



Final Report

NDIS, housing assistance and choice and control for people with disability

authored by

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Acronyms and abbreviations used in this report

ABS	Australian Bureau of Statistics
AHURI	Australian Housing and Urban Research Institute Limited
AIHW	Australian Institute of Health and Welfare
CHFA	Community Housing Federation of Australia
COAG	Council of Australian Governments
CRA	Commonwealth Rent Assistance
CRPD	Convention on the Rights of People with Disabilities (UN)
DIG	Disability Investment Group
DMUs	Disability Modified Units
EPI	Evidence-based Policy Inquiry
FaCSIA	Australian Government Department of Families, Community Services and Indigenous Affairs
EPI	Evidence Based Policy Inquiry
LHA	Livable Housing Australia
NAHA	National Affordable Housing Agreement
NPA	National Partnership Agreement
NPARIH	National Partnership Agreement on Remote Indigenous Housing
NDIS	National Disability Insurance Scheme
NDIA	National Disability Insurance Agency
NIMBY	Not in My Back Yard
NRAS	National Rental Affordability Scheme
OECD	Organisation for Economic Cooperation and Development
PC	Productivity Commission
SDAC	Survey of Disability, Ageing and Carers
UNSW	University of New South Wales
YCH	Yarra Community Housing

Executive summary

- The National Disability Insurance Scheme (NDIS) will profoundly impact on patterns of housing demand by people with disability.
- There is an estimated unmet need in affordable housing for between 83 000–122 000 NDIS participants at full rollout of the scheme in 2019.
- There is lack of policy clarity about the roles of the NDIS, Commonwealth and state governments in addressing the shortfall in housing for NDIS participants.
- Supply-side subsidies—integrated with planning, finance and design innovations—can deliver affordable housing that meets the present and long-term goals and needs of NDIS participants.
- With appropriate design and location, capital costs of housing development can be recouped through savings on support provision.
- Well-designed and located housing can deliver additional benefits in terms of economic participation, social inclusion, health and wellbeing.
- Unless there is an adequate supply of affordable and accessible housing, safeguards are necessary to ensure choice for people with disability, for example: a separate allocations system in social housing and possibly choice-based allocation, and advocacy and support to assist people with disability when applying for housing.

A fundamental goal of the NDIS is to maximise participants' choice and control over which support services they receive, who they receive it from and where it is delivered. The primary mechanism for achieving this is to move from block funding disability support services to funding eligible individuals on the basis of their personal support plan. This shift to individualised funding is based on international innovations in disability services funding and successful pilot programs across Australia.

The NDIS is expected to be fully rolled out nationally by 2019, and will have major implications for housing assistance. The increase in overall funding for disability services, alongside the individualisation of funding—no longer tied to a specific service or home—could potentially enable a large number of NDIS participants to move from their parents' home, or from group homes or institutional accommodation, to independent living in the community. To achieve this objective, most NDIS participants on low incomes will need access to affordable housing. It has been estimated that at full rollout of the scheme, there will be an unmet need in affordable housing for 83 000–122 000 participants.

Under current legislation, the NDIS is not responsible for the provision of housing for participants. However, the Productivity Commission's costings for the NDIS include a 'user-costs of capital' component that could in certain circumstances be used to subsidise housing for participants. At this stage the scope of the NDIS's capacity to support the housing needs of participants, and more specifically the nature of user cost of capital subsidies, are unclear and still being negotiated between the NDIA and the Commonwealth and state governments. A key policy question is whether and how housing assistance for NDIS participants can be individualised.

A demand-side approach to housing assistance for NDIS participants appears more consistent with the scheme's overarching individualised approach. Furthermore,

demand-side subsidies may be appropriate to assist NDIS participants who already live in, or can access, private housing suitable for their needs in most respects other than affordability.

Nevertheless, the report identifies advantages of supply-side subsidies in enhancing housing choice for NDIS participants. Supply-side housing subsidies can address not only the cost of housing, but also the size, type, quality, location and management of housing. A supply-side subsidy could potentially stimulate development of new housing supply that is not only affordable, but also produces additional benefits for people with disability, including:

- Adaptable and accessible housing to meet the needs of people with mobility restrictions or other design requirements related to their disability.
- Housing that reduces the costs of support for people with disability by enhancing their access to informal support (location) and increasing their independence in core activities (design).
- Housing that is designed and managed to mitigate the disadvantage experienced by people with disability in terms of social inclusion, economic participation, health and wellbeing (e.g. more secure tenancies; elimination of domestic health hazards).
- Housing that is culturally appropriate for Indigenous people with disability.

While an additional supply of affordable and suitable housing will increase overall housing choice for people with disability, further measures are necessary to minimise constraints on individual choice in the context of supply-side housing subsidies. The crisis-driven allocation of existing social housing is unresponsive to individual preferences and excludes most people with disability. This suggests a need for a separate allocations system that is responsive to individual preferences to enhance choice and control for NDIS participants. Information about available properties and allocation priorities can be made more transparent and accessible, and choice-based allocation models from Europe could potentially be adapted to the local context. Independent advocacy and support would also assist applicants with disability in the process of applying for housing. Allocation procedures should enable people to make meaningful choices about who they share their homes with, and new strategies will be needed to allow housing and support providers to manage the associated operational challenges.

These issues are elaborated in the report, which is based on desk-based review and analysis of existing policy and academic literature. The discussion on housing choice is reinforced by financial modelling undertaken independently by Yarra Community Housing (YCH).

1 Introduction

- Additional housing assistance will be necessary to meet growth in housing demand arising from the NDIS reforms. This report considers housing assistance options for NDIS participants.
- A supply-side approach can deliver housing that is affordable and enhances independence, social inclusion, economic participation, health and wellbeing for people with disability.
- The risks associated with a supply-side approach call for safeguards to minimise constraints on people with a disability's choice and control.

A fundamental goal of the NDIS is to maximise participants' choice and control over which support services they receive, who they receive it from, and where it is delivered. The primary mechanism for achieving this is to move from block funding disability support services to funding eligible individuals on the basis of their personal support plan.

The substantial increase in overall funding for disability services, alongside the individualisation of funding—no longer tied to a specific service or home—could potentially enable thousands of NDIS participants to move from their parents' home, group home or institutional accommodation, to independent living in the community. To achieve this objective, many NDIS participants on low incomes will need access to affordable housing. The National Disability Insurance Agency (NDIA) which oversees the scheme, estimates that at full rollout, there will be an unmet need in affordable housing for 83 000–122 000 participants (Bonyhady 2014).

The NDIS is not responsible for the provision of housing for participants. However, the Productivity Commission's costings for the NDIS include a 'user-costs of capital' component that could in certain circumstances be used to subsidise housing for participants. It has not yet been confirmed how user cost of capital will be delivered, for what purpose and at what scale.

A key policy question is whether housing assistance for NDIS participants—including potentially user cost of capital—should be delivered in the form of demand-side or supply-side subsidies. A supply-side approach to housing subsidies appears inconsistent with the scheme's 'individualised' approach to the funding of disability services. This report examines the benefits of a supply-side approach to housing assistance and considers how choice and control for NDIS participants could be maximised in this context. It highlights how a supply-side approach could increase the overall supply of affordable housing and deliver additional benefits for NDIS participants in terms of independence, social inclusion, health and wellbeing. The report also highlights risks associated with a supply-side approach, and the need for safeguards to ensure that housing for NDIS participants is small-scale and dispersed and that non-market allocation systems are responsive to individual preferences.

Access to housing is a critical issue for many people with disability in Australia, including the majority (90%) who are not likely to be eligible for NDIS packages. In this report we focus on the small minority of NDIS participants because of the specific housing challenges and opportunities arising from the NDIS. Nevertheless, the discussion has broader implications for the general population of people with disability.

1.1 Approach

This report, in the format of an AHURI Essay, is designed 'to compose a logical argument directed at emerging policy issues. Essays are designed to foster debate around the conceptual or practical issues underpinning the future development of policy ... Essays are intended to focus on a particular policy research issue and bring together secondary evidence, innovative thinking and debate led by a position or argument from the researcher' (AHURI 2013).

The report is based, primarily, on desk-based review and analysis of existing policy and academic literature. The Productivity Commission's (PC 2011) *Disability care and support* Inquiry report and a public address by the NDIA Chairman, Bruce Bonyhady, in March 2014, are key documents cited in the report to gain insight into the design of the NDIS and its approach to housing. The paper also draws on findings from a separate concurrent AHURI project on this topic (Wiesel et al. 2015) and other academic and grey literature on housing for people with disability. These are used to aggregate existing data on the current housing and living arrangements of people with disability, and the expected changes with the NDIS.

The discussion on housing choice is reinforced by financial modelling undertaken by Yarra Community Housing (YCH). The modelling was commissioned by the research team, but completed independently by YCH (Appendix 1). The scenarios selected include Disability Modified Units (DMUs) integrated ('salt and peppered') into a new apartment block. These show how supply-side subsidies that deliver frontload capital for housing development can significantly reduce the overall costs of housing provision.

While this can be read as a stand-alone report, it was designed as a 'case study' for a larger research venture, an AHURI Evidence-based Policy Inquiry (EPI) on individualised forms of welfare provision and reform of Australia's housing assistance system. The report was developed through an initial consultation with the Inquiry Panel, and informed the Inquiry Panel's deliberations on the questions of how housing assistance policy in Australia can respond to, and link with, social policy innovation around individualised welfare assistance. However, the opinions in this publication reflect the views of the authors and do not necessarily reflect those of the Inquiry Panel members.

2 What is the NDIS?

- People with disability are some of the most disadvantaged populations in Australia in terms of workforce participation, income, education, health, social participation and housing.
- The NDIS was established to fix an inadequate system of support for people with disability.
- Choice and control for people with disability, sought through individualised funding, is a key objective of the NDIS.

2.1 Disability in Australia

According to the Survey of Disability, Ageing and Carers (SDAC) (ABS 2012), close to a fifth of the Australian population, 4.2 million people, had a disability in 2012. About a third of these, 1.4 million, had profound or severe core-activity limitation or restriction.

People with disability are some of the most disadvantaged populations in Australia in terms of workforce participation, income, education, health and social participation. In 2012, labour force participation of people with disability aged 15 to 64 was 53 per cent, and for those with a profound or severe core activity limitation only 20 and 36 per cent respectively, compared to 83 per cent for those without disability (ABS 2012).

People with disability require various forms of assistance in daily tasks such as self-care, mobility, communication and support in building social connections. While a great deal of assistance is provided 'informally' (i.e. unpaid)—mostly by family members, particularly mothers (AIHW 2012)—in 2010–11. Over 314 000 people with disability received formal support services, funded by government and delivered by a multi-billion dollar industry of private companies, not-for-profit organisations and government agencies. People with intellectual or learning disability are the largest group of service users (AIHW 2012, p.28), and close to half of government expenditure on disability services goes to accommodation support (AIHW 2012, p.11).

The right of people with disability to adequate housing has been recognised in the United Nations (2006) *Convention on the Rights of Persons with Disabilities* (CRPD), to which Australia is a signatory. In the CRPD, the right to housing is integral to the right to independent living and full inclusion and participation in the community. It specifies that people with disability should have the opportunity to choose where and with whom they live on an equal basis with others, and have access to public housing programs. In Australia, the Council of Australian Governments (COAG) initiated the National Disability Strategy (Australian Government 2011) which complies with Federal and state government obligations under the CRPD and which states that people with disability should have access to affordable and secure housing across all tenures.

Despite these obligations, people with disability are disadvantaged in access to adequate housing. While housing affordability stress has affected low- and moderate-income Australians of all abilities in recent decades, people with disability face additional barriers in accessing suitable housing and experience housing and living arrangements that are markedly different to the rest of the population:

- While most young adults in Australia leave their parents' home by their mid-20s, people with disability are more likely to continue living with their parents for many years. Limited access to support for independent living has been the primary

barrier preventing people with disability from leaving their parents' home. Using Survey of Disability Ageing and Carers (SDAC) 2012 data, Qu et al. (2012) identified close to 100 000 people with disability over 25 years living with parents, including a high proportion of ageing parents.

- According to the Australian Institute of Health and Welfare (AIHW 2014, p.51), in 2012–13, 16 433 people with disability (most with intellectual disability) lived in over 4000 group homes across Australia.
- Despite four decades of deinstitutionalisation programs in Australia, in 2012–13, 3459 people with disability were still living in institutional accommodation, including large institutional facilities (accommodating over 20 people), small institutional facilities (7–20 people) and hostels (usually less than 20 people). Unlike institutions, hostels do not provide segregated specialist services (AIHW 2014, p.51).
- Home ownership rates among people with disability, particularly those with a severe or profound core activity limitation, are significantly lower than the general population (Wiesel et al. 2015).
- People with disability are over-represented in housing assistance programs. In 2012, nearly 160 000 households with a member with disability lived in social housing, representing approximately 40 per cent of all households in social housing. Approximately 250 000 people receiving a Disability Support Pension also received Commonwealth Rent Assistance (CRA), representing approximately 21 per cent of all CRA recipients (AIHW 2013b, p.40).

2.2 Disability sector reforms

2.2.1 The need for disability sector reforms

In 2011, the disability services sector and its funding arrangements were described by the Productivity Commission (PC) as extremely inadequate:

Current disability support arrangements are inequitable, underfunded, fragmented, and inefficient and give people with a disability little choice. They provide no certainty that people will be able to access appropriate supports when needed. (PC 2011, p. 5)

The disability service system and its funding arrangements were criticised by the PC (2011, pp.5–10) for:

- The crisis-driven nature of support funding which undermined opportunities for early intervention.
- The inequitable rationing processes through which access to services is determined.
- The lack of choice for people with disability about how, when and where they receive services.
- The lack of certainty for people with disability, families and support providers about the availability of funding for lifelong support, resulting in anxiety about the future and difficulty in planning ahead.
- The prevalence of outdated models of support, including the continued operation of large congregate accommodation facilities and institutions.

These failings of disability services and funding systems placed an unacceptable burden on people with disability and their families, and triggered the NDIS reforms as discussed below.

2.2.2 *The making of the NDIS*

In April 2008, the Disability Investment Group (DIG) was established to explore innovative funding ideas to improve support for people with disability and their families. The terms of reference for the DIG work included consideration of options for investment in housing for people with disability through private and shared equity. Its final report (DIG 2009) recommended and outlined the establishment of a new national scheme—the NDIS—to fund long-term support for people with significant disability. Following these recommendations, in 2010 the Australian Government instructed the Productivity Commission (PC) to undertake a public inquiry to assess the costs, benefits, and feasibility of the NDIS. The PC report made public in August 2011 (PC 2011) endorsed the NDIS and provided further advice on its structure, roles and costings. The PC's recommendations for the NDIS were endorsed at a Council of Australian Governments (COAG) meeting later that month and at a meeting of the Select Council on Disability Reform in October 2011. In March 2013, the *NDIS Act 2013* was passed. Throughout this process, the creation of the NDIS was achieved through bi-partisan support, strong endorsement across the disability sector, and broad public backing demonstrated most notably through the 'Every Australian Counts' grassroots campaign launched in 2011. Since July 2013 the scheme has been piloted in seven launch sites across Australia and from July 2016 to 2019 it is expected to progressively rollout nationally.

2.2.3 *Overview of the NDIS*

In 2012–13, prior to the launch of the NDIS, government funding for disability services totalled \$7 billion, including \$4.7 billion from the states and territories and \$2.3 billion from the Commonwealth Government (Parliament of Australia 2013). In 2019–20, the first year of full rollout, total funding for the NDIS is expected to be \$22.2 billion, of which \$11.7 will be funded by the Commonwealth Government. The additional costs for government will be covered in part through an increase in the Medicare levy (from 1.5% to 2% of taxable income).

The NDIS will not only increase the amount of funding available for disability services, but will also differ from the existing system in its design. Key differences include:

- The scheme will be overseen by a single national agency (NDIA) reporting to all Australian governments.
- The NDIA will be the assessor and funder of services, but not their provider. State governments are expected to withdraw from direct provision of disability services.
- NDIS funding will be individualised and allocated to individuals rather than services. The aim of this is to provide NDIS participants with more choice and control about the support services they receive (as elaborated in Section 2.3).

The NDIS provides different levels of insurance cover for each of three target groups (see Table 1 below). The core business of the NDIS is funding a range of long-term supports for people under 65 (when first accessing the scheme) with a significant and permanent disability, representing about 10 per cent of all people with disability in Australia. An individual support plan for each participant will specify which 'reasonable and necessary' support services will be funded by the NDIS to help the participant achieve their goals.

Table 1: The three tiers of the NDIS

	Target group	Provisions
1. Insurance Cover	Every person in Australia	Creates general community awareness about the issues faced by people with disability and promotes inclusion and opportunities for people
2. Information, Linkages and Capacity Building	People with disability (4 million individuals) and their primary carers (800 000 individuals)	General information about the most effective care and support options within generic and community support groups and services.
3. Long-term Supports	People under 65 (when first accessing the scheme) with a significant and permanent disability (410 000 individuals)	Provides specific supports, aids and equipment from specialised and/or generic services and facilities in the community, according to an agreed plan and resource allocation for each person.

2.3 Choice and control for NDIS participants

The NDIS is designed to increase participants' choice and control over how, when and where they receive support services. As various commentators suggest, choice is a very appealing value in contemporary culture (Clarke & Newman 1997, p.50). It also aligns with the disability rights movement's emphasis on person-centred approaches to disability services delivery (O'Brien & O'Brien 2002). These person-centred approaches have developed in response to earlier models of service delivery criticised as inflexible and at times oppressive. Person-centred approaches recognise that goals and preferences differ from one person to another, and are not always easily observable by others. Person-centred approaches also seek to do more than offer service users more options to choose from. Their fundamental aim is to diminish uneven power relations between people with disability and the people and organisations supporting them.

The substantial expansion in government funding for disability services under the NDIS demonstrates that 'choice and control' is approached not merely as a civil right—that is a 'freedom'—but also as a more progressive welfare right involving redistribution of resources (Ife 2006). At the same time, the emphasis on consumer choice, the quasi-market approach sought through individualised funding and the withdrawal of government from direct provision of services under the NDIS are all highly characteristic of neoliberal policy (Larner 2003, p.511).

2.3.1 *Choice mechanism: individualised funding*

Individualised funding programs have been piloted in most Australian jurisdictions over the last decade (Fisher et al. 2010), but to date the bulk of government spending has remained in the form of block-funding for services. The NDIS will result in the individualisation of most disability support funding in Australia. Block funding for services will continue to be used in certain situations such as in pilots of innovative services, in rural and remote areas where supply of services might not respond to demand, and where there is a need to build longer term capacity, such as services for Indigenous people with disability (PC 2011, p.51; Section 3.3.2).

Individual participants' support funding packages will be determined through a person-centred assessment and a planning process that aims to maximise their choice as consumers about what types of supports they receive, where and from whom. An

individualised package can be defined in cash value or specified quantities of support services. Participants are free to choose any provider or mix of providers from which to purchase services. The NDIS allows participants to manage their funding package on their own (self-directed funding), or to choose a service provider to manage their individual funding package for them. The PC offered the following metaphor to explain the differences in terms of consumer choice:

Choice of provider is like consumers selecting a restaurant. They do not cook the food, but they do get to choose the restaurant that suits their preferences, and know they will be able to afford a good meal. They will not go back if the food or service is poor. In contrast, a pure form of self-directed funding is like a person buying their preferred ingredients and cooking the meal. He or she would have the freedom to choose when to cook, the exact recipe, cooking methods, and utensils. However, it would involve a lot of work and they could make mistakes. (PC 2011, p.349)

The evidence of research on past programs in Australia and overseas suggests that individualised funding increases consumers' control over service provisions and improves their overall quality of life (Purcal et al. 2014; Fisher et al. 2010; PC 2011, E11; Head & Conroy 2005). The PC (2011) also expected that consumer choice would stimulate competition between providers resulting in improved quality, greater variety and lower costs of services and products.

Individualised funding promises to not only improve participants' choice about their support provider and the type of supports they get; it also potentially unlocks new housing opportunities, enabling recipients to purchase support wherever they live, to move home without having to change a support provider, or change their support provider without having to move home. The housing implications of the NDIS are elaborated in Chapter 3.

3 NDIS and housing

- The NDIS will profoundly impact patterns of housing demand by people with disability.
- Existing supply of affordable housing is insufficient to meet expected growth in demand.
- The NDIS is not responsible for housing assistance, and there is lack of policy clarity about 'user cost of capital' funds costed into the scheme for this purpose.
- There is lack of policy clarity about the roles of Commonwealth and state governments in providing housing assistance for NDIS participants.
- Supply-side subsidies could potentially be integrated with planning and housing finance innovations to maximise supply output.
- Shared equity schemes can assist in the leverage of housing finance from people with disability and their families.
- With appropriate design and location, capital costs of housing development can be recouped through savings on support provision. The savings achieved by reducing 5.5 weekly hours of support are equivalent to the cost of an NRAS subsidy.
- Well-designed and located housing can deliver additional benefits in terms of economic participation, social inclusion, health and wellbeing.
- Existing models of social housing allocations and management will undermine choice and control for NDIS participants, suggesting the need for separate choice-based management systems.

3.1 NDIS impact on housing demand

The NDIS is expected to impact the lives of its participants in various ways, including their housing options. To date, the range of housing options available to people with disability has been very limited because of two primary factors: the cost of support when living independently and the cost of private housing (Beer & Faulkner 2008). The availability of individualised supports funded by the NDIS is expected to significantly reduce the first barrier, potentially enabling eligible participants to move to housing that better suits their goals and needs.

By providing the equipment or support needed by some people to gain work, the NDIS is expected to increase workforce participation rates among its participants, therefore enhancing their housing options. The employment rate for people with disability in Australia is low by international standards (ranked 21st out of 29 members of the Organisation for Economic Cooperation and Development (OECD) in 2010), pointing to a significant potential for improvement. Modelling undertaken by National Disability Services (2013), for example, estimated that the NDIS will support people with severe disability to enter into about 35 000 new full-time equivalent positions. However, it is expected that the majority of NDIS participants will remain low-income and will require affordable housing.

It can be expected that more adults with disability will be moving out of their parents' home into independent living. Wiesel et al. (2015) identified 51 000 people who are

likely to be eligible for NDIS support funding, aged 25–64 and currently living with their parents. Some—with appropriate planning, training and ongoing support—might be able to move to live on their own. Others will need to share housing in order to afford the costs of housing and in some cases pool their individualised funding packages.

Although group homes will no longer be block-funded, their residents will be able to choose to stay together and continue to pool their individualised funds. However, some individual residents might choose to move to other housing and living arrangements. Incompatibility between residents is common in group homes (Wiesel 2011), suggesting many would choose to move if alternative housing and support is available.

A primary principle of the NDIS is the commitment to non-congregated housing (Bonyhady 2014). Individualised NDIS support funding will enable people with disability currently living in institutions to move to alternative community-based housing. Historically, many plans for institution closures or redevelopments in Australia have faced effective resistance by relatives of some residents who were concerned about the suitability of community-based housing and care for their family member. More recently, such debates have surrounded plans for institution closures in the NDIS launch sites (Wiesel & Bigby 2015).

In pursuing new housing options, people with disability will face a range of barriers. In the private rental market such barriers include (Wiesel et al. 2015):

- **Affordability:** even in the lowest value areas of Australia’s major cities, a single person with disability can expect to pay more than 50 per cent of their Centrelink income (including the Disability Support Pension and Commonwealth Rent Assistance) on a one-bedroom private rental unit. Based on a crude assessment, the NDIA estimates unmet need for affordable housing for 83 000–122 000 NDIS participants across Australia. This figure represents the estimated total of NDIS participants (at full scheme) who are over 25 years old, low-income and who do not currently have suitable housing (Bonyhady 2014).
- **Disadvantage in competition over private rental tenancies** due to low income, the lack of rental history and references and discrimination by landlords and real-estate agents.
- **Shortfall in supply of housing that is appropriately designed for people with mobility restrictions** in the social and private sectors.
- **The insecurity of tenancies in the private rental sector** (which also make modifications of stock unviable).

Social housing provides tenancies that are more secure and affordable compared to private rental, with rents set as a proportion of tenants’ income and longer lease terms (including indefinite leases in some states). In 2012, nearly 160 000 households with a member with disability lived in social housing, representing approximately 40 per cent of all households in social housing (AIHW 2013b, p.40). Social housing is expected to remain an important housing option for people with disability in coming years. However, social housing in Australia is a scarce and declining resource. From 1998 to 2010, the number and proportion renting social housing dropped from 5.8 per cent of households to 3.9 per cent, while waiting lists are burgeoning (NHSC 2013). After decades of disinvestment, access to social housing is by and large reserved for people experiencing, or at immediate risk, of homelessness. This crisis-driven approach to social housing provision will remain a major barrier to people with disability moving into independent living. People with disability living with family or in group homes are typically considered by social housing providers as being in stable

housing and therefore are not given priority in access to social housing. Furthermore, like most social housing tenants, those with disability face very constrained choices about the location, form and management of their home. Difficulty obtaining social housing in locations with good access to jobs, transport and, importantly, family and informal support networks could add to the costs of the paid supports they require (Wiesel et al. 2015).

3.1.1 NDIS housing responsibilities

The NDIS will fund a range of support services to assist its participants to live independently. However, it is beyond the responsibility of the NDIS to provide housing for participants (see Box 1 below). The PC (2011) argued that NDIS funding for housing would weaken the incentives for state governments to properly fund social and affordable housing, and may result in the segregation of people with disability in specialist accommodation.

In addition to ongoing supports to assist people to live independently, the NDIS will provide other housing-related forms of assistance such as funds for home modifications, and 'user cost of capital in some situations where a person requires an integrated housing and support model and the cost of the accommodation component exceeds a reasonable contribution from individuals' (Australian Government 2013, Section 7.19).

User cost of capital were costed by the Productivity Commission (2011, p.767) as housing costs for people with very high support needs, the majority of whom already living in group homes or institutions (approximately 6% of all NDIS participants). User cost of capital was costed as 12 per cent of the average funding package for participants in this cohort, on the basis of existing data on the capital costs of group homes. At this stage the approach to allocation of user cost of capital is still being negotiated between the NDIA and Commonwealth and state governments. Key points of debate include the question of whether Commonwealth and state governments will contribute additional housing assistance funds over and above their existing NAHA obligations and programs; whether user cost of capital will be restricted to specialist housing for people with the highest level of support need; the extent to which these funds will be used to cover the costs of sustaining existing supply of group homes, or invested in adding to new supply of housing; and, whether and how the funds will be individualised.

In April 2015 COAG (2015) announced that NDIS funds will be used to 'enable the market to generate and leverage new and innovative specialist disability housing' for 'people with disability requiring an integrated housing and support model'. However, the absence of more detailed information to date has created a lack of policy clarity about the planned objectives and delivery of NDIS user cost of capital.

Box 1: Housing in the National Disability Insurance Scheme (Support for Participants) Rules 2013

The following transcript from the *National Disability Insurance Scheme (Support for Participants) Rules 2013* defines the role of the NDIS with respect to provision of housing and community infrastructure:

7.19 The NDIS will be responsible for:

- (a) supports to assist a person with disability to live independently in the community, including by building their capacity to maintain a tenancy, and support for appropriate behaviour management; and
- (b) home modifications for accessibility for a person in private dwellings; and
- (c) home modifications for accessibility for a person in legacy public and community housing dwellings on a case-by-case basis but not to the extent that it would compromise the responsibility of housing authorities to develop, maintain and refurbish stock that meets the needs of people with disability; and
- (d) user cost of capital in some situations where a person requires an integrated housing and support model and the cost of the accommodation component exceeds a reasonable contribution from individuals.

7.20 The NDIS will not be responsible for:

- (a) the provision of accommodation for people in need of housing assistance, including routine tenancy support and ensuring that appropriate and accessible housing is provided for people with disability; or
- (b) ensuring that new publicly-funded housing stock, where the site allows, incorporates Liveable Housing Design features; or
- (c) homelessness-specific services including homelessness prevention and outreach, or access to temporary or long-term housing for participants who are homeless or at risk of homelessness; or
- (d) the improvement of community infrastructure, that is. accessibility of the built and natural environment, where this is managed through other planning and regulatory systems and through building modifications and reasonable adjustment where required.

3.2 Demand-side vs. supply-side subsidies

A demand-side approach to housing assistance for NDIS participants appears more consistent with the scheme's individualised approach to the funding of disability services. Taleporos (2014), for example, argued in favour of such an approach to increase participants' purchasing power:

Individualised funding for housing ... would empower a person to make choices about where they live and who they live with. It would enable them to withdraw their funding if the arrangement wasn't working out and enable them to purchase an alternative housing arrangement that will better suit their needs. Most importantly, it would create a market mechanism that would hold providers accountable to their tenants. Providers who were not achieving tenant satisfaction would fail and we would witness growth and success in tenant-centred options ... Accountability is key when it comes to quality services and in my view, block funded services will never be truly accountable to their service users.

However, in the context of housing provision, the notion that demand-side subsidies are always preferable in terms of consumers' choice has been highly contested (Yates & Whitehead 1998; Hoek-Smit & Diamond 2003). As argued by Yates and Whitehead (1998), there is no universal resolution to this debate, since the benefits of supply-side or demand-side approaches depend on a variety of contextual factors. Demand-side subsidies are more likely to increase consumer choice when applied in segments of the housing market that will respond to an increase in demand by producing more housing in the desired category. Even in ideal conditions, because of the time it takes

to build dwellings and the amount of frontload capital required, the supply of housing is generally less responsive to demand than other markets. If supply markets are not responsive to the increase in demand generated by demand-side subsidies, the benefits of such subsidies are likely to be passed on to lenders or developers through housing cost increases, rather than to consumers. In such market segments where supply is least responsive to increase in demand, it is more effective to provide supply-side subsidies directly invested in new supply of housing (Hoek-Smit & Diamond 2003).

While focused on alleviating housing affordability stress experienced by consumers, demand-side subsidies can also assist in the development of new affordable housing stock more generally. The Commonwealth Rent Assistance (CRA) subsidy allocated to community housing tenants, for example, is captured in full by community housing providers through rent settings. This supplements their rental revenue and can be accounted for in business plans for new affordable housing development. However, supply-side subsidies that deliver frontload capital for housing development can significantly reduce the overall costs of housing provision. This is demonstrated in the financial modelling presented in Appendix 1.

More specifically for people with disability, there are significant advantages to a supply-side approach in enhancing housing choice. While demand-side subsidies may assist in addressing the affordability problem, they are likely to be less effective in addressing other persistent problems such as the insecurity of private rental tenancies and the absence of private rental stock that meets (or can be modified to meet) accessibility standards. Supply-side housing subsidies can address not only the cost of housing, but also the size, type, quality, location and management of housing (Hulse 2002, p.17). Thus, a supply-side subsidy could potentially stimulate development of new housing supply that is not only affordable, but is also:

- Adaptable and accessible to meet the needs of people with mobility restrictions (or other design requirements related to their disability).
- Designed to reduce the costs of support for people with disability.
- Designed and managed to mitigate the disadvantage experienced by people with disability in terms of social inclusion, economic participation, health and wellbeing.
- Culturally appropriate for Indigenous people with disability.

The opportunities associated with a supply-side approach to housing assistance for NDIS participants are elaborated in Section 3.3.2.

Although recognising the limitations of a supply-side approach and its inconsistency with the individualised ethos of the NDIS, our view is that, where these are possible, supply-side subsidies will enhance housing choice for NDIS participants. In certain circumstances these can be mixed with demand-side subsidies that can be more appropriate to assist NDIS participants who, for example, experience severe housing affordability stress, yet already live in, or can more easily access, private housing that is suitable for their needs in other respects. As argued by Hall and Berry (2006, p.1582) diversifying the mix of housing assistance measures 'will tend to maximise the number of households assisted', by diversifying the risks for funders, housing providers and consumers (e.g. asset and operational risks in demand-side approaches, versus inflation risks in demand-side approaches).

3.3 Maximising housing choice through supply

While housing assistance for NDIS participants could potentially include a proportion of demand-side subsidies, the following sections are focused on the benefits and risks

of a supply-side approach. A supply-side approach can enhance housing choice by increasing the overall supply of affordable housing, and also by influencing the nature and quality of new housing to better meet consumers' goals. At the same time, a supply-side approach entails a risk of removing control from consumers since the subsidy is delivered directly to developers or managers of new housing. The following sections address the conditions necessary to maximise the input of new supply; the types of housing that will meet consumers' current and future goals; and the measures necessary to minimise restrictions on consumers' choice and control within a supply-side approach to housing assistance.

3.3.1 Boosting affordable housing supply

The primary factor influencing housing choice for NDIS participants will be the availability of suitable and affordable housing supply. Despite the lack of clarity about the nature of NDIS user cost of capital, it is obvious that these funds alone are insufficient to address an estimated unmet need in affordable housing for between 83 000 to 122 000 NDIS participants. Additional sources of capital will therefore be required to achieve the necessary scale of new supply, including government, communities, philanthropy and families of people with disability. Therefore, in this section we discuss two primary factors that will influence supply output: the sources of finance and planning mechanisms to reduce the cost of housing development.

Finance sources

Commonwealth and state governments

Around 80 per cent of NDIS participants are likely to have low or very low personal income (Wiesel et al. 2015), due to low rates of participation in paid employment associated with significant and ongoing disability. Commonwealth and state governments' responsibility for providing housing assistance for this cohort should therefore be understood as an integral part of their responsibility for housing low-income households more broadly. However, funds for housing assistance are in short supply and tightly rationed by state and Commonwealth governments.

Most NDIS participants are likely to be eligible for existing housing assistance schemes provided by Commonwealth and state governments. Approximately 60 000 people likely to be eligible for NDIS packages are already living in social housing. Most other NDIS participants, while meeting income eligibility requirements, will have difficulty accessing social housing due to existing allocation rules that prioritise people experiencing or at immediate risk of homelessness. The COAG (2013, p.10) agreement that social housing 'will continue to provide accommodation for people in need of housing assistance in line with existing allocation and prioritisation processes', suggests these barriers will remain in place.

A majority of NDIS participants living in, or moving into, private rental or housing that is managed by community housing providers, are likely to be eligible for CRA. Although CRA is an individualised demand-side subsidy, it can also be captured by non-government housing providers through their rent settings, and can be accounted for in business plans for new affordable housing development. An advantage of CRA is that there are no restrictions on the number of recipients. However, CRA subsidies are based on fixed formulas and are not designed to meet affordability targets.

NDIS participants are likely to be eligible for affordable housing dwellings developed under the National Rental Affordability Scheme (NRAS). However, the defunding of NRAS in April 2014 has eliminated an existing pool of funds that could more readily

be leveraged from state and Commonwealth governments for the purpose of producing new housing supply for NDIS participants.

NDIS participants who purchase a home for the first time may also be eligible for First Home Owner Grants, valued at \$15 000 for purchase of newly-built homes. People buying into a shared equity scheme could be eligible for subsidies such as the First Home—New Home in the form of concessions on transaction taxes (NSW Government 2012).

The respective roles of the NDIS, Commonwealth and state governments in funding new housing supply for NDIS participants are currently still being negotiated (COAG 2015). A key policy question is Commonwealth and state governments' willingness to fund housing assistance for NDIS participants over and above their existing obligations under the National Affordable Housing Agreement (NAHA) and related National Partnership Agreements (NPAs). This question pertains to a broader policy discussion on Federation reforms, and the need for more clarity about the roles of Commonwealth and state governments with respect to housing policy, funding, delivery and regulation (Australian Government 2014, p.26).

It can be questioned whether NDIS participants should be prioritised over other low-income households (including the majority of people with disability who will not be eligible for NDIS packages) in accessing limited housing assistance resources. One key argument that could be made in favour of boosting housing assistance for NDIS participants is that appropriately designed and located housing will achieve savings in the ongoing costs of support that could offset the capital investment (Section 3.3.2). It is also potentially an opportunity for state housing authorities to enhance the impact of their housing investment by leveraging NDIS user cost of capital.

Family equity

Many NDIS participants are likely to come from lower income families, because parents, particularly mothers, of people with disability are less likely to be employed, due to caring responsibilities (Qu et al. 2012, p. 6). Despite these circumstances, some families will have the financial capacity and motivation to provide financial support for a member with disability, particularly for the purpose of obtaining secure housing. In the past, although families were often willing to invest some of their assets in housing for their relative with disability, the absence of ongoing support funding was a barrier. With the NDIS, this barrier to financial assistance by families will be removed. And while family carers of people with disability experience relative socio-economic disadvantage, some are nevertheless in a position to provide financial assistance by withdrawing equity in their own homes or their superannuation funds (Wiesel et al. 2015). Largely reflecting the age profile of this cohort and the fact that they purchased their homes at a time when these were more affordable, parents of people with disability have significant equity in their homes: 81 per cent of parent carers over 65 years old fully own their homes. Furthermore, 26 per cent and 37 per cent of ageing female and male carers, respectively, earn weekly family incomes above the Australian median (Qu et al. 2012, p.8). Families with outright ownership of housing, and sufficient income allowing comfortable retirement, are potentially able to contribute finance for a family member with disability.

Financial contribution from families could include a one-off contribution to capital costs of home building or purchase or an ongoing contribution to rent or loan repayments. Some families will fully purchase homes for their son or daughter with disability, in which case no additional housing assistance will be required. Other families will be in a position to provide only part of the finance for housing their relative. Shared equity schemes are one way to leverage equity from such families, and can provide NDIS

participants a number of significant advantages: a share in the ownership of their homes, which may also accrue capital gain; secure occupancy; an affordable rent on the housing provider's share of the property (in some shared-equity models participants pay no rent on the providers' share, but are responsible for maintenance costs); and, choice about the specific property they wish to purchase (Wiesel et al. 2015).

Over time, participants in shared equity schemes may be able to upgrade to full ownership of their home. Participants receiving an inheritance, for example, will be able to step up from shared to outright full ownership of their home. This will allow the partner housing provider to 'recycle' their investment to assist another NDIS participant to enter a shared equity scheme.

It needs to be acknowledged that not all families will be in a position to contribute any equity, and many people with disability have very little or no support—financial or other—from families. Furthermore, carers cannot commit all or even some of their savings to assist a relative with disability, because of their own financial needs during retirement and because assets will often be distributed to other family members (Wiesel et al. 2015). There is a need for sophisticated means assessment tools to ensure that people with disability who have limited access to financial assistance from families are prioritised for other forms of housing where no such equity is needed. Furthermore, to assist in leverage of family equity, families of people with disability—particularly ageing carers—also need to be supported to manage the risks of withdrawing equity from their homes, superannuation or other savings and to ensure they retire comfortably. Government policies concerning the treatment of ageing carers will therefore have a major impact on the success of the NDIS in leveraging family equity. This nexus between both areas of policy requires further research.

Affordable housing supply strategies: planning and mixed housing portfolios

There is a wealth of research in Australia and internationally on strategies to increase affordable housing supply through planning and mixed housing portfolios. Such strategies can be applied to augment the impact of supply-side subsidies.

Building code and planning levers

In Australia, although public spaces are now required to provide non-discriminatory access, there is no equivalent national requirement for housing design. Voluntary initiatives to increase supply of adaptable or accessible housing—such as the Livable Housing Australia (LHA) Guidelines—have been largely ineffective, and despite population ageing, demand for newly-built accessible housing in the private market has remained low (Franz et al. 2014). Furthermore, it is currently impossible to establish either the existing supply of housing with accessibility features or functionalities because there are no central data repositories that are reliable and valid for all Australian states and territories (Bridges 2005). There are also significant barriers to modification of existing private rental stock. As noted by Franz et al. (2014, p.18) under the *Disability Discrimination Act 1992* tenants have the right to modify a rental property within reason but are obliged to remove the modifications at the end of their tenancy. Many tenants are unwilling to make this financial commitment without security of tenure and landlords are often reluctant to allow modifications even when they are not obliged to pay for them. New legislation and building standards requiring non-discriminatory access standards for newly-built dwellings will significantly increase the availability of housing supply that is accessible or at least adaptable for people with mobility restrictions, across all housing tenures.

In addition to access legislation, a range of urban planning interventions can incentivise and ease the production of new affordable housing supply. These include:

- Release of sites for affordable housing development.
- Reduction of planning and regulatory barriers to affordable housing development, such as exclusionary zoning.
- Planning levers to ensure preservation of existing affordable housing.
- Planning incentives (e.g. planning density bonuses or relaxation of parking requirements) for affordable housing projects.
- Planning requirements for dedicated affordable housing in new residential developments (Davison et al. 2012).

Additional barriers in the supply of affordable housing specifically for people with disability include superfluous requirements, such as fire safety requirements, applying to residential care facilities. For example, in the *NSW State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004*, residential care facilities are defined as accommodation for people with disability and seniors that includes meals, cleaning and support services. Housing developments that fall under this definition are required to meet building standards that do not apply to other 'mainstream' housing, such as fire sprinkler requirements that add to both capital and operational costs (Appendix 1). Furthermore, the designation of new development plans as specialist housing for people with disability often triggers Not in My Back Yard (NIMBY) community opposition that hinders or delays development (Bostock & Gleeson 2004). New affordable housing supply for NDIS participants that is not developed, owned or managed by disability support services and is not defined as specialist housing in plans, could potentially be exempt from superfluous requirements and avoid discriminatory community opposition. However, further research is required to consider the preferred form of regulation or policy to ensure that housing for NDIS participants is built to high safety standards without blanket imposition of 'over-specifications' (CHFA 2014, p.15).

Mixed housing portfolios and economies of scale in finance

New supply can be maximised through economies of scale in housing finance. This does not mean developing large congregated housing for people with disability which will undermine social inclusion objectives as discussed in Section 3.3.2. Rather, more sophisticated economies of scale can be achieved through 'pooled financing', rather than bilateral deals, for multiple housing projects dispersed geographically, within diversified housing investment portfolios that include a mix of housing for NDIS participants in addition to affordable and market-value rental properties (see e.g. the model described in Appendix 1).

The aggregation of finance will reduce transaction costs and spread risk for investors. By achieving scale and a higher rate of return, aggregated finance could also potentially eliminate some of the key barriers to institutional investment, which could ensure ongoing access to a large and stable stream of finance. This points to the need for an intermediary which will aggregate projects and serve as a bridge between investors, housing providers and developers. An intermediary could also enhance liquidity by having the capacity to purchase as well as offer any securities issued (Milligan et al. 2013, p. 38).

3.3.2 *Supply that meets current and future demand*

NDIS participants' housing choice will be determined not only by the quantity of affordable housing, but also the quality of housing. A well-designed supply-side subsidy can be effective in facilitating new supply of housing that is designed to meet NDIS participants' needs and preferences. Importantly, it could also potentially reduce the ongoing costs of support for NDIS participants. In this section, we discuss the type of housing that is necessary to meet demand: dispersed and non-congregated; adaptable or accessible; located and designed to maximise health, employment, social inclusion and living affordability outcomes; a proportion of housing designed to enable sharing; and, culturally appropriate housing for Indigenous NDIS participants.

Dispersed and non-congregated housing

The research evidence suggests that smaller-scale, non-congregated housing dispersed in the community is a fundamental condition for the social inclusion, self-determination, and wellbeing of people with disability (Walsh et al. 2010). As summarised in Kozma et al.'s (2009) review of existing evidence on housing for people with intellectual disability:

People in small-scale community-based residences or in semi-independent or supported living arrangements have a better objective quality of life than do people in large, congregate settings. Particularly, they have more choice-making opportunities; larger social networks and more friends; access more mainstream facilities, and participate more in community life; have more chances to acquire new skills and develop or maintain existing skills; and are more satisfied with their living arrangements. (p.210)

Similarly, a systematic evidence review by Mansell and Beadle-Brown (2009) found that dispersed housing is superior to cluster housing on the majority of quality indicators studied.

A major argument in favour of certain cluster housing models, such as 'intentional communities', is the advantage of living close to other people with disability, creating opportunities for friendships that can be more easily sustained over time (Randell & Cumella 2009). Indeed, people with disability experience significant benefits from housing that facilitates opportunities for friendships and meaningful relationships with other people with disability living nearby. However, this could be achieved in non-congregated housing where there is a more balanced mix of people with and without disability (Wiesel et al. 2015).

The notion of 'choice' has been central to debates about institutional, congregate and cluster housing for people with disability. Media campaigns cited in Bigby (2004) argued that people with disability should have the right to choose to live in clustered, congregate, or even institutional housing if so they wish, because choice itself is a valued right. Furthermore, the evidence that residence in non-congregated and non-clustered housing generally offers superior outcomes does not necessarily apply for every individual, because needs and preferences vary. However, the segregated nature of congregate housing creates a tension between the policy objective of 'individual choice' and that of 'social inclusion'. Another apparent tension is between increasing the variety of housing choices available for people with disability, and the evident lack of choice experienced by residents of congregate housing in their daily lives (Kozma et al. 2009). Furthermore, although some people might choose to live in cluster or congregate housing, in the context of a housing supply shortfall, some people may be forced to live in congregate housing due to the lack of other alternatives. In other words, cluster housing (or any other housing option for that matter) can only be a meaningful choice in the context where there is sufficient supply

of other options. As argued by Bigby (2004, p.204), cluster housing 'might reflect the choice of a few now, but will leave behind a legacy of bricks and mortar that will restrict choice and segregate people with intellectual disability for decades to come'.

Adaptable and accessible housing

Poor housing outcomes for people with disability—primarily those with physical disability—are compounded by poor domestic design that inhibits their movement into and around their own home or other people's homes (Imrie 2003). People with physical disability, particularly those with mobility restrictions, may require accessible housing. Currently, people with physical disability are a minority within the population of disability service users across Australia (AIHW 2014), and a minority within the cohort of NDIS participants in the trial sites (NDIA 2014a, p.27). However, people with physical disability represent a majority within the population of adults with a severe or profound core activity limitation, indicating that their proportion in the population of service users will increase with the full national rollout of the NDIS (Wiesel et al. 2015). These expected changes, and the evident variation across regions and states, calls for more detailed regional-level forecasts of the population of NDIS participants with physical disability and the housing they require.

A large group of NDIS participants will not require fully accessible homes. However, 'adaptable' housing design—such as meeting Livable Housing Australia's (LHA) Silver and Gold standards (see Box 2 below)—will enable ageing in place and relatively low-cost modifications if necessary. Modifications may be required, for example, if a resident's support needs change over time, or if they are replaced by another NDIS participant. The cost of retrofitting an existing dwelling—particularly when structural changes are required—will be significantly higher, in some cases twice the cost of undertaking similar work during the initial construction phase (Victorian Government 2010; pers. comm., YCH 2015). Examples of particularly costly retrofitting include replacing plaster board with solid walls, hoists (requiring changes to the roof) and non-step bathrooms.

For a proportion of NDIS participants with mobility restrictions, a higher level of accessibility standard (e.g. LHA's Platinum standard) will be necessary to meet their needs and preferences. Accessible housing will increase independence for people with mobility restrictions, and can reduce the long-term costs of support (Carnemolla & Bridge 2011). Where the identity of the future resident is known in advance, consultation with them during the design or procurement stage would be beneficial, and in the long run can achieve substantial savings on support and modifications. At the same time, supply of affordable housing that is well-located and adaptable or accessible (Silver, Gold and Platinum) is likely to be in high-demand by NDIS participants even if developed without specific residents in mind.

There will also be a minority of NDIS participants who may require housing design solutions that diverge from general accessibility standards such as those defined by LHA. In such cases, consultation with NDIS participants prior to development of their dwelling would be necessary to meet preferences, and in the long term can result in substantial savings on support and modifications.

There is a risk that in multi-story apartment buildings with a mix of people with and without disability, some developers might choose to cluster together all units for NDIS participants on the ground floor, in order to avoid the capital and operational cost of lifts (Wiesel et al. 2012). Clear guidelines and benchmarks on the clustering of dwellings for NDIS participants are necessary to prevent this.

Box 2: Livable Housing Australia's Performance Levels

Livable Housing Australia is a not-for-profit partnership between community and consumer groups, government and the residential building industry. Its Livable Housing Design Guidelines (LHA 2010) provide a voluntary nationally-consistent set of standards to inform the design and construction of new housing across Australia. The endorsement of these guidelines by a number of Australia's largest property developers and industry bodies suggests it is a useful standard for design of new housing supply for NDIS participants. The guidelines specify three livable design Performance Levels:

Silver: Homes with Silver certification incorporate a number of structural and spatial elements that ensure a home's future flexibility and adaptability, to avoid more costly home modifications post-construction.

Gold: Homes with the Gold level of performance have even more generous dimensions than Silver level, as well as some additional livable features in areas such as the kitchen and laundry room.

Platinum: Platinum level certification is the highest level of Livable Housing Design certification. Homes with the Platinum level of performance have the most generous dimensions and include additional elements such as the size of the living room and the choice of flooring. Platinum level homes are ideal for people with higher mobility needs.

Because of their voluntary nature, despite their endorsement by large builders and industry bodies, to date the LHA guidelines have rarely been implemented in the construction of new housing in the private sector with the majority of certified dwellings being either government-funded housing specifically for people with disability or housing in retirement villages. The very limited impact of the LHA initiative demonstrates the need for legislated building codes requiring non-discriminatory access standards for all newly-built dwellings (Franz et al. 2014, p.16).

Housing design and location that achieve positive non-shelter outcomes

In addition to meeting the fundamental human need for shelter, the way housing is located and designed can have both positive and negative 'non-shelter' outcomes related to the social inclusion, economic participation, health and wellbeing of residents (Phibbs & Thompson 2011). To mitigate rather than exacerbate the disadvantage experienced by people with disability in these various domains of life, housing for NDIS participants should be located and designed in a way that achieves positive non-shelter outcomes.

Existing literature highlights key features of housing and neighbourhood conditions that can lead to improved physical and mental health (Phibbs & Thompson 2011; Thomson et al. 2013), including:

- Elimination of health hazards such as slips, radon, dampness, roach & rodent infestation, dust mites.
- Privacy and space.
- Reduced noise levels.
- Thermal comfort (controlled warmth and humidity).
- Access to natural light.
- Access to clean air.
- Safe and well-serviced neighbourhoods.

Other features of housing design and location can contribute to improved social inclusion outcomes, including:

- Smaller-scale and geographically dispersed housing (Kozma et al. 2009; Walsh et al. 2010; Mansell & Beadle-Brown 2009), enabling social connections with people both with and without disability living nearby.
- Privacy and space at home for guests and social gatherings (Wiesel et al. 2015).
- Stable housing allowing residents to maintain friendships over time (AIHW 2013a; Wiesel et al. 2015).

Employment opportunities could be improved through stable and well-located housing with good access to jobs (Dockery et al. 2008, p.74).

In addition to health, social inclusion, employment and other wellbeing outcomes, significant long-term savings on the costs of ongoing support, transport and utilities for NDIS participants could be achieved through housing that provides:

- Improved access to informal support (e.g. close to family and informal support networks).
- Opportunities for pooling of formal and informal support through sharing arrangements or a Keyring model (Wiesel et al. 2015).
- Design of dwellings that reduces reliance on formal support (Carnemolla & Bridge 2011; Lansley et al. 2004).
- Reduced reliance on more expensive modes of transport such as taxis, through housing that is located close to shops, services and public transport (Wiesel et al. 2015).
- Sustainable housing design that reduces costs of energy and water consumption (Wiesel et al. 2012).

The cost effectiveness of investment in appropriately designed and located housing for NDIS participants can be assessed by using a similar base cost unit for both housing assistance and support—\$36, the estimated cost of one hour of support funded by the NDIS. The substitution of 5.5 weekly hours of paid support through housing design and location can fully offset the cost of an annual \$10 000 supply-side housing subsidy—equivalent to an NRAS incentive.

These examples demonstrate the need for more evidence on the non-shelter outcomes of housing quality, design and location for people with disability, including cost-effectiveness analysis to understand the social and financial return on investment in such features.

Housing for sharing

Many NDIS participants will share housing with others in order to reduce housing costs, pool together formal and informal supports, and increase social contact (Wiesel et al. 2015). At the same time as housing costs are reduced for each resident, the overall rental revenue for housing providers can increase, potentially making development of new stock more viable financially or improving utilisation of existing housing stock.

In the past, group homes for people with disability—particularly intellectual disability—have been criticised for the lack of choice residents had about where they live and with whom. The lack of choice resulted from both the shortfall in supply of group homes, as well as their block funding (PC 2011; Wiesel 2011). However, in the context of individualised and portable support funding, a sufficient supply of suitable housing will provide NDIS participants with more choice about who they wish to share

with. They will also be free to choose to move out of shared housing without losing their support funding.

The choice of housemates will therefore be a key to overall housing choice for many NDIS participants. They will need to identify housemates with whom they get on together well; who have similar housing requirements in terms of housing costs, design, and location; and who can achieve mutual benefits from pooling together their funding packages. When housemates' families also share similar values and develop friendships, there are significant benefits for people with disability in terms of pooling together their formal and informal support (Wiesel et al. 2015).

Two main strategies could potentially increase NDIS participants' choice in sharing arrangements. First, investment in the development of community networks will create opportunities for people with disability, and their families, to identify potential housemates. Programs could also be developed to support NDIS participants seeking to 'trial' sharing arrangements in private rental before committing to more substantial investment such as purchasing a home together. Second, new housing stock should be designed in a way that maximises privacy in living areas in addition to shared spaces for socialising. Housing for sharing should also be designed to higher accessibility standards (Gold or Platinum) to allow a wider range of household compositions and adaptations when necessary (e.g. if one co-resident leaves and is replaced by another with different design requirements).

Further research is needed to examine the impact of the number of people sharing on the costs and quality of housing and support provision, on social inclusion and other quality of life outcomes, including the capacity for people to choose their housemates.

Culturally appropriate housing for Indigenous people with disability

Disability has been a largely neglected area of service provision for Indigenous people. The NDIS will change this, but cultural, social and geographic factors create particular challenges to the delivery of individualised support and housing assistance. High levels of need, the impact of remoteness and poor access to disability services have meant that NDIS funding for Indigenous populations is anticipated to be high relative to their size in the population. The PC has noted that in remote settings these factors mean that improvements are likely to be slow (2011, p.531).

Rates of disability among the Indigenous population are estimated to be double those of the general population (PC 2011, p.533) with a much younger age profile (ABS 2014). Prevalence rates are around 2.2 times the rate of non-Indigenous Australians for those with a profound or severe core activity limitation (PC 2011, p.531). High rates of co-morbidity due to chronic disease mean many individuals have more than one disability.

Because of the younger age structure of the population, rates of disability are likely to increase over time (Biddle et al. 2013). This will need to be taken into account in planning, together with careful assessment of levels of need due to sampling and data collection problems (ABS 2014). Financial planning will need to include managing the higher costs of service provision and capital developments in remote settings.

Factors affecting service access and delivery include low levels of identification with disability, a distrust of mainstream services (FPDN 2013, p.3), low income, the collective nature of Indigenous family and community arrangements and the impact of Indigenous cultural requirements on housing arrangements. Households are often multi-family, with a high dependence on social housing and high levels of crowding and homelessness (SCRGSP, 2014). The importance of family and country means that individuals may prefer to remain in locations where services are limited or non-

existent. Language differences, culturally-motivated population movement and differences in the way that housing is used require housing support to be delivered flexibly, and in ways that are culturally adapted. As much as possible, services should employ Indigenous staff (Habibis et al. 2013).

Limited, or non-existent disability services mean a high reliance on informal care, especially in remote settings where carers may themselves have a disability and are likely to be caring for more than one person (Massey et al. 2013, pp.6–7). If respite care is not available, as is often the case, families may seek to relocate. The experience of renal dialysis has shown that this kind of forced migration is costly for housing services, and disruptive for families and communities (Habibis et al. 2011).

Demand for home modifications is likely to be high because of high rates of physical and intellectual disability (Massey et al. 2013, p.3). As well as ensuring modifications are culturally appropriate, consideration needs to be given to the appropriateness of modifications where housing is sub-standard and in the context of high dependence on the rental market. But a failure to provide appropriate housing will increase the cost of support as individuals may be unable to remain in the home and as levels of need for services increase over time (Grant et al. 2014, p.26).

Additional considerations in remote communities include the high cost of housing and maintenance, the absence of a housing market, and the limited choice of partners with access to capital funds. The willingness of people to pool their benefits is likely to be influenced by factors such as the level and type of disability, the availability of family support, home modification needs, the types of housing available on the community, distance from service centres and the availability of services including disability, health, mental health and employment. Low education and differences in understandings of disability require careful attention to the principle of consumer-driven services (Biddle et al. 2013).

The individualised approach that underpins the NDIS is poorly aligned with the service needs of Indigenous communities, especially in remote locations where one-third of the population live (SCRGSP 2014). This is recognised by the PC (2011, p.531) which has signalled that block funding may be required for some service providers. Careful attention will be necessary to ensure that this does not compromise NDIS goals of improving choice for participants and quality of services. There is a need for well-developed processes of consultation that are culturally respectful and take into account levels of education. In remote settings, brokers may be necessary to ensure that client decisions are fully informed and understood (Biddle et al. 2013; Massey et al. 2013).

The high number of people with very high support needs living in unsuitable housing conditions, and the effect of this on other family members, will require appropriate housing not only for the person with disability, but also in some cases for other family members. This will require partnerships between the NDIA and social housing providers to create suitable housing that enables in-home support and sustaining existing family arrangements, where this is preferred. Some people may choose to move into shared housing in order to pool together support packages. In remote settings where appropriate housing and support services are not available, there is a risk that participants will be required to move away from their family and community to access appropriate support (Massey et al. 2013, p.6).

In most locations, potential partners for investment in housing projects are likely to be health and aged care services as these often have the most well developed services and infrastructure. The NDIA may also partner with mainstream community housing providers and some Indigenous community organisations. Such partnerships would

help to develop a whole-of-government approach to service provision but require adequate funding to avoid further stretching of an already over-stretched system (Biddle et al. 2012).

Support will be required when people move into housing to help them negotiate tenancy requirements and ensure housing stability. This includes individuals exiting hospital or custodial care for community settings so that they are able to sustain their tenancies and find their place within households and communities (Arafmi 2013, pp.48–49).

Culturally appropriate models of housing and support will need to be developed which take proper account of the aspirations of Indigenous people with disability, including where new facilities should be located. In addition to long-term housing, there is a need for transitional accommodation for individuals exiting custodial and other institutional care settings including hospitals, prisons and mental hospitals, as well as hostel accommodation for employment, and visits to regional centres for treatment.

The NDIS funds provide an important opportunity to increase employment opportunities in regional and remote locations through employment of local people for support service delivery and for infrastructure development (FPDN 2013, p.3). The experience of the National Partnership Agreement on Remote Indigenous Housing (NPARIH) has improved the capacity of governments to develop appropriate strategies to achieve this (Habibis et al. 2014).

3.4 Allocations procedures and priorities

A supply-side housing assistance context enhances the risk that the housing choices of NDIS participants will be compromised by the rules and procedures through which housing vacancies are allocated. Given the extent of unmet need for affordable housing, for the foreseeable future affordable and suitable housing for NDIS participants will remain a scarce resource that needs to be rationed.

In the current social housing system, people with disability living with their parents or in group homes, while eligible for housing assistance, often do not qualify for priority access into social housing. Many wait years on the non-priority waitlist until experiencing housing crisis that qualifies them for priority access (Wiesel et al. 2015). Even those applicants who successfully secured a social housing tenancy are highly constrained in their choices. Applicants are able to nominate the general area they wish to be housed in, but their choices are otherwise largely restricted. In some jurisdictions, an applicant who declines more than one housing offer can be penalised by being removed from the priority waitlist. Applicants are therefore pressured to accept housing that does not necessarily meet their preferences. Opportunities to transfer to another social housing unit at a later stage are also highly constrained (Wiesel et al. 2012).

Addressing the role of social housing in assisting NDIS participants, COAG (2013, p.10) has agreed that it 'will continue to provide accommodation for people in need of housing assistance in line with existing allocation and prioritisation processes'. Yet, the crisis-driven and rigid allocation system in social housing conflicts with the NDIS objectives of enhancing participants' choice and control and seeking early-intervention. Thus, we argue that while NDIS participants in urgent need of housing should be able to access social housing through its existing priority system, new affordable housing stock developed specifically for NDIS participants should be managed in a separate system where priority and allocation processes are not crisis-driven and are more responsive to individual preferences.

Hulse et al. (2005), drawing on alternative models of housing allocation—such as choice-based lettings in the UK and the Delft model in the Netherlands (van Daalen & van der Land 2008; Fitzpatrick & Pawson 2007, p.170)—identify several policy options to increase participants' choice in housing allocation processes, including:

- A bidding process akin to choice-based allocation models in Europe, to ensure applicants are not penalised for declining offers, and administrative effort is focused only on those who want the specific property on offer.
- Independent advocacy, brokerage and support to assist applicants in the bidding process, to eliminate the potential disadvantage to those who are less capable of negotiating a choice-based allocations system.
- Transparent and accessible information about available lettings and allocation criteria, including common registers of information about properties across all providers operating in an area.

Importantly, allocation procedures need to enable people to have meaningful choice about whom they share with. This entails some risks, such as reduced rental revenue for housing providers due to the time it takes to fill a vacancy in a shared home to allow existing residents to choose their preferred housemate. Further research is needed to develop financially viable allocation strategies that enable choice in sharing. Arguably, when sharing is necessary in order to pool together support packages, the costs of vacancy risks associated with choice-based allocations represent a housing cost that '*exceeds a reasonable contribution from individuals*' (Box 2) and thus potentially falls within the responsibility of the NDIS.

As long as affordable housing remains a scarce resource, principles will be required to guide the prioritisation of applicants to ensure it is rationed in a consistent and fair way that contributes to policy objectives. An 'individualised' approach suggests the primary criteria for prioritisation should consider the outcomes for people. Whereas applicants in most need will be prioritised in social housing, priority access to new affordable housing can be offered to those who will *benefit* most from the specific property on offer, for example, in terms of access to their informal support networks or work opportunities. At the same time, there is also scope for additional prioritisation criteria that relate to community building objectives, such as the compatibility of the applicant with the desired social-mix in a building or neighbourhood.

One potentially contentious question is whether applicants who are capable of contributing equity should be prioritised, and what means testing methods will be appropriate considering the expectation for financial contribution from families. Prioritising those who can contribute capital can be justified on the basis that they require a smaller subsidy, and can actively contribute to the policy objective of leveraging finance to maximise new supply. However, it should be recognised that such prioritisation will reinforce the disadvantage of those who do not have access to financial resources.

4 Conclusions

The NDIS is expected to be fully rolled out nationally by 2019, and will have major implications for housing assistance. The substantial increase in overall funding for disability services, alongside the individualisation of funding—no longer tied to a specific service or home—could potentially enable a large number of NDIS participants to move from their parents' home, group homes or institutional accommodation to independent living in the community. Yet, to achieve this objective, a large number of NDIS participants—an estimated 83 000–122 000 when the scheme is fully rolled out nationally (Bonyhady 2014)—will require additional housing assistance to be able to secure and sustain suitable housing.

Existing forms of housing assistance in Australia include a mix of supply- and demand-side subsidies and programs. There is ongoing negotiation between the NDIS, Commonwealth and state governments, and other stakeholders on the sources and amount of housing assistance that can be provided to NDIS participants. This includes NDIS user cost of capital, costed into the scheme by the PC. Furthermore, it is debated whether and how such funds should be individualised, in line with the 'individualised' approach that is a centrepiece of the NDIS.

A demand-side approach to housing assistance for NDIS participants appears more consistent with the scheme's individualised approach. Furthermore, demand-side subsidies can be appropriate in assisting NDIS participants who already live in, or can access, private housing that is suitable for their needs in most respects other than affordability. There is a risk, however, that without sufficient supply of appropriate housing, the benefits of demand-side subsidies will flow to housing providers rather than consumers (Hoek-Smit & Diamond 2003). For example, private landlords could potentially increase rents on accessible homes.

Therefore, the report examined the advantages of supply-side subsidies in enhancing housing choice for NDIS participants. Supply-side housing subsidies can be cost effective (e.g. if designed as a frontload capital contribution that reduces the lifecycle costs of a housing project); enable closer regulation of house prices to ensure affordability outcomes for consumers; be integrated with planning (Davison et al. 2012) and housing finance (Milligan et al. 2013) innovations to maximise supply output; and, deliver housing supply that is designed to provide additional benefits for people with disability.

Building codes and legislation requiring non-discriminatory access standards for newly-built dwellings will significantly reduce the accessibility barrier for people with mobility restrictions. In the absence of such legislation, supply-side housing assistance is necessary to deliver new housing supply that is designed to meet the needs of people with mobility restrictions or other requirements related to their disability. This could be achieved by requiring adaptable housing (LHA Silver and Gold Standards) as the minimum design standard for all new subsidised supply, and building accessible housing (LHA Platinum standard) for NDIS participants with mobility restrictions. There will also be a minority of NDIS participants who may require housing design solutions that require individual consultation prior to development of their dwelling. Accessible housing design will increase people's independence and mobility in and around their homes, and could potentially also reduce the costs of ongoing paid support as well as the high costs of post-construction modifications (Carnemolla & Bridge 2011; Lansley et al. 2004). The substitution of paid support with home modifications and design is an emergent field of research (Carnemolla & Bridge 2011), and further evidence on the extent to which capital costs of housing development can be recouped through savings on support

provision will be instrumental in justifying supply-side housing assistance for people with disability.

New housing supply can also be designed to reduce the costs of support for people with disability by enhancing their access to informal support, in locations where housing provided by the market is not affordable. New affordable housing supply in locations close to shops, services and public transport could also potentially reduce costs of transport funded by the NDIS for its participants. Further research, including rigorous cost-effectiveness analysis, is necessary to examine the extent to which housing location could achieve long-term savings on support, health services and transport.

Supply-side subsidies can also stimulate development of housing that is designed and managed to mitigate the disadvantage experienced by people with disability in terms of social inclusion, economic participation, health and wellbeing. More secure tenancies compared to those offered in the private rental sector could provide more stable housing that enables developing and maintaining relationships over time. Housing design that improves thermal comfort, access to clean air and natural light and elimination of domestic health hazards could potentially improve health and wellbeing outcomes for NDIS participants.

New housing supply designed to enable comfortable sharing could potentially reduce the costs of housing and enable pooling together of individualised support packages. Some of the difficulties associated with sharing can be minimised through housing that is appropriately sized, and designed to maximise privacy for each housemate. Further research is needed to examine the cost of housing for people with disability living in sharing arrangements in different housing market contexts, to establish the availability of suitable stock, and the level and form of housing assistance that is required to meet affordability benchmarks.

Investment in innovative models of housing finance and ownership, such as shared equity schemes, can assist in the leverage of finance from people with disability, their families and financial institutions. Additional benefits to individual co-owners include improved choice and control, secure occupancy and opportunities for capital gain.

Culturally appropriate models of housing will need to be developed to take proper account of the aspirations of Indigenous people with disability, the collective nature of Indigenous family and community life, and culturally-motivated mobility. For example, appropriate housing may be required not only for the person with disability, but also in some cases for other relatives to sustain existing family arrangements, where this is preferred.

While additional supply of affordable and suitable housing will increase overall housing choice for people with disability, supply-side housing subsidies and housing options delivered outside the market are often associated with constraints on individual choice for consumers. Additional measures may be necessary to minimise such constraints. There is a risk that a supply-side subsidy specifically designed to facilitate development of housing for NDIS participants, will encourage development of congregate facilities to achieve economies of scale, and use of available sites. Although the option of congregate housing can be seen as increasing the variety of housing choices available for people with disability, this is offset by the evident lack of choice experienced by residents of congregate housing in their daily lives (Kozma et al. 2009), and the likelihood of people being forced to 'choose' congregate housing due to the absence of other housing options. The research evidence suggests that smaller-scale, non-congregated housing dispersed in the community is a fundamental condition for the social inclusion, self-determination, and wellbeing of people with

disability (Walsh et al. 2010). Rather than large congregated housing for people with disability, more sophisticated economies of scale can be achieved through ‘pooled financing’—rather than bilateral deals—for multiple housing projects dispersed geographically, within diversified housing investment portfolios that include a mix of housing for NDIS participants in addition to affordable and market-value rental properties (see e.g. the model described in Appendix 1).

The management of new housing supply will also impact on NDIS participants’ housing choice. The crisis-driven allocation of existing social housing is unresponsive to individual preferences and excludes most people with disability despite the high level of need. This suggests a separate system of allocations that account for both individual goals and community-building objectives may be necessary to enhance housing choice for NDIS participants. Choice-based allocation models from Europe could potentially be adapted to the local context, and information about available properties and allocation priorities needs to be transparent and accessible. Independent advocacy and support is needed to assist applicants with disability in the process of applying for housing. Allocation procedures should enable people to make meaningful choices about who they share homes with, and new strategies are needed to enable housing and support providers to manage the associated operational challenges.

To conclude, the NDIS is a social policy reform of historical significance that has the potential to change for the better the lives of people with disability across Australia. At the same time, the NDIS presents a major challenge for housing policy, and its success depends, to a large extent, on the willingness of Commonwealth, state and territory governments to invest in new supply of affordable, well-designed and well-located housing for NDIS participants. The genesis of the NDIS itself demonstrates the need for a comprehensive plan and broad political, industry and popular support to achieve a transformative national housing policy reform of the scale that is needed to meet this challenge.

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Appendix 1: Financial modelling

(Authored by Craig Colgan, Jennifer Borrell, Pablo Gimenez, and Paul Ryan of Yarra Community Housing)

Yarra Community Housing (YCH) was engaged by the UNSW AHURI Research Centre to undertake financial modelling of housing options for NDIS participants, drawing on the organisation's experience and knowledge relating to the costs of incorporating disability modification into affordable housing developments.

The scenario selected for financial modelling included 11 Disability Modified Units (DMUs) integrated ('salt and peppered') into a new apartment block (33 units in total) over three floors. The DMUs' design specifications included adaptable design standards (silver level), lifts for each level, durable surfaces and sprinklers to meet regulations. The building locations have low cost land value, but with good access to transport, shops and services. Calculations for platinum level would require reconfiguration of the design plans and result in much larger units.

For this project, YCH and other Registered Housing Associations would require upfront capital contributions or operational subsidies. This requirement is due to a shortfall in the amount of revenue which is able to be recouped through rent, as market rent is not able to be charged. Registered Housing Associations can only charge Centrelink recipient tenants up to 30 per cent of their income (excluding Commonwealth Rent Assistance) and employed tenants 75 per cent of market rent.

Capital in the form of free land or through the financial contribution by an agency supporting people with a disability can contribute to the sustainability of the development. If the full capital costs of the development cannot be secured upfront, then it would be necessary to secure an ongoing operational subsidy to offset the construction, finance and operational costs.

Key assumptions for three options of the chosen scenario are provided in the table below, along with the financial implications of the variations in assumption.

Table A1: Scenario 1—Key assumptions for the three options

	Option A: 100% Capital Funding	Option B: 50% Capital Funding	Option C: No Capital Funding
Silver level standard of Universal Design (all options)			
No. of units	11	11	11
Total construction cost of 11 units (including land value & finance costs)	\$2,290,745	\$2,344,192	\$2,464,566
Cost per unit	\$208,250	\$213,108	\$224,051
Capital Funding	\$2,290,745	\$1,172,112	\$0
Capital Funding % of construction	100%	50%	0%
Debt	\$0	\$1,172,081	\$2,464,566
Debt % of construction cost	0%	50%	100%
Recurring Annual Operational Subsidy required per unit	\$0	\$2,000	\$6,000
Total Annual Operational Subsidy required over 40 years	\$0	\$1,658,828	\$4,976,483

It is evident from the table above that the lowest cost option by far is Option A, which includes 100 per cent capital upfront for construction. A related point is that upfront construction costs are not necessarily the greatest expense, when ongoing maintenance (LRM) costs are considered, for example, the LRM for this development is approximately \$4 000 000 while the construction costs are around \$2 300 000. More detail for each option is provided on the following pages.

Option A spreadsheet—main points

Low land value—\$375 000, 5.5 per cent interest, 0 per cent debt load.

Option A is feasible for YCH, but requires an upfront capital contribution of \$2 290 745. The capital contribution is significant and unlikely to be secured through philanthropic grants or partner contributions including land.

Unit type	No.	Cost type	\$
Disability modified units	11	Total development costs	\$2,290,745
		Total finance costs (construction phase)	Nil
		Total development costs including finance	\$2,290,745

Development and finance costs	%	\$
Equity required	100%	\$2,290,745
Debt	0%	Nil
Total development and finance costs		\$2,290,745

Loan details (cost of borrowing)

	Total Debt
Senior debt	Nil
Finance costs construction phase	Nil
Loan amount	Nil

First year rent revenues

	Units	Weekly rent	Annual rent
Disability modified units—DSP	11	\$244	\$140,009

First Year cash flow

Receipts	\$	Payments	
Rent	\$140,009	Administration & tenancy mgmt	\$16,289
Operational Subsidy	Nil	Operational maintenance	\$15,025
Vacancy/Bad debt	-\$7,000	Council rates	\$6,872
<i>Net income</i>	<i>\$133,009</i>	Insurance—prop.& pub. liab.	\$1,750
		Utilities common areas	\$2,001
		Utilities tenants	\$25,740
		Loan repayments	Nil
		Lift maintenance	\$7,857
		<i>Total</i>	<i>\$75,533</i>
		<i>Cash surplus/deficit</i>	<i>\$57,475</i>
		<i>Net surplus/deficit to lifecycle replacement Maintenance</i>	<i>\$57,475</i>

Total external contributions to cost of building & maintaining property

Capital contribution	Operational subsidy	Total
\$2,290,745	Nil	\$2,290,743

Option B spreadsheet—main points

Low land value—\$375 000, 5.5 per cent interest, 50 per cent debt load, debt repaid over 30 years.

Option B is feasible for YCH but requires both an upfront capital contribution of 50 per cent as well as a \$1 658 828 operational subsidy (over 40 years) to assist with borrowing and maintenance costs. The capital contribution is significant and unlikely to be secured through philanthropic grants or partner contributions including land.

Unit type	No.	Cost type	\$
Disability modified units	11	Total development costs	\$2,290,745
		Total finance costs (construction phase)	\$53,447
		Total development costs including finance	\$2,344,192

Development and finance costs	%	\$
Equity required	50%	\$1,172,112
Debt	50%	\$1,172,080
Total development and finance costs		\$2,344,192

First year rent revenues

	Units	Weekly rent	Annual rent
Disability modified units—DSP	11	\$244	\$140,009

First year cash flow

Receipts	\$	Payments	\$
Rent	\$140,009	Administration & tenancy mgmt	\$16,289
Operational subsidy	\$22,000	Operational maintenance	\$15,025
Vacancy/Bad debt	-\$7,000	Council rates	\$6,872
<i>Net income</i>	<i>\$155,009</i>	Insurance—prop.& pub. liab.	\$1,750
		Utilities common areas	\$2,001
\$2,000 per DMU		Utilities tenants	\$25,740
		Loan repayments	\$79,859
		Lift maintenance	\$7,857
		<i>Total</i>	<i>\$155,393</i>
		<i>Cash surplus/deficit</i>	<i>-\$384</i>
		<i>Net surplus/deficit to lifecycle</i>	<i>-\$384</i>
		<i>Replacement Maintenance</i>	

* There is only an operational deficit in year 1 and from then on sufficient cash is generated to fund the 40-year life cycle replacement maintenance costs.

Total external contributions to cost of building & maintaining property

Capital contribution	Operational subsidy	Total
\$1,172,112	\$1,658,828	\$2,830,940

Option C spreadsheet—main points

Low land value—\$375 000, 5.5 per cent interest, 100 per cent debt load, debt repaid over 30 years.

Option C is feasible for YCH but requires a \$4 561 776 operational subsidy (over 40 years) to assist with borrowing and maintenance costs. The operational subsidy is significant and unlikely to be secured through philanthropic grants or partner contributions including land.

Unit type	No.	Cost type	\$
Disability modified units	11	Total development costs	\$2,290,745
		Total finance costs (construction phase)	\$173,821
		Total development costs including finance	\$2,464,566

Development and finance costs	%	\$
Equity required	0%	Nil
Debt	100%	\$2,464,566
Total development and finance costs		\$2,464,566

First year rent revenues

	Units	Weekly rent	Annual rent
Disability modified units—DSP	11	\$244	\$140,009

First year cash flow

Receipts	\$	Payments	
Rent	\$140,009	Administration & tenancy mgmt	\$16,289
Operational subsidy*	\$66,000	Operational maintenance	\$15,025
Vacancy/Bad debt	-\$7,000	Council rates	\$6,872
Net income	\$193,509	Insurance—prop.& pub. liab.	\$1,750
		Utilities common areas	\$2,001
		Utilities tenants	\$25,740
		Loan repayments	\$167,922
		Lift maintenance	\$7,857
		Total	\$243,456
		Cash surplus/deficit	-\$44,447*
		Net surplus/deficit to lifecycle Replacement Maintenance	-\$44,447*

* There are operational deficits until year 11 and from then sufficient cash is generated to fund the 40-year life cycle replacement maintenance costs.

Total external contributions to cost of building & maintaining property

Capital contribution	Operational subsidy	Total
Nil	\$4,561,776	\$4,561,776

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