Factors that Facilitate High Quality Medium Density Residential Development

A Report Commissioned by the Independent Hearings Panel for the Christchurch Replacement District Plan

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Prepared by:

Environmental Management Services Ltd
PO Box 1307
HAMILTON
Executive Summary

Environmental Management Services Ltd (EMS) was engaged by the Independent Hearings Panel for the Proposed Christchurch Replacement District Plan (the “Proposed Plan”) to investigate other (overseas) jurisdictions to identify examples of high quality medium density residential development, along with the factors (regulatory and non-regulatory) that led to and/or facilitated such forms of development.

Based on the research undertaken, the overall purpose of this report is to identify the regulatory and non-regulatory factors that will facilitate and/or promote high quality medium density residential development in Christchurch.

There is a wide range of economic and sociological factors which influence the supply and demand for particular residential typologies.

The Kiwi dream of owning a ‘quarter-acre pavlova paradise’ is still alive and well despite the diminishing prospect of it becoming a reality in cities where land is becoming an increasingly scarce and higher priced resource.

Two key challenges to overcome for medium density residential development to become an increasing reality in Christchurch (and New Zealand generally), are:

- Negative perceptions associated with medium density residential developments resulting in reduced demand and greater risks for developers; and
- Opposition to proposed medium density residential developments from owners of more traditional forms of residential accommodation (exhibiting the classic NIMBY syndrome).

Despite these challenges, there are sound reasons (which are set out in this report) for facilitating and promoting medium density residential development.

Numerous examples of high quality medium density residential development can be identified in overseas jurisdictions. Some of those examples and the factors that have influenced their success are discussed in this report. However, it is not a simple case of just seeking to replicate the examples of development overseas and expecting them to work in the New Zealand context. For the purposes of this report, the housing product is less important than the process and factors which brought it about. The common factor of each of the case studies that have been examined, however, is that they all seek an intensification of what existed previously.

An extensive amount of research has been undertaken overseas and within New Zealand examining the factors that need to be addressed to facilitate and promote medium density residential development. The review of that research, undertaken as part of the preparation of this report, suggests that a pre-requisite for instigating a successful change in direction appears to be a shared understanding that there is an issue that requires attention in the particular area and in a particular way. Only when an issue has reached a ‘tipping point’ in terms of its significance does there seem to be acceptance that action, or a change of direction is required. Despite the apparent urgency to address a housing shortfall in Christchurch, there does not seem to be a consensus that the current approach will provide the answer.

Strategic issues require strategic responses championed by lead agencies. The experience of other cities faced with needing to respond to economic downturn or natural disasters is that redevelopment takes decades. It will span the lifecycle of several governments and local bodies. The response needs to have a degree of immunity from the risk of regular changes in regulatory regimes, funding programmes and policy
direction. Local authorities typically take a key role but they may not be, and do not need to be, the lead agency. The best UK examples of housing led regeneration are driven by volume house builders.

Effective solutions may require innovation in terms of construction techniques and building design as well as innovation in regulatory provisions. The creation of a new ‘product’ can be the catalyst for developing new markets although there is always a risk that a product may ultimately fail.

Solutions need to be targeted. Without focus it will be difficult, if not impossible, to engage funding or construction partners to pioneer forms of development that break the traditional mould. Lot by lot development is unlikely to make any impression on Christchurch’s need to address a significant shortfall and increase housing numbers.

Enabling planning provisions alone are unlikely to result in significant change unless there is the capacity and commitment to deliver. Current options which enable the continuation of conventional development as an easier option will undermine the availability of, capacity and commitment to more significant change.

Most of the successful examples of medium density residential development in overseas jurisdictions have occurred as a result of:

- consultative and collaborative planning processes resulting in well-defined outcomes to be achieved;
- a comprehensive mixed use approach including walkability to goods and services, public transport, and open spaces / recreational opportunities; and
- an emphasis on good urban design and quality architecture.

Notwithstanding the introduction of a more targeted approach led by key agencies utilising new techniques, an increase in the extent of medium density residential development will still be an evolutionary process. It will typically happen in a slow and incremental manner. The benefit of this is that it provides the opportunity for the market to adapt. However, unless there is intervention to specifically drive new approaches, the market will typically choose the easiest option (i.e. individual lot by lot development).

Key findings are discussed in more detail at the end of this report along with recommendations regarding the nature of possible amendments to the Proposed Plan aimed at promoting and enabling medium density residential development in Christchurch.

The final word goes to Brent Toderian¹:

Density is a tough discussion; many politicians don’t like to touch it, but the truth is no city can have a serious discussion about being a greener, more economically resilient, sustainable city without talking about the D-word. It’s about how to change the narrative into a more collaborative, constructive discussion; not about whether you do density but how you do it better.

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Author
Mark Chrisp

Reviewer
Ian Johnson

Signed

[Signature]
1 Introduction

Environmental Management Services Ltd (EMS) was engaged by the Independent Hearings Panel for the Proposed Christchurch Replacement District Plan (the “Proposed Plan”) to investigate other (overseas) jurisdictions to identify examples of high quality medium density residential development, along with the factors (regulatory and non-regulatory) that led to and/or facilitated such forms of development.

The Land Use Recovery Plan states:\[2\]:

*Since the earthquakes, a significant proportion of new housing has been new stand-alone homes, especially in greenfield subdivisions. Much of this is larger family housing. A better supply of smaller, more affordable homes is needed to offer greater housing choice and meet changing housing needs. The Land Use Recovery Plan encourages more intensive housing types, such as terrace and town house developments, within existing urban areas. As well as providing smaller and more affordable housing options, this will:*

- allow people to live close to existing communities and facilities
- support the recovery of suburban centres and Christchurch central city
- make best use of existing infrastructure networks.

The Land Use Recovery Plan puts in place a package of measures to promote infill and intensification as a way of achieving these results and complementing residential development in the central city.

Medium density development is already encouraged in Christchurch’s inner suburbs through the district plan. A review [of] Christchurch City Council’s district plans will identify other appropriate areas and enable intensification in these areas.

The ‘package of measures’ referred to above includes the following:

**Action 2: Christchurch City Council district plan review**
Christchurch City Council to enable in the next review of its district plans to provide for the following measures:

**Housing choice**

1. a range of housing types and locations recognising the changing population and loss of housing options as a result of the Canterbury earthquakes

**Intensification**

2. a choice of housing through a range of residential density and development provisions to facilitate intensified development
3. comprehensive residential and mixed use developments, including on brownfield sites

**Supporting rebuilding activities**

4. reduced consenting and notification requirements
5. address the efficiency and effectiveness of urban design provisions.

The Proposed Plan adopts the widely used approach which defines medium density residential development in terms of the number of households per hectare. Specifically, it refers to a site that delivers a minimum density of 30 households per hectare (one unit per 330\(\text{m}^2\)), and a maximum density of 65

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\[2\] Section 4.1.1, pages 17 and 18.
households per hectare (one unit per 150m²). According to the Ministry for the Environment, medium density residential development:

“... can include stand-alone dwellings, semi-detached (or duplex) dwellings, terraced housing or apartments within a building of four storeys or less. These can be located on either single or aggregated sites, or as part of larger masterplanned developments.”

In some overseas jurisdictions the term “mid-rise” (i.e. buildings up to six storeys) is used to describe a common typology of medium density residential development, although increased height does not necessarily equate to increased density.

The Proposed Plan seeks to allow medium density residential development within a ‘Residential Medium Density Zone’. However, concerns have been raised in submissions on the Proposed Plan about the adequacy of the provisions in the Proposed Plan and likely extent to which a greater amount of medium density residential development will become a reality.

The issues addressed in this report are not unique to Christchurch. There is a substantial body of research and literature relating to medium density residential development in urban environments all over the world (including New Zealand jurisdictions). Given the scope and timeframe associated with the preparation of this report, only a relatively small amount of that documentation and information was able to be reviewed, but was undertaken in a targeted manner. Within New Zealand, Auckland is currently dealing with similar issues as Christchurch in relation to medium density residential development, much of which has been the subject of a special feature in the NZ Herald over recent weeks.

1.1 Purpose of Report

Based on the research undertaken, the overall purpose of this report is to identify the regulatory and non-regulatory factors that will facilitate and/or promote high quality medium density residential development in Christchurch.

The scope of work involved:

- Gaining an understanding as to what sort of residential development is currently provided for within the Residential Medium Density Zone.

- Investigating other (overseas) jurisdictions to identify examples of high quality medium density residential development, along with the factors (regulatory and non-regulatory) that led to and/or facilitated such forms of development. The jurisdictions investigated were cities within the United Kingdom (UK), Australia, Canada and the United States of America (USA).

- Summarising the documented benefits of medium density residential development.

- Analysing and discussing the issues and challenges associated with medium density residential development in New Zealand.

- Identifying the type of outcomes, principles and approaches that need to be followed to facilitate and/or promote the development of medium density residential development in Christchurch.

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1 Section 14.7.3 of the Proposed Plan.
No primary research has been undertaken as part of the preparation of this report (other than personal observations made by the author including during a recent trip to Vancouver and previous trips to the UK, USA and Australia). This report is based on a review of existing literature and publicly available information (with many key points presented by way of direct quotations from other sources).  

1.2 Research Methodologies

The research undertaken to prepare this report involved the following methodologies.

(i) Review Planning Provisions relating to the Residential Medium Density Zone

The research began with a review and analysis of the planning provisions in the Proposed Plan relating to the Residential Medium Density Zone to gain an understanding as to what sort of development was allowed to occur (as a Permitted Activity or by way of a resource consent application).

(ii) Identification of Examples of Medium Density Residential Development in Overseas Jurisdictions

Examples of medium density residential development in overseas jurisdictions were identified by searching publically available information (mostly via the internet) including information that assisted with an understanding as to the factors that facilitated that development.

(iii) Review Publications

Relevant academic and other publications (books, reports, journals, research papers and articles) were obtained from the internet and the library at the University of Waikato.

(iv) Personal Observations

The author of this report has travelled extensively throughout the UK, Continental Europe, Australia, and parts of Canada and the USA. This includes a recent trip to Canada (in July 2015) which included several days in Vancouver during which examples of different typologies and densities of residential development were observed first hand.

(v) Google Earth Street View

Google Earth Street View was used to observe examples of medium density residential development that has been developed in overseas jurisdictions and the nature of the environments in which such development has occurred.

(vi) Assessing the Prospect of Medium Density Residential Development in Christchurch

Throughout the research and investigations of what has occurred in overseas jurisdictions, the overseas examples have been compared with what is currently allowed for in the Proposed Plan. An understanding was sought as to why medium density residential development has been able to successfully occur in overseas jurisdictions, yet there are few highly regarded examples where the same has occurred in New Zealand.

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* The protocol adopted in this report is that direct quotes are presented in italics without quote marks.
(vii) Identifying Outcomes, Principles and Approaches

The research identifies the type of outcomes, principles and approaches that need to be followed to facilitate and/or promote the development of medium density residential development in Christchurch.

1.3 Structure of Report

The structure of this report is as follows:

- Chapter 2 summarises and discusses the provisions in the Proposed Christchurch Replacement District Plan relating to the Residential Medium Density Zone;

- Chapters 3 – 5 identify examples of medium density residential development in Australia, the UK and Canada respectively. The factors (regulatory and non-regulatory) that facilitated and/or promoted such forms of development are also discussed. Based on the research undertaken, there are many examples of medium density residential development that could be presented and discussed in relation to each jurisdiction. However, the approach adopted has been to focus on examples which illustrate a diversity of what has been achieved overseas (including for different reasons).

- Chapter 6 discusses the situation that has occurred in Detroit, USA, as an example of urban renewal to provide a different perspective.

- Chapter 7 provides an analysis and discussion in relation to the factors influencing the prospect of medium density residential development being established in Christchurch, within the New Zealand context.

- Chapter 8 summarises the key findings of the research undertaken.
2 Christchurch Residential Medium Density Zone

The following sets out and discusses the provisions in the Proposed Plan relating to the Residential Medium Density Zone.

2.1 Objectives and Policies

Many of the objectives and policies in Chapter 14 of the Proposed Plan directly refer to the density of residential development or are otherwise relevant to the manner in which medium residential development might occur, as follows:

14.1.1 Objective - Housing supply
An increased supply that will:
  i. enable a wide range of housing types, sizes, and densities;
  ii. meet the diverse needs of the community in the immediate recovery period; and longer term, including social and temporary housing options; and
  iii. assist in improving housing affordability.

14.1.1.1 Policy - Location density and type of housing
  a. Ensure:
     i. high density residential development in the Central City that achieves a net density of 50 households per hectare;
     ii. existing medium density residential areas achieve a net density of 30 households per hectare;
     iii. new residential medium density development is immediately available and located within and around suitable Key Activity Centres and larger neighbourhood centres where it meets the following criteria:
       A. achieves a net density of 30 households per hectare;
       B. accessible to a public transport mode;
       C. within a 400 metre walkable distance of a selected Key Activity Centre or larger suburban commercial centre;
       D. able to be efficiently serviced by Council owned stormwater, wastewater and water supply networks;
       E. located outside Special Amenity Areas unless the potential adverse effects of increased density on the unique residential character and amenity of these areas can be mitigated;
       F. in close proximity to existing parks or open space, or where there is a local deficiency of parks and open space, this is able to be efficiently addressed to support medium density development;
       G. is located outside of high hazard areas and/or those areas where the adverse environmental effects of land remediation outweigh the benefits; and
       H. there is adequate potential for the land to be redeveloped and yield 30hh/ha based on the age of the housing stock and the presence of sufficient vacant land, property amalgamation potential, and large sites that have not been redeveloped in the last 20 years;
     iv. low and medium residential density development in greenfield neighbourhoods achieves a net density of 15 households per hectare;
v. greenfield land is available for further residential development up to 2028; and
vi. low density residential environments in other existing suburban residential areas, and in the residential areas of Banks Peninsula, are maintained, but limited apartments are provided for smaller residential units that are compatible with the low density suburban environment.

14.1.1.2 Policy - Provision of social housing
a. Enable small scale medium density social housing developments throughout the residential area.

14.1.1.3 Policy - Non-Household residential accommodation
a. Enable sheltered housing, refuges, and student hostels to locate throughout residential areas, provided that the building scale, massing, and layout is compatible with the anticipated character of any surrounding residential environment.

14.1.1.6 Policy - Recovery housing - higher density comprehensive redevelopment
a. Enable higher density comprehensive redevelopment of larger and suitably located sites within lower and medium density residential areas whilst ensuring that this development:
i. achieves high quality urban design and on-site amenity;
ii. has appropriate access to local services and facilities;
iii. integrates with, and is compatible with, the anticipated character and amenity of the surrounding residential environment;
iv. provides a range of housing types and sizes;
v. can be adequately serviced with infrastructure; and
vi. is located in an area where tsunami inundation hazard can be avoided and other natural hazards appropriately mitigated.

14.1.1.7 Policy - Recovery housing - social housing redevelopment
a. Enable comprehensive redevelopment of social housing in areas where:
i. natural hazards can be adequately mitigated;
ii. adequate infrastructure services and capacity are available; and
iii. reverse sensitivity effects on existing industrial areas are managed.

b. Ensure social housing redevelopment achieves:
i. high quality urban design and on-site amenity;
ii. development integrated and sympathetic with the amenity of adjacent neighbourhoods and adjoining sites;
iii. the stock of community housing units being maintained or increased;
iv. increased residential density; and
v. an increased range of housing types, including housing for lower income groups and those with specific needs.

14.1.2 Objective - Residential recovery needs
a. Short-term residential recovery needs are met by providing opportunities for:
i. an increased supply throughout the lower and residential medium density areas;
ii. higher density comprehensive redevelopment of sites within suitable lower and residential medium density areas;
iii. medium density comprehensive redevelopment of community housing environments; and  
iv. new neighbourhood areas in greenfields priority areas.

14.1.3 Objective - Housing distribution and density  
a. A distribution of different density areas with:  
i. increased density of residential development in and around the Central City and identified commercial centres where there is ready access to a wide range of facilities, services, public transport, parks and open spaces;  
ii. limited additional infill housing in other existing suburban areas to maintain a low density, open and landscaped environment;  
iii. a mix of housing densities in New Neighbourhood areas;  
iv. medium density residential development in suitable brownfield areas and on larger suburban residential sites where external impacts on the surrounding areas can be mitigated; and  
v. integrated provision of infrastructure.

14.1.5 Objective - High quality residential environments  
a. High quality, sustainable, residential neighbourhoods which are well designed, have a high level of amenity, and enhance local character.

14.1.5.1 Policy - Neighbourhood character, amenity and safety  
a. Ensure individual developments achieve high quality residential environments in all residential areas by:  
i. reflecting the context, character, and scale of building anticipated in the neighbourhood;  
ii. contributing to a high quality street scene;  
iii. providing a high level of internal and external amenity;  
iv. minimising noise effects from traffic and other sources where necessary to protect residential amenity;  
v. providing safe, efficient, and easily accessible movement for pedestrians, cyclists, and vehicles; and  
vi. incorporating principles of crime prevention through environmental design.

14.1.5.3 Policy - Character of low and medium density areas  
a. Ensure that:  
i. low density residential areas are characterised by a low scale open residential environment with predominantly one or two storey detached or semi-detached housing, and significant opportunities for landscaping and good access to sunlight and privacy are maintained; and  
ii. medium density areas are characterised by medium scale and density of buildings up to two or three stories, including semi-detached and terraced housing and low rise apartments, and landscaping in publicly visible areas, while accepting that access to sunlight and privacy may be limited by the anticipated density of development.

14.1.6.2 Policy - Higher density housing location  
a. Ensure that some higher density housing is located to support, and have ready access to, commercial centres and public transport, and to provide opportunities for walking and cycling, and ready access to open space.
14.1.6.3 Policy - Higher density housing to support papakainga development
a. Ensure that opportunities are provided for higher density papakainga housing.

The objectives and policies address the issue of residential density extensively and establish a clear mandate for the establishment of medium density residential development as part of a range of residential typologies sought for Christchurch.

2.2 Zoning

A map showing the areas zoned Residential Medium Density Zone and the Residential Suburban Density Transition Zone (amongst other features) in the Proposed Plan is presented in Appendix A. No site visits or analysis has been undertaken as part of the preparation of this report in relation to the appropriateness of the areas zoned. However, as a general observation, the concept of medium density residential development being located around the periphery of the Central Business District and in proximity to other commercial centres is consistent with the patterns of development in some of the other jurisdictions investigated in this report. It remains at the low end of the scale compared with cities such as London and Vancouver which have a significant residential population within the CBD (as a result of both medium and high density residential development).

2.3 Rules and Performance Standards

Chapter 14.3 sets out the rules and performance standards in relation to the Residential Medium Density Zone. Most of the activities identified as Permitted Activities are exactly the same as those specified in other residential zones such as the Residential Suburban Zone and Residential Suburban Density Transition Zone. Rule P1 in Section 14.3.2.1 includes as a Permitted Activity:

Residential Activities that occur within [sic] residential unit.

For residential activities to be Permitted Activities they are required to comply with the Built Form Standards in Rule 14.3.3 and the area specific standards in Rule 14.3.4. The Built Form Standards include:

- Minimum number of trees and landscaping.
- A height limit of 9 or 11m depending on roof pitch (height limits of up to 20m are provided in various site specific locations).
- A maximum building site coverage of 45%.
- Minimum outdoor living space areas (and dimensions) for each residential unit.
- Daylight recession planes.
- Minimum building setbacks from internal boundaries.
- Minimum setback for a living area window from an internal boundary.
- Setbacks from road boundaries.
- Minimum unit size.
- Minimum ground floor habitable space.

The key performance standard which seeks to increase residential density is Rule 14.3.3.17 which states:
14.3.3.17 Minimum site density from development or redevelopment of residential units

The minimum residential site density to be achieved when a site is developed or redeveloped with a residential unit or units shall be:

1. for allotments less than 400m² – not less than one residential unit;
2. for allotments between 400m² and 650m² – not less than two residential units;
3. for allotments between 650m² and 900m² – not less than three residential units; and
4. for allotments over 900m² – not less than one residential unit per 300m².

This rule is not required to be enforced on a site which prior to the Canterbury earthquakes of 2010 and 2011 was used for residential activity which will be demolished because the insurer(s) of that unit have determined that the residential unit was uneconomic to repair because of earthquake damage.

Of specific relevance to the subject matter of this report, Section 14.3.2.3 of the Proposed Plan classifies any form of medium density residential development as Restricted Discretionary Activity (requiring a resource consent application), expressed as follows:

The erection of new buildings and alterations or additions to existing buildings including all accessory buildings, fences and walls associated with that development, that result in:

a. three or more residential units, or
b. one or two residential units on a site smaller than 300m² gross site area, or

1.4.3.3.2 and for a. and c. only, Liquefaction susceptibility of site and development - 14.9.20

c. one or two residential units resulting in residential floor area greater than 500m²;

d. over 40m² of a building used for other activities, on a site.

The effect of the above rule is that a development of only two residential units (on sites greater than 300m²) is able to occur as a Permitted Activity. Three or more residential units require a resource consent application as a Restricted Discretionary Activity. In the context of such an application, the Council’s discretion is limited to the following matters:

a. Urban design and Māori urban design principles - 14.9.6
b. Minimum unit size and unit mix 14.9.9 (2)
c. and for a. and c. only, Liquefaction susceptibility of site and development - 14.9.20

In relation to urban design and Māori urban design principles, Section 14.9.6 of the Proposed Plan states:

New developments shall be assessed against the five main Urban Design, Appearance and Amenity matters set out in the table below with the Council needing to be satisfied that the proposal makes positive a contribution under each.

While they may be well-intended, some aspects of the ‘assessment matters’ and the key criteria for demonstration of each assessment matter work against the establishment of medium density residential development (including ‘mid-rise’ development – discussed later in this report) in any way other than allowing a more compact smaller scale version of traditional residential development (i.e. single or duplex housing with a yard typically around all four sides of the building). For example, a requirement to “reinforce or complement the scale and character anticipated for the surrounding area” which is includes “subdivision patterns, scale and form of buildings” is going to militate against the approval multi-story development (e.g. apartments) or terrace housing of the nature found in many overseas jurisdictions (discussed in Chapters 3 – 5 of this report).
Section 14.9.6 of the Proposed Plan also states:

Consideration will also be given where appropriate to of Whanautanga, Kotahitanga, Wairuatanga, Mauritanga, Orangatanga, Manaakitanga, Kaitiakitanga, Rangatiratanga and Mātauranga.

The Māori urban design principles listed above need to be considered “where appropriate”. It is unclear as to what, where or when the circumstances are deemed ‘appropriate’ whereby the principles should be addressed as part of resource consent application. It is also unclear as to how an applicant would be able to demonstrate that a development was in accordance with those principles.

2.3.1 Enhanced Development Mechanism

For sites within the Residential Medium Density Zone and the Residential Suburban Density Transition Zone that are greater than 1,500m² and less than 10,000m² (and which meet other qualifying standards specified in Rule 14.7.3⁶) there is the option of advancing a proposed medium density residential development under the Enhanced Development Mechanism (EDM) set out in Section 14.7 of the Proposed Plan. In a similar manner, Section 14.8 of the Proposed Plan sets out rules in relation to the Community Housing Redevelopment Mechanism. Any such development (under Sections 14.7 and 14.8 of the Proposed Plan) requires a resource consent application as a Restricted Discretionary Activity.

The EDM specified in Section 14.7 of the Proposed Plan is obviously intended to be a temporary planning provision as it ceases to have effect on 31 December 2018. The reasons for this are unclear but could be significant in the context of the lengthy lead in times that may be needed to enable site amalgamation and development.

An aspect of the qualifying standards specified in Rule 14.7.3 which is consistent with the findings of this report is the importance of medium density residential development being located within walking distance (widely accepted as being up to 800m) of various goods and services, public transport, and open spaces. Sites needing to be within 800m of a primary or intermediate school is a questionable requirement as it pre-supposes the demographic composition of the potential occupants of medium density residential development. Much of the research reviewed suggests that the inhabitants of medium density residential development are more likely to be young single people, childless households, or retirees.

2.4 Agglomeration of Land Holdings

In response to a request by the Independent Hearings Panel, Counsel for the Crown filed a memorandum dated 2 June 2015 which addressed ways in which agglomeration of residential properties within Christchurch City might be able to be incentivised through Proposal 14 (Residential) of the Proposed Plan for the purpose of enabling greater residential intensification.

Counsel for the Christchurch City Council also filed a memorandum dated 3 June 2015 which addressed the same topic and responded to the memorandum filed by Counsel for the Crown.

Some of the matters addressed in the above memoranda will be referred to in the analysis and discussion in Chapter 7 of this report.

⁶ Some of which are difficult to interpret and understand what is required.
3 Examples of Medium Density Residential Development in Australia

3.1 Perth Case Study: 362 Charles Apartments

3.1.1 Location and Nature of the Development

362 Charles Apartments is a new development in North Perth, Western Australia. The development is 3km from the Perth CBD. It is positioned close to eateries, cafes, bars, and shops. The development is in close proximity to nearby parks and reserves, a leisure centre, the Perth Arena and other leisure options. There are good public transport and cycle routes nearby.

The development is a mixed use complex of 18 luxury architecturally designed apartments. There is off-street undercover parking (under the apartments), bike parking and storage lockers, and a common space outdoor roof garden. All of the apartments have been pre-sold with construction due to commence shortly. The application for planning approval for the development describes it as:

*Proposed demolition of existing commercial buildings and construction of four-storey mixed-use development comprising two (2) offices and eighteen (18) multiple dwellings, ten (10) single bedroom dwellings and eight (8) two bedroom multiple dwellings and associated carparking.*

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7 http://362charles.com.au
3.1.2 Regulatory Provisions and Process

The developer lodged an application and plans with the City of Vincent in May 2014. The Metro West Joint Development Assessment Panel considered the application in August 2014 when it was approved with conditions. The conditions were subject to further consideration by the Panel in October 2014 when some minor changes were made to conditions. The conditions of the development cover such matters as the finish of boundary walls, glazing types, parking provision, access ways, landscaping, acoustics, construction management, external finishes and waste management, and matters to be recorded on a LIM equivalent (including that neighbouring properties can be developed to a zero setback, no residential car parking permits will be issued to residents in the complex, and that “the use and enjoyment of the property may be affected by noise, traffic, car parking and other impacts associated with nearby commercial and non-residential activities”). The approval also requires a contribution to Public Art for the city and provision made for ongoing maintenance of the development. The City has provided developers with clear policies relating to the area and provides guidance in the form of other documentation as to what is acceptable development in the area.

The Development Assessment Panels (DAPs) are a relatively new tool in the consideration of development proposals in Western Australia. DAPs are an independent decision making body made up of technical experts and elected local government representatives. The Government of Western Australia has produced a comprehensive question and answer booklet about the panels and how they operate. According to this guide, the DAPs were introduced to improve the planning system by providing more transparency, consistency and reliability in decision making on complex development applications. The regulations relating to DAPs clearly identify what types of developments are to be subject to the DAP process. One of the advantages of the process is that the more complex types of applications will have the benefit of being determined by experts with technical knowledge alongside local elected representatives. Furthermore, the process is designed to help balance local representation and professional advice and so ensure that decisions made by DAPs are based on the planning merits of the application.

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8 Minutes of the “Development Assessment Panel” (similar to commissioners) which also includes all the conditions of consent. http://www.planning.wa.gov.au/daps/data/metropolitan%20daps/metro%20west%20jdap/Meeting%20agendas%20and%20papers/20141031%20-%20Agenda%20No%2077%20City%20of%20Vincent%20City%20of%20Subiaco.pdf

3.1.3 Factors that Led to Success

The development was marketed in the following terms:

*Designed by renowned architects Bollig Design Group, 362 Charles is set to become a North Perth iconic building. With its stunning architectural form, careful choice of fine grain materiality and cutting edge urban living design concept with proactive environmental sustainability initiatives, 362 Charles will stand the test of time and be enjoyed and celebrated for generations to come.*

This development is successful example of a medium density apartment block (at least in terms of market demand) on the basis that the apartments have all been sold “off the plans” prior to construction commencing.

The key reasons for the success of this development appear to be the location in a key lifestyle precinct that is in close proximity to the CBD. There are opportunities for leisure, dining, shopping and work nearby (in walking distance). The site is on a public transport route. It is a true ‘work-live-play’ location. The apartments are architecturally designed in a luxury style with common spaces available to residents.

Additionally, the City Council has a clear expectation as to what sorts of development are appropriate for this area which is reflected in the current planning documents and processing regime. The City is currently working on a review of the policies\(^{10}\) and early indications are that the new policies and guidelines will be even more explicit on what types of development should occur in the area.

3.2 Adelaide Case Study: Mawson Lakes

3.2.1 Location and Nature of the Development

Mawson Lakes is a growing suburb where more than 23,300 people live, work and study – 12,000 residents, 6,300 at the university campus and 5,000+ workers. This makes Mawson Lakes the biggest suburb in Adelaide.\(^{11}\)

Mawson Lakes is an award winning\(^{12}\) “master-planned” subdivision 12km north of Adelaide’s CBD. It is located in close proximity to Technology Park South Australia\(^{13}\) and the Mawson Lakes Campus of the University of South Australia.\(^{14}\) It includes a mix of both commercial and residential development. Residential development includes large homes, smaller “courtyard homes” and townhouses, and apartments in mid-rise blocks up to five stories high. Mawson Lakes has shops, services, cafes and sporting opportunities nearby. The development has 30% of the area set aside for open space and recreation with lakes, waterways, tennis courts and other sporting facilities, hiking and biking trails, playgrounds, parks, and gardens. There are good transport links with the Mawson Lakes Interchange offering high frequency bus and train links into the city. The train journey to central Adelaide is about 20 minutes and it is a 30 minute drive along a main arterial road.


\(^{11}\) [http://www.mawsonlakesliving.info/sustainabilitytour.pdf](http://www.mawsonlakesliving.info/sustainabilitytour.pdf) (p.3)


The development has a number of sustainability initiatives\textsuperscript{15} that:

- reduce the environmental footprint;
- re-uses the storm-water run off;
- use a unique system of aquifers below the Salisbury / Mawson Lakes Region;
- uses the benefits of solar heating and power;
- uses sustainable landscapes in an urban area;
- use the Green Star Rating development; and
- creates an environment that is eco-friendly for families and businesses.

### 3.2.2 Regulatory Provisions and Process

The development is located within the City of Salisbury in Adelaide, South Australia. While the planning regime for South Australia has changed somewhat since the commencement of this project, the provisions relating to the development are set out in the Salisbury Council City Development Plan.\textsuperscript{16} The provisions relating to the development were incorporated into the Development Plan in December 1996. Amendments to the Development Plan relating to Mawson Lakes are currently being consulted on through a public process.\textsuperscript{17}

Mawson Lakes is part of the ‘Multi Function Polis (The Levels) Zone’ in the Salisbury Council Development Plan. The Plan is explicit in setting out the desired character for the area and includes, among other things, a desire that the development:

- is mixed use in nature, integrating living, working, learning and recreational activities and uses;
- provides a broad range of housing types and tenures at medium net dwelling densities; and
- is designed and developed on the principles of environmental sustainability and conservation of the natural environment and resources.\textsuperscript{18}

\textsuperscript{15} http://www.mawsonlakesliving.info/sustainabilitytour.pdf
\textsuperscript{17} http://www.salisbury.sa.gov.au/Our_City/Developments/Development_Plan_Amendments/Mawson_Lakes_Development_Plan_Amendment
\textsuperscript{18} City of Salisbury Development Plan (p.180)
The Plan also sets out the ‘Principles of Development Control for Land Use and Form and Character’ to ensure consistency and compatibility of uses in the development. The plan is explicit that a mix of densities for housing is expected in the development.

### 3.2.3 Factors that Led to Success

According to the developer, Lend Lease, the success of the development is “testament to the key partnerships held between Lend Lease, the State Government’s Land Management Corporation, the City of Salisbury and the University of South Australia.”

A number of other factors can be attributed to the success of Mawson Lakes including those which are described above. The nature of the development, being a planned greenfields site in proximity to the technology park and the university is obviously a key contribution to the success. However, it also has other benefits that have contributed to its success, as follows:

- It offers a range of housing at different densities. The different types of housing available means there is a mix of residents in the community including students, young couples and young families, and mature couples and families. According to real estate marketing information, the higher density housing in terraced townhouses and apartments appeal to students and office workers while families opt for the larger houses. This reflects the general consensus that higher density housing is more attractive at different stages of life;
- It is close to employment and study opportunities;
- There are lots of recreational activities available within walking distance;
- There are good public transport links; and
- It is a work-live-play development.

### 3.3 Sydney Case Study: Redfern Social Housing Development

#### 3.3.1 Location and Nature of the Development

Located only 3km from the Sydney CBD, the Redfern Social Housing Development is a Housing NSW development to provide housing for young families, seniors and people with disabilities. Completed in 2010, the development on is 0.97ha and has 66 apartments, 40 townhouses and 2 community rooms for residents.

The Development consists of low rise three or four storey apartment blocks on the corners of the site with low rise townhouses on the longer street frontages. The apartment and townhouses were designed to maximise sunlight and natural ventilation. The development was designed to meet Green Star specifications and has a 5 star rating and has won several sustainability awards.

The development was part of a revitalisation project and existing older housing stock was demolished to allow for the construction of the new townhouses and apartments.

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Site Plan of Redfern Social Housing Development

Photo of Redfern Social Housing Corner Apartments
The resources section of the Auckland Design Manual considers the Redfern Social Housing Development as a Case Study and includes many illustrations of the development and its benefits.

### 3.3.2 Regulatory Provisions and Process

The NSW Department of Housing announced this development in 2002 as part of a wider project to revitalise the social housing in the area. The development was undertaken as a private public partnership for redevelopment which would provide for both social housing and private housing. The planning process was not straightforward. A masterplan was approved in 2003 which was extensively consulted on and used to tender for the partnership agreement.

In 2007, following extensive community consultation the Minister for Housing issued a media release announcing that the development would proceed as part of State Plan Priority E6. A development application was lodged with the City of Sydney seeking approval for the development. The application was notified and submissions were received which were considered by the decision makers. The development was considered under the South Sydney Local Environmental Plan 1998 and considered to comply with the provisions relating to Planning Principles, Zoning Controls (being Residential Medium Density) and Urban Design Principles and Masterplans.

The development was ultimately approved and demolition and construction commenced in 2008.

### 3.3.3 Factors that Led to Success

There was some community concern relating to the development during the early consultation period likely because the area had been stigmatised by poorly designed high density social housing such as “Poet’s Corner”, three 18 storey apartment blocks near to the development. By introducing a range of housing

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typologies – terrace housing and low rise apartment buildings - that are common elsewhere in the area and not readily identifiable as social housing, the development is also be acceptable to the private sector.  

The apartments and townhouses were designed to maximise solar exposure and natural ventilation and were constructed with a number of sustainable design features including gas boosted solar hot water heating, grey water irrigation, rainwater re-use and photovoltaic cells for common area lighting. The development received a 5 Star Green Star rating.

There is very limited provision for onsite parking. A small number of accessible parks are near to the apartments but all other parking is “on-street”. This increases the open space available for each unit and reduces the area in “common ownership”.

The units are positioned on the site to protect mature trees around the houses and apartments. The houses and apartments are close to the street maximizing open and private space behind them. This positioning also means there is a wide separation between the backs of the houses further maximising privacy and allowing for greater green spaces.

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27 http://www.aucklanddesignmanual.co.nz/resources/case-studies/redfern “Understanding the neighbourhood”
29 http://www.aucklanddesignmanual.co.nz/resources/case-studies/redfern
30 http://www.aucklanddesignmanual.co.nz/resources/case-studies/redfern
4 Examples of Medium Density Residential Development in the United Kingdom

4.1 London Case Study: Kidbrooke

4.1.1 Location and Nature of Development

Kidbrooke Village is the redevelopment of a former housing estate constructed between 1968 and 1972 within the London Borough of Greenwich. It is currently one of the largest regeneration projects in the UK, aiming to replace 1,906 dwellings of the former Ferrier Estate with 4,400 dwellings comprising a mix of sizes, tenure and typology and supported by major open space, supermarket, restaurants, schools and health facilities.

Despite being an award winning scheme of its time, the Ferrier Estate suffered severe issues of neglect, deprivation and crime. Redevelopment was identified by the local authorities (local and Greater London) as being the strategic response.

In partnership with a premier volume housebuilder (Berkeley Group), the local authority (Royal Borough of Greenwich) developed proposals that are now being implemented in the form of four neighbourhoods set with 53ha of open space, based around a hub of community and commercial facilities and integrated with strategic public transport networks including a direct 15 minute rail link to the London CBD. Some existing buildings are to be retained for renovation and re-use. Design principles underpin the development of each neighbourhood and aim to provide distinction in housing form and the layout of development. The project avoids the pitfalls of applying a uniform code or typology.

Overall, development densities will achieve approximately 64 dwellings per hectare, with considerable variety within and between neighbourhoods responding to the proximity of services or the sensitivity of local environments. Just as significant in the London context, and in relation to the scale of the development, is the mix of different unit sizes and tenures providing a balance between family and non-family homes. 32% of proposed dwellings are intended as affordable housing provided through a variety of tenure options, with 62% intended for private development. Typologies include townhouses, mid-rise apartments and detached dwellings.

http://www.berkeleygroup.co.uk
The lead developer, Berkeley Homes, specialises in the development of high-end gated communities. While such forms of development occasionally attract a poor press, the concept has been incorporated into the project through the development of apartment courts with enclosed communal space for residents, set within the wider landscaped context of the project. The success of the approach at Kidbrooke is in contrast to reports of conflict elsewhere where it appears that issues relate to the apparent disparity of wealth between particular groups of residents (celebrities) and the wider community, rather than the form of development itself.

4.1.2 Regulatory provisions and process

The UK planning system is well developed, sophisticated but also heavily centralised. National Planning Policy Statements provide direction of key matters including the priority for re-using brownfield urban land in preference to greenfield, requirements to maintain an identified 5 year land supply, and the achievement of target densities for residential development. The system also stipulates requirements in terms of statutory development plans. Departures from national policy direction are rigorously scrutinised.

The system requires planning permission to be granted for virtually all forms of development (although there are exemptions). The process of gaining consent is the equivalent of a full discretionary process under the RMA. Third parties have the right to make submissions but not to appeal decisions. Decisions are made by local authorities but there is provision for them to be “called in” for ministerial determination depending on their significance. Appeals (only able to be made by developers) are heard by appointed Inspectors rather than by a Court.

In the London context, the London Plan provides a strategic overview of the City. Prepared by the Greater London Authority and led by the Mayor of London it sets out an integrated framework for development up to 2036. Local Plans prepared by the London Boroughs need to be in conformity with the London Plan. The London Plan identifies Opportunity Areas for strategic development and seven Areas for Intensification. Kidbrooke was listed as an Area for Intensification in the original (2004) London Plan and was carried forward into subsequent reviews of this Plan. The current Plan is supported by an Implementation Plan which identifies partnerships between the Greater London Authority, London

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33 PPS3 – Housing,
34 [https://www.london.gov.uk/priorities/planning/london-plan](https://www.london.gov.uk/priorities/planning/london-plan)
35 [https://www.london.gov.uk/priorities/planning/publications/london-plan-implementation-plan](https://www.london.gov.uk/priorities/planning/publications/london-plan-implementation-plan)
Boroughs and the private sector as being critical to address strategic issues. In relation to housing the Plan provides a London perspective on the issues of density, affordability and design and it includes Supplementary Planning Guidance (SPG) which is to be used by the Boroughs in administering their Local Plans.

At the local level, the project became established through the identification of the Kidbrooke Development Area by the Royal Borough of Greenwich in 2006. London Boroughs prepare Local Plans which, in relation to Kidbrooke, is the 2006 Unitary Development Plan and this Plan sets out policies relating to the Development Area. Subsequently, SPG was prepared and adopted in 2008 to provide a framework for the development of the Kidbrooke Village site.

Local Plans provide the basis for land use decisions. Public participation is a fundamental aspect of all forms of plan making. SPG, where it is the subject of public consultation and adoption as part of the Plan, is material to the consideration of applications for planning permission.

The SPG describes development densities in terms of both habitable rooms/hectare and dwellings/hectare. Target densities were informed by capacity testing taking account of the vision for each neighbourhood, planned requirements for open space, access, parking, community facilities and anticipated building typologies.

4.1.3 Factors that Led to Success

Consent for the development was issued in 2009 and the construction commenced with £43m of government agency funding, followed by a further £65m grant towards affordable housing provision. Without such funding it is questionable whether the private sector would have engaged as a development partner. Equally, government agencies are reluctant to commit public funding unless it is required to facilitate action so it can reasonably be assumed that this project was of such significance that the availability of funding support was key.

All areas are now consented and construction is underway. The identification of the project within strategic planning documents and the focussed delivery of site specific planning and design guidance undoubtedly helped the project through the consenting processes. However, such high level buy-in probably only arose due to the severity of the situation that needed to be addressed.

Has it been a success? In 2013 the Berkeley Group commissioned a social sustainability report to assess performance and effects. The Report was based on the results of interviews of 125 residents in the first phase of development. It examined a range of 13 indicators based on establishing quality of life, well-being and sustainability. The results were benchmarked against similarly constructed surveys elsewhere and demonstrated markedly higher levels of satisfaction against other surveyed areas. In drawing conclusions from this, the authors commented:

*The house building industry is good at creating safe, well-maintained places. But it lacks the tools to understand, and therefore to support, the social fabric of the new communities we are building. Housing need and the lack of public funding, along with new policy frameworks that emphasise wellbeing and sustainability, make it increasingly important to create this knowledge. It needs to be embedded across all the organisations involved in planning, development and estate management.*

37 http://www.kidbrookeregeneration.info/media/pdf/9/7/kidbrooke-village-social-sustainability-report.pdf
While the Report sets out a wide range of individual findings, perhaps the most significant in terms of relevance to the recovery of Christchurch is that by 2013, approximately 30% of the occupiers of the first 500 dwellings were former residents of the original Ferrier Estate.

4.2 North England Case Study: Allerton Bywater

4.2.1 Location and Nature of Development

The restructuring of the UK manufacturing sector in the 1980’s and 90’s resulted in wholesale closures of major industrial plants, predominantly in the north of England. Historically, industries such as mining and steel manufacture were located where the mineral resources existed. Towns and villages became established simply to service the industry but, because of the remoteness from other principal settlements, they developed their own social and community facilities around which a distinct community identity was established. Such communities were devastated by the closure of major industries. Unemployment increased dramatically with consequential reductions in spending power to support community and commercial activity.

English Partnerships was established as a government agency to provide support for the regeneration of former industrial towns. Changes to the agency over time have seen it recast as the Homes and Communities Agency (HCA) but essentially providing the same level of support. Key aspects of the agency’s role have been to champion urban design and drive initiatives to help deliver the increased densities sought through national planning policy, particularly in relation to brownfield land. Pathfinder projects are used to test and implement design principles.

Allerton Bywater is located approximately 10km from the City of Leeds. The town was anchored by a colliery until its closure in 1992 with consequential population loss and social and economic decline. The town was identified as a focus for the regeneration of the 24 hectare colliery site in 2000 under the banner of Millennium Community.

Master Plan of Allerton Bywater Millennium Village
(Source: http://udc.homesandcommunities.co.uk/allerton-bywater-leeds)

http://udc.homesandcommunities.co.uk/allerton-bywater-leeds
As part of delivering a “new vision” for the future, a design competition led to the selection of a preferred masterplan providing for 520 homes planned in conjunction with new commercial development, workspace units and infrastructure. Major public sector funding has been targeted at the remediation of land contamination and site preparation, as well as the provision of new infrastructure. Private sector volume house builders have been selected to development zones of housing, each bringing a variety of styles but all conforming to EcoHomes “Excellent” standards, being the benchmark for build quality. All zones include a mix of tenures with high proportions of “affordable” housing and shared ownership housing.

Reflecting the need for rapid transformation to address any stigma that might be attached to the former colliery site, HCA promoted a “Design for Manufacture” competition to stimulate innovation in Modern Methods of Construction. The result produced a steel framed modular house design capable of adaptation from two to three storey making use of prefabricated panels and fitments. Each house achieves the highest build quality and energy ratings, has built in flexibility for expansion or adaptation, can be constructed on site within 25 days, and costs less than £60,000.

The design flexibility of the housing responds to the variety of situations that exist around the development site, including aspect and topography. They enable interchangeability between living rooms at ground or first floor. They adopt central ducting for servicing (rather than walls) and include designs to enable home working/office space.

Externally, dwellings make use of traditional materials and front onto roading and open space infrastructure that is modelled and designed to prioritise pedestrian rather than vehicular movement. Consent for the project necessitated the approval of detailed plans for every aspect of the public realm, including roading design and speed restrictions.

4.2.2 Regulatory Provisions and Process

Consenting processes are the same as those applying elsewhere in the UK, where virtually all development requires planning permission through the equivalent of a discretionary process.

All decisions are guided by the Unitary Development Plan. UDPs must be consistent with national policies or justify why they need a different approach. The UDP identifies the site as a Phase 1 housing site for a construction start 2003-2008. However, this essentially reflects decisions that had already been reached that the town needed attention and it needed it quickly; hence the Millennium Village Project came into being through collaboration of key government, local authority and community stakeholders.

Nevertheless, planning permission was still required and subsequently granted. This consent details the housing typologies for each housing area and prescribes the detailed design of public realm including road layout, formation and cross section. The consenting process has been across all aspects of the project, from site restoration to development.

4.2.3 Factors that Led to Success

The issues affecting former industrial towns following restructuring of the manufacturing sector are well documented but not well understood. Communities lost their identity and purpose. Little was available in terms of alternative employment and those seeking work had to look elsewhere. Revitalisation of such areas focussed on the retention of key facilities such as the Miner’s Welfare Hall and Infant’s School but also sought rapid transformation in terms of urban fabric.

The use of competitions to engage with communities and stimulate private market interest resulted in the development of a masterplan, urban designs and building techniques that have enabled the transformation from colliery to townscape.

Public funding was a critical factor in addressing the underlying issues related to ground conditions and the provision of new infrastructure, but perhaps just as significant was lower levels of public funding directed at improvements to the Welfare Hall, Infant’s School and the joint venture partnership to deliver new workspace units.

The key aspect appears to have been the holistic approach to identifying and meeting the needs of the community, with new housing being just one element in the strategy.
5 Examples of Medium Density Residential Development in Canada

Vancouver, the capital of British Columbia in Canada, is frequently held up as an example of good urban design. It is has been consistently voted as one of the most ‘liveable cities’ in the world (but is also reputedly one of the most expensive). Vancouver has a significant amount of both high and medium density residential development.40

To describe the way in which Vancouver has been developed, the term ‘Vancouverism’ has been coined.

Vancouverism is an urban planning and architectural phenomenon in Vancouver, British Columbia, Canada, that is unique to North America. It is characterized by a large residential population living in the city centre with mixed-use developments, typically with a medium-height, commercial base and narrow, high-rise residential towers, significant reliance on mass public transit, creation and maintenance of green park spaces, and preserving view corridors.41

Renowned architect Bing Thom described Vancouverism this way:

It’s a spirit about public space. I think Vancouverites are very, very proud that we built a city that really has a tremendous amount of space on the waterfront for people to recreate and to enjoy. At the same time, False Creek and Coal Harbour were previously industrial lands that were very polluted and desecrated. We’ve refreshed all of this with new development, and people have access to the water and the views. So, to me, it’s this idea of having a lot people living very close together, mixing the uses. So, we have apartments on top of stores. In Surrey we have a university on top of a shopping centre. This mixing of uses reflects Vancouver in terms of our culture and how we live together.42

Part of Vancouverism is the concept of ‘EcoDensity’. Brent Toderian, the former head of Planning for the City of Vancouver, explains:

In 2006, Vancouver Mayor Sam Sullivan introduced the term EcoDensity to the city, region, and world. From that point on, it was Brent Toderian’s task to define the term, convene a challenging but healthy city-wide public dialogue about strategic, green densification across every neighbourhood, and eventually develop a Charter and Action Plan that would make it a reality.

In 2008, after three drafts, hundreds of meetings, huge public discussion and media around what “density done well” could mean in many contexts across the downtown and city, and 7 nights of public hearings before Council, Vancouver City Council unanimously approved EcoDensity. This unanimous approval under challenging circumstances (including a highly politicized situation where the two political parties that didn’t coin the term, were initially invested in the initiative’s failure) was largely credited to the strategy, approach, credibility and innovative content executed by Brent Toderian as hands-on leader with a talented staff team.

40 Personal Observation.
41 https://en.wikipedia.org/wiki/Vancouverism
42 Ibid.
EcoDensity has transformed planning and design in Vancouver, through the Charter policies and priorities around smart, strategic densification (i.e. along transit, in centres and along corridors); “gentle, hidden and invisible density” in the former single-detached neighbourhoods (including over 500 laneway houses already approved); the first LEED Gold and District Energy policies for private developments in North America; removal of barriers to green design; and many other actions and initiatives. EcoDensity has become a globally known and studied initiative, transforming density debates regionally, and won the Canadian Institute of Planners Excellence in Planning Award in 2009.43

5.1 Vancouver Case Study 1: Olympic Village - South East False Creek

5.1.1 Location and Nature of the Development

The South East False Creek redevelopment is a medium density mixed use mixed income development situated on the waterfront across an inlet from downtown Vancouver.44

The Olympic Village is located on the southeast side of False Creek in Vancouver. It has views of the city’s downtown skyline and Coast Mountains. It is located within a 32ha former industrial site which was redeveloped as a model sustainable city to house the athletes for the 2010 Winter Olympics. After the Olympics the village became residential housing. According to the City of Vancouver the development “aligns with the City’s goals, addressing environmental, economic and social issues”.45 It is described as:

43 http://www.toderianurbanworks.com/portfolio/ecodensity/
The newest waterfront property in Vancouver to be developed, this hot new residential neighbourhood is the result of a multi-use development plan including state of the art ‘green’ construction, new public parks and a wonderful new stretch of boardwalk.46

While it is a greater density development than other examples discussed in this report, the development is considered medium density by Vancouver standards, referred to locally as “mid-rise”.

In 2009, prior to the Winter Olympics, the development was described as follows:

[The site] will offer 130,000m$^2$ of commercial and residential space in low-to mid-rise buildings up to a maximum of 12 storeys. After the Winter Olympics the neighbourhood’s 1,100 dwellings will be converted to permanent residential housing, ranging from studios and one-bedroom suites to family-oriented accommodation.47

The aim is that by 2020 there will be 7,200 residential dwellings housing between 12,000 to 16,000 people at a density of approximately 225 dwellings per hectare.48

The site required extensive remediation to remove contamination resulting from the sites many years of industrial activities including sawmills, foundries, shipbuilding, metalworking and salt distribution.49

46 http://thecanadaline.com/station-guides/olympic-village-station/
48 Ibid.
The area has been developed with open public space, including a new waterfront walkway, a public plaza, public art and a community garden. Nearby, the shoreline has been rehabilitated to create a new habitat island, a seawall, a pedestrian bridge and intertidal marine habitat.

There are good transport links in the vicinity. There are two train stations nearby offering options to get into downtown Vancouver. Ferry services and buses are also available providing alternative modes of transport into the CBD.

South East False Creek is classified as a mixed use community and the number of retail and service outlets is growing.\textsuperscript{50}

South East False Creek is also near to Granville Island, one of Vancouver’s major visitor attractions. Granville Island has a large food market and a wide variety of dining and shopping options.\textsuperscript{51}

5.1.2 Regulatory Provisions and Process

Moscovich (2009) describes the long redevelopment process as follows:

\textit{In 1991, the City of Vancouver directed that SEFC (South East False Creek) be redeveloped as a residential community that would be a model of sustainable urban design. The City held a series of consultations, at which the public was invited to contribute its views to the proposed future development of the site. Following the consultation, the SEFC Policy Statement was drafted, in which environmental, social, and economic aspects of building a sustainable community were addressed. The Policy Statement was subject to formal public review before being adopted by City Council in 1999.}

\textit{Based on the outcome of the public review, the City of Vancouver put together the Official Development Plan (ODP) for SEFC, which was adopted as a bylaw in July 2005. The focus of the Plan was the development of a complete community that would serve as a learning experience for the application of sustainability principles to large scale neighbourhood design. According to the ODP vision, the area will be transformed into a community ‘where people live work, play and learn in a neighbourhood that has been designed to maintain and balance the highest possible levels of social equity, livability, ecological health and economic prosperity.’}\textsuperscript{52}

According to the City of Vancouver the ODP established urban design and sustainability principles for the new community, a mixed use neighbourhood plan focusing on diversity of residential uses for people of all incomes, and a framework for policies, zoning and other bylaws, housing programs, shoreline treatment and configuration, child care and community services and more.\textsuperscript{53}

The City of Vancouver approved the South East False Creek rezoning in October 2006 after a number of public meetings and consultation with the community.

The project was achieved in a record 30 months from commencement of construction to the opening of the 2010 Olympic Winter Games,\textsuperscript{54} however it was not without issue when during construction there were cost

\textsuperscript{50} http://vancouver.ca/home-property-development/olympic-village.aspx
\textsuperscript{51} Personal Observation.
\textsuperscript{53} http://vancouver.ca/docs/sefc/olympic-village-fact-sheet.pdf
\textsuperscript{54} http://vancouver.ca/news-calendar/final-sale-of-olympic-village-wins-gold-for-vancouver-taxpayers.aspx
overruns which resulted in the City of Vancouver providing finance to the developer, Millennium Properties Ltd., who subsequently defaulted on the loan.

5.1.3 Factors that Led to Success

The transformation of South East False Creek has ultimately been a success, however it is important to note the project was not without its difficulties. The site required extensive remediation due to site contamination. There were time pressures with the immovable deadline of the Winter Olympics that required the Olympic Village to be completed to house the international athletes and officials. There were troublesome financing arrangements exposing the City of Vancouver to the entire financial risk of the project. Despite these factors, the Olympic Village is a great example of medium density sustainable housing in Vancouver.

With the major event of the 2010 Winter Olympics, the City had the impetus to develop the area. However, the City also looked beyond that event and at the use of the land and the development of the area after the Olympics.

The proposal for South East False Creek, and the Olympic Village went through a comprehensive planning process with extensive consultation with the community. The development was consistent with the City aims to create greater density throughout the city in a way that reduces environmental impact, ensures there are adequate amenities (both physical and social), and supports new and different housing typologies.

The Olympic Village is in a good location. It overlooks the water with views across to Downtown Vancouver. This proximity to the CBD also contributes to its success. With excellent transport links and proximity to the CBD it is easy for commuters to get in to the city for employment.

Finally, in Vancouver, there is a market acceptance and demand for this type of housing development.

5.2 Vancouver Case Study 2: South Granville

5.2.1 Location and Nature of the Development

South Granville is approximately 2.5km from downtown Vancouver. The residential area surrounding the eleven blocks of the commercial centre is about 3km². The density of population was recorded in the 2006 census as 7,674 residents per square kilometer. The majority of South Granville consists of apartments most of these are older, low-rise (i.e. under five storeys).

South Granville is an affluent area with a safe neighbourhood feel, and as an established commercial centre which features fashion designer shops, restaurants, concert venues and art galleries.

55 For a chronology of events relating to the project, and particular in relation to the financial aspects, see http://vancouver.ca/docs/sefc/olympic-village-fact-sheet.pdf
Positioned on a main arterial route (the drive from Vancouver International Airport via Granville Road passes through this suburb) the area has good public transport links.

The majority of housing in the area is mid-rise apartments but there are also townhouses and high rise apartment buildings in the suburb.
The housing in the area is a mix of styles as illustrated below\textsuperscript{59}:

![Low rise apartments above retail centre](Source: South Granville BIA (Flickr Stream))
![Low rise residential apartment with high rise in background](Source: South Granville BIA (Flickr Stream))

![Stepped in apartments above retail centre](Source: South Granville BIA (Flickr Stream))
![Residential low rise apartment block](Source: South Granville BIA (Flickr Stream))

### 5.2.2 Regulatory Provisions and Process

The retail area along Granville Street is primarily zoned as Commercial District with two Multiple Dwelling Zoning parcels (RM-3) and one Comprehensive Zoning Parcel (CD-1).

The planning process in Vancouver is based on collaboration by aligning the development goals of the City prior to determining the particular development proposals. Discretionary planning allows the automatic approval of small developments that conform to the existing building codes. Larger projects are subject to design review by the Planning Department. The Planning Department has authority to make decisions that force developments to conform to design guidelines.\textsuperscript{60}

In Vancouver, a development permit is required for:

- Building a new home;


\textsuperscript{60} [https://en.wikipedia.org/wiki/Vancouverism](https://en.wikipedia.org/wiki/Vancouverism)
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- Installing a residential suite;
- Making structural repairs, doing renovations, or building additions that are permitted conditionally (may be allowed) by your district zoning schedule; and
- Building an accessory building (garage, carport, garden shed etc.) that is permitted conditionally (may be allowed) by your district zoning schedule.61

The City of Vancouver has developed checklists62 that are to be completed and submitted with any development application. In respect of Multiple Dwelling Developments (which much of the South Granville area is zoned for) the checklist63 requires comprehensive information including:

- Site plans;
- Building grades plan;
- Survey plans;
- Floor plans;
- Various area calculations;
- Elevations;
- Roof plans;
- Landscape plans (referring to the zoning guidelines);
- Arborist reports (relating to any existing trees and in particular, protected trees);
- Streetscape drawings;
- Context plans (showing relationship to surrounding buildings);
- Parking, loading and bicycle parking plans (in compliance with the relevant by-laws);
- Design rationale (“A written statement with illustrations as needed, conveying the proposal’s urban design and architectural concept and its response to the by-law and relevant sections of the applicable guidelines, including justification of request for any discretionary zoning provisions.”);
- A land information type report;
- A model of the development;
- Photographs for context;
- View analysis – detailing the impact of the development on any existing view corridors or any view impacts on adjacent properties or nearby open spaces and any skyline impacts;
- Shadow analysis;
- Acoustic reports; and
- Material and colour sample board.

5.2.3 Factors that Led to Success

South Granville is an established and well developed community in Vancouver. It has a long history as a commercial centre. The development that has occurred in proximity to the commercial centre means that residents are able to have a “work-live-play” existence. There are excellent shopping opportunities, places to dine, entertainment options and nearby open spaces.

Strong transport links means that commuting is a viable option for residents needing to work in the CDB and elsewhere in the city. The city’s commitment to maintaining view shafts and open spaces means the outlook from many parts of the suburb look down over the Vancouver city scape and across to the mountains.

61 http://vancouver.ca/home-property-development/when-you-need-a-permit.aspx
There are clear guidelines\textsuperscript{64} for what is acceptable development in the community and compliance is ensured through the planning and development application process.

The general market acceptance in Vancouver of living at a greater density means that this community is a highly desirable place to live. In contrast to the typical New Zealand impression of higher density living, residents in this part of Vancouver have higher education levels and higher household incomes than the average\textsuperscript{65}.

\textsuperscript{64} http://vancouver.ca/home-property-development/land-use-and-development-policies-and-guidelines.aspx
6 Example of Urban Renewal in the USA

6.1 USA Case Study: Detroit

6.1.1 Location and Nature of Development

Detroit was selected as a case study to illustrate an entirely different approach to addressing issues of enormous magnitude.

Detroit was once a premier manufacturing city with a manufacturing workforce of 270,000. That workforce had dwindled to 27,000 by 2000. The City’s population declined 25% between 2000 and 2010, and has been in the order of 60% since the manufacturing peak of the 1950’s. The legacy of such fundamental shifts in the economic base of the City, and associated outward migration, are the enormous swathes of vacant land and derelict buildings.

Further devastation affected large areas of the remaining urban fabric through storm and floodwater damage in 2014. Much of the City’s housing supply consisted of ground level and basement apartments which were severely affected. The City has developed a fragmented, disjointed pattern of activity which has impacted negatively on the image and identity of the City and community perceptions of well-being. Neighbourhoods are separated by extensive areas of unused/underused land.

Market activity in Detroit has naturally been severely affected.

6.1.2 Regulatory Provisions and Process

The Response has needed to be equal in scale to the extent of the issue. Despite the poor and declining quality of its housing stock, the City recognised that there is little to be gained in attempting to secure redevelopment of vacant areas. The focus needs to be on supporting the needs of existing communities, recognising that land and property values do not support comprehensive development or redevelopment.

In reframing the issue, Detroit Future City66 (DFC) emerged through a 24 month consultative process culminating in 2010 by the incumbent Mayor to address issues arising from structural economic decline. Subsequent changes of leadership have kept the initiative alive despite significant political differences between successive regimes. The effects of the 2014 storms gave renewed impetus to the initiative, to specifically focus on community well-being.

Summing up the challenge facing the city, DFC states:

DETROIT’S LAND VACANCY AND LAND USE. The city’s 20 square miles of total vacant land is roughly equal to the size of Manhattan. This characterization of Detroit is supported by the housing statistics of rising foreclosure rates, falling home and property values, and an excess of vacant land and homes for which there is not enough demand to fill before property deterioration sets in. Many homeowners in particular have been unable to balance their checkbooks as they see housing and transportation expenses account for over 50% of their monthly income, while the value of their investments continues to decrease. With nearly 150,000 vacant and abandoned parcels scattered throughout the city, every area of the city is vulnerable to some level of disinvestment. Despite a common perception, the majority of residents in the city live in areas that have only low or

66 http://detroitfuturecity.com/framework/
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moderate levels of vacancy less than 30%. This is not ideal, however, when more stable neighborhood options exist elsewhere in the region. This also leaves nearly 100,000 residents in areas of the city that are sparsely populated and unlikely to return to their previous traditional residential neighborhood character. Detroit must transform its image of vacancy into an image informed by the new possibilities for 21st century land uses. This means creating new opportunities for vacant land to become assets that contribute tax dollars, produce jobs, or become a public amenity. It does not mean that the people who might remain in higher-vacancy areas should not receive essential city services. Becoming a more affordable city for families and government means that land uses, regulations, and investments must be strategically coordinated to create more efficiency and sustainability now and over the long term.

In contrast to conventional approaches which might focus directly on housing and attempt to encourage, coerce or regulate development to achieve improved outcomes, DFC targets the future of vacant land. The strategy has resulted in the remapping of the geography of the city, the effect being to align large swathes of vacant land with adjoining neighbourhoods and to target public and private investment into the development of these areas as strategic open spaces providing access to facilities, landscapes and resources that were previously unrecognised. The strategy redefines “landscapes as infrastructure”, with emphasis on “blue infrastructure” being the creation of water based landscape and recreational opportunities and “green infrastructure” being land based and planting opportunities of a strategic scale.

The redefinition of the city means that previously vacant areas are now regarded as being part of a neighbourhood rather than wasteland between disparate communities.

Where the DFC sits in relation to statutory planning documents is as the equivalent of New Zealand’s Local Government Act 2002 requirements for Long Term Plans. In the context of a local economy that is in serious decline, the DFC reflects the need for proactive approaches to stimulate activity, in contrast to regulatory regimes that rely on activity occurring to have any effect.

6.1.3 Factors that Led to Success

The severity of the issues affecting Detroit is beyond the ability of any single agency, developer or sector to address. The economic situation and the prospects for short term growth are such that a development / investment led approach could be catastrophic. A period of consolidation is needed to provide the community with stability and to provide some aspiration of a brighter future.

DFC has provided that. It has carefully avoided placing additional financial burdens for recovery onto the community. It has reframed the nature of the issues affecting the City, turning around the negative connotations associated with the vast areas of vacant land. The land is now becoming a valued part of the Detroit landscape and townscape.

A key aspect of achieving this turn-around is the consensus that has been established through consultative processes that the City could not build its way out of the situation. In place of a development led regeneration initiative, grassroots projects and ideas emerged through community engagement which over time, have attracted financial support from philanthropic agencies. The DFC Implementation Office now acts as a catalyst and facilitator, empowering communities and agencies to identify and pursue opportunities. Early indications are that the proximity and availability of new opportunities is having a positive effect on the level of investment in the renewal and refurbishment of the housing stock.
7 Analysis and Discussion

With the benefit of the research undertaken, including the examples of medium density residential development in overseas jurisdictions (discussed in Chapters 3 – 5 of this report) and a review of a substantial amount of literature, the following provides an analysis and discussion in relation to the factors influencing the prospect of medium density residential development being established in Christchurch.

7.1 Benefits of Medium Density Residential Development

In relation to the sustainable management of natural and physical resources, the benefits of medium density residential development (compared with traditional patterns of residential development in New Zealand characterised by a lesser density of development) are well documented. These benefits (which can be seen as a result of the examples of medium density residential development in Chapters 3 – 5 of this report) include:

- More efficient use of a finite supply of land (requiring less land per household and per capita);
- Retaining the ability to use rural land productive purposes;
- Greater cost effectiveness in relation to the provision of infrastructure and services;
- Reduced economic costs associated with time spent travelling;
- More concentrated demand for public transport making it more cost effectively and ultimately providing a better quality of service;
- A greater degree of social connectedness and vitality;
- Greater vibrancy and safer environment (including lower levels of crime) due to a greater density of people;
- Greater levels of physical activity, with consequent health benefits;
- Reduced run-off from vehicles to water, and overall emissions to air/atmosphere (although air emissions may be more locally concentrated); and
- Reducing the adverse effects associated with ‘urban sprawl’ which are typically the opposite outcomes to the benefits listed above including the higher cost of infrastructure and services, and traffic congestion.

McConnell and Wiley (2012) state:

Planners and public policy analysts give many reasons for why new development patterns that include more high-density, mixed-use infill development would achieve improved social outcomes. Infill development is often seen as an opportunity to address sprawl and its associated problems while at the same time revitalizing and growing existing communities. Nevertheless, such new infill development has proved difficult to achieve in practice, for a host of economic, political and regulatory reasons.

Recognising the benefits associated with medium density residential development does not automatically translate into demand for such forms of development. In this regard, medium density residential development is similar to public transport – people acknowledge the benefits, but typically choose not to use it unless the benefits (including costs considerations) outweigh those associated with available

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alternatives. This is why people occupy medium density residential developments and use public transport to a far greater extent in cities like London and Vancouver.

7.2 Factors Influencing the Supply and Demand for Medium Density Residential Development in New Zealand

To understand the factors influencing the supply and demand for medium residential development in New Zealand, some understanding as to what has occurred in the past provides a useful starting point.

7.2.1 The Quarter Acre Pavlova Paradise

A lot of early European immigrants came to New Zealand to get away from aspects of European life they didn’t like. New Zealand was sparsely populated and there appeared to be plenty of land available. According to one website:

The quarter-acre section was established in the early years of European settlement as a suitable size for a New Zealand home. It soon became a feature of this country’s way of life, along with pavlova and six-o’clock (pub) closing.

A typical quarter-acre section had a street frontage of 66 feet (20.1m) – corresponding to the standard surveyor’s measuring “chain” – and a length of 165 ft (50.3m). Because many early sections were carved out of thick bush, owners may have pitched a tent in a clearing until something more substantial could be built.

Immigrants from Britain were used to rows of terrace houses with little land attached. By comparison, New Zealand’s quarter-acres allowed sizeable gaps between neighbouring houses. There was also room for a vegetable garden, a vital part of the domestic economy until the 1960s. Another useful feature of the quarter-acre section was that it had room for a septic tank to deal with toilet waste, before the days of the mains sewage system.

This standard-sized section came to represent the New Zealand dream – hence Austin Mitchell’s description of this country in 1972 as “The Half-Gallon, Quarter Acre, Pavlova Paradise”.

New Zealand in the mid 1960s was one of the best housed nations in the world with one dwelling for every four persons. The dream of home ownership could be realised by taking an advance on the family benefit, the weekly Government grant paid for dependent children. The typical house of the day was built of timber – a plentiful material and one suitable for a country prone to earthquakes. Such a house was weather boarded, on one level, of 1,000 sq. ft (93 sq. metres) and with three bedrooms and a corrugated iron roof.

The house was usually set back from the street, with a flower garden and a regularly mown lawn presenting a tidy image to the world. It was usually built at one side of the quarter-acre section with a concrete drive running down the other to the garage or car

69 http://kiwianatown.co.nz/kiwiana-displays/quarter-acre-section
70 The Half Gallon Quarter Acre Pavlova Paradise was a popular book by Austin Mitchel. It provided a witty, satirical description of life in New Zealand in the 1960s, and New Zealand ‘Kiwi’ culture. Described as “a celebrated vision of New Zealand as heaven on earth”, the book was a great success in New Zealand. The phrase "Half Gallon Quarter Acre Pavlova Paradise" soon became part of the New Zealand vernacular, with the term "quarter acre pavlova paradise" being included in the Dictionary of New Zealand English (https://en.wikipedia.org/wiki/The_Half_Gallon_Quarter_Acre_Pavlova_Paradise).
shed. The back section was the place for the more practical vege garden and fowl house and perhaps a tool shed for recreational tinkering and, of course, a kids’ hut or home cricket pitch. From the back door of the house a path led to a revolving clothesline.

The quarter-acre has become in cities and larger towns a thing of the past. While suburban sections have shrunk, fewer New Zealanders now have the time to maintain such large plots of land. As a result, vege gardens and fowl houses are no longer a regular feature of the New Zealand backyard.

Research commissioned by Mitre 10 surveyed more than 1,500 New Zealanders on their connection to the quarter-acre dream and asked their opinions on the size of back yards and what they were doing to make the most of them. Despite the comments in the last paragraph above, the Mitre 10 research concluded:

An overwhelming 84 per cent of respondents agreed that they liked the idea of the traditional Kiwi quarter-acre paradise – a large plot of land with a standalone house on it, with plenty of room outdoors, and almost all said they would rather live on the traditional quarter-acre section than in high-density housing with reduced outdoor living spaces.

This is consistent with the fact that gardening is one of the most popular hobbies in New Zealand.

Large lot residential sections are typically marketed as being more desirable than higher densities of residential development. For example, the St Kilda residential subdivision in Cambridge is marketed in the following way.

Remember when a quarter acre section was the norm? When kids raced trolley-carts in the street and people still chatted over the fence to the next-door neighbour. At St Kilda, the Kiwi dream is back.

At St Kilda, an average section is 1600m² - that's bigger than the quarter acre of old, and it's twice the size of today's average suburban sections for sale in Hamilton and Cambridge. With 1600m² you have more than enough room to live your very own Kiwi dream. Start by building your dream home, to your own design, with tons of space for family and friends. Then move on to your other dreams - outdoor living, a pool, fabulous garden, multiple vehicle garaging, or the man-cave you've always wanted. Your options, like your space, are endless.

Sections in the St Kilda residential subdivision are selling well.

Even larger residential properties, such as those in Tamahere (just south of Hamilton) which have an average lot size of 5,000m², command a higher place in the market (in terms of perceived quality of living environment due to a greater amount of land area and, as a consequence, greater financial value).

The increasing inability of people to obtain their ‘slice of the Kiwi dream’, typically due scarcity of land supply and rising prices, is now referred to in the Auckland context as a “crisis”.

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73 http://www.portaloceania.com/nz-life-hobbies-ing.htm
74 http://www.stkildacambridge.co.nz/
7.2.2  Negative Perceptions of Medium Density Residential Development

Coupled with (and partially driven by) the ‘quarter-acre dream’ there are widely held negative perceptions of medium density residential development.

The Centre for Housing Research, Aotearoa New Zealand - Kainga Tipu ("CHRANZ")\(^{75}\) commissioned research undertaken by CityScope Consultants Ltd in June 2011\(^{76}\), the aim of which 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.*

This research is made up of four working papers, five case studies and an overall report which examines the various and complex trade-offs made by different market segments, within the constraints of affordability and geography. The report presents the following conclusions under the heading ‘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.*

One of the four working papers produced as a result of the research undertaken by CityScope Consultants\(^{77}\) describes the negative perceptions of medium density residential development in more direct terms. It states:

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\(^{75}\) http://www.chranz.co.nz/index.html


Perceptions of Medium Density Housing

There was general resistance. Density was consistently seen in negative terms: lacking character, drab, monotonous, cramped, leaky, and subject to the complications of bodies corporate. For most – other than young renters and single women – medium density options were low on their list of preferences. They were particularly resistant to large apartment complexes.

Living in 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 any capital gain. Bodies corporate were also a negative, with this expressed primarily in terms of the fees charged. It was hard for respondents to identify with likely residents as they perceived 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 (also observed in the literature) towards increased rather than diminished social segregation as a result of residential intensification.

Eric Watson wrote an article in the NZ Herald on 2 June 2013 in relation to the Proposed Auckland Unitary Plan pointing out that the ‘quarter-acre dream’ cannot continue and that Auckland needed to address its housing shortage by developing ‘environmentally responsible’ higher density housing options. Watson states:

We’re talking semi-detached, terraced and low- or mid-rise apartment buildings of high-tech materials and methods and with modern common amenities.

He also discusses financing options and potential inhabitants of such developments (specifically retirees). However, for the purposes of this report, the more interesting aspect of the article was the ‘comments’ from readers that followed it. Some of the comments vehemently opposed to the idea of more intensive forms of residential development. They included, for example:

If you want “Kiwis” to live in ugly chicken coops with no garden you must be dreaming. Large-scale migration and slum living for the slave class of locals born here will lead to worse than riots...

Higher density housing is seen in Detroit [sic], Manchester and other such places. Stancombe Rd in Flatbush and Stonefields and others like them will be the slums of 30 years time. Stonefields in particular is depressing even now and it's not even finished.

Other comments expressed positive opinions about Stonefields (a medium density residential development in Auckland). However, the fear that medium density residential development will become the ‘slums of the future’, particularly if it is at the lower end of the market, is a reoccurring theme that gives rise to objections to this form of residential typology.

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78 http://www.nzherald.co.nz/opinion/news/article.cfm?c_id=466&objectid=10887852
79 http://stonefields.co.nz
A paper presented to a New Zealand Planning Institute Conference by Scrafton and Bredemeijer\(^{80}\) notes the prevalence of negative perceptions of medium density housing but claims there are signs of some demographic groups recognising the benefits. The paper states:

... it is also important to make sure that medium density housing or intensification is not mistaken for affordable, low cost or social housing. In this regard, terminology is very important. A starting point is to give consideration to ways of rebranding medium density housing.

What is happening in parts of Australia could also occur in New Zealand cities (for similar reasons). According to research undertaken by Bankwest\(^{81}\), more than half of all dwelling approvals in 2014 were for medium density\(^{82}\) homes in New South Wales, Australia. Over the past two years, the highest proportion of medium density approvals was in Sydney. Medium density represented 99.4 per cent of building approvals in Inner Sydney, followed by Botany (97.5 per cent), the Strathfield-Burwood-Ashfield area (95.1 per cent) and Parramatta (93.2 per cent).

Like the situation that has been frequently reported in the media in relation to Auckland, an Executive of Bankwest states:

For many, the most affordable and attainable inner-city dwellings are medium density. The acute popularity of medium density housing in Sydney is likely to be driven by the city’s first time home buyers, who are finding it difficult to afford a free standing house in locations close to the city. \(^{83}\)

7.2.3 The NIMBY Factor

A significant, and seemingly unavoidable, factor is the NIMBY factor – ‘Not In My Back Yard’.

Objections often arise in relation to medium density residential developments including up-market proposals. For example, a recent article in the NZ Herald\(^{84}\) in relation to a proposed 56 unit development on Rawene Road in Birkenhead (with units ranging in value from $600,000 - $1 million) includes the following statement which appears to be a classic NIMBY reaction to a medium density residential development:

[A resident\(^{85}\)] said the small apartments, inadequate parking, virtually no landscaping, excessive height and street shading from the building would adversely affect the environment. He said it was a shame that the council did not follow Vancouver, the Canadian seaport city that local politicians and planners use as a benchmark to make Auckland the "world’s most liveable city".

Ironically, the type of medium residential development proposed in Birkenhead is precisely what occurs extensively within Vancouver and, if anything, is at the lower end of the scale of development compared with that which occurs in Vancouver (discussed in Chapter 5 of this report).

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\(^{81}\) http://www.bankwest.com.au

\(^{82}\) “Medium density” in this context refers to units, townhouses and semi-detached houses.

\(^{83}\) http://www.bankwest.com.au

\(^{84}\) http://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=11498720

\(^{85}\) The name of the person has been deleted for the purposes of this report.
In line with the reaction to the Birkenhead proposal referred to above, Farr (2008) observes:

*Neighbors come out of the woodwork to oppose dense development, perceiving it as a threat to their quality of life. However tempers flare more often over traffic and parking, and occasionally blocked sunlight, than over the population density itself.*

According to Brent Toderian (quoted in The Australian):

*NIMBYs (not in my back yard) need give way to QUIMBY (quality in my back yard), and density – the oft maligned D-word – should be embraced as the answer to all things wrong with today’s urban development.*

*For many decades the environmental movement rejected cities and focused on pastoral areas. The truth is there is nothing greener than density if you do it well because it diminishes the pressure on agricultural land, it significantly reduces the cost of growth in a sprawl pattern and it improves everything from our climate footprint to our health, which have huge economic implications. So whether you’re motivated by environment, social cohesion or public dollars it’s a very strong argument for density.*

*Nowhere has this been more successful than in his home town, Vancouver, an international model for how to do good density. In the past 15 years 60,000 people have moved to the city’s downtown peninsula, 25 per cent more jobs have been created, 15 per cent more people travel to the city every day than 15 years ago but the number of car trips has fallen 25 per cent.*

*It’s the only North American city that’s dropped in vehicle miles travelled and the drivers love it,” says Toderian... “It’s about rethinking all our roles and re-educating all inputs into the city building process. It isn’t just about citizens, it’s about city hall, developers and many different stakeholders.”*

*Processes tend to be based on mistrust and that can lead to the wrong kind of debates about density. Density is a tough discussion; many politicians don’t like to touch it, but the truth is no city can have a serious discussion about being a greener, more economically resilient, sustainable city without talking about the D-word. It’s about how to change the narrative into a more collaborative, constructive discussion; not about whether you do density but how you do it better.*

*One of the most important elements of careful planning is public mobility. Vancouver’s city planners made walking, biking and public transport a priority but their plans didn’t preclude the car. They just designed the city in a way that made the first three options so inviting that fewer people wanted or needed to drive.*

*Often it’s seen as a war on the car, which is ridiculous because actually the worst thing for driving is a car-oriented city. (Think) gridlock.*

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87 http://www.toderianurbanworks.com/brent/
7.3 Medium Density Residential Development in the New Zealand Context

Numerous examples of high quality medium density residential development can be identified in overseas jurisdictions. Some of those examples and the factors that have influenced their success have been discussed in Chapters 3 – 5 of this report. However, it is not a simple case of just seeking to replicate the examples of development overseas and expecting them to work in the New Zealand context.

An extensive amount of research has been undertaken, both overseas and within New Zealand, examining the factors that need to be addressed to facilitate and promote medium density residential development. Many of the factors identified in the research include aspects which can be found in the examples of medium density residential development discussed in Chapters 3 – 5 of this report. These factors are discussed as follows.

7.3.1 Consultative and Collaborative Planning Processes

Exemplified by what has occurred in Vancouver, consultative and collaborative planning processes need to be undertaken with relevant stakeholders and the wider community to determine well-defined outcomes to be achieved. In Vancouver, one of the most significant agreed outcomes was the maintenance of view shafts to the surrounding natural environment (i.e. open spaces e.g. Stanley Park, coastal waterways and surrounding mountains).

This type of process has already been undertaken in Christchurch to some extent (at a fairly high level), or at least initiated, as part of the preparation of the Recovery Strategy for Greater Christchurch\(^89\) and the Land Use Recovery Plan\(^90\). As noted in the Recovery Strategy:

> Engaging communities extends well beyond the development of this Recovery Strategy. If the Strategy is to be implemented successfully, they must continue to be engaged in the recovery. Communities may be engaged in different ways during the development of the recovery programmes and plans. How they are involved will depend on what issues are being addressed and who is involved.\(^91\)

Many of the ‘Actions’ in the Land Use Recovery Plan relate to changes being made in various planning documents including the Proposed Plan (as noted in the Introduction to this report). Where the detailed planning has been completed for a particular area or neighbourhood, and the parameters of the any proposed development are well defined, are of a high standard, and have broad community acceptance, the Proposed Plan can reflect and provide for those developments (in a fairly permissive manner). Unfortunately, the timeframes associated with the Proposed Plan largely foreclose this approach. The risks associated with a permissive generic approach providing for medium density residential development and a lack of adequate controls are discussed later in this report.

However, if a ‘plan-led’ approach is proposed in the circumstances where the end result of any development has yet to be well defined (which, for the most part, appears to be the case in Christchurch), then consenting processes will invariably be required to ensure appropriate outcomes on a case by case basis as an interim measure pending the promotion of more definitive plan provisions for specific sites / areas through a series of ongoing variations or plan changes.

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\(^{90}\) Canterbury Earthquake Recovery Authority et al. (Undated). Land Use Recovery Plan Te MahereWhakahauamana Tāone. Christchurch: Canterbury Earthquake Recovery Authority.

\(^{91}\) Section 11.1, page 20.
Plan preparation processes provide the vehicle for community input. With more targeted provisions introduced through subsequent variations or plan changes, the burden of regulatory processes, notification requirements and compliance costs can be progressively reduced.

Developments that maintain or enhance and/or do not compromise outcomes specified in the Proposed Plan or agreed as a result of comprehensive consultative planning processes for a particular area or neighbourhood, should be able to proceed through a consenting process with no or minimal further public consultation (i.e. non-notified or limited notified applications).

The memorandum Counsel for the Christchurch City Council dated 3 June 2015 states:

\textit{On 30 April 2015, the Council resolved to establish a development authority, called Development Christchurch. The scope of the Development Christchurch is in its early phase and it is unclear at this stage what, if any, role it would have for incentivising intensification.}^92

Development Christchurch could be the sort of agency that continues the engagement with the community (as per the Recovery Strategy quoted above) and leads the consultative and collaborative planning processes described above. As illustrated through the UK case studies discussed in Chapter 4 of this report, such agencies provide continuity beyond the life of individual local authorities or governments, and provide a valuable resource to drive innovation and development rather than simply being a repository of good practice.

7.3.2 Provide for Mixed Use

The Residential Medium Density Zone in the Proposed Plan reflects a very typical approach throughout most district plans in New Zealand whereby zones are identified for specific purposes e.g. commercial, industrial, or residential. Within such zones only a very limited range of other types of activities are allowed. For example, in a residential zone, only small scale non-residential activities such as home occupations within very prescribed limits are typically allowed to occur.

To be successful, medium density residential development needs to be comprehensively planned as part of ‘mixed use’ approach where a variety of different living, working and recreational activities are in close proximity within a neighbourhood. This is recognised in Action 2 of the Land Use Recovery Plan (quoted in the Introduction to this report) which refers to “comprehensive residential and mixed use developments, including on brownfield sites”.

According to McIndoe et al. (2005)^93, urban design that supports mixed use neighbourhoods (in conjunction with other factors including connectivity and a relatively high intensity of different uses) can:

- offer people convenience, choices and opportunities, which lead to a sense of personal wellbeing;
- allow parking and transport infrastructure to be used more efficiently;
- lower household spending on transport;
- increase the viability of local shops and facilities;
- encourage walking and cycling – bringing health benefits, reducing the need to own a car and thus reducing emissions;
- increase personal safety; and

To increase the chances of medium density residential development being achieved on a comprehensive scale, there needs to be a paradigm shift in the way that planning provisions recognise and provide for that type of development. It is not just about having a zone called ‘Residential Medium Density Zone’ and having generous planning provisions that allow such development to occur lot by lot (even if some of those lots are agglomerated / amalgamated). Such an approach across such a large area is likely to result in an uncoordinated ad hoc pattern of intensification. A more comprehensive planning approach is required perhaps promoting bolder, targeted provisions for smaller areas rather than a broadly defined blanket zone.

As discussed in Chapters 3 – 5 of this report, the proximity of complementary activities was an important factor in most of the case studies, which is discussed below in relation to the concept of ‘walkability’.

7.3.3 Walkability

Closely related to the mixed use approach, walkability has been identified as a key factor contributing to the successful medium density residential development. This refers to medium density residential being located within a distance of up 800m from other activities, including:

- Supermarkets, cafés, restaurants and other shops;
- Public transport routes;
- Open space / recreational / leisure opportunities; and
- Educational facilities (not necessarily any particular type).

According to Guy Perry94, an expert on the design of healthy cities, cities with poor ‘walkability scores’ (usually due to large distances between residential activities and other activities) have the highest rates of obesity and the highest carbon footprint, therefore have a greater effect on human health and climate change (Atlanta, USA cited as an example95). In other words, walkability promotes walking which has health benefits, reduced obesity, lower health costs, and less adverse effects on the environment.

7.3.4 Planning Provisions

This report is not a ‘plan drafting’ exercise, however the tension between a permissive versus discretionary planning approach that could be included in the Proposed Plan is discussed as follows.

Consideration has been given to whether or not a Permitted Activity or Controlled Activity planning regime is appropriate to provide for medium density residential development. As discussed in Chapter 2 of this report, the notified version of the Proposed Plan provides for up to a maximum of two dwellings per lot as a Permitted Activity and did not utilise Controlled Activity status at all.

The memorandum Counsel for the Christchurch City Council dated 3 June 2015 (in relation to agglomeration of land) states:

The Council has endeavoured to enable medium density development to the extent it can within Proposal 14 without giving rise to long term adverse effects. Relaxing Proposal 14’s rules to further enable medium density development carries a risk that Proposal 14 would give rise to adverse effects and would not be consistent with sustainable management.

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95 http://www.radionz.co.nz/national/programmes/sunday/audio/201767627/guy-perry-on-quality-urban-living
Consequently, it is difficult to provide significantly more lenient rules for agglomerated sites in order to incentivise agglomeration without compromising on urban design quality and neighbourhood amenity.\(^{96}\)

The agglomeration of titles can be easily achieved via mechanisms under the Resource Management Act, Unit Titles Act or the Building Act, and is not in itself a barrier to development. However, the issue more relates to the rules and performance standards (and other non-regulatory matters) that will encourage comprehensive developments including medium density residential development which might well involve the agglomeration of land holdings.

None of the examples of medium density residential development discussed in Chapters 3 – 5 of this report were established as a result of ‘permitted’ planning regimes. They all involved some form of discretionary decision making process which enabled a wide range of matters to be considered and the development controlled by way of conditions.

Notwithstanding the repeal of section 76(3A) of the RMA, which removed the requirement to list the measurable standards as part of a Controlled Activity framework enabling greater flexibility over outcome focused matters of control, there are still limitations around matters of control and the conditions that can be applied as part of this approach. The actual conditions that can be imposed may not always be able to address the effects / matters of concern, particularly in relation to matters of urban and architectural design.

It is very difficult to develop performance standards which will guarantee quality architecture and good urban design outcomes. An apartment building in Knox Street, Hamilton (see photo below) has attracted attention from various opposing quarters regarding its design qualities.

![Photo: Knox Street Apartments in Hamilton.](image)

The design of buildings to maximising the use of the allowable building envelope (whereby the Council cannot prevent it because it ‘complies’) is often cited by critics as a factor that can lead to poor design (see the photo of the Peachgrove Road example below). This development is out of character with any aspect of the surrounding environment, including the adjacent higher density development (to the left in the

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\(^{96}\) Memorandum Counsel for the Christchurch City Council on Incentivising Agglomeration dated 3 June 2015. Para 5.
photo). Note also the five cars illegally parked on the side of the road due to inadequate on-site parking which have largely destroyed the grass verge.

The Knox Street and Peachgrove Road Apartments were both established as Controlled Activities on the basis that they complied with the requirements of the District Plan. Both developments have attracted negative reactions. That is not necessarily a reflection on the use of Controlled Activity status, but rather a lack of adequate controls in the District Plan to ensure that the developments are of a high quality and do not have adverse off-site effects.

Notwithstanding, a non-notified Controlled or Restricted Discretionary Activity approach removing the requirement for affected persons approval provides a level of certainty to the applicant that the matters over which the council has restricted its discretion will be confined to the council and applicant only.

As discussed in the next section of this report, design guidelines can be successfully used as part of the assessment and determination of Controlled, Restricted Discretionary, or Discretionary Activity resource consent applications.

7.4 Design Principles, Guidelines and Case Studies

Research undertaken by CityScope Consultants Ltd 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 residential development. The research concluded that one way to consolidate these findings from diverse sources is to use them to develop guidelines that might inform stakeholders across the housing “supply and production chain”. Given their direct relevance to the purpose of this report and the New Zealand context, the principles (to be used as guidelines) developed by CityScope Consultants Ltd along with recommendations in relation to affordability, ownership and implementation are presented in Appendix B of this report.

Throughout the research undertaken, numerous ‘design guidelines’ and ‘case studies’ have been found in relation to ways in which high quality medium density residential development can occur. Some of the design guidelines and case studies are comprehensive. These include:


Church, T (2012): *Medium-density Housing Case Study – Chester Courts, Christchurch*. Prepared for the Ministry for the Environment by Boffa Miskell Ltd.


More informative than all the others discovered, the ‘Apartment Design Guide’ prepared by the New South Wales Department of Planning and Environment\(^{97}\) is a comprehensive document addressing the design of residential apartment development at the site and individual building scale. It includes the following parts:

**Part 1 - Identifying the context**
This part introduces generic apartment building types to inform appropriate site, block and building design responses at a strategic level. It outlines the importance of understanding the context, setting, local character, size and configuration of a development site. It is to be used primarily during the design stage of a development and during the strategic planning process when preparing planning controls.

**Part 2 - Developing the controls**
This part explains the application of building envelopes and primary controls including building height, floor space ratio, building depth, separation and setbacks. It provides tools to support the strategic planning process when preparing planning controls.

**Part 3 - Siting the development**
This part provides guidance on the design and configuration of apartment development at a site scale. It outlines how to relate to the immediate context, consider the interface to neighbours and the public domain, achieve quality open spaces and maximise residential amenity. It is to be used during the design process and in the preparation and assessment of development applications.

**Part 4 - Designing the building**
This part addresses the design of apartment buildings in more detail. It focuses on building form, layout, functionality, landscape design, environmental performance and residential amenity. It is to be used during the design process and in the preparation and assessment of development applications.

**Part 5 – Design review panels**
This part explains the role of design review panels in the development assessment process, outlines administrative procedures and provides templates for the successful operation of a panel. It is to be used by councils to administer design review panels at all relevant stages of the development process.

**Appendices**
This part includes checklists for information required at different stages in the planning process.

The UK Homes and Communities Agency (discussed in Chapter 4 of this report) has published a document titled ‘Integrated Design’.\(^{98}\)

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\(^{98}\) [www.homesandcommunities.co.uk/udc](http://www.homesandcommunities.co.uk/udc)
8 Conclusions

8.1 Key Findings

There is a wide range of economic and sociological factors which influence the supply and demand for particular residential typologies.

Each of the case study examples discussed in this report provides pointers regarding the factors that might encourage additional or better quality medium density housing. Even in the case of Detroit, where market activity is at an extremely low level, the strategy that has been adopted aims to foster community identity to build confidence around renewed investment.

While we hesitate to suggest that any of the examples provides a model that can readily be translated into the New Zealand context we are mindful that Christchurch presents a unique situation where there is an increased justification for pushing the boundaries of conventional approaches.

Large scale change in the housing stock within the Christchurch Residential Medium Density Zone will take a considerable period of time. The following factors form part of a suite of economic, social and regulatory conditions that militate against major advances in the short term:

- Extent of the Residential Medium Density Zone. The zone reflects proximity to specific facilities such as retail centres, public transport and schools but it lacks any overall cohesion or integrity. Intensification is likely to be small scale, spasmodic and fragmented (i.e. lot by lot).

- Community Resistance. The lack of understanding and clarity regarding medium density residential development in the Christchurch context will tend to fuel opposition rather than foster consensus and support. The Kiwi dream of owning a ‘quarter-acre pavlova paradise’ is still alive and well despite the diminishing prospect of it becoming a reality in cities where land is becoming an increasingly scarce and higher priced resource. Two key challenges to overcome for medium density residential development to become an increasing reality in Christchurch (and New Zealand generally), are:
  - Negative perceptions associated with medium density residential developments resulting in reduced demand and greater risks for developers; and
  - Opposition to proposed medium density residential developments from owners of more traditional forms of residential accommodation (exhibiting the classic NIMBY syndrome).

- Development Options. While the Plan continues to provide an easier option to make a short term gain (e.g. small scale infill housing), landowners and developers will most likely pursue that option in preference to the costs and uncertainty of a more challenging development and associated planning processes.

- Development Standards. A continuation of conventional approaches of setbacks, separation and protection of an individual’s amenity expectations will perpetuate existing building patterns with a gradual reduction in available opportunities for more imaginative comprehensive development.

- Capacity and Capability. While there is a sizeable labour force available within the construction industry, the extent to which its skills and capacity can be matched to the construction of more innovative building designs is unknown and untested.
Despite these challenges, there are sound reasons (which are set out in this report) for facilitating and promoting medium density residential development.

Numerous examples of high quality medium density residential development and associated research can be identified in overseas jurisdictions. Some of those examples and the factors that have influenced their success are discussed in this report. However, it is not a simple case of just seeking to replicate the examples of development overseas and expecting them to work in the New Zealand context. For the purposes of this report, the housing product is less important than the process and factors which brought it about. The common factor of each of the case studies that have been examined, however, is that they all seek an intensification of what existed previously.

The review of research material undertaken as part of the preparation of this report, suggests that a prerequisite for instigating a successful change in direction appears to be a shared understanding that there is an issue that requires attention in the particular area and in a particular way. Only when an issue has reached a ‘tipping point’ in terms of its significance does there seem to be acceptance that action, or a change of direction is required. Despite the apparent urgency to address a housing shortfall in Christchurch, there does not seem to be a consensus that the current approach in the Proposed Plan will provide the answer.

Strategic issues require strategic responses championed by lead agencies. The experience of other cities faced with needing to respond to economic downturn or natural disasters is that redevelopment takes decades. It will span the lifecycle of several governments and local bodies. The response needs to have a degree of immunity from the risk of regular changes in regulatory regimes, funding programmes and policy direction. Local authorities typically take a key role but they may not be, and do not need to be, the lead agency. In the UK for example, key regeneration initiatives are often driven by volume house builders.

Lead agencies need to address the key matters that affected communities. Consultation with those communities around specific proposals will provide the mechanism to identify those key matters. The power of lead agencies is twofold; they can leverage public and private sector funding, and they can provide continuity and a degree of immunity from political change at the local and national level.

Effective solutions may require innovation in terms of construction techniques and building design as well as innovation in regulatory provisions. The creation of a new ‘product’ can be the catalyst for developing new markets but solutions need to be targeted. Without focus it will be difficult, if not impossible, to engage funding or construction partners to pioneer forms of development that break the traditional mould.

Lot by lot development is unlikely to make any impression on Christchurch’s need to address a significant shortfall and increase housing numbers. ‘Enabling’ planning provisions alone are unlikely to result in significant change unless there is the capacity and commitment to deliver larger scale comprehensive development providing the full range of activities expected by communities. Most of the successful examples of medium density residential development in overseas jurisdictions have occurred as a result of:

- consultative and collaborative planning processes resulting in well-defined outcomes to be achieved;
- a comprehensive mixed use approach including walkability to goods and services, public transport, and open spaces / recreational opportunities; and
- an emphasis on good urban design and quality architecture.

The issue of addressing the Christchurch housing supply is strategic in size and nature; it requires clear and continuing leadership across all sectors that will shape the future Christchurch. A key finding of the UK, Canada and USA case studies is that it is not so much about building; it is more about community development and regeneration.
The broad brush identification of a generic Residential Medium Density Zone does not provide an appropriate vehicle for embarking on such a debate. Communities will expect there to be a clear rationale for action in their neighbourhood. It demands a more targeted approach so that directly affected communities can be engaged in constructive rather than theoretical debate about how a particular site, or block or neighbourhood is to be intensified (as occurred in the Redfern Social Housing Development in Sydney). Such debate risks being mired in the relative merits of one density target rather than another, whereas more constructive dialogue is likely to be had around land use and building types rather than numbers. What this points to is a need for the Proposed Plan to be quickly followed by a programme of Plan Changes providing site specific proposals, controls and supporting material to give effect to the policy intentions underlying the Residential Medium Density Zone.

In the context of the RMA, examination of the factors related to medium density residential development must address the potential for adverse effects. However, that is not to suggest that such effects look or feel the same in every New Zealand city, or that such effects have the same significance now than they had pre-earthquake. The City is faced with addressing matters of strategic significance. It is necessary to revisit the values that have historically been ascribed to matters of amenity and consider whether, in the context of the issues that need to be addressed, they need adjustment. However, such an evaluation needs context. In that regard, noting the successful approaches reflected in the case studies, the identification of potential target sites or areas (as opposed to a blanket zone allowing lot by lot development by individual landowners) and the promotion of these through consultative processes would provide the ability to examine and evaluate such effects as part of plan preparation. Done effectively, and supported by provisions related to building design, there would appear to be potential for the Plan to enable development to be consented on a restricted discretionary basis without the need for notification.

Issues of activity status, certainty and compliance costs will always be central to development decisions. In contrast to many of the case study examples, the New Zealand system benefits from (or suffers from) a system that enables development to proceed with minimal scrutiny. To lead towards a situation where developers have more confidence with consenting requirements and to safeguard the opportunity to intensify key areas, the Proposed Plan perhaps needs to reconsider the degree of permissibility in relation to low level intensification (such as single lot infill). While superficially attractive, the availability of short term, low scale development options is likely to constrain future development opportunities by fragmenting land ownership and will drain the capacity of the construction sector to move towards more innovative design solutions. While the case studies illustrate examples of some small scale developments of medium density housing, large scale change is more likely to be achieved where it is less likely to be affected by fragmented patterns of ownership and development.

The capacity and capability of the construction sector is an unknown. What is clear is that while the market demands conventional building forms, that is what the building sector will deliver. But when circumstances change (for example, where the land supply reduces, where planning policy changes or where customer preferences change), the building sector is generally quick to respond. The growth of retirement villages in New Zealand is an example of how a sector can emerge to meet a growing demand. The UK case study examples illustrate the success of using design competitions to stimulate debate and select preferred solutions for general market housing. They also demonstrate how key players that are traditionally demand driven are prepared to engage to drive product innovation and achieve higher design outcomes than would ordinarily be sought by the market.

8.2 Where to From Here?

Although the timeframe associated with the hearing process for the Proposed Plan may not provide the opportunity to thoroughly revisit the Residential Medium Density Zone, it is capable of paving the way towards a framework that will be more enabling of comprehensive intensification proposals.
There is the opportunity to amplify the policy framework of the plan to give clearer emphasis on the intent to achieve comprehensive mixed use intensification and address the following:

- promote consultative and collaborative planning processes resulting in well-defined outcomes to be achieved in relation to the development of neighbourhoods;
- seek a comprehensive mixed use approach including walkability to goods and services, public transport, and open spaces/recreational/leisure opportunities;
- enable medium density residential development as part of, or in combination with, and mixed use approach to the establishment of land uses. This requires a paradigm shift away from zones that only provide (predominantly) for one type of land use;
- generally require an emphasis on good urban design and quality architecture;
- state an intention to identify (through consultation) areas within the Residential Medium Density Zone that will be promoted for comprehensive intensification through future plan changes or consent processes; and
- provide policy support for proposals satisfying a range of criteria which might include:
  - community consultation and buy in;
  - mixed use;
  - mixed housing typologies;
  - innovative design to recognised standards;
  - provision for alternative transport; and
  - high quality urban and architectural design.
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Appendix A: Map of Residential Medium Density Zone and the Residential Suburban Density Transition Zone in the Proposed Plan

Appendix B: Dunbar and McDermott - Principles as Guidelines and Recommendations
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 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 multiunit 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.