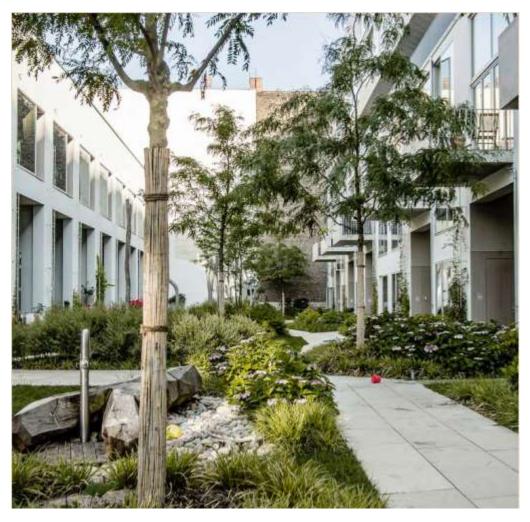
# **Christchurch City Council**

# **CENTRAL CITY RESIDENTIAL PROGRAMME (PROJECT 8011)**

# **Sub-project C1: Support alternative housing approaches and projects**

# Case study:

How have the barriers to the provision of alternative housing projects in the Central City been overcome elsewhere in NZ and overseas?



Prepared by Strategy & Transformation Group
Christchurch City Council
25 February 2020

# **EXECUTIVE SUMMARY**

# **Background**

Pre-earthquakes, the Central City had a residential population of approximately 8,000. Immediately post-earthquakes, this fell below 5,000 as the availability and choice of homes was significantly reduced, the choice of affordable homes in particular. It's currently around 6,000, which falls short of the critical mass of residents necessary to support the private sector investment delivered to date and achieve the self-sustaining regeneration of the Central City.

Increasing residential activity in the Central City has been a consistent priority for the City and Greater Christchurch for many years, mostly recently through the Council's Central City Residential Programme (aka Project 8011, adopted in September 2018). It aims to increase the residential population within the Central City to 20,000 within 10 years (by 2028) through a series of sub-projects that address both the supply and demand side of housing within the Central City.

The housing needs of families with young children, retired and/or single people and ethnicities other than European are not presently well served in the Central City and there is a limited amount of social housing provided compared to wider Christchurch. Providing a range of affordable and well-designed homes that meet people's needs within its nine neighbourhoods is integral to attracting a greater number and mix of residents to the Central City. Sub-project C1 will support alternative housing approaches and projects that bring a diversity of housing typologies, tenures and price points to the Central City. Alternative housing includes community housing, emergency housing, student accommodation, papakāinga housing, co-housing and co-operative housing communities and other, smaller scale, private self-builds.

# **Purpose of case study**

This case study provides further information on the promotion and delivery of alternative housing approaches and projects, as requested by the Council. It will help inform recommendations to the Council for consideration and decision-making during Stage 3 of sub-project C1 around exactly how it will support such development. The purpose of this case study is to determine:

- 1. what the barriers to the successful provision of alternative housing projects elsewhere in NZ and overseas have been;
- 2. how they were resolved; and
- 3. their relevance to Christchurch's Central City.

# Methodology

This case study involved identifying a variety of alternative housing projects in Christchurch, elsewhere in NZ and overseas and undertaking a desktop literature review of each of them, supplemented by direct information requests to the providers or associates where necessary, to obtain consistent, and therefore comparable, information regarding the project provider/s, project descriptions and findings.

#### **Findings**

While both traditional and alternative housing development are subject to commercial pressures, the main barriers to the latter, and means of overcoming them elsewhere in NZ and overseas, were found to be:

- poor leadership and goals, particularly where there are multiple parties, overcome via:
  - o good leadership via an experienced development organisation;

- o a simple but powerful shared goal; and
- o clear understanding of their respective roles and responsibilities, ideally contained in a written Partnership Agreement;
- the lack of suitable development partners, overcome via:
  - partnering with community housing providers that are either registered with the Community Housing Regulatory Authority or have charitable status, to ensure retention and recycling of the public contribution; and
  - partnering with prospective residents;
- immature finance systems and the treatment of risk (particularly for architect-led development), overcome via:
  - o utilising a property lawyer to navigate the system;
  - o being very clear about the nature of the development; and
  - advocacy for tax, bank, legal and other structures that recognise, provide for and enable alternative housing models and ensuring those within the Council also help overcome these barriers;
- access to land due to high land prices, overcome via:
  - o land sale below market value;
  - 'patient equity'; and
  - purchase with a pool of investors, including future residents and/or crowd-funding by ethical investors;
- the associated lack of central and local government support (with patient capital in particular, which is critical) for alternative housing approaches, overcome via:
  - o the provision of seed and/or other funding in various forms to developers, including land sale below market value, and to owners/occupiers, e.g. shared equity;
  - o partnership;
  - o information provision;
  - legal mechanisms to provide for a mix of housing typologies and tenures and restrict sale to owner-occupiers;
  - ensuring planning rules and the administration of them are focussed on good outcomes in favour of process;
  - o promoting the positive aspects of successful residential development;
  - o provision of 'wrap around support' for social housing tenants; and
  - policies and practices that make a meaningful difference to the delivery of alternative housing models;
- the tension between development quality and affordability, overcome via:
  - strategic cuts to development costs through omission and/or provision of communal facilities and/or efficient construction and/or development of a common standard for fixtures and fittings, enabling some degree of self-build;
  - o making sacrifices in terms of, or deferring the installation of some items until cash flow from rent is available; and
  - capping the profits from investment; and
- a housing culture in which everyone aspires to home ownership (which stigmatises renting) and investment incentives such as negative gearing and tax-free equity gains (which commodify housing), overcome via the above.

Alternative housing approaches tend to better deliver than the traditional on the wider benefits to the community, but require more support to de-risk such projects. There are a variety of ways in which the Council could potentially address the barriers to, and support, alternative housing approaches and

projects. Further information and recommendations about these will be presented to the Council during Stage 3 of sub-project C1.	

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# 1 INTRODUCTION

# **Central City Residential Programme (Project 8011)**

The Central City should be a place for everybody to live, work and play.

Pre-earthquakes, the Central City had a residential population of approximately 8,000. Immediately post-earthquakes, this fell below 5,000 as the availability and choice of homes was significantly reduced, the choice of affordable homes in particular. It's currently around 6,000, largely absent from the core and confined to the fringes at relatively low density. Providing a range of affordable and well-designed homes that meet people's needs within the nine Central City neighbourhoods is integral to attracting a greater number and mix of residents to it.

Increasing residential activity in the Central City has been a consistent priority for the City and Greater Christchurch for many years. The Council's Central City Residential Programme (aka Project 8011, adopted in September 2018) aims to increase the residential population within the Central City to 20,000 within 10 years (by 2028). This will be encouraged through a series of sub-projects that address both the supply and demand side of housing within the Central City, nine of which have been initiated during the first three years of the programme.

# Sub-project C1: Support alternative housing approaches and projects

Sub-project C1 will support alternative housing approaches and projects that bring a diversity of housing typologies, tenures and price points (including social and affordable) to the Central City.

For the purposes of this sub-project, an 'alternative housing provider' is one which delivers housing projects which meet significant deficiencies and demand within the Central City not met by the standard market-led, for profit model of housing delivery. These include providers of:

- Community housing, such as Kāinga Ora, Ōtautahi Community Housing Trust, ComCare, Emerge and Vision West.
- Emergency housing, such as The Methodist Mission, City Mission, Women's Refuge and YWCA women's shelter.
- Student accommodation, such as ARA Institute of Canterbury.
- Papakāinga housing on local iwi land, such as Te Rūnanga o Ngāi Tahu.
- Co-housing and co-operative housing communities which, instead of responding to market forces, responds to the specific and diverse needs of the people who are intended to live there, such as the Peterborough Street Co-op and the future Madras Square.
- Other, smaller scale, private self-builds, such as the Buckley Rd Project.

In terms of housing tenure, the current review of the Council's Social Housing Strategy proposes to define 'community housing' as 'A form of publicly-assisted housing working alongside private housing in the open market, meeting housing need through a range of social and affordable rental and home ownership options'. Community housing both encompasses and enhances the public (or social) housing more usually provided by Kāinga Ora (formerly HNZ) and local authorities. Using the Council's Housing Policy's housing continuum, community housing can be seen as that covered by the 'Assisted' part of this framework:

# **Housing Continuum**

Social Housing		Affordable Housing		Market Housing			
	Emergency (Refuge, Homeless)	Assisted	Assisted Rental	Assisted Ownership	Market Affordable	Private Rental	Private Ownership
	Assisted					Market	
	Housing Adequacy Framework: Secure, Affordable, Habitable, Accessible, Culturally Appropriate						

Community housing in this broad sense is targeted at low to middle income households (i.e. those earning up to 120% of median household income) spending no more than 25-30%¹ of their gross income on rent or mortgage costs. For those on middle incomes, this can be further defined in tenure terms of a median household income being sufficient to affordably purchase a lower quartile-priced house.

# Stages of sub-project C1

There are four stages to sub-project C1:

- 1. Stage 1: An evaluation report of the current Central City housing typologies, tenures, price points, residential locations/environments and residents, i.e. what's being delivered at the moment in for profit and not for profit spaces. This case study has also been undertaken in Stage 1, so as to help inform the Stage 3 report.
- 2. Stage 2: A report of the typologies, tenures, price points and locations of alternative housing needed to address the gaps.
- 3. Stage 3: A report on the innovative models and mechanisms needed to deliver these, how they'll be encouraged and feasibility assessment on test sites using different approaches, collaboration with housing providers/development partners.
- 4. Stage 4: Funding and delivery of residential development projects that will result in a to be determined number of residential units at or below the affordability measure identified in to be determined locations (e.g. available key development sites and/or in areas of lower than permitted density) within the Central City by 2028.

Engagement with key community housing providers, as well as self-builders, is embedded throughout the process.

This case study provides further information on the promotion and delivery of alternative housing approaches and projects, as requested by the Council. It will assist inform the manner in which the Council will determine exactly how it will support such development during Stages 3 and 4 of subproject C1.

# 2 PURPOSE AND STRUCTURE OF CASE STUDY

<sup>&</sup>lt;sup>1</sup> 30% is the accepted affordability threshold; 25% is what public housing tenants pay under the Income-related Ret Subsidy Programme (IRRS).

So as to help inform which alternative housing approaches and projects the Council is best to support, and how, the purpose of this case study is to determine:

- 1. what the barriers to the successful provision of alternative housing projects elsewhere in NZ and overseas have been;
- 2. how they were resolved; and
- 3. their relevance to Christchurch's Central City.

The methodology by which the above has been investigated is explained in Section 3. Sections 4 and 5 explain the context of the case study (i.e. the housing situation in NZ and Christchurch's Central City) and issues to be addressed respectively. The case studies can be found in Section 6 and the findings are summarised in Section 7. Resulting conclusions and recommendations are documented in Section 8.

# 3 METHODOLOGY

A case study is itself a type of research methodology.

This case study involved identifying a variety of alternative housing projects and undertaking a desktop literature review of each of them, supplemented by direct information requests to the providers or associates where necessary. The intent was to obtain consistent, and therefore comparable, information regarding the project provider/s, project descriptions and findings. The alternative housing projects are:

Where	Number	Example
Christchurch (3)	1	The Breathe Urban Village
	2	Peterborough St
	3	Goulding Ave
Elsewhere in NZ (3)	4	Cohaus, Auckland
	5	Buckley Rd, Wellington
	6	The Coh, Auckland
Overseas (6) 7		Transitional Housing Programme, Kununurra, Australia
	8	Nightingale 1, Melbourne, Australia
	9	Kalkbreite Housing Coop, Zurich, Switzerland
	10	L101, Berlin, Germany
	11	Ausbauhaus, Berlin, Germany
	12	R50, Berlin, Germany

Examples of alternative housing projects elsewhere in Christchurch have also been included. In terms of overseas, a conscious decision was made to include some projects from Australia in the examples from outside NZ, given its cultural and housing market similarities to New Zealand's. Research (Motu Economic and Public Policy Research Trust, 2010 and 2016) has also indicated that, while some minor regional differences are apparent, the impacts of the extent to which their respective monetary, fiscal, regulatory and planning policies differ are of second order importance relative to the broad macro

determinants of house prices in each country, making the NZ housing market part of a single trans-Tasman housing trend/broader Australasian housing market.

# 4 CONTEXT

# **Housing nationally**

Nationally, housing was affordable in the not too distant past and buying one in which to raise a family was not as difficult as it is today for many people. As the housing continuum from homelessness, to the rising demand for state houses, to the state of the housing market attests, New Zealand's housing system is failing too many people, often as a consequence of policy. Based on a stocktake of NZ housing in 2018 (Johnson et al, 2018), its key parts can be summarised as follows:

# Homeownership

At the 1991 peak, 74% of households owned their dwelling. By 2013, it had declined to 65%, with home ownership rates for Maori and Pacific peoples 28% and 19% respectively, compared to 57% for Europeans. Central city locations tend to have a significantly lower proportion of owner-occupiers compared to suburban locations. In 2013, 74.1% of Christchurch's Central City residents were renting, consistent with elsewhere (Adelaide was 27%, for example). In 2018, 74% of Christchurch's Central City residents remain renting.

# **Market renting**

High house prices are subduing yields on rental property investment, limiting new supply of rental housing, particularly in the main cities. As rents are rising faster than incomes and tenants remain in the housing they have, there is a growing shortage in affordable, good quality rental housing, including for the increasing numbers of retired people on a limited income who don't own their own home.

# State and social housing

Social housing (including state housing) can be divided into two broad groups, based on how it's funded. The Ministry of Social Development (MSD) partially funds the majority of social housing units through its Income-related Rent Subsidy Programme (IRRS), whereas most Council-owned and much of the Community Housing Provider (CHP) housing stock is not receiving IRR subsidies from the Crown. Although actual demand for social housing is difficult to measure accurately, a commonly accepted indicator of unmet need is the social housing waiting list administered by MSD. In September 2019 it hit 13,9663 nationwide.

# **Housing assistance**

Government housing assistance is provided through forms of both demand subsidies (i.e. those going directly to the person or household being supported, such as the Accommodation Supplement, or AS) or supply subsidies (i.e. paid to the provider of affordable housing, such as the IRRS). These subsidies mainly support rental housing through the AS and the IRRS, which are administered by the MSD. Two thirds of its recipients (around 180,000 households) are private sector tenants, with households renting and receiving the AS making up around 27.5% of all tenant households (approximately in \$870 million in FY16/17. The number of older people needing the AS to top up their Superannuation in order to

<sup>&</sup>lt;sup>2</sup> 2018 Census of Population and Dwellings

 $<sup>^{3} \ \</sup>underline{\text{https://www.stuff.co.nz/national/politics/} 117086660/\underline{\text{public-housing-waitlist-nears-}} 14000-\underline{\text{with-recordhigh}} \\$ 

afford housing is increasing, with much of the future demand for housing assistance expected to come from older tenants. Subsidies also support home ownership, partly through the AS and partly through the Homestart grant programme. Since the Homestart scheme began pay-outs in April 2015, \$148 million has been granted, with take-up by Maori and Pacific peoples lower than their percentage of the population.

# Homelessness and emergency housing

Homelessness comprises those without shelter (i.e. living on the streets or in improvised dwellings such as cars), in temporary or transitional accommodation (including motels, camping grounds, boarding houses and marae) or in shared accommodation (i.e. living as a temporary resident with family or friends, including in garages). Rates of housing-related poverty and homelessness, a key indicator as to whether the housing system is working, are rising, with a 'turn away rate' from emergency housing providers of 82% to 91% painting a picture of desperate families and emergency housing workers looking for emergency housing.

#### **New housing**

All housing providers, whether traditional or alternative, must operate in the same housing market, in which dwelling prices are ultimately determined by the highest value, best use of land. A housing development will only proceed if expected market prices for its dwellings exceed the expected total land and build costs. Furthermore, given that the cost of development land is determined by the developed value less development costs, the cost-plus approach is of limited value in creating affordable housing in that it merely provides more scope for the purchase price of land.

Generally speaking, the expected total costs (i.e. the barriers to housing development) which influence the expected market prices include land costs, financial costs (with allowance for risk), regulatory compliance costs (arising from both the regulatory requirements themselves and the regulatory practices to implement them), the costs of delay caused by extended consent processing and uncertainty, opportunity costs arising from forced changes to proposed developments, costs of providing specific infrastructure and construction costs.

While current levels of building consents and house construction are at decade highs, the supply of new housing has not been adequate for the strong population growth over the five years to February 2018, fuelled by a large increase in net migration.

# Security of tenure

Reductions in the number of state houses has led to major shifts in tenure patterns for those on low incomes. As state housing has become less available, unaffordable private rentals have become the only option left to many families. Private rental tenants generally pay a much higher proportion of their disposable household income on housing than social housing tenants or owner-occupiers.

# Social costs and benefits of housing quality

People spend most of their time indoors in their houses, so the quality of the indoor environment is important to health and wellbeing. Private rental dwellings (generally older stock) are in the worst condition, followed by state housing (which has had extensive retrofitting), with owner-occupied housing being in the best condition. The social and economic costs of poor housing conditions and insecure tenure include higher housing costs relative to income, overcrowding, higher rates of infectious and respiratory diseases, hospitalisation and poorer health (especially for babies, children, the elderly and those with chronic illnesses and disabilities), poorer education outcomes for children impacted by residential mobility and homelessness.

# **Housing within Christchurch's Central City**

Within Christchurch, the main barriers to the provision of quality additional housing and Central City living are:

- 1. Unlike in Auckland and Wellington, the lack of a pre-earthquakes residential culture within the Central City. There isn't a high desire for urban metropolitan lifestyles. Research by Ōtākaro (Research First, 2019) indicates the potential market for Central City living to be small (only 500 people a year), with no evidence of pent-up demand awaiting supply. Market growth is likely to be incremental in the absence of any step change towards different typologies, lower price points and more focus on renters.
- 2. **High land prices and associated land banking.** In addition to high land prices, apparent land banking (lack of development) of vacant sites within the Central City is due to a number of other reasons, often owner-specific. These may include under-insurance pre-quakes, ongoing insurance claim negotiations, additional post-quakes construction requirements and costs and ownership by building investors rather than builders. Greenfield development works against intensification rates within the Central City. Council staff have researched the extent to which medium density residential development undertaken in the two years since the CDP was reviewed is achieving the residential amenity and environments anticipated by the Plan's policies and rules. It indicates that the highest proportion of such development is occurring in the St Albans and Richmond suburbs within the inner city, as opposed to the Central City.
- **3. The high cost of building construction within NZ.** Within the Central City, this includes the cost of having to address poor land conditions.
- 4. A public perception that the Central City is still very much a work in progress, including neighbourhoods that lack some of the components that contribute towards how liveable a city is, e.g. access to services, facilities and amenities; a strong sense of place, identity and community; and environments that foster and support quality high density living.
- 5. There are more attractive alternatives on offer, such as suburban and rural living, which provide for greater housing diversity and affordability. The former includes inner city living, i.e. immediately outside of the four avenues which define the Central City. Responses to the Council's Central City-specific Life in Christchurch (Central City) Survey in 2019 indicated that such inner city residents have no impetus to relocate to the Central City as they already consider that they are contributing to and benefiting from it by virtue of their existing close proximity. They are probably right.
- 6. **Christchurch's physical and infrastructural attributes.** Christchurch is a flat and spread-out city with good suburban activity centres and transport infrastructure, which encourages people to live in and commute from the suburbs, as there is little cost or inconvenience to living further out from the Central City and still engaging with life there.
- 7. **Demographic trends**, including Christchurch's low population growth rate (0.8% vs 1% nationally), an aging population, reduced migration into NZ and Canterbury. Furthermore, most people do not work in the Central City.

# 5 THE ISSUES

The issues are that:

The Central City does not currently have the critical mass of residents necessary to support the
private sector investment delivered to date and achieve the self-sustaining regeneration of the
Central City.

- 2. Those not well served by the housing currently available in the Central City are families with young children, retired and/or single people and ethnicities other than European. Relevant strategic direction accordingly encourages the provision of Central City housing that meets the needs of Ngāi Tahu whānui and elderly persons in particular.
- 3. Compared to wider Christchurch, there is a limited amount of social housing provided in the Central City, largely concentrated in the north-eastern area. The post-quakes supply of it falls short of demand due to the demolition and repair of earthquake damaged homes and the influx of trades' people filling short term accommodation, increasing pressure on social housing providers.

# **6 CASE STUDIES**

# Christchurch

# Case study 1: The Breathe Urban Village (Breathe), Central City, Christchurch

# Project provider/s

Anselmi Attiani Associated Architects and Cresco group (Italy) and Holloway Builders (NZ), being a multi-disciplinary team capable of buying the land and developing the design on it.

# **Project description**

# Project goal/s:

Breathe was intended to be a flagship postquakes urban regeneration project to stimulate renewed residential development in the Central City. This design-and-build competition hoped to encourage the development of a replicable winning package that would provide a viable market template for other developers. Its eight criteria (effectively goals) were to be:



- 1. Viable, i.e. commercially feasible and support the local and regional economy;
- 2. Affordable, i.e. cater to the needs and budgets of a wide range of Christchurch residents;
- 3. Deliverable, i.e. of a design that could be practically delivered;
- 4. Liveable, i.e. meet the current and future lifestyle needs of its residents, foster strong community connections and enhance the surrounding neighbourhood;
- 5. Sustainable, i.e. resource-efficient in design, construction and over the life of its use and responsive to the local climate and ecology;
- 6. Enduring, i.e. promote excellence in earthquake resilience and be safe, healthy, adaptable and enduring in design;
- 7. Distinctive, i.e. a form and function well connected to, and enhances, the local context; and
- 8. Innovative, i.e. best ideas used to deliver exceptional 21<sup>st</sup> century Central City living. It was also expected that the development would be profitable, timely and return its costs to the Government, being the initial landowner and competition organiser.

#### **Proposed occupiers:**

Private buyers.

# Number, typology and tenure of units:

Seventy-two dwellings combining medium rise apartment blocks with individual two and three-storey housing, presumably freehold via a body corporate.

# **Design features:**

The low-maintenance, durable and sustainably timber-clad dwellings would incorporate cutting-edge seismic resistance foundation techniques known as ARMIDILLO™, which is both earthquake resilient and provides a fast way of re-levelling and stabilising buildings post-earthquake to allow re-occupation. Innovative Pres-Lam construction technology was being considered as part of the lightweight, sustainable structural solution.

The complex would have featured a commercial area on the exterior ground level, with a public access way leading into an inner courtyard containing an interactive summer fountain and reflecting pool. The courtyard design aimed to facilitate a fully functioning urban community, with inviting common areas, workshops, professional studios, small offices, a health clinic, a children's centre, etc.

#### Cost:

Land \$5.1 million and dwellings of \$300,000 - \$900,000 each.

# **Project location:**

235 Gloucester St, Christchurch, New Zealand.

# **Delivery period:**

The Breathe competition was launched internationally in 2010, the winning team was selected in October 2013 and indicated construction would begin in mid-2014. However, the government announced the development would not proceed in November 2015 and it did not go ahead.

# **Findings**

# What were the barriers experienced to delivery?

Although the government provided the land, it wanted to recoup the above market costs incurred buying the liquefaction-prone site (which required expensive geotechnical analysis and remediation) and running the competition within 23 months following site possession. The land was valued in such a way that the developers were asked to take the risk of being the first to start rebuilding in an area that was (at that time) a deserted wasteland, yet pay a land price which assumed development around it had already happened and provided higher amenity values.

Although the eight criteria were not formally prioritised, greater emphasis was placed (by the Government) on the financial criteria (1-3) over the design-orientated (4-8), which resulted in an unrealistic expectation for a design that was more sustainable, accessible, liveable and more affordable. Securing sufficient finance proved a critical barrier, as the winning team failed to do so. Factors critical to the financial viability of the proposal were the price, value and condition of the land; the challenge of the tension between quality of design and cost; and the options the finalists presented to make it financially viable.

Ultimately, the Government wanted to prescribe the site's use without making any financial contribution to it. The Government was also unwilling or unable to recognise that a pure market approach (believing it was up to the private sector to take both the risk and profits) would not deliver the innovative sustainable village expected. It likewise failed to factor in the opportunity cost to itself, local government, local businesses and the wider Christchurch community of delaying by many years the residential development of the eastern side of the city. Disparaging public comments by the Minister for Canterbury Earthquake Recovery undermined the project provider's final chance to secure the additional financing needed to meet the elevated \$5.1 million land price required by the Government.

# How were they resolved?

The government reduced the financial risk for the project provider by purchasing the parcels of land (including part of Gressons Lane) comprising the Breathe site and consolidating them into one 8145sqm title, enabling integrated designs to be developed for the entire site.

A contribution of central or local government money would have resolved the impasse in the circumstances. This could have been in the form of tax incentives, contribution of the land (by gift or lease), subsidies for land costs or land value write-downs, loans for land purchase and/or construction, site assembly, site remediation, additional density or height allowances, development contributions rebate, new infrastructure for transportation and facilities, open space and landscape beautification and homebuyers assistance incentives.

# Case study 2: Peterborough Street, Central City, Christchurch

# Project provider/s

Peterborough Housing Cooperative through the Ōtākaro Land Trust (a private trust, similar to a Body Corporate).

# **Project description**

# Project goal/s:

- Promotes cooperative living.
- Enhances social and economic participation.
- Encourages self-sufficiency and sustainability.

# **Proposed occupiers:**

Previous households of the pre-quake detached dwellings and shared back yards, plus new residents.

# Number, typology and tenure of units:

14 x terraced houses (across 2 blocks), three of which are privately owned (with first right of buy back by the Trust) and the balance eleven renting from the Trust.

# **Design features:**

The redevelopment proposes 14 dwellings designed in two rows, with the taller 3-storey terraces along the southern edge adjacent to Peterborough Street and a lower height row to the north. This will maximise sunlight access into the large, central common courtyard which is a car-free area. A community house (for communal use by residents) is also included on the eastern side of the site, as well as a workshop and secure bike storage shed. A new site off Salisbury Street was also purchased to provide vehicular access and parking opportunities on the edge of the site.



#### Cost:

Confidential.

# **Project location:**

173 - 183 Peterborough Street, Christchurch.

# **Delivery period:**

Currently under construction - complete 10 June 2020.

#### **Findings**

# What were the barriers experienced to delivery?

- Distilling, via consensus, the design ideas from the diverse group of residents (assisted with the advice from Chuck Durrett<sup>4</sup>, who suggested row houses to make the most efficient use of the site).
- The bank was initially reluctant to give them a mortgage and imposed a limit as "why would you want to live here".
- Valuation of the proposal based on a negative perception something common to shared housing developments which limited the amount available to secure a mortgage.
- The time and cost of the various hurdles of the Building Code.
- Mixed messages from Council relating to car parking numbers required on-site.
- Naming the community house a 'community house' (rather than an accessory building), added additional fire regulations and accessible car parking requirements as it was treated as a public building, which delayed the project and increased costs by tens of thousands.
- Being treated as a normal developer, rather than a self-builder of owner-occupied co-operative housing, in terms of the above.

# How were they resolved?

- Close collaboration between the group and the architect.
- The bank later became more interested and eventually gave a mortgage on the condition they sell some units to help repay it.
- A post-operational valuation may realise the liveability value of the development.
- More accurate naming of any communal building.
- The other barriers are not yet resolved, but provide a learning for others developing cohousing.

 $<sup>^{\</sup>rm 4}$  An American architect and author of a number of books on co-housing.

# Case study 3: Goulding Avenue, Hornby, Christchurch

# Project provider/s

A consortium of community housing providers, being the New Zealand Housing Foundation, Abbeyfield New Zealand, Housing Plus Charitable Foundation, Christchurch Methodist Mission and the Salvation Army.

# **Project description**

# Project goal/s:

Christchurch City Council sold 1.422 hectares of land at Goulding Avenue, Hornby, at below market valuation to a consortium of community housing providers, with the intent of creating affordable and social housing.



# **Proposed occupiers:**

Low to modest income households, including older adults.

# Number, typology and tenure of units:

44 new homes across a range of tenures, including shared ownership, affordable rental, social rental and a 12-room residential group home for seniors.

All the homes delivered will remain as social and affordable homes. 34 of the homes will be owned as rental housing over the long-term by the charitable organisations which developed them. The ten affordable ownership homes developed by the Housing Foundation are for first home buyers.

Organisation	Homes	Tenure
New Zealand Housing Foundation	4 X 3 bedroom 6 X 4 bedroom	Affordable home ownership
Abbeyfield New Zealand	12 X 1 bedroom ensuite 1 X 2 bedroom (housekeeper)	Affordable rental group home for seniors
Housing Plus Charitable Foundation	8 X 2 bedroom	Affordable rental
Christchurch Methodist Mission	3 X 2 bedroom	Social rental
Salvation Army	8 X 2 bedroom 2 X 3 bedroom	Affordable and Social rental

# **Design features:**

Mixture of single-storied detached and semi-detached housing, along with a larger complex, dedicated to older adults.

#### Cost:

The land was sold in 2012 for \$525,000 which was 42% of the estimated market value of \$1,222,500.

# **Project location:**

Goulding Avenue, Hornby, Christchurch.

# **Delivery period:**

Eight years from the point of land sale for the entire development to be completed,

#### **Findings**

# What were the barriers experienced to delivery?

- Delivering a mixed tenure model of social and affordable housing using publicly sourced land.
- Delivery by the Council alone.
- How to retain affordability.

# How were they resolved?

- The Goulding Avenue development is a successful example of delivering a mixed tenure model
  of social and affordable housing using publicly sourced land. The scheme was found to have
  created more value than the Council could have achieved either on its own, or by selling to the
  open market.
- The decisions made by the Council have placed it in a leadership role in implementing policies and practices that make a meaningful difference to the delivery of social and affordable housing by community housing providers.
- The development aligning with both the Council's Social Housing Strategy Goals at the time of approval in June 2012, and the Council's Housing Policy (2016). It was seen as an example of turning strategy and policy into tangible results.
- The adoption of clear policies on land sales and valuation for social benefit provided clarity and a more streamlined process.
- The strength of the consortium approach, aligned by a simple yet powerful shared goal (safe, secure and affordable housing), being led by a capable organisation (NZHF) with consistent leadership from the other four consortium members.
- Use of an experienced development organisation with a track record locally and/or nationally when subdivision and related consents are required.
- Preference for community housing providers that are either registered with the Community Housing Regulatory Authority or which have charitable status to ensure the retention and recycling of the public contribution.
- Supporting community housing providers to deliver mixed-income, mixed-tenure homes, through approaches such as the scheme's shared risk, responsibility and accountability approach between the Council and the community housing providers.
- Clear understanding of the respective roles and responsibilities of parties (possibly contained in a written Partnership Agreement).
- Requirements for a mix of housing types and tenures to deliver an integrated range from social rental to assisted ownership.
- The legal mechanism developed in this scheme to retain affordability to justify below-market sales and, more recently, the Council's policy to waive development contributions from community housing providers.

# **Elsewhere in New Zealand**

# Case study 4: Cohaus, Grey Lynn, Auckland

# Project provider/s

Architects Thom Gill and Helle Westergaard and academics David Welch and Georgianne Griffiths.

# **Project description**

# Project goal/s:

- Develop a community-led alternative development model that offers a solution to Auckland's housing affordability issue and increased social isolation.
- Incorporate leading-edge approaches to environmental sustainability and efficiencies at this scale of development.
- Promoting good quality medium density typology that is not really present in Auckland.

# **Proposed occupiers:**

Approximately 50 residents as co-developers.

# Number, typology and tenure of units:

20 x apartments in three buildings – one three-storey, one two-storey and a restored villa. Tenure is unit title.

# **Design features:**

The buildings will house 20 units ranging in size from one bedroom to five bedrooms. The central garden courtyard will be the focus of the development. There will be shared facilities including a guest bedroom, a common room, storage, laundry, bike parking, cars and car parking. 30+ secure cycle parks and 10 parking spaces, including 6 in car stackers (used for shared cars owned collectively by the Cohaus community).



#### Cost:

Two bedroom, 73m<sup>2</sup> unit to cost around \$850k once completed.

#### **Project location:**

11 Surrey Crescent, Grey Lynn, Auckland (site on the corner of Browning Street).

# **Delivery period:**

End of 2020. First level envelope of building is complete, with upper levels currently under construction.

# **Findings**

# What were the barriers experienced to delivery?

- Tax structures are set up for developers, not self-builders. Cohaus want to sell the houses at cost (as opposed to making a profit), "so there's underlying suspicions by the tax department that you're hiding some profit somewhere". So if they sell at cost, the tax department can say you've sold under market and they need to pay the tax department.<sup>5</sup>
- Borrowing from banks is difficult as banks may not want to lend to developments that do'not make a profit.
- Consenting process Initially, Auckland City Council recommended the project be turned down, citing a lack of parking as its reason, but also with strong opposition from the Heritage Team. It reversed its decision before an independent planning hearing. The Resource Consent process costs to the applicant were substantial over \$500k in holding costs, consultants and fees.

#### How were they resolved?

- They had to be really clear that they were a residents-only community. They sought advice from a property lawyer to navigate through the system. There needs to be recognition that these types of structures are worth providing for.
- They were self-financed up to the start of construction.
- The applicant had to argue clearly that their development fitted well within the goals of the Auckland Unitary Plan and also the stated goals of Auckland Transport. In the end, the Council supported the project and the neighbours who had objected had no real grounds on which to object, so the development was allowed to proceed.

 $<sup>^{5}\</sup> https://www.rnz.co.nz/programmes/two-cents-worth/story/2018700661/could-co-housing-be-the-answer-to-our-housing-crisis$ 

# Case study 5: Buckley Road Cohousing, Southgate, Wellington

#### Project provider/s

Buckley Road Project (self-builders Joe McCarter, Laetitia O'Connell, Nicole and Alana McCrossin, Hamish Cardwell and Tania Sawicki Mead).

# **Project description**

# Project goal/s:

- High quality housing and greater on-site amenity at more affordable prices.
- Successfully design and build a small-scale community together.

# **Proposed occupiers:**

Six friends (including two sisters) living across four architecturally-designed terraced houses.

# Number, typology and tenure of units:

4 x 77sqm (2.5 bedroom) terraced houses on a 650sqm residential site. Tenure is unit title.

# **Design features:**

- North-facing individual dwellings with a spectacular outlook.
- Well-designed private outdoor spaces, plus a number of additional shared amenity features not often found in typical developments such as:
  - A communal parking area near the entrance of the site unlocks the site layout for additional outdoor landscape areas;
  - An additional conservatory space which also hosts the laundry and a spare bathroom, providing additional shared space for socialising, working and enjoying the sunshine (but with shelter from the Wellington wind);
  - Individual storage lockers for each unit; and
  - o A shared terraced garden.



#### Cost:

Originally, they were aiming for each share, including common areas, to total a cost of \$600,000-\$650,000. But that number is now looking more like \$850,000.

#### **Project location:**

27 Buckley Road, Southgate, Wellington.

#### **Delivery period:**

Resource and Building Consents approved by Wellington City Council and currently working through finance options for the construction period.

# **Findings**

# What were the barriers experienced to delivery?

- The banking and valuation sector systems are not currently designed for alternatives to the forprofit sector of housing.
- Shared amenities are often viewed as a risk, rather than an asset, and therefore devalued. The way risk (to secure finance) is assessed is sometimes inflexible to unorthodox land development.

# How were they resolved?

The negotiations with the banking sector are still in progress.

# Case study 6: The Coh, CBD, Auckland

# Project provider/s

Ben Spence

# **Project description**

# Project goal/s:

Provide an up-market, co-living space for young adults - one of the first of its kind in Auckland (tiny apartment blocks are increasingly popular overseas).

# **Proposed occupiers:**

Post-graduates and professionals between the ages of 23 – 35 years old.

#### Number, typology and tenure of units:

22 bedrooms, with 9 bathrooms. Rental accommodation.

# **Design features:**

Conversion of an existing office block into a purposebuilt building for co-living, resulting in three-storey upmarket shared living with a shared kitchen, living room, home theatre, rumpus room and bathroom on the ground floor and 11 fully furnished bedrooms, 4 bathrooms, a work station and a washer and dryer





on each of the above two floors. The bedrooms are about 7m squared – about the size of an average car park – including a wardrobe. The building is doubled-glazed and insulated with 'fire jib' and pink batts, to minimise both internal and external noise.

#### Cost:

Rent is fixed at \$350 and \$380 per week for single and double rooms respectively for up to four months (utilities, cleaning and Wi-Fi inclusive), but decreased if tenants sign up for longer (e.g. 12 months).

# **Project location:**

124 Symonds St, Auckland.

#### **Delivery period:**

December 2018 - July 2019.

# **Findings**

# What were the barriers experienced to delivery?

- The biggest barrier was money.
- Banks were unsupportive as they had not seen this type of concept before.
- Wanting a high quality fit-out but needing to keep it affordable.

# How were they resolved?

- Use of 2<sup>nd</sup>-tier lending until the banks had seen occupancy rates over the first 6 months.
- The developer had to make some sacrifices in terms of fit-out and install some things a bit later on once he had some cash flow from rent.
- The Resource Consent having already been done by the previous owner contributed to the Building Consent going through pretty quickly.

#### **Overseas**

# Case study 7: Transitional Housing Programme, Kununurra, Kimberly Region, Western Australia

# Project provider/s

Partnership between Wunan Foundation (a Kimberly Aboriginal development organisation), Community Housing Limited (CHL) and the Western Australian Housing Authority.

# **Project description**

A 40 unit transitional development in Kununurra, Western Australia established as part of the East Kimberly Transitional Housing Programme.

The Transitional Housing Programme has a focus on bringing about positive social change for Aboriginal people and their families.

Government subsidised loans give tenants the opportunity to purchase their home after a period of two years, through shared equity or private ownership. The Programme also includes 'wrap around' support including financial planning and counselling, assistance with health management, mentoring for maintaining working and training, assistance with parenting, home management and home loan applications.



Within the programme there are roles for the various providers. At the development stage, the Housing Authority provided a full time project officer who worked in conjunction with Wunan. Wunan provide the 'wrap around' support services whilst CHL manage the properties including sales to tenants.

To qualify for the programme, tenants must be of Aboriginal decent and adhere to social and economic commitments including:

- Participation in work or training;
- Children are attending school regularly;
- Commitment to Wunan's support program; and
- Commitment to maintain the house, pay rent and be willing to make the transition to selfsufficiency and independence.

The programme is unique in that is combines positive outcomes in terms of employment and training and education with stable housing opportunities with the ultimate aim of transitioning tenants into home ownership.

# Project goal/s:

To provide stable, supported accommodation for indigenous households with the outcome being to support families and individuals into home ownership. There is also a secondary objective of increasing and diversifying the supply of affordable housing in East Kimberley.

# **Proposed occupiers:**

Indigenous families and individuals.

#### Number, typology and tenure of units:

40 dwellings across a range of dwelling typologies.

# **Design features:**

The development comprises a mixture of detached and medium density housing. The design features of the dwellings respond to the climate and offer flexibility in design to encourage a sense of ownership, pride and dignity.

# Cost:

\$20 million was secured through federal government funding.

# **Project location:**

Kununurra, Kimberly Region, Western Australia.

# **Delivery period:**

2012.

# **Findings**

# What were the barriers experienced to delivery?

The initial concept for the programme was developed independently of government intervention at a grass roots level. Whilst the concept generated local support, it required funding to bring to fruition.

# How were they resolved?

The Kununurra development is an example of the government working alongside the community and with a local not-for-profit group to produce transitional housing. Government support and funding was critical to the success of the programme. It is likely that without Federal Government funding the programme would have developed at a much slower pace and in smaller steps.

Another key to the success of the programme was strong leadership. The programme was driven by a few key individuals, including the Chair of Wunan, who were determined, innovative and willing to look outside previous methods used for both housing delivery and solutions to socio-economic disadvantage in the East Kimberley.

The Programme is considered to be a success with school attendance rates increasing and a number of tenants achieving home ownership.

# Case study 8: Nightingale 1, Melbourne, Victoria, Australia

#### Project provider/s

Nightingale 1 Investment Co. and Breathe Architects.

# **Project description**

# Project goal/s:

Deliver multi-residential housing that is environmentally sustainable, financially affordable and socially inclusive for owner-occupiers, not investors.

#### **Proposed occupiers:**

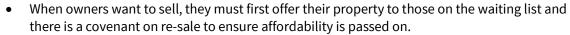
The development was intentionally designed for the 20 proposed owners/occupiers. Purchaser engagement from early stages allowed the building to be designed with the end users in mind.

# Number, typology and tenure of units:

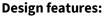
20 unit, five-storey apartment with a mixture of 1 and 2 bedroom apartments.

Breathe Architects purchased the site with a pool of investors. The development was crowd-funded by ethical investors – including architects – and future residents. The development was essentially architect-led using the Nightingale development model. Key principles of the Nightingale model include:

- Capping of profits from their investment at 15 per cent, which compares to industry standards of 20 per cent and above.
- Designed to reduce operating and maintenance costs
- Only people who want to live in their apartment, not rent it, are considered as buyers (although subsequent rental is possible if due to a change
  - in circumstances, with the owner encouraged to rent it long-term, to enable their tenants to become part of the Nightingale community, and at a maximum of 5% of their purchase price per annum).



- Transparent project costs to investors and purchasers and transparent decision-making processes.
- Meaningful participation of future home owners throughout the process.
- Contribution back to the local urban community through the creation of connected communities, active street frontages, fine-grain and tactile pedestrian experience for passersby.



Key features of Nightingale 1 include a ground floor retail space, rooftop communal gardens, shared laundry facilities and no on-site carparks. The apartments are roomy with lofty ceilings and interiors stripped of expensive details. The building has many sustainability features, such as being carbon neutral in its operation, and uses electrical reticulation and solar to ensure that every resident receives 100% green power at wholesale rates.

#### Cost:

Unknown. Prices for apartments ranged between NZ\$428,000-\$676,000.



# **Project location:**

Melbourne, Victoria, Australia.

# **Delivery period:**

2017.

# **Findings**

# What were the barriers experienced to delivery?

- Planning regulations (Victorian Civil and Administrative Tribunal) that required one parking space per unit whereas the Nightingale 1 proposal did not include any parking spaces.
- The availability of land.
- Keeping the costs of development down.

# How were they resolved?

- Over 200 letters of support were garnered for the project during its planning phase. The planning tribunal caused an expensive delay but ultimately the case was won and planning permission was granted.
- In the case of Nightingale 1, the lead architectural firm (Breathe Architecture) was able to purchase the site with a pool of investors following the success of another Nightingale-type development (the Commons). In terms of wider implementation of the Nightingale model, one of the biggest challenges lies in competing with commercial and oversees developers to purchase land.
- Affordability was maintained through strategic cuts. There was no marketing budget, display
  suite, real-estate agents or developer profit margins. There were also savings through the design
  of the building including cutting out basement car parking, air-conditioning, second bathrooms
  and individual laundries, while passive design principles and renewable energy sources keep
  running costs at a minimum.

Nightingale Housing Ltd enables licensed architects to develop Nightingale buildings using the learnings and interrogations of architects who have previously developed Nightingale buildings. Nightingale Housing Ltd assess the suitability of would-be licencees, draw up a waiting list of possible residents, pair future investors with opportunities and create a set of sustainable design principles to be used by all licencees.

# Case study 9: Kalkbreite Housing Co-op, Zürich, Switzerland

# Project provider/s

Verein Kalkbreite (co-operative association), and several partners including the City of Zurich, the local public transport corporation and the Karthago and Dreieck co-operative associations.

# **Project description**

# Project goal/s:

To deliver a mixed-use, transit-orientated development on a formerly undesirable space that enables a viable non-profit co-operative model that rejects speculation in favour of sustainability.

# **Proposed occupiers:**

It was anticipated that the development would attract a diverse population including a range of ethnicities, ages, incomes and households. The majority of the apartments are targeted to middle-income occupants with 20% rented to high-income residents and 11% reserved for low-income households.

# Number, typology and tenure of units:

The complex contains 88 apartments. So as to encourage a diverse population, a number of housing typologies are offered, including:

- 2-5 bedroom apartments for traditional nuclear families;
- Apartments with up to 17 bedrooms for extended households;
- Studio units with shared common spaces and communal kitchens;
- 20 'mini apartments' with a collectivelyfunded, staffed kitchen; and
- 9 small units with private bathrooms but no kitchens or bathrooms, available for temporary rental.

To join the co-operative, prospective tenants pay a membership fee, gaining eligibility to rent a residential unit as they become vacant. Once a unit is available, the prospective occupants pay for shares in the co-operative according to the size of the unit, as a refundable deposit. Rents are priced per square meter and factor in the cost of construction, maintenance and building operations.





#### **Design features:**

The Kalkbreite Housing Co-op is a mixed use, transit-orientated development, integrated with a tram depot. The units surround a park/courtyard, built three stories above the tram depot, which is wrapped in commercial and cultural spaces. A number of communal facilities are scattered around the development, including shared laundries, a library, canteen, roof garden and terraces. The building is set back from the street, allowing the tram stop, public café and plaza-like space to blend into each other. The circulation inside is staggered, helping to break up the large building into distinct units of housing and working spaces. So as to optimise the excellent on-site public transport connections, no car parking is provided on the site.

#### Cost:

£42million (approximately NZ\$83.5 million).

# **Project location:**

Zurich, Switzerland.

# **Delivery period:**

Construction commenced in 2012 and was complete by mid-2014.

# **Findings**

# What were the barriers experienced to delivery?

Financing the development.

# How were they resolved?

To propel the project from concept to reality, the council granted the co-operative a lease on the city-owned land until 2070. This enabled the co-operative to qualify for private loans to cover the construction costs from a range of banks and financial institutions. The members of the co-operative put up 6% of the total cost. The Council also approved a grant of £2.2million (approximately \$4.3 million NZD) to undertake a feasibility study to cover pre-development costs and to run an architectural competition.

It is noted that Zurich has large population of renters (approximately 70%) due to very high property prices. Property laws protect tenants, lease duration/occupancy is commonly at will, and rent rises are largely controlled and tied to major improvements for sitting tenants. Given this, occupants in co-operative developments such as Kalkbreite can enjoy rent prices well below the market rate and are also insulated from turbulent market conditions.

The Kalkbreite development also demonstrates how returns across a co-operative mixed use development can be used to cross-subsidise homes for people on lower incomes, i.e. rent from the retail units and high-end apartments.

# Case study 10: LI01, Berlin, Germany

# Project provider/s

Joint venture with 144 parties, supervised by SmartHoming with Zanderroth Architekten.

# **Project description**

# Project goal/s:

Produce a high quality residential development which caters to the range of relevant parties and enables flexibility for the changing needs of occupants.

# **Proposed occupiers:**

The development was intentionally designed for the 144 parties and, as such, needed to cater to a diverse range of ages and households.

#### Number, typology and tenure of units:

144 residential units. Flexible floor arrangements enable a range of housing typologies, from studio units to family sized apartments. Each unit is privately owned via strata title.

# **Design features:**

The development was a joint venture with 144 parties joining together to form a private company/development group that carried out the construction project under autonomous responsibility. The development consists of six buildings with park-like surroundings. A key design feature of the development is the highly flexible floor arrangements which can be added to or divided. The flexible floor plans enable small residential units for singles and couples, as well as large units for families (after merging). For





example, two apartments with a floor space of 52m<sup>2</sup> and 64m<sup>2</sup> can be individually used or combined to create a large 116m<sup>2</sup> apartment. This follows the principle of a flexible building; not dictated by load-bearing walls or other building elements. Floor plans can adapt to suit residents' differing needs and stages of life.

Each apartment has its own spacious balcony or "private garden". All apartments are orientated towards two or more directions and benefit from room-high façade glazing. The expansive glazing allows the well-lit apartments to enter into a special relationship with the urban landscape garden surrounding the houses.

# Cost:

Unknown, although such baugruppe/architect and resident-led development (no developer) is typically 10% below market rate (in Berlin).

# **Project location:**

Friedrichshain-Kreuzberg District, Berlin-Germany.

# **Delivery period:**

2014-2015.

# **Findings**

What were the barriers experienced to delivery?

- Co-ordinating a very large number of parties (144 parties).
- Designing residential units to suit the wide range of parties involved with the development and enabling the units to have a degree of flexibility for the changing needs of occupants.

# How were they resolved?

- The architect bought the site, did some initial concept design and then publicised the proposal and invited people to be a part of the development. This approach cuts the development timeframe from 7 to 3 years compared to assembling the residents first and designing together from square one.
- The project was supervised/guided by SmartHoming (an engagement/facilitation and project management company), who facilitated the resident engagement and acted as an intermediary between the residents and architect to ensure that the residents design needs were fed through to the architect
- An engineering solution was used to organise each building around a central staircase. The loadbearing structure is in the building core, reducing the need for load bearing walls, enabling the abovementioned flexible floor plan arrangement.

# Case study 11: Ausbauhaus, Berlin, Germany

#### Project provider/s

Praeger Richter Architects and a 'baugruppe' (building group)

# **Project description**

# Project goal/s:

Produce a community-oriented development based upon the 'baugruppe' cooperative development model that balances quality with affordability and offers the owner-occupiers the ability to individualise their own space.

# **Proposed occupiers:**

The development was intentionally designed for the 24 co-operative members and as such needed to cater to a diverse range of ages and households.

#### Number, typology and tenure of units:

24 unit owner-occupied apartment for living and working.

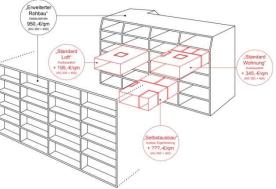
#### **Design features:**

The Ausbauhaus development is a 6-storey building, located on a corner site in Berlin.

The building was established using a cooperative development model known as a 'baugruppe' or building group. An architectural firm (Praeger Richter Architects) initiated the project by locating a potential site and preparing a concept design, complete with cost estimates, for a residential building that could operate as a baugruppe. The internet was used to find interested participants who were willing to share not only community values, but also project risks and up-front costs.

To keep costs down while maintaining high architectural quality, the architects developed an innovative system that contractually separated the construction of the "raw" shell of the apartments ("Rohbau") from the internal fitout ("Ausbau"). Each participant in the cooperative bought one of the 3 metre-high, bare, pre-cast concrete apartments and were





then given 3 choices for the "Ausbau": 1) pay for the interior to be constructed according to a predesigned plan, 2) pay for only a bathroom core to be built and self-build the rest, or 3) self-build the entire apartment interior. Given this, units could be developed to the desired level of budget and detail.

The shelving system enabled economic and time-saving objectives to be realised using preconstruction. Through the disconnection of the floor plan and supporting structure and the flexible perforated façade, various floor plan variations can be implemented without having to change the overall structure of the building. The units offer a degree of flexibility for the changing needs of occupants.

The building has a north-south orientation. All units have a ceiling height of 3 metres and a spacious south-facing terrace, which extends the living space over its full length to the exterior space. The development offers a number of communal features including a communal courtyard, playground, benches and landscaped areas. These common spaces raise a sense of community while keeping costs and square metres down.

#### Cost:

£3.5million (approximately NZ\$6.98 million).

# **Project location:**

Berlin (Neukölln), Germany.

# **Delivery period:**

The development was delivered in 2014.

# **Findings**

# What were the barriers experienced to delivery?

- Identification of an affordable and appropriate land parcel for the development.
- Keeping the costs of the development down.

# How were they resolved?

- With the 24 participants sharing the cost of the site up front, purchase of the site was made easier. The risk was shared across the various parties and, with the cost provided up front, the small window to purchase the site (2 weeks) was achievable.
- Provided that one could pay for the shared cost of land up front, the total project cost was significantly lower than comparable developments in the area. This was due to efficient construction, shared spaces and the ability to 'self-build'.

# Case study 12: R50, Berlin, Germany

#### Project provider/s

Architects (Ifau, Jesko Fezer and Heide & Von Beckerath), and a 'baugruppe'/ building group.

# **Project description**

# Project goal/s:

Deliver low-cost apartments that facilitate collective and affordable living and working.

#### **Proposed occupiers:**

The development and design process was undertaken by the architects and project manager in close collaboration with the future residents.

# Number, typology and tenure of units:

20 unit apartment of varied typology based on the residents' needs, including one studio. The units are privately owned with shared areas owned in common.

The building was established using a cooperative development model known as a 'baugruppe' or building group. The land was made available by the Berlin Senate Department for Urban Development who desired a non-conventional development model and ran a concept-based competition to award the building site. The project architects (Ifau, Jesko Fezer and Heide & Von Beckerath) initiated the project during the course of the concept-based competition and gathered potential residents from their networks, including friends, acquaintances and collaborators. The residents/building group collectively funded the purchase of the land and the construction.

# **Design features:**

The building has six storeys, a basement and an attic and comprises 19 individual apartments, one studio and various shared spaces. Each unit and all additional community spaces were developed by an intensive process of consultations, discussions and design. Based on the structural framework, the sizes of apartments could be determined and individual requirements accommodated in the floor plans. In parallel to this process, a common standard for fixtures and fittings was developed and defined, which has resulted in a collective approach to interior fittings, the use of materials and some surfaces left unfinished, whilst allowing individual layouts of the apartments. This kind of structured yet open design process not only allowed for extensive participation, selfdirected design and self-building, but has also led to mutual agreement on the type, location, size and design of spaces shared by residents.

Shared spaces include a double height, flexible community space which connects the building's main access with the public street space, a covered area in front of the basement, a laundry,





a workshop and a roof terrace with a summer kitchen and a winter garden.

#### Cost:

With public space costs factored in, apartments in R50 cost NZ\$4,690 per square metre<sup>6</sup>.

# **Project location:**

Berlin-Kreuzberg, Germany.

# **Delivery period:**

2013.

# **Findings**

# What were the barriers experienced to delivery?

• Financing the development.

# How were they resolved?

- The bidding process (run by the Berlin Senate Department for Urban Development) was based upon concept design and quality not price. The department held the land for the architects/residents at a stable price enabling the group to organise funds and partners.
- The bank and project manager structured a package of financing by pooling the individual
  mortgages for the units of future residents that would fund all the phases of construction. This
  unusual method of financing was made possible by specialised programmes offered by
  Nürnberg's UmweltBank.
- The cost of the development was kept relatively low due to the group effectively pooling funds and resources, efficient construction and the use of shared spaces.

<sup>&</sup>lt;sup>6</sup> The average cost of a 150m<sup>2</sup> 3-4 bedroom house (without shared community spaces) in Christchurch was \$2075 per square metre in 2018. https://www.stuff.co.nz/business/114779557/is-it-really-more-expensive-to-build-new-in-new-zealand

# 7. FINDINGS

Barriers to the provision of alternative housing projects	How they have been resolved	Relevance to Christchurch's Central City <sup>7</sup>
Experienced and capable leadership in support of a clear goal, particularly where there are multiple parties, such as future residents or consortium partners, involved.	<ul> <li>Good leadership via an experienced development organisation with a track record locally and/or nationally when related consents are required (CS 7, 11 and 12).</li> <li>A consortium approach, aligned by a simple but powerful shared goal and led by a capable organisation (CS3 and 10).</li> <li>Clear understanding of the respective roles and responsibilities of partners in a consortium, possibly contained within a written Partnership Agreement (CS3 and 10).</li> </ul>	As large tracts of land within the Central City remain undeveloped and underutilised, continued political leadership by Council would contribute to both the development of some of it and to the neighbourhood planning being promoted by sub-project E1, as local leadership by councils often better recognises the positive 'external benefits' of an economic, social and environmental nature that accrue to the wider community. Council leadership already exists in various forms, including the Central City Residential Programme (Project 8011), but may be redirected upon consideration of the recommendations ultimately arising from sub-project C1. This could include support for good project leadership among alterative housing providers.
Going it alone and/or developing without suitable development partners, such as future residents or consortium partners, involved.	<ul> <li>Partnering with community housing providers that are either registered with the Community Housing Regulatory Authority or which have charitable status, to ensure the retention and recycling of the public contribution (CS3, 9, 10, 11 and 12).</li> <li>Partnering with prospective residents (CS10 and 11).</li> </ul>	<ul> <li>As large tracts of land within the Central City remain undeveloped and underutilised, development via partnership is both desirable and likely in respect to some of it, whether public/public, public/private or private/private.</li> <li>There could be partnership opportunities for the Council identified through the Central City Residential Programme (Project 8011).</li> </ul>
Securing sufficient development finance.	<ul> <li>Funding in the form of tax incentives; site assembly; site remediation, contribution of the land (by gift or lease); land value write-downs; loans or subsidies for land and/or construction costs; additional density or height allowances;</li> </ul>	As large tracts of land within the Central City remain undeveloped and underutilised, the provision of targeted financial assistance could increase the pace, diversity or affordability of residential development.

<sup>-</sup>

<sup>&</sup>lt;sup>7</sup> Observations as to relevancy to Christchurch's Central City only, i.e. not recommended solutions at this point of the project, but potential actions for when the Council considers which alternative housing approaches to support, and how, during Stage 3 of sub-project C1.

Barriers to the provision of alternative housing projects	How they have been resolved	Relevance to Christchurch's Central City <sup>7</sup>
	<ul> <li>development contributions rebate; new transportation or other infrastructure; and open space and landscape beautification (C7 and 9).</li> <li>Capital injection may be via some form of public-private, potential also a multi-agency, partnership (CS7 and 9).</li> <li>Provision of sufficient seed funding to enable qualification for private loans from banks and financial institutions (CS9).</li> <li>Structuring financing by pooling the individual mortgages of future residents to fund all phases of construction (CS12).</li> <li>Pairing future investors with development opportunities (CS8).</li> <li>Use of 2<sup>nd</sup>-tier lending until the banks' uncertainty in respect to the development model has been allayed, e.g. by occupancy rates (CS6).</li> <li>Making sacrifices in terms of fit-out and installation of some things a bit later once cash flow from rent is available (CS6).</li> </ul>	<ul> <li>The Council's existing Central City residential and social housing-related development contribution rebates, due to expire on 30 June 2020 and 31 December 2022 respectively, could be continued.</li> <li>Other funding in other forms, especially patient equity, could be provided.</li> </ul>
Finding a suitable (sufficiently large and therefore economically feasible) site.	Purchase and consolidation of a number of smaller parcels into a larger site that is more feasible in both an economic and design sense (CS1).	<ul> <li>As large tracts of land within the Central City remain undeveloped and/or underutilised, some of which is separately owned, Council purchase or facilitation of smaller land parcels could render them more economically feasible upon amalgamation.</li> <li>The Council could directly gift any existing suitable surplus Council land or directly purchase other suitable sites.</li> </ul>
The land quality of the site.	Ensuring a detailed site assessment is undertaken and the associated estimated remedial costs are calculated, preferably prior to acquisition of a site (CS1).	<ul> <li>Sites within the Central City are known to be subject to geotechnical, land contamination and flood hazard issues and the associated remedial costs.</li> <li>The Council does, but could provide earlier, associated preapp advice regarding mitigation and remediation.</li> </ul>

Barriers to the provision of alternative housing projects	How they have been resolved	Relevance to Christchurch's Central City <sup>7</sup>
Valuation of the site, particularly if it assumes development around it has already happened and provides higher amenity values when such development many never eventuate.	Council sale of land for the purpose of affordable and social housing at below market valuation (CS3).	<ul> <li>As large tracts of land within the Central City remain undeveloped and/or underutilised, it's important that land prices reflect this.</li> <li>The appropriate valuation of any existing suitable surplus Council land for sale for alternative housing development.</li> </ul>
Land acquisition.	<ul> <li>Land sale at below market valuation (CS3 and 12).</li> <li>If not sold, the leaving in a project of 'patient equity<sup>8</sup>' over a period of years (most often available from central or local government) (CS1).</li> <li>Purchasing the site with a pool of investors, both future residents and/or via crowd-funding by ethical investors (CS8 and 11).</li> </ul>	<ul> <li>Undeveloped and/or underutilised land within the Central City will be subject to high land prices and alternative housing providers will be competing with traditional developers to purchase land.</li> <li>The Council could directly gift any existing suitable surplus Council land or directly purchase other suitable sites.</li> </ul>
Being government, as opposed to grass-roots, driven.	Development of the initial concept at grass-roots level, independent of government intervention (CS7).	<ul> <li>As large tracts of land within the Central City remain undeveloped and/or underutilised, such development could increase the pace, diversity and affordability of residential development.</li> <li>The Council could provide meaningful support for alternative housing developments, including the provision of appropriate loan funding and a pre-app service specific to alternative housing providers.</li> </ul>
Tax, bank, legal and other structures that don't recognise, provide for and enable self-builders,	<ul> <li>Utilising a property lawyer to navigate the system (CS4).</li> <li>Being very clear about the nature of the development, i.e. a joint owner-occupier self-build (CS4 and 5).</li> </ul>	As large tracts of land within the Central City remain undeveloped and/or underutilised, including sites within the Residential Central City Zone more likely the location of self-

<sup>&</sup>lt;sup>8</sup> Also known as 'patient capital', it reflects a willingness to forgo immediate/maximum return of financial investment in a project, through longer term return of such investment, in recognition of the positive environmental, social or cultural impacts of the project (or, traditionally, more substantial returns in the future).

Barriers to the provision of alternative housing projects	How they have been resolved	Relevance to Christchurch's Central City <sup>7</sup>
especially of multiple units built on a not-for-profit basis.	Advocacy for tax, bank, legal and other structures that recognise, provide for and enable self-builders, especially of multiple units, and ensuring those within the Council also help overcome these barriers. The legal structure needs to be able to recognise that common areas are a crucial component of the value of each unit and the way they function on-site (CS4 and 5).	<ul> <li>builds, such structures could increase the pace, diversity and affordability of such residential development.</li> <li>The Council could facilitate and advocate for education of, and enable amendments to, the relevant sectors by central government.</li> </ul>
No single framework or publicly accessible repository for information and guidance to enable self-builds.	Providing a framework or publicly accessible repository for information and guidance to enable self-builds would overcome this barrier (CS4 and 5).	<ul> <li>As large tracts of land within the Central City remain undeveloped and/or underutilised, including sites within the Residential Central City Zone more likely the location of self-builds, such a framework and publicly accessible repository could increase the pace, diversity and affordability of such residential development.</li> <li>The Council could facilitate and advocate for the provision of a publicly accessible repository for information and guidance to enable self-builds.</li> </ul>
Traditional methods of housing delivery.	<ul> <li>Use of alternative housing approaches, e.g. co-operative and intentional design development models, to ensure that housing diversity, tenure and price meet unmet needs (CS4, 5, 7, 8, 9, 11 and 12).</li> <li>Application of successful alternative housing approaches elsewhere (CS8).</li> <li>Prospective tenants pay a membership fee to the co-operative to gain eligibility to rent a residential unit as they become vacant. Once a unit is available, the prospective tenant pays for shares in the co-operative according to the size of the unit, as a refundable deposit (CS9).</li> </ul>	<ul> <li>As the diversity and affordability of housing within the Central City is less than ideal, alternative housing approaches and projects are needed to help meet those needs on the remaining large tracts of undeveloped and underutilised land within the Central City.</li> <li>The Council could provide meaningful support for alternative housing developments, including the provision of appropriate loan funding and a pre-app service specific to alternative housing providers.</li> </ul>
The higher cost of designing to meet occupant needs, including a mix of	Legal mechanisms to provide for a mix of housing typologies and tenures (CS3).	At present, the Central City market is dominated by 2 and 3-bedroom terraced and mid-rise apartments. Only a small number of 1-bedroom and 4+ bedroom units appear to be

Barriers to the provision of alternative housing projects	How they have been resolved	Relevance to Christchurch's Central City <sup>7</sup>
housing typologies and tenures/the scale economics associated with mass-producing a single product.	<ul> <li>Meaningful purchaser engagement from the early stages, allowing the development to be designed with the end users in mind (CS8, 10 and 11).</li> <li>Structural engineering which enables flexibility in respect to floor plans and housing typologies, e.g. engineering the building around a central staircase in the load-bearing core of the building which reduces the need for load bearing-walls, enabling a flexible floor plan arrangement and a range of housing typologies to meet occupants' needs (CS10 and 11).</li> <li>Provision for varying degrees of self-build in respect to the interior fit-out (CS11).</li> </ul>	<ul> <li>available. There is also a significant lack of availability of rental properties in the Central City.</li> <li>The Council could review the Christchurch District Plan provisions applicable to residential development within the Central City to better provide for a mix of housing typologies and tenures.</li> <li>The Council could provide earlier associated pre-app advice regarding structural engineering which enables flexibility in respect to floor plans, housing typologies and varying degrees of self-build.</li> </ul>
Onerous planning rules, e.g. on-site parking space requirements.	Ensure planning rules are fit for purpose, i.e. balance the desire to preserve the amenity of the existing environment whilst increasing the density of development (CS8).	<ul> <li>The Christchurch District Plan does not require on-site parking spaces in respect to residential development within the Central City zones, other than 1 cycle space per unit and 1 visitor space per 20 units in developments of 20+ units. Other planning rules may require resource consent if compliance is not possible or disregarded in the pursuit of optimal design.</li> <li>The Council could review the Christchurch District Plan provisions applicable to residential development within the Central City to ensure they're fit for purpose.</li> </ul>
Consent application administration focussed on process in favour of good outcomes.	Consent application administration focussed on good outcomes in favour of process (CS4).	<ul> <li>As large tracts of land within the Central City remain undeveloped and/or underutilised, consent application administration focussed on process rather than good outcomes has the potential to adversely affect the pace, diversity and affordability of such residential development, as well as neighbourhood amenity.</li> <li>The Council could provide a pre-app service specific to alternative housing providers.</li> </ul>
Failure to address the tension between	Strategic cuts to development costs through omission and/or provision of communal facilities and/or efficient construction	Houses prices in the Central City are generally higher than the Christchurch median price of \$450,000. Continuing housing

development quality and and/or development of a common standard for fixtures and fittings, enabling some degree of self-build (CS4, 5, 6, 8, 9, 11	affordability issues will create more demand for private rental accommodation and social housing. The provision of
<ul> <li>product.</li> <li>Making sacrifices in terms of fit-out and installation of some items a bit later once cash flow from rent is available (CS6).</li> <li>Capping the profits from investment (CS8).</li> </ul>	<ul> <li>affordable units is a Central City-wide issue, except perhaps within the Inner City East area where houses are below the Christchurch median are largely concentrated.</li> <li>The Council could review the Christchurch District Plan provisions applicable to residential development within the Central City to ensure they're fit for purpose.</li> </ul>
Initial and ongoing sale to/take up by property investors for rental purposes, as opposed to first home buyers in particular and owner-occupiers in general.  • Restrict sale to owner-occupiers, potentially also first home buyers in particular (CS8).  • Require subsequent sale to those on the development's waiting list (CS8).	<ul> <li>Purchase of the more affordable residential development by property investors for rental purposes, as opposed to first home buyers in particular and owner-occupiers in general, is a risk in the Central City. Of the total number of dwellings within the Central City, 74% are rented. The latter includes approximately 336 active entire home/apartment homeshare listings within the residential zones in the Central City as at August 2019, being 8.8% of the total number of dwellings.</li> <li>The high proportion of rented dwellings could undermine the formation of new and strong communities in the Central City, or indeed erode the strength of existing communities.</li> <li>The Council could ensure alternative housing developed by it, either directly or indirectly, is reserved for first home buyers in particular and owner-occupiers in general through the imposition of relevant legal mechanisms.</li> </ul>
Disparaging and undermining public residential development within, the Central City are regularly publicised is important (CS1).	As large tracts of land within the Central City remain undeveloped and/or underutilised, the pace, diversity and affordability of residential development is the subject of

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 $<sup>^{9}</sup>$  'Approximate' as the data capture platforms scramble the location to within 150m of the actual sites.

<sup>10</sup> The Residential Central City and Residential Guest Accommodation Zones, plus the Commercial Central City Business, Mixed Use and (South Frame) Mixed Use and Commercial Local Zones in which residential activity is also provided for.

Barriers to the	How they have been resolved	Relevance to Christchurch's Central City <sup>7</sup>
provision of		
alternative housing		
projects		The Council could recover attack
of progress towards high quality and affordable residential development within the Central City.		negative media coverage. The Council could more actively and positively publicise progress, including via sub-project B4 <i>Market the Central City</i> .
Securing sufficient finance for home purchase or rent.	Provision of financial assistance to owners/occupiers in the form of subsidised loans for private or shared equity home purchase (CS7).	As a significant proportion of new builds within the Central City remain unsold, the provision of targeted financial assistance to the purchasers of alternative housing developments could increase the pace, diversity or affordability of residential development.
Lack of 'wrap around' support for social housing tenants.	<ul> <li>Provision of 'wrap around' support for social housing tenants, including financial planning and counselling, assistance with home loan applications and home management, training and work-related mentoring, assistance with parenting and health management (CS7).</li> </ul>	<ul> <li>Having a diversity of people living within the Central City also requires ensuring that it's inclusive to those who require more support than others. Council provision of such support already exists in respect to its social housing, but could be expanded upon consideration of the recommendations ultimately arising from sub-project C1.</li> </ul>
Retention of affordability of purchase.	<ul> <li>registered with the Community Housing Regulatory Authority or which have charitable status, to ensure the retention and recycling of the public contribution (CS3).</li> <li>Retention of whole or partial ownership by the charitable organisations which developed the units and of some for first-home buyers (CS3).</li> <li>Waiver of development contributions for community housing providers (CS3).</li> <li>Imposition of a covenant on re-sale to ensure affordability is</li> </ul>	<ul> <li>House prices in the Central City are generally higher than the Christchurch median price of \$450,000. Continuing housing affordability issues will create more demand for private rental accommodation and social housing. Retention of units as affordable is potentially a Central City-wide issue on resale by the first home buyer within the traditional housing market.</li> <li>The Council could ensure alternative housing developed by it, either directly or indirectly, remains affordable on an ongoing basis through the imposition of relevant legal</li> </ul>
Retention of affordability of	<ul><li>passed on (CS8).</li><li>Income-related targeting of residents (CS9).</li></ul>	<ul><li>mechanisms.</li><li>As for retention of affordability of purchase above.</li></ul>
rent.	<ul> <li>Subsidisation of the low-income by the high-income residents (CS9).</li> </ul>	The state of the s

Barriers to the provision of alternative housing	How they have been resolved	Relevance to Christchurch's Central City <sup>7</sup>
projects	<ul> <li>Rents are priced per square metre and factor in the cost of construction, maintenance and building operations (CS9).</li> <li>Property laws that protect tenants by tying rent rises for sitting tenants to major improvements (CS9).</li> </ul>	
All of the above.	<ul> <li>Council policies and practices that make a meaningful difference to the delivery of affordable and social housing by community housing providers (CS2), including:         <ul> <li>having a Social Housing Strategy and Housing Policy;</li> <li>enabling multi-organisation partnerships that share the risk, responsibility and accountability; and</li> <li>clear policies on land valuation and sales for social benefit.</li> </ul> </li> </ul>	<ul> <li>As large tracts of land within the Central City remain undeveloped and/or underutilised, such policies could increase the pace, diversity and affordability of such residential development.</li> <li>The Council could take account of the ultimate findings and recommendations from sub-project C1 when reviewing the Council's Housing Policy and Social Housing Strategy.</li> <li>The Council could implement the ultimate recommendations from sub-project C1.</li> </ul>

# 8 CONCLUSION

Urban regeneration is the process of reversing economic, social and physical decay that has reached the point where market forces alone will not suffice. Housing developments that increase the number and diversity of people living in, and therefore the vibrancy of, an area can contribute positively to urban regeneration. People generally want to live in neighbourhoods that have a sense of identity, provide a choice of living environments, enable them to be part of and enjoy a great community atmosphere, greater choice of housing within financial reach of all stages of life, from one-bedroom units through to multiple-bedroom family houses that attract a diverse range of residents. While both traditional and alternative housing developments are subject to commercial pressures, the latter tend to better deliver on the above attributes but require more support to de-risk such projects.

The main barriers to alternative residential development identified as relevant to Christchurch's Central City through this case study and other engagement with alternative housing providers, and means of overcoming them elsewhere in NZ and overseas, are as follows:

- poor leadership and goals, particularly where there are multiple parties, overcome via:
  - o good leadership via an experienced development organisation;
  - o a simple but powerful shared goal; and
  - o clear understanding of their respective roles and responsibilities, ideally contained in a written Partnership Agreement;
- the lack of suitable development partners, overcome via:
  - partnering with community housing providers that are either registered with the Community Housing Regulatory Authority or have charitable status, to ensure retention and recycling of the public contribution; and
  - partnering with prospective residents;
- immature finance systems and the treatment of risk (particularly for architect-led development), overcome by:
  - o utilising a property lawyer to navigate the system;
  - being very clear about the nature of the development; and
  - advocacy for tax, bank, legal and other structures that recognise, provide for and enable alternative housing models and ensuring those within the Council also help overcome these barriers;
- access to land due to high land prices, overcome via:
  - o land sale below market value;
  - 'patient equity'; and
  - o purchase with a pool of investors, including future residents and/or crowd-funding by ethical investors;
- the associated lack of central and local government support (with patient capital in particular, which is critical) for alternative housing approaches, overcome via:
  - the provision of seed and/or other funding in various forms to developers, including land sale below market value, and to owners/occupiers, e.g. shared equity;
  - partnership;
  - o information provision;
  - legal mechanisms to provide for a mix of housing typologies and tenures and restrict sale to owner-occupiers;
  - ensuring planning rules and the administration of them are focussed on good outcomes in favour of process;
  - o promoting the positive aspects of successful residential development;
  - o provision of 'wrap around support' for social housing tenants; and

- policies and practices that make a meaningful difference to the delivery of alternative housing models:
- the tension between development quality and affordability, overcome via:
  - strategic cuts to development costs through omission and/or provision of communal facilities and/or efficient construction and/or development of a common standard for fixtures and fittings, enabling some degree of self-build;
  - o making sacrifices in terms of, or deferring the installation of some items until cash flow from rent is available; and
  - capping the profits from investment; and
- a housing culture in which everyone aspires to home ownership (which stigmatises renting) and investment incentives such as negative gearing and tax-free equity gains (which commodify housing), overcome via the above.

There are a variety of ways in which the Council could potentially address the above to support alternative housing approaches and projects, both financial and non-financial. These findings will help inform recommendations to the Council for consideration and decision-making around exactly how it will do that during Stages 3 and 4 of sub-project C1.

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