium density housing – are considered and if necessary reflected in development design. Poor consultation may intensify neighbourhood opposition, delaying or even derailing good projects, and increase risks around development and marketing. The guidelines that have been reviewed for the present study pay limited attention to process, instead operating on the grounds that the higher order plan legitimises what they set out by way of desirable development and house design.

Guidelines can be used for individual steps in the process, as suggested by CABE (2010). However, like those that aim to influence design even this approach leads to a proliferation of guidelines. CABE has analysed guidelines covering: national standards; standards that vary by location and type of project; standards for assessment procedures; guidelines for assessment and to processes for planning and building approvals. At another level, location and project guidelines are divided among those applicable to planning, building durability and style, national housing standards; and building regulations. CABE has suggested its “Building for Life” criteria should replace all these guidelines and concentrate all stakeholders on the single set. However, even these criteria do not reflect the market perspective on what is important in medium density housing.

4.1.1 Implications for this study

Building-focused guidelines emphasise technical issues and regulatory standards, while process-oriented guidelines can in theory take a broader view. The current study places dwellings in the context of the physical development, and the development in the context of

the neighbourhood. This framework recognises the range of stakeholders involved and the need for sound processes to ensure that at each point of the development chain they respond in a consistent way to the realities of the market as well as policy objectives.

The original contribution lies in filling a gap by representing market perceptions of medium density housing in a way that will be useful for different stakeholders, subject to the qualification that the study has dealt only with a part of the market and is based on a combination secondary sources and qualitative primary research only:

The following sections review the attributes covered in the current research in the context of developing either broad principles that might inform general guidelines that reach across city, domain, and sanctuary in a way which that might align stakeholders actions.

4.2 Preferred Attributes

The study has generated a lengthy list of attributes of what people seek in their residential choices, or which would influence their decision about what to buy. Prioritising among attributes will differ according to segment. Some attributes, though, may be sought after across all segments. In any higher density housing, these are “the bottom line”, the “must haves”. From the point of view of supply, they are the features necessary, if not sufficient, to ensure the marketability of medium density housing. These are summarised below.

Accessibility

Accessibility is important right across the board, but may be defined quite differently by different market segments. In generic terms accessibility will relate to the availability of public transport and proximity to motorways or arterial roads, facilitating connectivity with other parts of the city. In terms of domain, accessibility may relate to the availability of local services and amenities and how easy it is to get to them by various modes – car, cycle, foot or public transport.

Jointly these attributes suggest that accessibility has multiple dimensions, with favoured locations offering both local amenities and good connectivity beyond the neighbourhood.

Higher order (or more specialised) amenities, goods, and services such as tertiary education, specialist health care, and employment may be accessed further afield within the city or metropolitan area. These effectively bind people to the wider urban area beyond their immediate domain. The capacity to access them is an important influence on housing choice that will vary among households. Hence, a household of working adults may value the capacity to access a range of work locations. An older household may value access to centres of entertainment or medical facilities. Inner city locations offer the capacity to combine domain and connectivity attributes.

The key message is that a combination of proximity to local services and amenities and the ability to move easily to other localities including, but not limited to the CBD will provide the level of accessibility people expect from medium density and multi-unit development. Appropriate localities need not be in or even adjacent to the CBD or even town centres to offer these attributes.

Accessibility: *Medium density housing requires locations which provide a high level of access to local services and good connectivity to other parts of the city*

Safety and Security

Primary among the must-haves are security and safety at the level of domain (the neighbourhood and development) and at the level of sanctuary (the development and the dwelling). In the former this may reflect the quality and visibility of roads and provision for pedestrians, including children, within residential developments and in the wider neighbourhood.

This impacts on such things as: the width, visibility lines, and provision for movements by modes other than (as well as) cars on roads, drives and other access ways; the adequacy or otherwise of parking arrangements (including turning areas) for residents and visitors; speed limits; ease of movement and visibility around the site; avoidance of screened areas; the treatment and visibility of reserves, meeting places, gardens, parks, and playgrounds; avoidance of “dead” areas around buildings which can be used to screen intruders; and normal safety provisions around windows, doors and balconies.

Safety and Security: *Treat safety and security as drivers behind the design of the complex as a whole, its relationship with the neighbourhood and individual spaces and dwellings within it.*

4.2.1 Differentiating Between Domain and Sanctuary

Most other attributes can be divided between those relating mainly to domain and those relating mainly to sanctuary. This division is significant because people’s perception of medium density housing and their preferences are informed by neighbourhood and dwelling attributes, which may be traded off in the final choice of dwelling.

The division is critical also because it reflects the division of responsibilities among professions and suppliers: the quality of neighbourhood ultimately falls to the local authority through its plans, investment in infrastructure and amenities, and support of community development.

The quality of the **domain** is a joint responsibility between the local authority, developers, and bodies corporate. It is influenced by urban and landscape design decisions, the economics of development and construction, and the governance, management, and funding of public spaces in and around residential developments.

The quality of the **sanctuary** is also a responsibility of the developers, shared with urban designers, architects, and bodies corporate. It is influenced by the nature of dwellings and how they interact with their neighbours and with the public domain, whether that is the street, footpaths, or neighbouring houses. Maintenance will be an important influence, and the capacity for individual households to modify (and personalise) their dwelling.

4.2.2 Attributes of Domain

With the growth of older adult households (associated with the aging of the baby boom generation) demand for medium density housing is likely to be less concentrated than it has been to date. The dominant location preference among established and older households is to stay more or less in existing neighbourhoods or in submarkets defined at a sub-regional level. This maintains a sense of connection or belonging and encompasses the area where

a person circulates in day-to-day life, more so as they become older. Here they might expect to meet the bulk of their consumption, social, health, recreation, and educational needs through local amenities and local networks.

In order to encourage a greater variety of households to move to higher density accommodation it is important to provide for opportunities to be distributed throughout the city. This also means allowing a variety of medium density housing types, both to recognise the diversity of lifestyles to be catered for and in recognition of more difficulties associated with land assembly and medium density development in suburban areas.

Distribution and Diversity: *Recognise in planning the desirability of introducing a variety of medium density options (by way of housing types and lifestyle options) across a range of locations.*

4.2.2.1 Neighbourhood Amenities

The most frequently mentioned neighbourhood amenities are good schools for households with families. Schools may play a multiple role as centres of community activity and a focus for social networks. The absence of easily accessed schools may be an impediment to families in brownfield city or town centre developments, although this can be offset by the quality of transport connections with alternatives outside the immediate neighbourhood. It may be countered by the appeal of other attributes and compensated by good transport connections with more distant schools. This is more likely with older than younger children.

Places for children to play and parents to meet include parks and playgrounds. Safe, visible, walkable facilities are valued by households. In this respect, areas with busy roads and inadequate footpaths are likely to be seen negatively by families with young children.

Local shops and cafes add to the appeal of a locality, and are cited by residents as part of the attraction of where they live. Other amenities such as medical centres or recreation facilities were less often mentioned, although the presence of local parks and reserves was important to residents of the suburban developments at Tuscany Towers and Addison.

How far their presence contributes to the decision to purchase in a particular development or neighbourhood is unclear. Certainly the presence of such facilities is promoted when dwellings are marketed. The inference is that spontaneous reference to schools, parks and green space, on the one hand, and proximity to the amenities of the CBD, on the other, relegated other facilities to the “nice to have” category in our case studies.

Neighbourhood Amenities: *Medium density development should be favoured in areas with a range of nearby community and commercial amenities; or developed in areas where there is a commitment to the provision of such amenities.*

4.2.2.2 Urban Landscape

Neighbourhood appearance has a bearing on housing choice. There is some resistance to mixed development either by way of provision for medium density housing in commercial or light industrial areas, or as a result of brownfield development in run down precincts.

The urban character that appears to be preferred is one in which there is greenery and open space. Landscape and amenity may merge attributes given the capacity of public spaces to be developed and managed in a manner that enhances the landscape, softens the built up character of an area, and adds to ambience and general attractiveness to residents.

Even with apartment dwellers there is some concern over the impact of continuing intensification on the character of the neighbourhood.

Urban Landscape: *The focus of urban design for medium density housing development should be on the character and quality of residences, green spaces, and the associated urban landscape; where development takes place in a mixed use area the impact of unrelated uses should be mitigated by appropriate design or planning measures.*

4.2.2.3 Scale of Development

The scale of development is significant at several levels. Residents of apartments or comprehensive developments, like their counterparts in predominantly single house suburbs, tend to resist further intensification. This may be a reaction to the “massing” of the urban landscape around them, the cumulative impact on character, and the associated crowding.

In keeping with this, low rise (up to three storeys) rather than high rise apartments are preferred, and horizontal (terraces, town houses, small detached or semi-detached dwellings) rather than vertical (apartments) structures.

A preference for smaller scale may reflect the perceived amenity that can be achieved in walk-up apartments, with perhaps half of them having ground floor and direct outside access, or simply a greater sense of community. It may reflect a reaction against perceived crowding, or perhaps, a greater loss of control associated with a large body corporate.

In comprehensive developments the impact of scale and uniformity can be reduced by the creation of enclaves, creating the opportunity for familiarity and neighbourliness. There is a tendency for people to associate with their immediate neighbours in any case, something that poor design might frustrate and good design might encourage.

Scale of development: *Avoiding spill over effects and encouraging uptake of medium density housing will be achieved by limiting the scale of individual developments (a maximum of three or four storeys) and the local density of multiple developments.*

4.2.3 Attributes of Sanctuary

Attributes influencing housing choice do not necessarily differentiate according to housing density. How favoured attributes are incorporated into medium density housing will, however, influence how positively households look on it. If gardens, privacy, and space prevail in a segment's attitudes and cannot be achieved in medium density development their preferences will lean towards detached housing. If low maintenance is important and outdoor space less so, they are more likely to favour apartments. By designing elements of both into medium density housing it may be possible to broaden their general appeal.

Alternatively focusing on one – e.g. privacy and space – the appeal to one segment will be reinforced and weakened for the other.

4.2.3.1 Dwelling Site and Layout

As people are attracted to the convenience and comfort of modern dwellings a traditional interest in bungalows, “do-ups” and established homes may give way to a preference for the convenience, low maintenance, and comfort associated with contemporary dwellings.

There will remain an expectation for spaciousness, however, and this is likely to be stronger among older than younger candidates for medium density housing. This can be reflected in open plan living, which also provides for flexibility of use. Indoor-outdoor living is also important, both for the sense of space it offers and to meet a desire for good light and sunshine, on the one hand, and access to the outdoors on the other. This may be achieved by large balconies or small garden spaces, ideally screened from neighbours and the public.

Security and safety at the dwelling level are influenced by the capacity to fence or screen private areas. They also call for some control over entry and egress, and avoiding intrusive inward views from neighbours or the street. The challenge is to maintain a light and sunny aspect, without opening the interior to viewing from the outside.

Fences are not simply associated with privacy. They may be tied to the wish for a garden. Despite a move to reduce maintenance; gardens may remain a significant priority for many people. This may be to do with a sense of self-sufficiency, the satisfaction that creating and tending a garden brings, or aesthetics and the ability to create something personal. The preference was for private gardens. Apart from allowing personalisation, shared gardens were seen as reducing the ability to enjoy some privacy and reducing dwelling security.

The ability to personalise a dwelling may be an important motivator for buyers. Indeed, the restrictions on exterior design and embellishment are seen as a disadvantage of multi-unit living and a negative influence of bodies corporate. Space for gardening enables some individualisation. In apartment blocks, large balconies may provide a similar opportunity.

Dwelling Site and Layout: *Medium density housing should be modern in design, with a layout that allows for some personalisation supported by private outdoor space.*

4.2.3.2 Capacity

The capacity of a dwelling –its size -- is an obvious determinant of suitability for any given household, although socio-economic conditions mean that there is not always (or often) a neat match between supply and demand.

Capacity is one area in which flexibility is an important design ingredient. It can be provided by ample size of rooms, providing for flexibility in their use, and even by allowing for moveable partitions. It may be provided at the design stage when buyers’ and likely occupants’ needs and views may be incorporated. Alternatively it can be provided by offering a range of alternative floor plans.

Capacity is not just about housing a given number of inhabitants. It is also about the lifestyle a dwelling affords, reflected in space for hobbies and crafts. The ability to use a garage as a

workshop or for storage is important, or a bedroom for an office or studio. An additional room may provide for friends and relations on short or long-term visits, or enable a household to take boarders or flat mates to contribute to housing costs or the household budget.

The notion of privacy influences capacity. Some respondents indicated that areas within the house or even their backyards open to viewing by neighbours or passers-by became restricted in their use. The impact is to effectively reduce utilisation and lower the comfort associated with that area of the home. Even entertainment in the garden could be curtailed if there was a sense that conversation could be heard too clearly in the neighbouring unit.

<p>Capacity: <i>Medium density dwellings should be of sufficient size to provide adequate space, including storage space, for flexible living arrangements, which may entail multiple uses of rooms without undue visual or noise intrusion.</i></p>

4.2.3.3 Comfort

Some of the attributes raised in the research were to do with comfort. Comfort is afforded in part by satisfactory performance at all levels – dwelling, capacity, and quality– as discussed above. The reference here, though, is to how people see themselves living on a day to day basis “within the walls”.

There are some obvious attributes that contribute to comfort; warmth and the absence of leaks being obvious ones. Also important is whether or not the character and positioning of the dwelling provides all rooms with access to natural light and ventilation. In bathrooms in particular direct external ventilation via a window was important.

Maximising outside wall exposure and window coverage without impinging on privacy is a design challenge. The importance of sunlight and warmth highlight the role of aspect (as well as insulation) and offer another design challenge, especially in large scale apartments.

Aural privacy is also important – avoiding intrusive noise from neighbours, in particular, and street noise. There are some obvious design responses, ensuring separation of living rooms and bedrooms through the positioning of halls and staircases on common walls, for example; providing sufficient standards of insulation and noise proofing between apartments; and providing double glazing and sound resistant structural and cladding components on the outer walls. Provision of a separate room for the laundry was also seen as desirable to isolate the associated noise.

<p>Comfort: <i>Internal layout and treatment of external walls and windows and materials should contribute to adequate natural internal light, ventilation, and good thermal and aural insulation to enhance the liveability of dwellings.</i></p>

4.2.3.4 Quality

The leaky buildings episode has increased awareness of the risks of inadequate materials and construction methods and consequently, increased resistance to multi-unit dwelling. Consequently an assurance of structural integrity and the durability of materials have become “must haves” in the medium density market.

For many households the initial appeal of medium density dwellings lay in the quality of fittings. This reflects the fact that the case studies involved reasonably new developments. Clearly, the use of quality fittings and finishings -- floor coverings, cabinetry, appliances, hardware and the like -- influence perception of housing and may compensate for the reduced space people are faced with when they move into medium density housing.

Quality: <i>The integrity of structure and materials is important to the market while quality fittings will increase the attractiveness of medium density housing.</i>

4.3 Affordability

The principles outlined suggest design measures and provisions that should lift the appeal of medium density housing and increase demand. However, for many buyers achieving the levels of appointment, spaciousness and quality that would make a difference is likely to remain beyond their reach. Multi-unit dwelling of the style and standard that they would wish to live in remains aspirational. The developments surveyed by case study are affordable in large part for young working (and often professional) couples or for people reaching the end of the housing career who have been able to trade across (or up) from existing homes.

The exception may be Tuscany Towers where original owners have lost value and dwellings have become affordable because they have not been well constructed.

Implementing the principles advanced here would not necessarily make medium density more affordable and therefore would not increase choice for many in the housing market. The House Prices Unit (2008) concluded that the most likely ways to achieve a long-term reduction in housing prices was to streamline regulatory systems and increase land available for development. There has been little evidence of a response to this thinking since.

Despite all the analysis done, measures devised, and reports delivered, poor affordability simply reflects the high price of housing and the fact that it has continued to increase faster than household incomes. This makes it difficult and expensive to assemble the land necessary for the sort of comprehensive development that is necessary to achieve lower unit building costs in medium density housing. This leaves insufficient price differential between multi-unit housing and detached dwellings to encourage a shift from the latter to the former. And this simply adds to the risks that prospective investors and developers face in today's over-complicated regulatory and conservative commercial environments.

The high cost of housing generally and multi-units in particular, has led to a growing rental sector. Measures residents take to improve affordability include extended family living, home-stays (paying subtenants) and perhaps more people sharing (flatmates) houses and apartments than would be necessary in a more affordable housing market. In some cases the share of rental properties in medium density developments is moving up to a level that meets resistance from owner occupiers. There is a concern that more renters will undermine dwelling values. If this eventuates, affordability may be assisted but demand for medium density housing may suffer. The market may tolerate a greater diversity in lower density developments than in higher density because there is less erosion of sanctuary.

Currently, the very tight housing supply in New Zealand and especially Auckland means that people are prepared to accept significant compromises in their housing. The results of falling ownership and the commitment of growing shares of households (and their incomes)

to renting, this is likely to lift the average occupancy of dwellings and raises the spectre of widespread crowding. It may also impact on family formation and birth rates, increase transiency, and contribute to more volatile labour markets.

Market conditions that have led to relatively high prices in the lower housing price quartile have raised the affordability bar to entry level private housing, especially in Auckland. One way to redress this may be to create medium density housing options that appeal to current owner occupiers thereby freeing up existing second-hand stock and hopefully generating sufficient movement in the second-hand house market to lift the prospects of home ownership in the intermediate housing (two income households without the ability to purchase) and the young family markets. More options for medium density housing in more parts of the city might also reduce investment and development barriers, increasing the capacity of the market to supply through a proliferation of smaller scale developments.

A shift in policy and market settings to achieve this would correct what appear to be the prevailing assumption that the way to increase choice comes from building multi-unit housing primarily for entry level purchasers or rentals by way of apartments, rather than as a viable option for mature and ageing households. Our assessment of Addison and Urban Ridge, in particular, indicate that this might be an effective alternative. The success of the retirement village sector also confirms this.

By directing a substantial share of multi-unit developments at the middle two quartiles, observing the sorts of design principles outlined above, there may be a prospect of boosting housing stock at standards of design and quality and affordability that can free up the market and achieve greater intensification at the same time. This implies a significant shift, though, from the sort of apartment stock that has dominated the growth of the medium density market over the past decade, and far greater provision for and encouragement of diversity in type, style, and location of medium density housing.

One benefit of this will be the potential to free up the second-hand market, providing a wider range of entry opportunities for the current intermediate market renters in particular.

Affordability - Recommendation: *Review current plans and regulations affecting the construction of multi-unit development with a view to increasing flexibility to promote diversity and innovation in new medium density housing throughout urban areas, including inner and outer suburbs, and encourage a more flexible and active residential market for existing homes.*

4.4 Governance and ownership

4.4.1 The Unit Titles Act 2010

The Unit Titles Act 2010 provides for the rational ownership and management of multiple dwellings with each dwelling unit owned outright but with shared property, including land, held in common by all the owners. This arrangement makes it relatively straightforward to develop a variety of styles, scales, and formats of multi-unit dwelling.

One of the impacts of the previous Unit Titles Act 1972 was to create the capacity to develop relatively small developments. The revision of 2010 was intended to rationalise its operation to reduce the costs and inconsistencies associated with a variety of ad hoc bodies (Dupuis

and Dixon, 2010) and the ongoing issues from unsatisfactory governance arrangements that might result (Dixon and van Roon, 2010).

The provisions of the Unit Titles Act offer comfort to purchasers of apartments in larger developments regarding the transparency and equity of arrangements for ownership, management, and maintenance. While reducing individual rights over property, it adds to the confidence necessary to sustain a market in apartments, the more so as the market becomes more familiar with unit title ownership.

Through this the Act enables small investors to participate in large, often downtown, developments. Equally, unit title facilitates the development of smaller developments – terraces, town houses and low rise apartments, for example – by providing a relatively low cost and straightforward vehicle for management and maintenance. Among other things, unit title has helped promote the absentee owner or retail investor market and consequently increased the supply of rental accommodation.

4.4.2 Consequences of unit title

Randolph (2006) raises questions over the long-term implications of these governance and ownership arrangements in a discussion of strata title in Australia. He raises questions over the capacity of strata management to deal with major refurbishment needs as properties age and with the need eventually for site redevelopment. He also questions whether there is a long-term market for the sorts of dwelling associated with strata title -- typically small (two bedroom) apartments in central areas -- and questions their likely impact on social segregation from the way they encourage the emergence of homogenous local communities.

The evidence in the current study suggests that bodies corporate can operate reasonably effectively in the short term. In Tuscany Towers the body corporate through its on-site manager maintains good standards in common areas, and has been effective in achieving some redress for faulty construction. In Hanson St the owners' committee was seen as an important and positive contributor to the character of the resident community.

These impressions may simply reflect the relatively new nature of the developments covered. More contentious issues are likely to come to the fore longer term, and these may become more divisive as early owners move on. Certainly, the turnover in units and increasingly diverse occupants will see more divergent views brought to bear on the management, maintenance, and use of common areas. For example, the mixing of families with older children and their need for activity space with older households with a preference for quiet and tranquillity is already an issue among some of the people interviewed.

Growing cultural diversity is also challenging. Communities struggle to find common interests for social interaction especially with language and other cultural barriers. Policies to encourage diversity may see festivals and celebration of diversity at the city-wide level but these do not reflect the daily realities of diversity in more intensive housing developments. There may well be a role for community development initiatives to assist in this area.

4.4.3 Rental tenure

The report has also highlighted issues around growing rental tenure, and the potentially negative impact of a high share of renters on the sense of community for owner occupiers

and on property values. As the intermediate housing market expands and housing stress increases, this division is likely to increase, together with the spatial segregation effect of multi-unit dwelling, especially if dominated by small units in apartment blocks in central areas.

If this rental tenure is to continue to grow, it will be important to reconsider legislation pertaining to the relative rights of owner and occupier of rental properties. The aim would be to better protect the value of the owner's property and the value of the properties of other owners in the same development, and the medium- to long-term security of occupiers including renters. This is especially the case if more families are faced with long-term renting. Greater security and longer term tenancies may encourage a greater commitment to the host community and help to break down the resistance to renters from owners.

Given a long-standing cultural, economic, and social commitment to owner occupancy in New Zealand, though, its association with social stability and economic progress, the aspirations of the population, and especially expectations associated with a maturing population, maximising ownership should remain a priority in policies directed at medium density housing. Ownership will be achieved more readily in settings which provide for a diversity of household types, through design and location. While policies directed at affordability should ensure that rental levels remain reasonable, it can be argued that their objective should remain facilitating the transition to ownership.

Ownership - Recommendation: *Recognise the social, cultural, and economic importance of home ownership to the majority of New Zealand households and provide for the diversity of housing development that will help to meet those aspirations, including the preservation of property values.*

4.5 From Planning to Implementation

There has been rapid growth in medium density dwellings in New Zealand, particularly in Auckland, but not necessarily where it was planned. This growth has contracted sharply in a depressed market, however, much more than it has in detached housing.

There is an association between medium density housing and growing rental tenure, but little if any evidence that encouraging medium density housing has helped ease stress in the Auckland housing market.

This report has suggested some reasons why this might be so:

- There remain major impediments to investment – the long-standing supply-side issues some of which are associated with an unsympathetic consenting environment;
- The poor construction and structural standards of the last twenty years have added to a widespread aversion to multi-unit housing;
- The form of multi-unit development in many places – medium rise apartments – put in place to date tends to focus on the young – pre family -- and transient ends of the market through its design and location, while the greatest prospects for growth lie on the more advanced rungs of the housing ladder;

- There is some resistance to living close to people with different lifestyles – young non-family households, party-goers and students, immigrants, renters compared with families or older households, for example. An increase in the share of transient people or concentrations of residents who are “different”, including immigrant groups, makes owner-occupation of multi-unit developments unattractive to some people;
- There is a commitment among families, especially families with children but also among older households, to detached housing and suburban communities;
- Property values are more easily enhanced or protected where the owner has the control and capacity to modify or individualise a dwelling in ways which are not possible in multi unit housing.
- The design of many units has been lacking, especially in terms of space and privacy.

Based on the satisfaction observed among residents of existing developments, there is nevertheless significant potential for multi-unit housing to play a bigger role in the future. The report has indicated what may work by way of design and quality, and proposed principles and recommendations that should help in this.

However, the experiences of residents and other stakeholders suggest more deep-seated problems associated with lack of a coordinated approach to development, while population dynamics suggest at least two long-term issues that will require greater attention to be given to collaboration. The first is the shift in relative demand from young to older cohorts and in expectations about the design, quality, and management of medium density housing. Responding to this is not something that can be done simply by tweaking plans and regulations.

The second is the need to manage the relationships between owners and renters within medium density developments. This might in the future call for greater involvement of local councils, especially where it impacts on the interface between public and private spaces, rights, and responsibilities.

Despite the public policy commitment to creating more capacity for smaller households in smaller dwellings there appears to be inconsistencies among and within agencies and a lack of trust between the public and private sector parties involved.

Inconsistencies often relate to the intent of policy makers and the plans they prepare compared with the limited support that other parts of councils might give to those responsible for implementing their policies on the ground: the development sector. Hence, consent officers are seen to be acting inconsistently with policy or policy objectives when they delay consents or impose excessive conditions. Development contributions levied on inner city properties do not appear to reflect the purported public benefits of intensification. Infrastructure may be below capacity with an expectation that the developer – and ultimately therefore the resident – will meet the costs.

The opportunity for intensification in suburban areas, which may call for a greater variety of outcomes and rely on small scale initiatives, can be frustrated often by zoning regulations. Attempts to achieve higher density living in greenfield sites may be frustrated by rigidity around urban limits. The local public amenities that might increase the appeal of higher density developments in more centralised areas may be lacking and councils slow in

progressing community facilities that might compensate residents for reduced private space and a reluctance to take on maintenance responsibilities after construction.

Without alignment of objectives among the various stakeholders, it is unlikely that the sorts of increase in density that plans currently call for will be achieved in a satisfactory manner. This means working together to accommodate:

- The ownership, lifestyle, and comfort aspirations of the public;
- The risk and return requirements of investors including institutional and retail debt and equity investors;
- The risk and return profile and needs of the sector;
- Policy outcomes sought by way of social, economic, and environmental sustainability.

The necessary cooperation can take place at several levels:

- Through the more careful alignment of regulatory and institutional frameworks relating to planning and plans, building standards, infrastructure supply, ownership, and development;
- By ensuring that city-wide plans and local plans are mutually consistent; reflect public expectations, needs, and means; and can be achieved within the current commercial framework or a reasonable variant of it;
- By creating cross-sector teams for the planning, development, and implementation of larger comprehensive developments where these are clearly justified;
- By developing protocols for cooperation between councils and bodies corporate in areas of mutual interest.

This may well call for institutional as well as procedural changes that commit the key players to collaborating through the course of planning, design, and implementation, with a key element the requirement to engage with the market from the outset.

Implementation - Recommendation: *That in the preparation of policies, plans and targets intended to increase housing densities, policy makers should incorporate community attitudes and expectations, identify how they will be implemented, and make explicit the role that planners, infrastructure providers, and other government agencies and developers are expected to play in this*

References¹

- Alexander E (1993) "Density measures: a review and analysis" *Journal of Architectural and Planning Research* 10, 3, pp181-202
- Alves T (2006): "Managing Medium Density Housing Development: A municipal case study". PhD Thesis Swinburne Institute of Technology Australia.
- Ancell S and Thompson-Fawcett M (2007) "The Social Sustainability of Medium Density Housing: A Conceptual Model and Christchurch case Study" *Housing Studies* 23,423-441
- Auckland Regional Authority (1974) *Operative Regional Planning Scheme*, Auckland
- Auckland Regional Authority (1982) *Proposed Auckland Regional Planning Scheme*, Auckland
- Auckland Regional Authority (1988) *Proposed Auckland Regional Planning Scheme*, Auckland
- Auckland Regional Council (2003) *The Mysteries of Bodies Corporate: A guide to rights and responsibilities of apartment owners.*
- Auckland Regional Council (2007) *Growing Smarter: Auckland in the 21st Century, An eventuation of the Auckland Regional Growth Strategy 1999* Report to the Auckland Regional Growth Forum
- Auckland Regional Council (2008) *Capacity for Growth Study* Technical Publications 369
- Auckland Regional Council and North Shore City Council "What to look for when buying a terraced house or an apartment"
- Auckland Regional Growth Forum (1997) *Residential Intensification Developer Survey* Auckland Regional Council
- Auckland Regional Growth Forum (1999) *Auckland Regional Growth Strategy* Auckland Regional Council
- Auckland Regional Growth Forum (2000) *Key Methods for Implementation*, Auckland Regional Council
- Auckland Regional Growth Forum (2003) *Auckland Metropolitan Area: Capacity for Growth 2001*, Auckland Regional Council
- Auckland Regional Growth Forum (2006) *Developer Survey: Intensification in Auckland*, Auckland Regional Council
- Auckland Regional Growth Forum (2007a) *Growing Smarter: the Auckland Region in the 21st Century. An Evaluation of the 1999 Regional Growth Strategy*, Auckland Regional Council
- Auckland Regional Growth Forum (2007b) *Auckland Sustainability Framework: an Agenda for the Future*, Auckland Regional Council
- Auckland Regional Growth Forum (2007c) *International Trends and Lessons in Growth Management* Auckland Regional Council

¹ The list of references is drawn from the project working papers as well as Final report.

- Auckland Sustainable Cities Programme (2006) *Success in Sustainability* Manukau City Council
- Audirac I and Shermyn A, Smith T (1990) "Ideal Urban Form and Visions of the Good Life: Florida's Growth Management Dilemma" *Journal of the American Planning Association*, Autumn, 470-482
- Bayer P, McMillan R, Murphy A, and Timmins C (1997) *A Dynamic Model of the Housing Market*, Manuscript, Duke University http://www.stanford.edu/group/SITE /archive/SITE_2007/segment_5/bayer_dy_dem_paper7_12_07.pdf
- Beacon Pathway Ltd (2010) *The Determinants of Tenure and Location Choices of 20-40 year old Households in the Auckland Region*, Centre for Housing Research Aotearoa, Wellington
- Bedford R (2002) *Recent Development in Population Movement*, Report to SmartGrowth Bay of Plenty, Waikato University, Hamilton
- Beer A, Faulkener D (2007) "Myth Busted: Australians and their Housing in the 21st Century" Paper Presented to the School of Geography, Population and Environmental Management, Flinders University, www.socsci.flinders.edu.au/ahuri.src/docs/MythBustedSeminarPaper.pdf,
- Beer A, Faulkener D (2009) *21st Century Housing Careers and Australia's Housing Future* Australian Housing and Urban Research Institute, Southern Research Centres
- Beer A, Faulkner D, Gabriel M (2006) "21st Century Housing Careers and Australia's Housing Future: Literature Review", National Research Venture 2: 21st Century Housing Careers, *Working Paper 1*, Australian Housing and Urban Research Institute, Melbourne
- Bennett J (2010): "New Zealand Apartment Living: Developing a Liveability Evaluation Index" University of Victoria.
- Blandy S, Dupuis A, and Dixon J (2010) *Multi-Owned Housing: Law, Power and Practice* Ashgate, Surrey
- Boffa Miskell (2009) *Case Studies of Intensive Urban residential Development Projects*, Department of Building and Housing, Wellington
- BRANZ (2007), *Changing Housing Need Study Report 183*, Building Research Association of New Zealand, Wellington.
- Bray Sharpin A (2006) "The Social and Environmental Effects of Residential Development in New Zealand" *Urban Development Strategy Working Paper 6*, Wellington City Council
- Bruegmann R (2005) *Sprawl: A Compact History*, University of Chicago Press, Chicago
- Brownlee G, Chairperson (2008) *Inquiry into housing affordability in New Zealand* Report of the Commerce Committee Forty-eighth Parliament
- Buys L and Miller E (2011) "Conceptualising convenience: Transportation practices and perceptions of inner-city high density residents in Brisbane, Australia", *Transport Policy*, 18, 289-297
- CABE (2010): "Improving the design of new housing: what role for standards?"
- CABE (2010): "Mapping Space Standards for the Home" <http://www.london.gov.uk/thelondonplan /policies/4b-01.jsp>
- CABE (accessed January 2011): "Creating Excellent Buildings: A guide for clients" <http://webarchive.nationalarchives.gov.uk/20110118095356>

- CABE (accessed January 2011): "Creating successful master plans: A guide for clients"
<http://webarchive.nationalarchives.gov.uk/20110118095356>
- Carliner M (2001) "Comment on Dowell Myers and Elizabeth Gearin's 'Current Preferences and Future Demand for Denser residential Environments' *Housing Policy Debate* 12, 4, 661-664
- Chapman R B (1981) *To rent or buy? Housing Tenure Choice in New Zealand, 1960-80*. PhD Thesis, University of Auckland.
- Christchurch City Council, Environmental Canterbury, Transit New Zealand, Selwyn District Council, Waimakariri District Council (2007) *Greater Christchurch Urban Development Strategy and Action Plan*, Christchurch
- Churchman A (1999) "Disentangling the concept of density" *Journal of Planning Literature*, 13, 389-411
- City of Sydney (1996 consolidated 2010): *Central Sydney Development Control Policies: Residential buildings*
- Commission for Architecture and the Built Environment (2008) "Building for Life: Delivering great places to live: 20 questions you need to answer".
- Darroch Ltd (2010) *Auckland Regional Housing Market Assessment*, Centre for Housing Research New Zealand Aotearoa, Wellington
- Davey J (2007) "Ageing in Place: The Views of Older Homeowners on Maintenance, Renovation and Adaptation" *Social Policy Journal of New Zealand*, 27
- Department for Communities and Local Government UK (2010): *Planning Policy Statement 3 Housing*, London.
- Department of the Prime Minister and Cabinet (2008) *Final Report of the House Prices Unit: House Price Increases and Housing in New Zealand*, Wellington
- Dixon J and Dupuis A (2003) 'Gatedness and Governance: Residential Intensification in Auckland, New Zealand, Paper presented at the Gated Communities: Building Social Division or Safer Communities? Conference, University of Glasgow, 18-19 September, 2003
- Dixon J, Dupuis, A, Lysnar P (2001) "Issues in Medium Density housing", *Planning Quarterly* June 2001, 9-11
- Dixon J, Dupuis A, Lysnar P (2004) "Urban Innovation or Fortification" *Planning Quarterly*, March 2004, 9-12
- Downs, A (2005) Smart Growth: Why we Discuss it More than we Do it" *Journal of the American Planning Association*, 71, 4, 367-378
- DTZ New Zealand (2004) *Changes in the Structure of the New Zealand Housing Market* Centre for Housing Research, Aotearoa New Zealand, Wellington
- DTZ New Zealand (2005) *Changes in the Structure of the housing Market* Centre for Housing Research, Aotearoa New Zealand, Wellington
- DTZ New Zealand (2005) *Housing Tenure Aspiration and Attainment* Centre for Housing Research, Aotearoa New Zealand, Wellington
- DTZ New Zealand (2007) *The future of home ownership and the role of the private rental market in New Zealand*, CHRANZ, Wellington
- DTZ New Zealand (2008) *The Intermediate Housing Market in New Zealand*, Centre for Housing Research, Aotearoa New Zealand, Wellington

- Dupuis A and Dixon J (2010) "Governing Multi-owned residential developments in New Zealand" in Blandy, Dupuis and Dixon (2010) 193-206
- Dyckman J (1976) "Speculations on Future Urban Form" *Working Paper* Center for Metropolitan Planning and Research, John Hopkins University, Baltimore
- Easthope H and Randolph B (2009) "Governing the compact city: the challenges of apartment living in Sydney, Australia" *Housing Studies* 24, 2, 243-2569
- Ely A (2004): *The home buyers guide: What to look and ask for when buying a new home* Black Dog publishing, UK
- Felt E (2007) *Patching the Fabric of the Neighborhood: The Practical Challenges of Infill Housing Development for CDCs* Joint Center for Housing Studies, Harvard University
- Firey W (1947) *Land Use in Central Boston* MIT Press, Cambridge MA
- Fischel W (2001) *The homeowner hypothesis: How home values influence local government taxation, school finance, and land use policies* Harvard University Press, Cambridge, Massachusetts
- Flint A (2005) "The Density Dilemma: Appeal and Obstacles for Compact and Transit-Oriented Development" Lincoln Institute of *Land Policy Working Paper*, Cambridge, Massachusetts
- Forsythe A (2003) *Measuring Density: Working Definitions for Residential Density and Building Intensity*, Design Center for American Urban Landscape *Design Brief*, Number 8, University of Minnesota
- Friesen W (2009) "The Demographic Transformation of Inner City Auckland" *New Zealand Population Review* 35, 55-74
- Gober P (1992) "Urban housing geography", *Progress in Human Geography*, 16, 2, pp171-189
- Gordon P and Richardson H (1997) "Are Compact Cities a Desirable Planning Goal?" *Journal of the American Planning Association* Winter, 95-106
- Gow L (2000) *Curbing the Sprawl: Urban Growth Management in the United States – Lessons for New Zealand*, Ministry for the Environment, Wellington
- Grant J (1987) *Residential Consolidation Study*, Auckland Regional Authority
- Grant J (1989) *Residential Consolidation: Policy Implications for the Auckland Region*, Auckland Regional Authority
- Gravitas Research and Strategy Ltd (2004) *Building the Future: Towards a New Zealand Housing Strategy, Analysis of Submissions on Discussion Document*, Housing New Zealand Corporation, Wellington
- Gravitas Research and Strategy Ltd (2005) *Wynyard Point Development: A Survey of Higher Density Development Dwellers in Auckland's CBD North* Report prepared for Auckland City Council
- Gravitas Research and Strategy Ltd (2008) *Community Research in Flat Bush: Survey of Residents*, prepared for Manukau City Council
- Gray R N (2008) *SmartGrowth Growth Management Implementation Issues*, Prepared for SmartGrowth Bay of Plenty, Tauranga
- Greater London Assembly (website accessed 28th March 2011) "The London Plan: Design principles for a compact city". <http://www.london.gov.uk/thelondonplan/policies/4b-01.jsp>

- Greater London Authority (2010): "2009 Draft replacement London plan: Housing Supplementary planning guidance".
- Greater Wellington Regional Council (2007) *Internationally Competitive Wellington: Wellington Regional Strategy*, Greater Wellington Councils
- Grimes A and Aitken A (2005) *Regional Housing Markets in New Zealand: House Price, Sales and Supply Responses*, Motu Economic and Public Policy Research for CHRANZ, Wellington
- Grimes A and Yun Liang. 2007. "Spatial Determinants of Land Prices in Auckland: Does the Metropolitan Urban Limit Have an Effect," *Motu Working Paper* 07-09.
- Grimes A and Yun Liang. 2010. "Spatial Determinants of Land Prices: Does Auckland's Metropolitan Urban Limit Have an Effect?" *Applied Spatial Analysis and Policy*, 2, 23-45
- Hamilton City Council, Environment Waikato, Waipa, Waikato District Councils (2009) *Future Proof Growth Strategy and Implementation Plan Summary*, Hamilton
- Hand Consultants (2008) *Community Research in Flatbush, Report of Research with the Residents of Flatbush*, Planning of Services and Facilities by Manukau City Council and Other Agencies
- Healy E and Birrell B (2005) *Housing and Community in the Compact City*, Australian Housing and Urban Research Institute, Swinburne-Monash Research Centre, Melbourne
- Heerwagen J. (2008) "Psychosocial Value of Space" National Institute of Building Sciences *Whole Building Design Guide* (website accessed 28th March 2011): http://www.wbdg.org/resources/psychospace_value.php?r=promote_health
- Housing and Communities Agency (website accessed 28th March 2011): *The urban design compendium* <http://www.urbandesigncompendium.co.uk/>
- Housing New Zealand Corporation (2005): *Building the Future: The New Zealand Housing Strategy* Wellington.
- Housing Shareholders Advisory Group (2010) *Home and Housed: A Vision for Social Housing in New Zealand*, Department of Building and Housing, Wellington
- Howden Chapman P, Stewart K, and Chapman R (2010) *Sizing up the City: Urban Form and Transport in New Zealand*, Steele Roberts, Wellington
- Howely P (2010) "Sustainability versus Liveability: An Exploration of Central City Housing Satisfaction" *International Journal of Housing Policy* 10, 2, 173-189
- Howley P (2009) "Attitudes towards compact city living: Towards a greater understanding of residential behaviour" *Land Use Policy* 26, 792-798
- Hoyt H (1938) *The Structure and Growth of Residential Neighbourhoods in American Cities* Government Printing Office, Washington DC
- Jones C, Leishman C, Watkins, C (2001) *Housing Market Processes*, Urban Housing Submarkets and Planning Policy RICS Cutting Edge Conference 2001, Oxford
- Jones C, Watkins C (2009) *Housing Markets and Planning Policy* Wiley Blackwell, Oxford
- Kendig, H. (1984) "Housing Careers, Life Cycle and Residential Mobility, Implications for the Housing Market", *Urban Studies*, 21, 3, pp271-283
- Leggatt-Cook, C (2007) *Housing Demand, Supply and Affordability in the Auckland Region: A Review of Current Trends and Drivers Background Report*, Social and Economic Research and Monitoring Unit, Auckland Regional Council

- Lewis P and Baldassare (2010) "The Complexity of Public Attitudes Towards Compact Development: Survey Evidence from Five States" *Journal of the American Planning Association* 76, 2, 219-237
- LIVES (1999) *Community Preferences: What the Buyers Really Want in Design, Features, and Amenities*, – Follow-up Study to the 1994 Shopper and Home-owner Study and the 1995 New Urbanism Study, American LIVES Inc, Oakland,
- Maré D C (2008) "Labour productivity in Auckland Firms" *Motu Working Paper* 08-12, Motu Economic and Public Policy Research, Wellington
- Market Economics and Harrison and Grierson (2008) *Adequacy of the Auckland Region's Residential Land Supply* Department of building and Housing. Wellington
- McDermott P (2010) *Anticipating Flat Bush: Part 1: Building a Demographic Profile for Flat Bush 2*, Report to Manukau City Council
- Mead D, McGregor A (2007) *Regional Intensification: Intensive Housing Demand and Supply Issues*, Auckland Regional Council
- Meen G (2001) *Modelling Spatial Housing Markets: Theory, Analysis, and Policy Advances in Urban and Regional Economics*, Kluwer Academic Publishers, Massachusetts
- Ministry for the Environment (2002) *People, Places, Spaces: A Design Guide for Urban New Zealand*, Wellington
- Ministry for the Environment (2005) *The Value of Urban Design* Wellington
- Ministry for the Environment (2005a) *Urban Design Protocol*, Wellington
- Ministry for the Environment (2007) *Urban Design Toolkit* 2nd Edition, Wellington
- Ministry of Works and Development (1982) *Hawkes Bay Area Planning Study*, Town and Country Planning Division, Wellington
- Ministry of Works and Development (1986) *Bay of Plenty Urban Development Study*, Town and Country Planning Division, Wellington
- MJP Architects (2010): "Sustainable Suburbia: A walkable garden suburb"
<http://www.sustainable suburbia.co.uk/>
- Morrison P (2008) *On the Falling Rate of Home Ownership in New Zealand Market*, Centre for Housing Research, Aotearoa New Zealand, Wellington
- Morrison P S and McMurray S (1999) "The Inner-city Apartment versus the Suburb: Housing Sub-markets in a New Zealand City" *Urban Studies*, 36, 2, 377-397
- Motu Economic and Public Policy Research (2005) *Housing Supply in the Auckland Region, 2000-2005*, Centre for Housing Research Aotearoa/New Zealand
- Motu Economic and Public Policy Research (2007) *Regional Housing Markets in New Zealand: House Prices, Sales and Supply Responses*, Centre for Housing Research Aotearoa/New Zealand, Housing Corporation New Zealand, and Department of Building and Housing
- Murphy L (2008) "Third-wave gentrification in New Zealand: the case of Auckland", *Urban Studies* 45(12),2521-2540
- Myers D and Gearin E (2001) "Current Preferences and Future Demand for Denser residential Environments", *Housing Policy Debate*, 12, 4, 633-659
- Nelson A and Wachter S (2003) "Growth management and affordable housing policy", *Journal of Affordable Housing and Community Development Law*, 12, 2, 173-187

- Nelson A, Pental R, Dawkins C J, Napp G (2002) *The Link Between Growth Management and Housing Affordability: The Academic Evidence*, Discussion Paper, Brookings Institution Center on Urban and Metropolitan Policy
- Neutze M (1997) *Funding Urban Services : options for physical infrastructure*, Allen and Unwin, Sydney
- New South Wales Government Department of Human Services (2010): *Housing NSW Design Requirements (V 6.2110)*
- New South Wales Government Department of Planning (2010): "Housing Sydney's Population Paper" *D Metro Plan for Sydney 2036 Strategic Direction*.
- New South Wales Government Department of Planning (accessed March 2008): *Design Quality Programme: Improving Flat Design* <http://www.planning.nsw.gov.au/Programsservices/DesignQualityProgram/ImprovingFlatDesign/tabid/160/language/en-US/Default.aspx>
- New South Wales Government Department of Planning: (website accessed 28th March 2010) *Residential flat design guide* <http://www.planning.nsw.gov.au/Programsservices/DesignQualityProgram/ResidentialFlatDesignCode/tabid/158/language/en-US/Default.aspx>
- New South Wales Government Department of Planning: (website accessed 28th March 2010) :*Residential Flat Pattern Book*. <http://www.patternbook.nsw.gov.au/>
- No Doubt Research (2003) *Auckland City CBD Metadata Analysis*, Report Auckland City Council
- North Shore City Council (2005) *The Good Solutions Guide to Mixed Use Developments in Town Centres*
- North Shore City Council (2007) *The Good Solutions Guide for Apartments*
- North Shore City Council (2007) *The Good Solutions Guide to Medium Density Housing*.
- O'Connor K (1998) "understanding metropolitan Melbourne ... without being confused by coffee and doughnuts" *Urban Policy and Research* 16, 2, 139-145
- Painter G, Lee K (2009) "Housing tenure transitions of older households: Life cycle, demographic, and familial factors" *Regional Science and Urban Economics*, 39, 6, 749-760
- Parliamentary Commissioner for the Environment (1998) *The Cities and their People: New Zealand's Urban Environment*, Wellington
- Perkins H C (1988) "Bulldozers in the Southern Part of Heaven: defending place against rapid growth. Part 2: the Alliance strikes back", *Environment and Planning A*, 20, 435-456
- Perkins H C, Thorns D C and Newton B M (2008) "Real estate advertising and intraurban place meaning: real estate sales consultants at work", *Environment and Planning A*, 40, 2061-2079
- Preval N, Chapman R, Howden-Chapman, P (2010) "For whom the city? housing and locational preferences in New Zealand" in Howden-Chapman et al. (2010)
- Projects for Public Spaces (website accessed 28th March 2010) *Eleven principles for creating great community places*. <http://www.pps.org/articles/11steps/>
- Public Health Advisory Committee (2008) *Review on Healthy Urban Planning* Report to the Minister of Health, Wellington
- Rapoport A (1975) "Towards a redefinition of density" *Environment and Behaviour* 7, 2, 93-118

- Randolph B (2006) "Delivering the Compact City in Australia: Current Trends and Future Implications", *Urban Policy and Research*, 24,4, 473-490
- Reed R (2001) "The Significance of Social Influences and Established Housing Values", Paper to the 7th Pacific Rim Real Estate Society Conference, Adelaide
- Reid A (2008) *Profile of Higher Density Living in the Auckland Region* Auckland Regional Council
- Reiner, T (1963) *The Place of the Ideal Community in Urban Planning*, University of Pennsylvania Press, Philadelphia
- Russonello J (2003) *Residential Housing Preferences in Michigan: Summary Analysis of Four Focus Groups in Detroit and Grand Rapids* Report to the Michigan Environmental Council, Belden Russonello and Stewart, Washington DC
- Schwanen T and Mokhtarian P (2005) "The extent and determinants of dissonance between actual and preferred residential neighbourhood type" *Environment and Planning B: Planning and Design*, 31, 759-784
- Senior M, Webster C, and Blank N (2004) "Residential preferences versus sustainable cities: Quantitative and qualitative evidence from a survey of relocating owner-occupiers" *Town Planning Review*, 75, 3, 337-357
- SGS Economics and planning (2006) *Competitive Cities and Prosperous Economies: the Role of Urban Design*, Report to the Ministry for the Environment, Wellington
- Sheppard D (1980) *Planning for residential Needs: a review of current means and methods of providing for residential needs and an assessment of their relevance for the future* Kingston Reynolds Thom and Allardice for the Ministry of Works and Development
- SmartGrowth Bay of Plenty (2006) *Population and Employment Projections Update*, Tauranga
- Stigler G J and Sherwin R A (1985) "The extent of the market" *Journal of Law and Economics*, 28,3 555-585
- Syme, C, McGregor A, Mead D (2005) *Social Implications of Housing Intensification in the Auckland Region: Analysis And Review of Media Reports, Surveys and Literature*, Auckland Sustainable Cities Programme
- Tauranga City Council, Western Bay of Plenty District Council, Bay of Plenty (2004) *Smart Growth: Building Blocks to a Better Future, 50 Year Strategy and Implementation Plan*, SmartGrowth Bay of Plenty, Tauranga Regional Council
- Turner D, Hewitt J, Wagner C, Su B and Davies K (2004) *Best Practices in medium density housing design*, Housing New Zealand Corporation, Wellington
- UDS Partners (2005) *So Many Options* Canterbury Regional Council, Christchurch
- UMR (2009) *Are You Happy where You Live* UMR Omnibus Results, March; Wellington
- Urban Task Force (2009) *Main Report and Recommendations*, Ministry for Building and Construction, Wellington,
- Urban Task Force UK (2005) *Towards a strong urban renaissance*.
- Urhahn Urban Design (2006): *Town Centre Enhancement in North London: a design-led approach to sustainable town centre intensification*, London Development Agency.
- Urhahn Urban Design (2009): *Housing intensification in seven south London town centres*, London Development Agency.
- URS Corporation and Patel Taylor (2006) *London Plan Density Matrix Review*, Greater London Assembly:

- Vallance S, Perkins H C and Moore K (2005) "The results of making a city more compact: neighbours' interpretation of urban infill", *Environment and Planning B Planning and Design* 32, 715-733
- Victorian Department of Sustainability and Environment (2003) *A more compact city Melbourne 2030 Direction 1*.
- Victorian Department of Sustainability and Environment (2005): *Activity centre design guidelines*, Melbourne
- Victorian Department of Sustainability and Environment (2005) "Neighbourhood Principles", *Melbourne 2030*. Housing Section. Appendix 1: Melbourne
- Waitakere City Council (2001) *From Claypit to community: Ambrico Place: Summary of Research*
- Walton D, Murray SJ and Thomas JA (2008) "Population Density and Perceived Neighbourhood Quality" *Social Indicators Research*, 89, 3, 405-420
- Western Australian Department for Planning and Infrastructure (2003): "*Enquiry by design workshop process Preparation Manual*, Melbourne
- Whitehead C (2008) "The Density Debate: A Personal View", LSE Collections, London
- Wilson R, Krizek K and El-Geneidy A (2007) "How Stable are Preferences for Neighborhood Characteristics and Accessibility? Analyzing Residential Relocation Decisions", Paper to the 86th Annual Meeting of the Transportation Research Board, Washington DC
- Wulff M, Healy, E and Reynolds M (2004) "Why don't small households live in small dwellings – disentangling a planning dilemma" *People and Place* 12, 1, 57-70
- Yang F (2006) "Consumption over the Life Cycle: How Different is Housing?" *Working Paper* 635 Federal Reserve Bank of Minneapolis