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Social housing as infrastructure: rationale, prioritisation and investment pathway

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Phil Fagan-Schmidt	Consultant (formerly Housing SA, SA Government)
Adrian Harrington	Charter Hall
Paul McBride/Allyson Essex	Department of Social Services (Commonwealth)
Sandi Phelan	Department of Housing and Public Works (QLD)
Llewellyn Reynders	Victorian Council of Social Services
Martin Robinson/Angela Rymer	Federal Treasury (Commonwealth)
Jon Ross	Westpac Institutional Banking
Richard Watling	Department of Environment, Land, Water and Planning, (VIC)
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Acronyms and abbreviations used in this report

ABS	Australian Bureau of Statistics
AHAT	Affordable Housing Assessment Tool
AHWG	Affordable Housing Working Group
AHURI	Australian Housing and Urban Research Institute Limited
ASVB	Australian Social Value Bank
CBA	Cost-benefit analysis
CEFC	Clean Energy Finance Corporation
CHO	Community housing organisation
CRA	Commonwealth Rent Assistance
GFC	Global Financial Crisis
GST	Goods and Services Tax
MCA	Multi-criteria analysis
NAO	National Audit Office (UK)
NBC	Needs-based capital
NDIS	National Disability Insurance Scheme
NFP	Not for profit
NHFIC	National Housing Finance and Investment Corporation
NPV	Net present value
NRAS	National Rental Affordability Scheme
PFI	Private Finance Initiative
PPPs	Public–private partnerships
REIT	Real estate investment trust
SDA	Specialist Disability Accommodation
SROI	Social return on investment
WTP	Willingness to pay

Glossary

A list of definitions for terms commonly used by AHURI is available on the AHURI website www.ahuri.edu.au/research/glossary.

Executive summary

Key points

- Safe, adequate, affordable and appropriate housing is critical to health, wellbeing and social and economic security, but many Australians cannot find housing in the private market, and the social housing system, incorporating public and community housing, is under-resourced and manifestly unable to meet demand.
- As a form of spatially fixed, materially realised capital expenditure that supports a range of social objectives in areas like public health, economic development and addressing market failure in the housing market, social housing is a form of essential social infrastructure that warrants public investment. However, political will remains the critical determinant of the level of that investment.
- Policy-makers argue that cost-benefit analysis (CBA) and related business case techniques could be usefully applied to build the case for investment in social housing. However, the following factors must be considered.
  - The core benefits of social housing are not easily quantified or monetised and are thus often overlooked or excluded from such assessments. The benefits attributable to social housing, such as social inclusion, education and employment, are not measured or traded in markets. They occur over extended periods of time and are often multi-dimensional.
  - The use of public health evaluation methodologies may provide a better basis for social housing appraisal than other approaches (for example, the housing-adjusted life years approach, adapted from health economics).
- Investment in other forms of social infrastructure, such as schools and hospitals, is typically based on the spatial distribution of need over time. Historically, this has not been the case for social housing.
- We analysed the extent and spatial distribution of need for social housing and the cost of its procurement in 88 different land and construction markets across Australia. The results show that over the next 20 years, 727,300 additional social housing dwellings will be required, with current-price procurement costs varying from $146,000 to $614,000 per dwelling, depending on local land values, building types and construction costs in different regions.
- Even with efficient financing provided by the National Housing Finance and Investment Corporation (NHFIC), there remains a considerable funding gap. We undertook financial modelling to identify the most effective strategy to address this gap, finding that needs based capital investment (NBC) supplemented by efficient financing provides the most cost-effective pathway for Australia. A model with no upfront capital investment, reliant on commercial financing and funded by an operating subsidy is substantially more expensive.

Key findings

Even when social housing is considered as infrastructure, this is not sufficient for making the case for social housing

Between 1951 and 1996, Australian jurisdictions built 8,000 to 14,000 social housing dwellings per year (Troy 2012). Social housing building programs were funded through direct public investment, via grants and long-term loans. Analysis of Australian Bureau of Statistics (ABS) figures (Groenhart and Burke 2014: 12) shows plummeting public sector residential construction since the 1970s, with a short rise during the Global Financial Crisis (GFC) via the National Rental Affordability Scheme (NRAS) and the Social Housing Initiative (SHI). With continuing sales and demolitions, Australia's public housing stock is declining (down 20,000 since 2007) and its share in the housing market is shrinking (4.4% nationally, lower in Victoria) (AHURI 2017a).

In Australia, changing attitudes to the role of government and economic policy have meant that funding and other support for the social housing system has steadily declined over the past decades, and more recent interest in increasing diversity and contestability within the system has, to date, had only limited effect.

While there is a strong historical precedent to regard the social housing system as making a broad social and economic contribution by promoting decent living conditions for all Australians regardless of income, social housing is still largely judged as a service to disadvantaged households reliant on government benefits. This categorisation of social housing means arguments to cast social housing as a necessary component of urban planning have yet to gain traction. At a time when governments prioritise reducing tax rates and discretionary spending, there is little enthusiasm for increasing investment in affordable housing for disadvantaged communities.

There is increasing interest in methods of calculating the benefits of social housing relative to cost, including the savings that might accrue in other areas of government expenditure but extending to the broader economic contribution that social housing can make by enabling economic and social participation among tenants. New investment is required to ensure cities function well and that aggregate consumer demand is not adversely affected by rising housing costs, and the provision of social housing has a part to play in these efforts.[1]

Interviewees repeatedly emphasised the importance of a publicly funded subsidy to 'fill the gap' and for government funding to supplement the finance that will be made available through the NHFIC. However, there are difficulties in advancing a case for increases in recurrent expenditure through existing budget processes. As a result, most of the interviewees were pessimistic about the prospects for a reconceptualisation of social housing as infrastructure, however convincing, to achieve much in the way of meaningful change.

Social housing requires an 'infrastructure investment pathway'

An 'infrastructure investment pathway' is the route capital takes to construct and operate assets and services to deliver social and economic benefits to broader society. Both funding and financing play an integral role in this pathway. 'Funding' describes the resources allocated by governments and the community to cover capital investment and operating costs. 'Financing' describes the instruments or arrangements through which these costs, especially high upfront

[1] A number of interviewees saw City Deals and other place-based initiatives as a potential vehicle by which social housing organisations could secure much-needed investment for new housing. These initiatives are only embryonic, however, and operate at a local, rather than national, scale.

capital costs, are spread over time as government surpluses and service charges allow. Seen in this light, financing ultimately requires funding and is not a replacement for it.

While users of infrastructure are increasingly called on to pay for associated services through various charges, full payment can undermine the social and economic benefits they are intended to deliver. For this reason, services such as health and education are neither delivered on a full fee-paying basis nor driven to generate surpluses or even be cost recovering. These services are intentionally subsidised to maximise the social and economic benefits they are designed to deliver. The design and use of subsidies are integral to all needs-based services, and their use must also be equitable, efficient and effective. More recently, the government has acknowledged the importance of targeted public investment to address the infrastructure needs of our growing cities (Taylor 2017).

Greater capacity in needs-based planning, securing and allocating adequate funds, and designing and implementing programs is required

Australia's social housing is tightly targeted and its market share is declining. A range of investment pathways have been pursued in recent decades, including contracting out services, raising off-balance-sheet debt via community housing organisations (CHOs), mixed redevelopment and densification, as well as asset sales and cross-subsidisation. These strategies have overseen the decline of social housing construction and will not generate sufficient units to address Australia's backlog and growing need.

Transnational organisations, such as the International Monetary Fund, have set out arguments for more effective public investment and efficient financing of infrastructure, stressing greater capacity in needs-based planning, securing and allocating adequate funds, and designing and implementing programs (IMF 2015: 13). To maximise social and economic outcomes, social housing requires a capital investment strategy informed by current and future needs.

A more ambitious and effective pathway is required, which grows and improves the social housing stock. Australia can learn from the practices of other nation states where national housing strategies include more productive strategies to boost social housing supply.

Productive social housing systems use a combination of policy instruments to reduce the cost of land, invest strategic equity and lever efficient long-term financing. Productive social housing systems do not rely solely on demand-side subsidies, which have proved ineffective when rents are deregulated and vacancies low. The use of grants and efficient financing not only reduces long-term costs to government, but also reduces pressure on service charges and related assistance in other policy areas.

Greater transparency in comparing the cost of capital and requirement for additional recurrent subsidies is vital to help policy-makers and program designers determine the ideal mix of funding and financing that should be used to address Australia's social housing deficit.

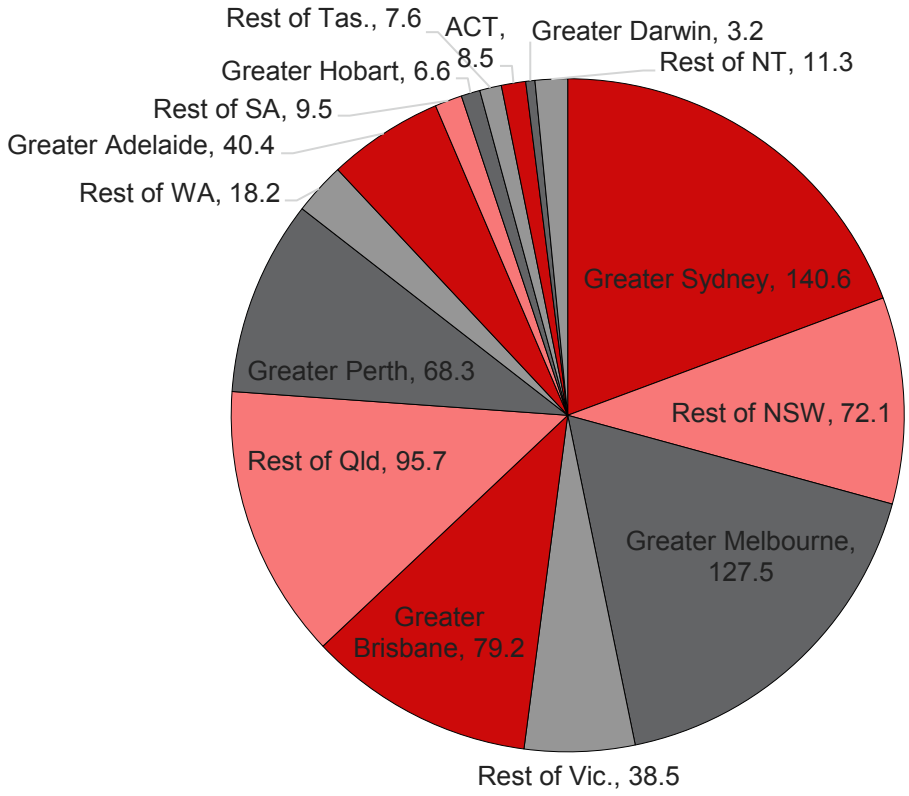
Housing need and procurement costs vary across different land and housing markets, necessitating a nuanced strategy

To calculate the government capital investment required to address need over time, including the current backlog, it is necessary to estimate: (i) the scale of unmet need, (ii) the total cost of providing the homes required to meet that need (bearing in mind its spatial distribution), and (iii) the portion of that cost that is in excess of what housing providers should be able to finance through private debt.

Our analysis of unmet need examined levels of homelessness and housing stress amongst very low-income in the lowest income quintile (Q1) households renting privately. It found a need for construction of some 730,000 new social dwellings over the next 20 years. Need is unevenly spread and growth rates also differ across Australia. Figure 1, below, illustrates the number,

proportion and location of social housing units needed to address the current deficit and rising need over time, to 2036.

Figure 1: Location and number of social housing units needed to 2036



Note: All figures are in '000s.

Source: Lawson, Pawson et al. (2018).

Total procurement costs vary for regions within each state and territory. This variation includes land and construction costs, as well as estimated professional fees (legal and design services), and local impact fees/infrastructure contributions. Affordable rents can only cover part of this cost of procuring, managing and maintaining this body of housing. For this reason, a spatially nuanced subsidy will be required to fill the remaining funding gap.

Direct investment pathway is the most cost-effective

We examined the best way to fund and finance this gap via multi-criteria financial analysis and financial modelling. Building on the Affordable Housing Assessment Tool (AHAT) developed for the AHURI *Inquiry into increasing affordable housing supply* (Randolph, Troy et al. 2018), project-level costings of CHO-led development from across Australia have been used to test the impacts of different funding and financing scenarios.

Each investment pathway aims to be cost-neutral after 20 years. Five pathways have been modelled, to enable a comparison of the implications they have for government expenditure in terms of ongoing operating subsidies and Commonwealth Rent Assistance (CRA) payments.

Overall, our modelling reveals that an NBC investment strategy is substantially more cost-effective in the short and long term than a commercially financed model that is reliant on an operating subsidy to ensure affordable social tenancies. Indeed, privately financed and

subsidised strategies are 24 per cent more expensive in the first year alone, and these costs accumulate with each new tranche of privately financed dwellings, as shown in Table 1, below.

Table 1: Comparison of five investment pathways

Program Summary (Lifetime cost of Year 1 of program)	Scenario 1: Private financing with operating subsidy	Scenario 2: NHFIC financing with operating subsidy	Scenario 3: Upfront capital grant	Scenario 4: Upfront capital grant + NHFIC financing	Scenario 5: Larger capital grant + NHFIC, excluding cost of CRA
Total development costs (excl. GST and taxes)	$7.0B	$6.4B	$5.8B	$5.7B	$5.4B
Total operating costs	$2.8B	$2.8B	$2.8B	$2.8B	$2.8B
Rental income	$3.2B	$3.2B	$3.2B	$3.2B	$3.2B
Operating/ *capital* grant	$5.4B	$4.8B	*$4.2B*	*$4.1B*	*$5.0B*
CRA payments	$1.2B	$1.2B	$1.2B	$1.2B	
Government subsidy	**$6.6B**	**$6.0B**	**$5.4B**	**$5.3B**	**$5.0B**
Savings on Scenario 1	**-**	**9%**	**18%**	**20%**	**24%**

Source: Lawson, Pawson et al. (2018).

Under privately financed models, recurrent expenses continue for a considerably longer duration, fulfilling obligations to cumulative long-term financing contracts. As shown in Figure 2, a significant disadvantage of the operating subsidy model comes at the end of Year 20, when operating subsidies would still be required to be paid out on dwellings built in the later part of the program, unlike a capital grant model.

Figure 2: Annual expenditure under capital grant vs. operating subsidy programs

Note: All values are represented as net present value (NPV) and do not include any costs associated with CRA payments.

Source: Lawson, Pawson et al. (2018).

Post Year 20, these ongoing recurrent expenses can place a considerable burden on public finances, constraining public investment in other priorities. Our Australian findings on the long-term costs of private financing approaches share many similarities with the experience of the Private Finance Initiative (PFI) in the UK. There, the National Audit Office (NAO 2018) recommended curtailing the use of PFI, leading to the shift towards more direct public investment approaches. PFI was finally abolished in 2018 and the borrowing cap limiting local authority investment in social housing was gradually lifted to boost supply efforts.

Upfront public equity investment is not only more cost-effective in the long term: unlike recurrent operating subsidies, it creates real value over time. This can be used and revolved to drive the achievement of policy goals, maximising locational advantages, setting decent building standards and driving innovation in (energy-efficient) design. Strategic public investment, carefully executed, can also attract and channel more efficient financing (such as NHFIC and the Clean Energy Finance Corporation—CEFC), building on recent Australian progress in mission-driven investment.

Evaluating a long-term social housing investment program

Cost-benefit analysis (CBA) is a method for program and policy analysis, founded in US welfare economics during the 1930s to justify spending on infrastructure (Berry 2017). It monetises the willingness to pay (WTP) for certain projects, to provide a quantifiable assessment of whether a project is of net benefit to society. In Australia, the most prominent use of CBA is in the assessment of major transport projects, guided by state and federal infrastructure bodies, as well as technical guidelines and parameters published by central agencies.

Yet CBA should not be seen as the only basis for infrastructure decision-making. Recent developments in the transport sector, in particular, have been made on a political rather than technically quantified basis. It is also notable that other forms of social infrastructure, such as schools and hospitals, do not rely on positive CBAs to determine investments. Rather, non-monetised, ethical considerations, such as need, distributional equity and environmental sustainability, come to the fore. This indicates that while CBA can provide numerical

reassurance to government of the net benefit to society of a project, other bases for advocacy are also influential in making decisions about infrastructure.

While there has been recent interest in developing methodologies for applying CBA to social housing questions, methods remain underdeveloped in comparison to transport. There is no agreed approach to monetising the benefits of social housing. This reflects the long-term, multifaceted and interrelated benefits of social housing, many of which are regarded as 'intangible' and too difficult to quantify in CBA studies reliant on the 'rod of money'.

The project appraisal methodology selected may influence outcomes and funding priorities. If CBA and business-case methodologies are to be relied upon for funding long-term social housing development programs, much work will need to be done to establish more suitable approaches than currently exist. These will need to address the gap in expertise and resources required to develop and implement CBA applicable to social housing, and provide the conceptual clarity, analytical guidance and rigour expected by decision makers. Appropriate longitudinal data also needs to be collected.

Therefore, this Inquiry recommends two methodologies for the supporting appraisal of the proposed social housing development program.

- An avoided costs methodology, which is a financial assessment of net savings to government of social housing provision due to lower frequency of use of health, justice and welfare services.
- An economic analysis based on the equivalent private market rental value of social housing, predicated on the assumption that the rent represents the WTP for the bundle of goods provided by the housing (including security, social inclusion, health, access to services, amenity and wellbeing).

These criteria reflect a pragmatic view of appraisal methodologies, based on efficacy, resource requirements and the need to provide support for a long-term social housing development now, rather than after years of subsequent research and data collection. These recommendations are made with an important caveat, included in the criteria listed above, that analytical methods and outcomes need to be accepted by decision makers and funding bodies.

Policy development options

Capital investment makes for a more effective pathway

Reforming Australia's social housing investment pathway to generate more productive outcomes must to be accompanied by a shift in the ways governments and key stakeholders talk and think about housing. Social housing's contribution to social wellbeing, economic stability and sustainability requires a more central and firmly assured place in Australian public policy. A more ambitious and positive view of social housing can open up discursive space for the more technical requirements of changes to processes and institutions to gain traction.

Social housing requires value-building, patient capital serving its stakeholders—not extractive financial innovation serving shareholders. Governments are placed in an ideal position to provide this, to ensure wider social benefits are achieved. Australian governments have used direct investment and long-term public loans very effectively in the past to lift the provision of public housing.

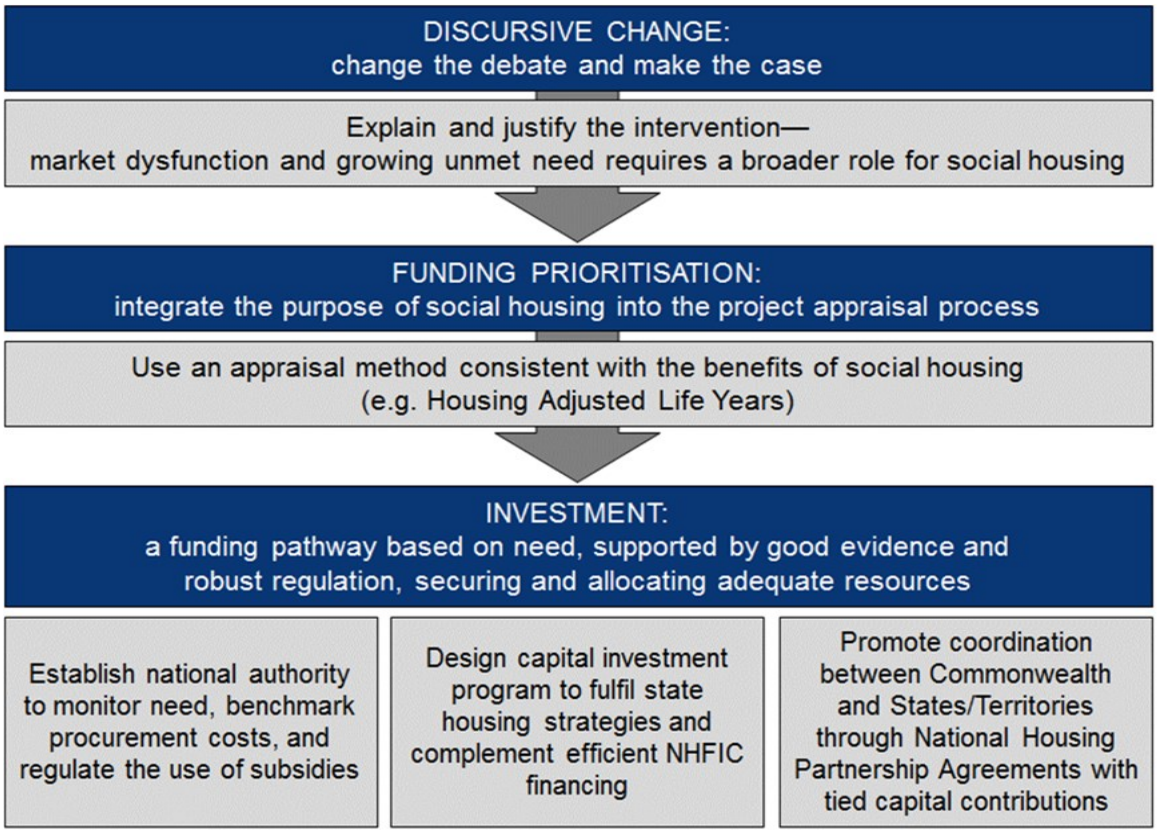
Today's governments would need to substantially increase investment in social housing to address the backlog and effect real change in housing outcomes. Direct equity investment will enable other patient investors, such as superannuation funds, to increase their useful role in providing more efficient financing for CHOs, investing in long-dated, government guaranteed NHFIC bonds.

Such reforms require not only awareness of the needs and costs of procurement but also the will to change the way Australian government prioritises infrastructure investment. It will require hard work to incorporate the pertinent metrics, covering the intangible and long-term benefits of social housing, in decision-making and assessment. Methods such as the 'housing-adjusted life years' approach show promise and have proven their value in public health economics. Thinking outside the envelope, and accounting for the avoided costs of homelessness, can also have traction in public expenditure deliberations.

Governments can further develop the needs assessment and financial modelling tools presented in this report to measure and evaluate their community's unmet need for social housing infrastructure. Additional qualitative work, involving social housing landlords and tenants, is required to examine these needs more sensitively. Consultation with industry is also required to determine appropriate cost benchmarks for procurement on the required scale. Such an effort necessitates greater commitment by all levels of Australian government to develop and implement long-term investment programs. This requires national leadership.

To drive this effort, the Inquiry recommends the establishment of a national housing authority, operating under the guidance of a national housing strategy. A national housing authority could establish the level of funding required for state- and local-level efforts to develop needs based capital (NBC) investment programs to complement lower cost NHFIC financing. The outcome of this evidence base, state strategies and funding negotiations, would be National Housing Partnership Agreements with state governments, making use of NHFIC's investment mandate to channel more efficient finance. The national housing authority could also have the capacity to guide and regulate organisations that make use of government subsidies for social housing provision, such as state housing authorities and CHOs. Such a strategy is outlined in Figure 3, below.

Figure 3: Foundations of a national needs-based capital (NBC) investment strategy for social housing



Source: Authors.

The Inquiry

The Inquiry was undertaken in 2017–18 and involved three research teams, from RMIT University, The University of New South Wales (UNSW) and University of Tasmania (UTAS), and was co-ordinated by Dr Julie Lawson. It actively engaged with an Industry Panel throughout, which provided feedback discussion papers and research presentations, informing the peer-reviewed publication of three Research Reports and this Final Inquiry Report, as detailed in Table 2, below.

Table 2: Research questions, methods and publications

Research question	What is the justification for defining social housing as infrastructure, alongside other forms of infrastructure?	How can we best undertake a business case for social housing investment?	What is the most effective investment pathway to deliver required housing outcomes?
Methods	• Review of national and international literature conceptualising social housing and infrastructure, contextualised by interviews with key international informants. • Interviews with 19 policy-makers (Commonwealth, Victoria, NSW) focussed on potential overlaps between housing and infrastructure policy. • Critical policy analysis (derived from Bacchi 2009) examining meanings currently attached to social housing and infrastructure, opportunities for reconfiguring and reimagining those meanings, and implications for policy.	• Review of policy, guidelines and commentary on infrastructure business case preparation in Australia. • Review of selection of business cases for recent major infrastructure projects. • Interviews with 18 stakeholders in industry, government and academia to test potential future approaches and methods to the application of CBA to social housing.	• Review of national and international literature on needs assessment methodology and infrastructure investment pathways. • Interviews with 20 stakeholders and two half-day industry workshops (with Clean Energy Finance Corporation and NSW Federation of Housing Associations CFO group). • Development of demographic model of level and distribution of social housing need over 20 years, and associated cost of procurement based on real project costs. • Development of evaluation framework assessing the effectiveness, equity and efficiency of alternative funding and financing scenarios, supported by financial modelling of cost to government (using UNSW's Affordable Housing Assessment Tool).
Publication	Flanagan, K., Martin, C., Jacobs, K. and Lawson, J. (2019) *A conceptual analysis of social housing as infrastructure*, Final Report No. 309, AHURI, Melbourne	Denham, T., Dodson, J and Lawson, J. (2019), *The business case for social housing as infrastructure*, Final Report No. 312, AHURI, Melbourne	Lawson, J., Pawson, H., Troy, L., Van den Nouwelant, R. and Hamilton, C. (2018) *Social housing as infrastructure: an investment pathway*, Final Report No. 306, AHURI, Melbourne

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Source: Authors.

1 Introduction

Usually conceptualised as referring to physical assets such as roads, water and power supplies, the term 'infrastructure' can be—as this report argues—reasonably applied to a wider range of social and economic amenities that are fundamental to inclusive, productive and sustainable cities.

With good planning and adequate investment, such infrastructure contributes towards social equity, stable economic growth and environmental sustainability, and also delivers equitable, effective and efficient services.

Treating social housing as a component of infrastructure means it can be aligned with developments in infrastructure policy more broadly, including shifts towards greater transparency and efficiency.

This research uses a variety of qualitative and quantitative methods to inform the development of a social housing investment pathway from the perspective of needs-based social infrastructure.

Urban development, and the social and economic opportunities it provides, is underpinned by investment in infrastructure. To meet the needs of a growing population and ensure more inclusive and sustainable living environments for the future, this entails investment not only in transport infrastructure, but many other beneficial assets such as parks, schools, hospitals and social housing. How social infrastructure—including secure affordable accommodation for low-income households—is delivered depends on our willingness to prioritise and fund it.

This Inquiry examined approaches to investment in social housing from this perspective of infrastructure. Understood in this way, social housing can be aligned with developments in infrastructure policy more broadly, including shifts towards greater transparency and efficiency in project appraisal and funding prioritisation, as well as emerging financing, development and operating structures.

The three main research questions addressed by this Inquiry are as follows.

1 What is the justification for defining social housing as infrastructure, alongside other forms of infrastructure?

2 How can we best undertake a business case for social housing investment?

3 What is the most effective investment pathway to deliver the required housing outcomes?

1.1 Policy context

Between 1951 and 1996, Australian states and territories built 8,000 to 14,000 social housing dwellings each year (Troy 2012). These building programs were funded through direct public investment, via conditional grants and long-term loans. Since the 1990s, however, social housing construction levels have languished at residual levels, apart from a short-lived revival immediately following the GFC via the Social Housing Initiative (SHI) (Groenhart and Burke 2014: 12). While Australia's total number of households expanded by 30 per cent over the two decades to 2016, social housing provision grew by just 4 per cent (calculated from Yates 2013; ABS 2015; SCRGSP 2016).

Since the 1990s, Australian housing assistance has been directed away from capital investment in accommodation assets. Instead, public funds have been provided to individuals as indirect subsidies via the tax system, and as direct assistance through first home owner grants and rent assistance (Jacobs, Atkinson et al. 2010; Groenhart and Burke 2014). This shift has been championed as the most efficient way to target public resources (Productivity Commission 2016) and reduce public debt. Closer analysis reveals the inequity and unintended consequences of a demand-focussed investment orientated approach (Groenhart 2014).

Highly competitive demand of the rental accommodation in the context of low vacancy rates and weak rent regulation, has led to the majority of tenants (52.9%) paying more than 30 per cent of their incomes in rent. To assist with excessive housing costs, private tenants receiving Commonwealth pensions can receive Commonwealth Rent Assistance (CRA). Their number has grown to 1.3 million income units in 2017–2018, costing the budget $4.43 billion that year (Tables GA6 and GA7, Productivity Commission, 2019). While CRA assists a large proportion (68.3%) of recipients to meet their housing costs, this support is not sufficient to address housing affordability stress amongst a substantial 40.3 per cent of recipients (Productivity Commission, 2019). Further, CRA does not assist public housing tenants. Their rents are geared to their often very low incomes. The cost of public housing are supported by National Affordable Housing Special Purpose Payments, but the amount of this support has declined by 8 per cent from 2013 to 2018 ($1.3 billion in 2013 in real terms).

Notably, payments via intergovernmental agreements such as NAHA or NHHA are not clearly tied to expenditure on capital assets or operating costs. While supply targets are now specified in new NHHA bi-lateral agreements (e.g. between the Commonwealth and Victorian Government), these could be linked much more effectively to local needs analyses, to better inform the level of budgetary resources required, real expenditure, outcomes generated and budget reporting. While improvements to supply targets have been made for social housing, no such scrutiny has been imposed on the generous levels of indirect assistance provided via the tax system to housing *investors*. As negative gearing provisions and capital gains tax exemptions erode government revenues, the social benefits of these implicit subsidies are regressive (Duncan, Hodgson et al, 2018).[2]

Starved of direct capital investment, state housing authorities serving those in urgent need of housing, have turned to extracting the accumulated value stored in existing public housing assets and attracting private investment in an effort to renew their deteriorating assets and create new ones. The outcome of this effort is often a range of ‘affordable’ products rather than targeted on increasing social housing stock (Randolph, Troy et al. 2018).[3]

Heads of Treasury have been advised of this funding gap by the Commonwealth’s Affordable Housing Working Group (AHWG 2017). According to the most recent Productivity Commission Report (2019) the number of public housing households has decreased over the last decade from 328,736 in 2009 to 304,532 in 2018. There has been some growth over the same period of ‘affordable’ rental in the community housing sector, largely through cash payments under the National Rental Affordability Scheme (NRAS) and the transfer of public housing management, as well as new social housing funded by direct public investment under the Social Housing Initiative. Both NRAS and SHI investment have ceased. Consequently, real growth has slowed

[2] According to detailed AHURI research “Negatively geared investors who receive the highest tax savings are typically middle-aged fulltime employed males. On the other hand, the ones who benefit the least are females and older investors aged 55+ years who are not in the labour force. Home-owner investors who own both a family home and at least one rental investment property received the greatest CGT discount benefits, while renters who do not own properties do not receive any CGT discount.” (Duncan et al, 2018:2)

[3] The NSW Government’s 2016 Social and Affordable Housing Fund (SAHF) is a notable exception, designating 75% of procured dwellings as social housing (Pawson and Milligan 2015).

(other than that aided by stock transfers) (Productivity Commission, 2019), and is declining relative to both overall household growth and estimated need. In a recent turnaround in funding, the Queensland Government has announced major direct capital investment in social and affordable housing (de Brenni 2018).

Some governments have privatised their social housing stock. As institutional investors, such as pension funds and private equity funds seek returns, these assets and their rent rolls have attracted growing interest. For some investors, the availability of government-provided 'match funding' or concession payments makes such investments even more attractive. This motivated the growth of concession-based Private Finance Initiative (PFI) infrastructure contracts in the UK, enabled by a wave of privatisations of government services. In Germany, private equity and hedge funds, such as Fortress Investment Group and Blackstone, purchased discounted social housing stocks following the Sovereign Debt Crisis, fuelling the creation of global corporate landlords with more active asset management strategies (commercialisation of rents, capital value extraction, debt loading). The Vonovia property company is now the largest landlord in Europe, with over 370,000 dwellings (Aalbers, Van Loon et al. 2017; Vonovia 2015).

There are real questions to be raised as to whether this approach is either cost-effective for governments or beneficial for tenants in both the short and long term. Clearly, a critical re-assessment of the current approach to housing assistance and investment strategies is required if Australia's stock of social housing is to be maintained and increased. This Inquiry seeks to inform policy-makers about the merits and pitfalls of reconceptualising social housing as a form of infrastructure.

1.2 Existing research

Social housing was once a recipient of government investment, aimed at addressing housing market failure but also achieving outcomes in the areas of economic growth, national development, public health and social cohesion. Today, as measured by the size of its waiting list and length of waiting times, the social housing system is failing to meet these broader objectives and directly address growing need (SCRGSP 2018; AIHW 2018). Academics, advocates and policy-makers have argued that this failure is due to inadequate funding, short-term policy, and costly private finance arrangements (Lawson, Berry et al. 2009; 2014).

In this context, it has been suggested that reconceptualising social housing as a form of essential infrastructure might help to unlock investment, especially from non-government sources, for increasing social housing supply (see Australian Government 2014; AHURI 2016). There is scope within existing conceptualisations of both social housing and infrastructure to allow for this, and social housing features in some infrastructure typologies alongside the provision of hospitals, schools and prisons (e.g. Productivity Commission 2014; Infrastructure Victoria 2016). More broadly, there is space within recent political statements on infrastructure to include social housing (see, for example, Taylor 2017). However, to date there is little evidence that this association between social housing and infrastructure has directly shaped practice or resulted in meaningful additional investment.

1.2.1 Measuring the contribution of social housing

Governments and the private sector use business case and cost-benefit analysis (CBA) to appraise infrastructure investment proposals. A business case sets out the purpose, costs, benefits and risks associated with a project, based on financial, economic and strategic assessments. Infrastructure business case processes have been refined over recent decades, and are adopted by a range of public and private sector organisations. CBA is used to quantify the net benefits that result from an initiative, and generates the benefit-cost ratio and net present value that are central to assessment outcomes.

While there is an extensive literature on the benefits associated with adequate housing—and social housing—provision, there are few examples of CBA application or the monetisation of benefits as normally required in CBA. This is most likely due to the difficulty of quantifying and monetising the range of non-market traded benefits that accrue from social housing, such as wellbeing, participation in education and social inclusion. As Pugh and Catt (1984: 28) explain:

> *It is relatively uncontroversial to specify the capital and current costs of housing programmes. But it is more difficult to find widespread agreement on the way the benefits should be reasoned, measured, and enumerated. The challenges associated with quantifying non-monetary outcomes is probably a reason why CBA is not widely used for assessing other variants of social infrastructure, such as health and education, where decisions are made on the basis of need, demography and funding agreements between the Commonwealth and States.*

The limited examples that do exist include CBAs undertaken for the South Australian Housing Trust (Pugh and Catt 1984) and the New South Wales Department of Housing (Carter, Milligan and Hall 1988) in the 1980s. The background for both these studies was the transition of the social housing system to a residualised, safety-net model (Spiller 2017). Both studies found that the benefits of social housing could be calculated by comparing public and private market rents, although they used different assumptions and applications. Pugh and Catt (1984) adapted a method developed by DeSalvo (1971), where benefits are a function of estimated market rents, actual rent paid in social housing, rent-income ratios of people not in social housing, and the income of the tenant.

A 1989 report by Econsult compared rental assistance and housing provision using cost-effectiveness analysis, based on the questionable assumption that both options provide 'secure and affordable housing to low income persons' (Econsult 1989: 1). The report found that, over a 12- to 15-year time frame, housing provision was more cost-effective than rental assistance. The central discount rate used in the analysis was 3 per cent, with sensitivity testing at 0 per cent and 5 per cent. The justifications for this were: imperfect capital markets and their failure to account for externalities; private capital having comparatively low regard for future generations; taxation liabilities for private investment; and lower risk for public projects (Econsult 1989: 23–4).

Econsult's work informed the 1993 report on public housing by the Industry Commission. The Commission (1993: 66–7) found that in the long run it is cheaper for governments to directly increase supply than to stimulate additional supply through vouchers or allowances[4], because additional rents resulting from the vouchers or allowances must also be paid to the existing landlords. Government retention of social housing stock was also seen as beneficial as it provided a hedge against housing market fluctuations and mitigated private landlord discrimination against prospective social housing tenants. However, in recent years the Productivity Commission (2017) has focussed on efficiency within the social housing sector, emphasising the need for competition, contestability and user choice, and advocated more market-based methods of providing housing assistance, such as rental assistance, over directly increasing social housing supply. Less attention has been given to the inequity of Australian housing assistance across the wider housing system (Groenhart 2014). A focus on equity and effectiveness would inevitably highlight the constrained resources devoted to social housing.

[4] The issue of supply versus demand-side subsidies is discussed in more detail in Lawson, Pawson et al. 2018, especially section 3.5.1. Australia spends relatively little on direct investment, and lack of investment in supply is considered by the social housing industry to be one of the greatest barriers limiting growth (Lawson, Pawson et al. 2018: 41–42).

A number of approaches to assessing the broader economic benefits of social housing have been applied by researchers in the past decade. Ravi and Reinhardt (2011) used social return on investment (SROI) methods to evaluate the benefits of community housing in Australia. Kraatz and Thomson (2016) collected an evidence base of the benefits of social housing to construct a 'composite return on investment'—including SROI, wellbeing valuation, value to the individual and the value of equity—as 'a single method does not capture the complex nature of the value returned to society and the individual of having access to safe and secure housing' (Kraatz and Thomson 2016: 24).

The purpose of the composite return on investment measure is similar to the intent of the framework described in this report: 'to establish a robust methodology for valuing the return on investment of providing social housing, in order to build the case for on-going investment' (Kraatz and Thomson 2016: 24). However, implementation of this framework is different. Witte (2017) found that for every $1 invested in last-resort housing, $2.70 of benefits are generated over the subsequent 20-year period, including health cost savings, improved quality of life, reduced crime costs (both as victim and perpetrator), increased human capital, avoided property blight and nuisance, volunteering, and economies of scale and scope. However, as 'last-resort' housing is for short-term emergency relief, helping people transition into longer-term secure tenancies, it does not account for the additional benefits associated with *secure* tenure.

These detailed investigations of social housing's economic benefits provide valuable insights for investment decisions, but for a CBA of social housing their methods are not directly transferable. While SROI draws on CBA theory and techniques, it is not recommended for use in comparisons of different programs and with different stakeholders (Maier, Schober et al. 2015). The summation of itemised benefits technique employed by Kraatz and Thomson (2016) introduces the risk of the double counting of benefits (by including separate measures for employment and education, for example) and does not provide a single monetised estimate for use in calculating net present value or benefit-cost analysis.

To address some of the concerns with SROI in particular, Alliance Social Enterprises[5] developed the Australian Social Value Bank (ASVB), to be used as a tool for undertaking CBA of social infrastructure programs within Australia. The ASVB is a social value calculator, based on the 'wellbeing valuation' methodology, considering 62 different social measures, broadly categorised as: health, home, education, social and community, drugs and alcohol, crime and employment. Wellbeing valuation calculates changes in peoples' circumstances and then assumes that these changes will result in increased income to monetise the improvements. Secondary benefits are also included, such as reduced welfare payments and increased tax receipts. The ASVB benefit calculation method reduces the propensity for double counting by limiting the number of benefits included to three, with explicit warnings included in the guide (Fujiwara, Keohane et al. 2017: 19). This method can be seen as a step towards the development of a standardised set of parameters for evaluating social infrastructure programs, akin to those published by the Australian Transport Council (2006) for the assessment of transport infrastructure proposals.

1.2.2 Options for investment

A review of international and national experience in social infrastructure provision undertaken for this Inquiry revealed that the contribution of social housing to overall economic development and social wellbeing varies considerably according to its core purpose: as an instrument of welfare, a market stabiliser, or to progress broader social, economic and environmental goals. Like Australia, the UK and US have narrowed the role of their social housing sectors to one of

[5] https://asvb.com.au

addressing only urgent housing needs. In contrast, countries as diverse as China, Singapore, Finland and Austria pursue a much broader set of goals. There, social housing is perceived as promoting sustainable and stable housing markets, ensuring efficient housing supply outcomes and promoting economic productivity. Austria and Finland also use direct investment social housing to promote more inclusive and energy-efficient housing options (Chen, Stephens et al. 2013; Lawson and Milligan 2008).

Australia often draws policy inspiration from anglophone countries such as the US and the UK, where the level of public investment in infrastructure has declined relative to recurrent expenditure assistance (Housing Vouchers and Housing Benefit respectively). These governments have relied on private financing, funded in part by operating subsidies and rising consumer charges (Chen, Stephens et al. 2013; NAO 2013, 2015, 2018b; NHF 2017). Policies prioritising competition, choice and private investment in the UK, US and Australia have driven changes in the financing, construction and charging policies of infrastructure projects and services such as schools, hospitals and prisons. This trend also affects social housing and, most notably in the UK, there is heavy reliance on private investment—supported by rising rents (due to inflation) and underpinned by deep housing allowances—to address declining public capital investment in social housing (Williams and Whitehead 2015). To illustrate, the proportion of housing assistance spent on housing allowances in the European Union (EU) rose from 54 per cent to 75 per cent between 2009 and 2015, with the highest share (85%) in the UK (NHF 2017). In contrast, total expenditure on housing development in the EU has declined by 44 per cent, from €48.2 billion in 2009 to €27.5 billion in 2015.

This decline in capital investment and rapid growth in rent subsidies has indirectly contributed to a shortage of accessible affordable rental housing in major European cities—with notable exceptions in Austria and Finland. As we discuss later in the paper, there is a need for a more accurate depiction of the subsidies underpinning housing supply and consumption, and their equity and effectiveness, so that policy reforms are better equipped to address challenging and dynamic market circumstances.

1.3 Research methods

This Inquiry establishes the policy rationale for defining social housing as infrastructure, provides a business case for funding and financing it, and recommends an appropriate investment pathway. It is informed by analysis of national and international argumentation, current barriers and emerging financing pathways, and provides demographic and financial modelling of the need for social housing, the cost of procuring it, and the impact of different funding and financing strategies on the costs to government. A more detailed overview of the methods used is provided in Table 3, below.

Table 3: Inquiry into social housing as infrastructure: methodological summary

Research question	What is the justification for defining social housing as infrastructure, alongside other forms of infrastructure?	How can we best undertake a business case for social housing investment?	What is the most effective investment pathway to deliver required housing outcomes?
Methods	Review of national and international literature conceptualising social housing and infrastructure, contextualised by interviews with key international informants Interviews with 19 policy-makers (Commonwealth, Victoria, NSW) focussed on potential overlaps between housing and infrastructure policy Critical policy analysis (derived from Bacchi, 2009) examining meanings currently attached to social housing and infrastructure, opportunities for reconfiguring and reimagining those meanings and implications for policy.	Review of policy, guidelines and commentary on infrastructure business case preparation in Australia. Review of selection of business cases for recent major infrastructure projects. Interviews with 18 stakeholders in industry, government and academia to test potential future approaches and methods to the application of CBA to social housing	Review of national and international literature on needs assessment methodology and infrastructure investment pathways. Interviews with 20 stakeholders and two half-day industry workshops (with CEFC and NSW Federation of Housing Associations' CFO group) to validate review findings. Development of demographic model of level and distribution of social housing need over 20 years, and associated cost of procurement. Development of evaluation framework to assess effectiveness, equity and efficiency of selected funding and financing pathways, supported by specialised modelling (using UNSW's Affordable Housing Assessment Tool).
Publication	Flanagan, K., Martin, C., Jacobs, K. and Lawson, J. (2019) *A conceptual analysis of social housing as infrastructure*, AHURI Final Report No. 309, AHURI, Melbourne	Denham, T., Dodson, J. and Lawson, J. (2019) *The business case for social housing as infrastructure*, AHURI Final Report No. 312, Melbourne	Lawson, J., Pawson, H., Troy, L., Van den Nouwelant, R. and Hamilton, C. (2018) *Social housing as infrastructure: an investment pathway*, Final Report No. 306, AHURI, Melbourne

Source: Authors.

2 Recognising social housing as essential social infrastructure

Key points

Social housing is a form of spatially fixed, materially realised capital expenditure that supports social objectives in areas like public health and economic development, and compensates for inequities and inefficiencies in the housing market. It can therefore be conceptualised as essential social infrastructure that warrants public investment.

However, political will remains the determinant of the level of that investment. In mobilising political will to increase the level of investment in social housing, the following are critical considerations.

- Social housing providers could make more effective use of infrastructure policy tools (like CBA) to mount a business case for investment, but these tools and their associated conceptual frameworks may implicitly limit the scope of intervention.
- In cases of market failure, direct intervention by government is accepted as necessary and appropriate. However, conventional understandings of 'market failure' are too narrow to encompass the extent of housing market dysfunction in Australia or the positive role that could be played by governments in addressing housing need.
- Decision-making on social housing investment is affected by a perception that governments are naturally and inevitably financially constrained. This perception lends credence to claims that the goal of a budget surplus is the most important objective of government. The valorisation of a budget surplus undermines welfare objectives like health, housing and education.
- Social housing historically has made a significant contribution to Australian society by providing accommodation for working households and thereby supporting economic development. There is a strong contemporary case for it to be supported to make this kind of contribution again, and at a level that could ameliorate inequalities that surface in the broader housing market.

2.1 Social housing is infrastructure

Within the literature, 'infrastructure' is conceptualised as both a special type of object and a field of practice (e.g. Chong and Poole 2013; OECD 2002; Dodson 2009, 2017; O'Neill 2017).

- As an **object**, the term refers to large-scale, spatially fixed public works that support or enable economic or social functions, in cases where externalities are diffuse and adequate private investment consequently less likely.

- As a **field of practice**, infrastructure involves diverse actors, discourses and practices. One result of the recent 'infrastructure turn' is consolidation of this field, with statutory infrastructure agencies established in Australia and elsewhere to promote decision-making about investment.

The 19 stakeholders interviewed for this research espoused understandings of infrastructure consistent with the approach taken in the literature, but they put greater emphasis on economic or productivity gains as outcomes of infrastructure. These stakeholders were primarily senior officers in government departments (Treasury, infrastructure and social housing agencies) and statutory infrastructure authorities, while three were working as consultants or in the industry (for further detail, see Flanagan, Martin et al. 2019). Their views provided evidence of current understandings within government of social housing and infrastructure policy and their potential areas of overlap. Alongside the findings of the literature and policy review, the transcripts of these interviews served as the material for a detailed critical policy analysis, which aimed to problematise and critique their underlying assumptions (see Bacchi 2009: Table 3).

There is a strong historical precedent in Australia and elsewhere for conceptualising social housing as essential infrastructure that enables industrial development, better public health, and security for working-class households (Troy 2012). There are also recent international precedents for using social housing investment to achieve policy goals in energy efficiency and urban cohesion (Flanagan, Martin et al. 2019: 35–39). However, in Australia this broader contribution of social housing has been eroded by a set of policy positions that can be grouped under the label of neo-liberalism. Neo-liberalism varies in its manifestations but generally incorporates measures to wind back government intervention in favour of free-market mechanisms, through limiting government regulation, public provision of goods and services, cutting taxes and reducing or at least containing social welfare expenditure (Berry 2014). As neo-liberal values have become normalised, policy-makers, including those interviewed for this research, have come to perceive social housing as safety-net or welfare housing: heavily subsidised, tightly targeted and associated with the need for additional social services to manage tenants' multiple and complex support needs.

Despite this, there is still conceptual common ground between infrastructure and social housing: both are a form of subsidised provision enabling delivery of an outcome, and social housing is increasingly on the agenda for statutory infrastructure agencies. For example, one informant stated:

> *I do think it's infrastructure. I think it's a valuable asset stock, and when we build it we're building [something] that makes society work.*

One of the hoped-for consequences, and therefore key justifications, of reconceptualising social housing as infrastructure is that the sector will become a more attractive destination for private investment (AHURI 2016: 5). The desire for private finance to resolve the problem of underinvestment in the social housing system arises in part because public investment is perceived to be unavailable or undesirable, or both. Yet even if private finance were forthcoming, this would not negate the need for a public subsidy to fill the 'funding gap' (see Section 3.6). The principal institutional barrier to adequate investment in the social housing system is therefore not the lack of private investment, but the political economy of government decision-making.

Any additional public funding for social housing would need to be allocated through the competitive government budget process. In the recent past, it has proved extremely difficult for housing agencies to successfully argue the case for giving priority to expenditure on social housing—as one interviewee described it, social housing is 'fighting it out with education services, health services, roads, maintaining roads and subsidising rail tickets'. The requirement

to find internal 'cost offsets' for any new expenditure adds another pressure in human services departments, where housing is frequently co-located with other areas of significant social need.

None of these conventions are inevitable. It is possible for governments to allocate substantial new funding to areas of significant social need if they choose to do so. **Political will is therefore the critical factor in determining the level of investment in social housing.** Treating social housing as a form of infrastructure can be advantageous, as it gives policy-makers and advocates access to different processes and ideas than those that currently dominate social housing policy and practice. However, as both informants and members of the Inquiry Panel made clear, on its own, the claim that social housing is a form of infrastructure is not enough to make the case for a new approach. In mobilising the necessary commitment to overcome the current lack of political will to sufficiently resource the social housing system, other factors need to be considered. They include the processes involved in building the case for social housing and the beneficial role that a properly resourced social housing system could play in Australian society.

2.2 Building the case for social housing

2.2.1 Quantifying the benefits

Policy-makers interviewed for this research argued that social housing providers needed to make more effective use of techniques employed in infrastructure policy, such as CBA. They considered that being able to present a credible, costed business case for investment in social housing—one in which the contribution of social housing to meeting social and economic objectives, and the value of providing it relative to the cost, was clearly and rigorously articulated—would strengthen arguments in favour of investment. They also suggested that exploiting such techniques might give social housing providers access to previously inaccessible funding pathways, such as those available for other forms of infrastructure. For example, one informant stated:

> *One of the things that we've worked on here is looking at what are the economic and social benefits of providing social housing? Trying to cost them not just on improvements in health and education but what it means in terms of infrastructure, as a way of discussing these with Treasury to say, well actually, there are flow-on benefits.*

However, identifying, quantifying and costing the 'outcomes' of housing assistance is a complex undertaking (see Chapter 3). In current infrastructure practice, greatest weight is given to assessments of value and risk derived from private market pricing; in a conventional cost-benefit analysis, service delivery must be measured and expressed in quantified, monetised form. This emphasis could lead to the values, aspirations and qualities central to the work of social housing providers and the experiences of tenants being downplayed, obscured or excluded, inadvertently negating one of the principal advantages of conceptualising social housing as a form of infrastructure—that is, the capacity to recognise and build upon the broader social, cultural and economic role that could be occupied by an appropriately resourced social housing system. Some informants drew attention to these kinds of risks, for example:

> *'Cause it'll pigeonhole it into private investment, 'cause that's what infrastructure does … and yeah, you'll kind of lose some of the argument for investment because we stop talking about people's lives and start talking about the asset, like the bricks and mortar.*

Informants provided little if any concrete evidence to support the suggestion that a lack of CBA-style assessment had prevented investment in social housing or that wholesale adoption of it would increase investment. However, it was clear from the interviews that there is an increasing

interest within government in using this kind of analysis to underpin decisions about social policy expenditure, and that adoption of such an approach would give greater legitimacy to claims for additional funds.

2.2.2 Building from market failure

One of the key reasons for the establishment of the post-war Australian public housing system was the recognition that 'private enterprise, the world over, has not adequately and hygienically housed the low-income group' (CHC 1944: 24), and that this had contributed to the shortage of reasonable accommodation for workers across the country, and significant issues with substandard, insanitary housing in particular (see also Troy 2012; Martin 2018). For policy-makers of the time, the most appropriate response to the crisis (Dufty-Jones 2018) was direct government involvement in the provision of decent, affordable housing for lower-income groups (CHC 1944: 17–18, 24–25). The work of the new public housing authorities was part of a broader economic program, in that public investment in economic and social infrastructure, including housing, was integral to Keynesian economics (Chick and Tily 2014).

Under neo-liberalism, levels of public investment in infrastructure, including social housing, have fallen, while public infrastructure monopolies have been restructured to become private infrastructure markets. The conventional interpretation of economic theory is that markets are more efficient than governments at allocating goods and services, but that where circumstances prevent, distort or inhibit the efficient operation of markets—where the market has 'failed'—it is legitimate for governments to intervene. It is increasingly evident that in Australia the private housing market is not meeting the needs of a growing proportion of Australian households in the absence of—and sometimes in spite of—subsidies and incentives from government (National Welfare Rights Network 2014; Parkinson and Parsell 2018).

Some researchers have argued that the notion of 'market failure' can constrain government action rather than promote it. Kattel, Mazzucato and colleagues (2018) argue that the concept rests on the false assumption that an ideal or perfect market can and does exist. Situations where there is 'imperfect' access to information, for example, is presented in the theoretical literature as one of the four traditional forms of market failure, which implies it is an exceptional circumstance that occurs rarely—but in the 'real' world, the quality, availability and accessibility of information is almost always imperfect (Kattel, Mazzucato et al. 2018: 5). Edwards (2007: 127–140) argues that the conventional definition of market failure is misaligned with deeply embedded Australian cultural norms and values. She calls for an expanded definition of market failure that incorporates 'quality of life', arguing that '[h]ow we organise our economy lies at the heart of our quality of life' (130). Such an expanded understanding of market failure would take account of the importance of social connection, and the capacity for all people, whether they are in paid employment or not, to make a meaningful contribution to others. It would also recognise the social costs to individuals and communities of excessively long, inflexible or unpredictable working hours. A similar vision was expressed in 1944 by the Commonwealth Housing Commission, which argued that public housing provision would lead 'the people to a fuller social life and a fuller exercise of the rights of the citizenship' (CHC 1944: 67).

There is significant consensus on the existence of market failure in the Australian housing system. For policy-makers interviewed for this research, this failure was ample justification for Australian governments to intervene in the housing market to ensure all households have access to affordable and appropriate shelter. Because of this consensus, the concept of 'market failure' provides a pragmatic starting point for a necessary policy discussion about the future role of government in the Australian housing system. Within that discussion, the alternative perspectives available from the academic critique of market failure could be used to facilitate the development of more innovative responses. An expanded understanding of what constitutes market failure (see Edwards 2007) can function as a platform for redefining the role, size and form of the social housing system. Rather than just 'levelling the playing field', governments can

use social housing investment to 'shape [housing] markets and direct economic activity in socially desirable directions … to achieve publicly accepted outcomes' (Kattel, Mazzucato et al. 2018: 6).

2.2.3 Tackling perceptions of budget constraint

Infrastructure discourse distinguishes between 'financing' and 'funding': the former refers to the provision of money for the construction and operation of an infrastructure asset; while the latter means the way in which the costs of financing, such as interest charges, will be paid (see Flanagan, Martin et al. 2019: 27). Funding can be provided by user charges, but in the case of social housing, where the very low incomes of tenants severely restrict their capacity to pay, the only feasible source is a payment from government. Yet, as noted above, expenditure decisions by governments are underpinned by an assumption that there are natural, inevitable constraints on government spending. For example, the Australian Government's Infrastructure Finance Working Group suggests that:

> *a major constraint on the delivery of social and economic infrastructure is the funding capacity of Australian governments. This is distinct from the capacity of the private sector to provide financing capital for infrastructure projects … Under current arrangements, governments do not have sufficient headroom on their budgets to fund the level of infrastructure required (2012: v. 1).*

Or, as one of the policy-makers interviewed for this research put it, 'the reality is, governments have to live within their means'. The choice of the word 'reality' here is significant—it indicates the extent to which a perception of constraint has become accepted fact.

In Australia, the belief in constraint is closely associated with bipartisan commitment to the importance of budget surpluses and distaste for government debt. This approach to fiscal policy has 'conditioned' public discourse, with 'deficits and debt linked to the mismanagement of public expenditure' (Brenton and Pierre 2017: 658). It has also been written into the processes of government, such as through the institution of forward estimates. These act to 'lock-in' the projected expenditure, which makes later changes, especially those involving new spending, less achievable (Brenton and Pierre 2017: 564). Requests for new spending are handled through a competitive process in which the convention is that increases in one area must be met by corresponding reductions in others. An informant described the central dilemma as follows:

> *I think if you ask most people, do they think we should have it [social housing], I think the answer would be yes. Is it valuable? Yes. Should we spend money on that rather than something else? I think that's when the problem arises.*

To attain adequate resources for social housing, these orthodoxies and perceptions, and the politics that underpin them, need to be tackled. At present, the allowable option for government faced with multiple, competing needs is to fund what it can, and leave the rest unfunded. There are of course alternative approaches, which would allow the role of government to be widened to one in which governments fund what is necessary for the public good. These include: reforming current revenue-raising instruments and directing savings to deliver greatest social outcomes; strategic investment of public equity or debt to drive supply and innovation outcomes; and more cost-effective fund raising via a public infrastructure bank, monetary financing or similar.

2.3 A broader role for social housing

Historically in Australia social housing was infrastructure. The size and nature of the post-war building program, and the way it was described and explained within policy, made it clear that

government provision of decent and affordable housing for low-income households was part of a broader agenda of economic development and social equity. The housing program was a core responsibility of government.

This status has been weakened in recent decades. Since the 1970s there has been substantial economic change on a global scale. In Australia, this has led to high rates of unemployment and underemployment (especially among the traditional 'blue-collar' working class), putting pressure on the welfare safety net and leading to the emergence of geographical, social and increasingly intergenerational patterns of poverty and disadvantage. These patterns of inequality are arguably most evident in the Australian housing market. As part of the reaction to economic change, there has also been an identifiable ideological shift within government, and this has led to altered understandings of the role of government and the merits of some kinds of government spending (Jacobs, Atkinson et al. 2010). The consequences for the social housing system have included continued reductions in funding, stringent targeting to need, and an increasingly stigmatised reputation (Atkinson and Jacobs 2008).

Currently, social housing is a rationed resource. As some interviewees pointed out, at its current scale, even operating with perfect efficiency, the system would be incapable of housing every household currently both eligible and in urgent need. If governments decided to direct funds at increasing the number of households that could be accommodated, at what point would that investment be 'enough'? The following exchange illustrates this point:

> Interviewee: *[What is the] aspirational growth ambition for the sector … because it would take an extraordinary change in circumstances for them to be able to absorb all those people who now aspire to be in there—in social housing.*
>
> Researcher: *Yeah, it'd almost be sort of post-war building program kind of—*
>
> Interviewee: *And you know that's not going to happen. Not going to happen. So where does that leave us realistically as to who we should focus on, what our goals should be, what is realistic success?*

The answer to this question depends on the way in which the 'problem' is defined. A policy restricting social housing to the very, very poor and disadvantaged, or households with 'complex' needs, identifies the 'problem' as confined to this group. Yet housing market failure in Australia is arguably broader than this, extending to low-paid workers living in locations where rents are high, supply is low, or both; low-income retirees or age pensioners living in the private rental market; single people; 'key workers' whose incomes are insufficient for them to live within a reasonable distance of their place of work; young people trying to establish themselves in independent housing; and people experiencing changes in income or housing need due to illness, unemployment or a relationship breakdown. For the growing numbers of households living for extended periods in the private rental market, a systemic lack of tenure security affects workforce and educational engagement and social cohesion, and imposes additional and significant transactional costs. Ordinary housing market processes do not respond to these needs. Research indicates that new housing supply is weighted towards higher priced rather than more affordable housing, even though there is sustained demand for the latter (Ong, Dalton et al. 2017).

Much existing policy discussion on social housing assumes a continuation of its current, circumscribed role as primarily a response to significant, complex need. An infrastructure perspective, however, offers a starting point for the social housing system to take on a broader role, one of relevance to housing market dysfunction more generally. Although there is need to be nuanced in the application of infrastructure policy settings to social housing, to preserve its core values and purposes, using an infrastructure conceptualisation makes explicit the potential of social housing investment to be a legitimate, powerful strategic intervention.

2.4 Implications for policy

Recognising social housing more explicitly in policy as a form of essential social infrastructure provides a basis on which investment can be better calibrated to need. However, it may also lead to social housing being considered primarily or exclusively through an 'asset lens', with a corresponding interpretation of the 'outcomes' these assets should be enabling. It narrows the purpose of social housing to one facilitating particular kinds of economic performance and constructs tenants as objects of intervention designed to promote 'outcomes' like social and economic participation. This presents risks for applicants or tenants who are deemed to lack capacity for enhanced productivity or economic participation, and devalues tenants' own aspirations and preferences.

Historically, social housing in Australia fulfilled a broader role: it addressed a range of social and economic needs, and enabled the achievement of a range of social and economic aspirations by promoting decent living conditions for all Australians. Conceptualised in this way, future investment in social housing could alleviate a much wider set of problems in the private housing market than is currently possible under the existing 'safety net' model of provision, and allow the system to once again contribute on multiple levels to a broader agenda of social and economic inclusion and development.

3 Taking the right pathway of financing and funding

Ensuring necessary and appropriate levels of social housing investment begins with a well-evidenced understanding of the scale, type and location of need; and secondly, an accurate understanding of the cost of procuring appropriate dwellings in the right locations. The design of an investment pathway, and the use of public or private equity and debt, also significantly influences the cost to government and the wider community.

- Our research builds a customised method for establishing both current unmet need (the backlog) for social housing, and future projected need based on a proportionate share of expected household growth. It also provides evidence for the great diversity of land procurement and construction costs, depending on geographic location
- Five alternative social housing pathways have been modelled, involving a range of debt, efficient financing and capital grant strategies, to assess their relative costs to government. The research identifies the 'capital grant' model, supplemented by efficient financing, as providing the most cost-effective pathway for Australia—in preference to the 'no capital grant, commercially financed, operating subsidy-funded' model.
- Over the next 20 years, we estimate that 727,300 additional social housing dwellings will be required, with current-price procurement costs varying from $146,000 to $614,000 per dwelling, depending on local land values, building types and construction costs in different regions. This report provides extensive data on needs and costs for 88 statistical areas (SA4 level).
- Where public housing rents are set at levels affordable to low-income households, revenues can only support modest levels of government debt financing, and thus private co-investment is required.
- International experience on infrastructure investment pathways demonstrates the suite of land, funding and financing instruments required, alongside political support, to increase social housing production. It also cautions that, while off-balance-sheet public–private partnerships (PPPs) and PFI approaches have been widely utilised in comparator countries (as well as in Australia), these have often proven sub-optimal in terms of cost efficiency and effectiveness (NAO 2015; 2018b).
- This chapter provides inspiration from the productive, supply-orientated social housing systems that flourish in countries such as Scotland, Finland, France and Austria, and most prominently amongst our Asian neighbours, China, Korea and Singapore.

3.1 The concept of an infrastructure investment pathway

An ‘infrastructure investment pathway’ is the route capital takes to construct and operate assets and services that deliver social and economic benefits to society. Both funding and financing play an integral role in this pathway. ‘Funding’ describes the resources allocated by governments and the community to cover capital investment and operating costs. ’Financing’ describes the instruments or arrangements through which these costs, especially high upfront capital costs, are spread over time as government surpluses and service charge revenues allow. Seen in this light, financing ultimately requires funding and is not a replacement for it (Lawson, Pawson et al. 2018).

Social housing shares similarities with many other forms of social infrastructure serving societal (as well as economic) needs (Chan, Forwood et al. 2009: 3). Schools, courts, prisons and hospitals are also long-term asset-based services that enhance social and economic wellbeing, and which are allocated on a ‘needs’ rather than ‘capacity to pay’ basis. Investment in social infrastructure enables essential services to be delivered more equitably and effectively: schools enable education, hospitals enable health care, and social housing enables households, whose accommodation needs cannot be met by the operation of market forces, to establish and secure a home (Lawson, Pawson et al. 2018).

While some forms of infrastructure apply ‘user pays’ charges, an expectation that cost of provision can be fully recovered in this way may be incompatible with the social and economic benefits the service is intended to deliver. Thus, services such as health and education are neither delivered on a full-fee paying basis nor operated to extract surpluses or even be cost-recovering. The use of subsidies is integral to all needs-based services, and their operation and design must also be equitable, efficient and effective (Lawson, Pawson et al. 2018).

Social housing aims to provide affordable accommodation to eligible low-income households, who pay some form of submarket rent, cost rent or rent geared to income. This typically involves the use of subsidies, affecting the costs of supply and the revenue from demand. The aim of this research is to strengthen Australia’s social housing investment pathway by building capacity in our understanding of the role of investment, needs assessment and financing alternatives.

3.2 Social housing costs, revenues and the funding gap

Social housing, with its eligibility criteria, allocations and rent policy, distributes housing opportunities in a fundamentally different way to the private rental market. Social housing is provided by public state housing authorities and increasingly regulated not for profit landlords, who have a mission to deliver specific community service obligations including:

- allocation of housing according to need, especially that not met by market
- rent setting, to maximise social return not commercial return
- management of waiting lists, to ensure fair access is given to eligible households
- maximising social outcomes through good tenant management and neighbour relations
- negotiating arrears problems and seeking alternatives to eviction
- conducting client surveys to improve tenant services
- providing data for budgeting, strategic planning and policy development
- implementing tenant participation and support programs
- liaising with external services—education, employment, health and justice—to support tenants and improve estates

- overseeing construction of new dwellings (Lawson 2017).

A generalised model of social housing costs and revenues, shown in Figure 4, highlights the role that various policies and market conditions play in provision. Importantly, these instruments and conditions also influence the magnitude of the funding gap, being the difference between the cost of procurement and the revenues received to cover these costs.

Indeed, a range of government policies and instruments used in social housing systems affect both the upfront cost of provision as well as the rent revenue received. Rents may be based on market levels, the historic cost of production or financing costs, or geared to household incomes. These scenarios are depicted as 1, 2 and 3 in Figure 4.

Subsidies directed towards individual tenants are often described as 'individual demand-side consumer subsidies'. If they are directed towards landlords, they are considered to be 'operating subsidies'. Subsidies directed towards the construction of housing are often described as 'production' or 'supply-side subsidies', as represented in Figure 4. Ideally, government commitment to subsidy settings is stable and long term, to foster innovation and investment.

To ensure that subsidies are used for their intended purpose, providers are typically well-regulated not for profit housing providers with a public purpose. They may receive tax exemptions, grants or access to low-cost financing in recognition of their social task and not for profit business operation.

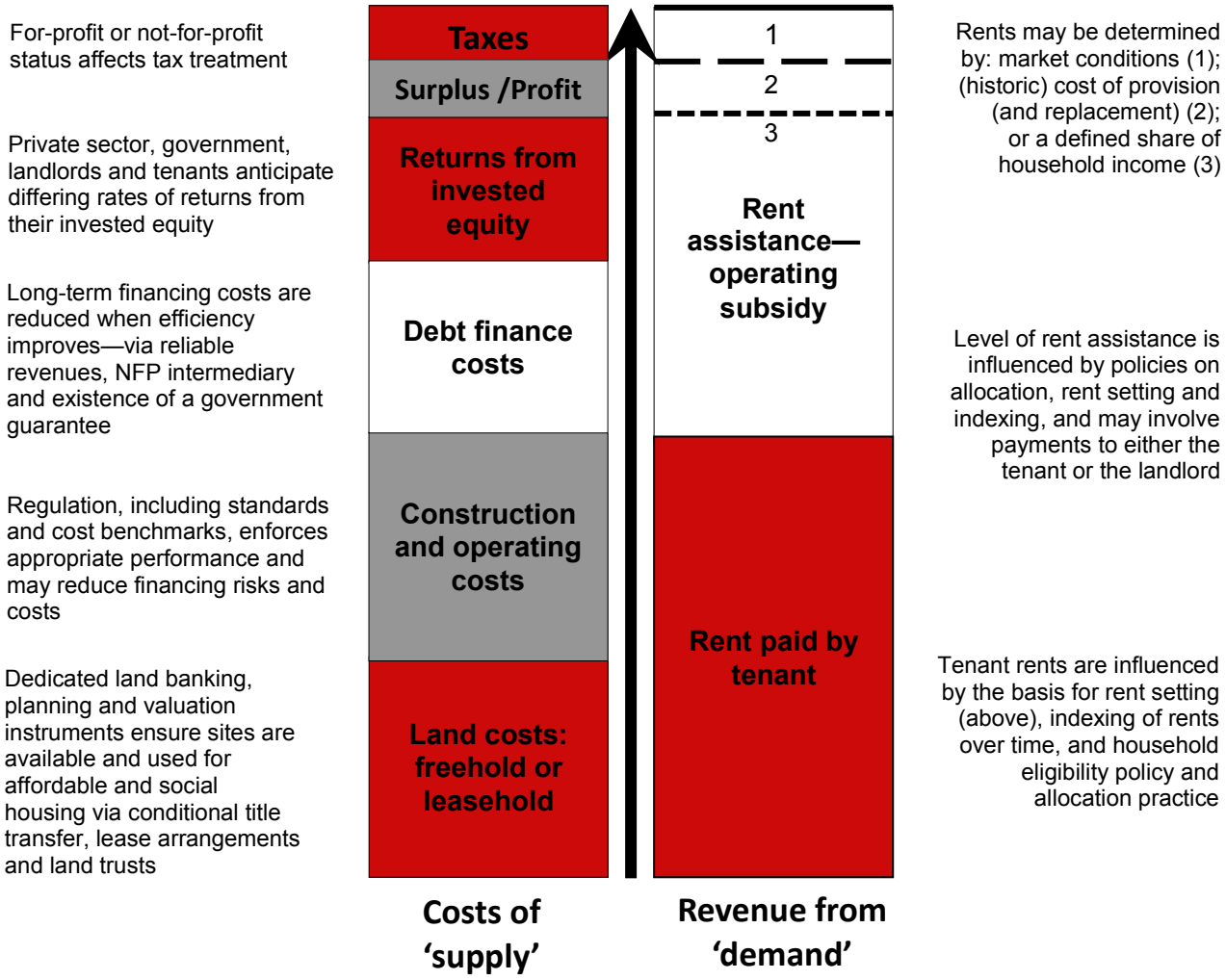
Increasingly, however, for-profit providers advocate for a greater role in affordable housing provision, seeking to take advantage of accumulated public equity, low-cost financing, and potential access to long-term concession payments. In Australia the social housing system is broadening to include a role for Real Estate Investment Trusts (REIT) in acquisition, leaseback arrangements and concession payment arrangements, also in the field of disability housing field. This introduces a very different policy and subsidy dynamic which, although attractive in the short term, PFI and REITs can prove very costly for governments and service users in the medium to long run. Serious problems have arisen with inflexible PFI schemes (NAO, 2018b), reliance on global providers (NAO, 2018a) and REITs extracting fees from housing providers reliant on government concession payments (Barratt, 2019).

These recent Australian developments reflect tends in the privatisation and financialisation of social housing in parts of Europe. For example, following abolition of NFP housing laws in Germany, and later through sales of municipal housing assets, property investment hedge fund Vonovia quickly became the largest owner of social housing in Germany, with 370,000 units (Wijberg and Aalbers 2017). The company is now making inroads into social housing systems in other European countries, such as the Netherlands (Aalbers, Van Loon et al. 2017) and more recently France (Saunderson 2018) and the UK. These developments will have profound implications for the purpose of social housing (commercialisation) and growth of this segment of the housing market (reduced) in the years ahead.

Housing assistance can be provided by governments indirectly through the tax system, offering exemptions for NFP organisations or tax credits for investors in affordable housing, or more directly through upfront grants or ongoing recurrent subsidies to individual households or housing providers.

Direct capital investment can be in the form of long-term equity held in social housing land or accommodation assets that can be released or revolved over time. Governments try to ensure that this equity remains in use for its intended purpose over the long term—often over generations. In the UK, regulations governing equity have recently loosened, heralding a new era of for-profit social housing investment: out bidding not for profits for land and housing and REITs extracting concession payments from supported accommodation providers (Williams 2018, Barratt, 2019).

Figure 4: Generalised social housing costs, revenues and subsidy instruments



Source: Adapted from Lawson, Pawson et al. 2018.

3.2.1 What influences the funding gap?

Different policies and tools influence the magnitude of the funding gap (or surplus) that arises when the costs of procuring housing differs from the revenues received. The various instruments used to ensure consistent housing supply outcomes, detailed below, are summarised in Figure 5.

The first set of instruments used to ensure supply outcomes concerns land policy and involves instruments of land-use planning, land banking and land valuation. Land is a crucial element of housing provision and the cost of land can decisively influence the affordability of housing produced, as well as access to low-cost development finance, and the level and security of household incomes. Governments wishing to ensure that well-located, affordable and quality dwellings are built can use a range of mechanisms to either reduce the land price by intervening in the land market, or provide subsidies to reduce development costs.

Leasing is a means of reducing upfront land costs and thereby the costs associated with promoting social housing provision. It has long been practised for this purpose in Finland, France, Sweden and the Netherlands—and in the Australian Capital Territory (ACT).

Governments use land leases as a means to more closely manage the use of land. Where secure long-term leasehold is the norm, it becomes acceptable to financial institutions from which credit is obtained.

The second set of instruments concerns direct capital investment from a variety of sources: governments, landlords and tenants. Capital investment programs are used by governments to ensure satisfactory scale, location and quality of provision via conditional grants or 'silent equity' (as in the UK), which acts as a hedge against inflating land and housing costs and may be retained and revolved over time to ensure responsiveness to need.

Direct public investment remains the most influential mechanism to increase social housing supply levels in most countries—for example, public housing programs in the US, Austria's broadly accessible regional housing programs, and the UK's housing assistance grants. Some countries, such as Switzerland and Austria, additionally rely on tenants to contribute equity for new projects. In many countries, grants are linked to the cost of provision in local areas and the complexity or depth of needs being addressed, as in Finland.

The third set of instruments aims to improve access to, and reduce the cost of, financing social housing (as distinct from *funding* it). In Europe and globally, national and multilateral development banks drive investment in social housing to promote social inclusion, economic resilience and sustainable development. They provide mission-focussed loans, often with grants for (green) social housing, to work towards these goals. In Europe, their role has increased since the GFC, due to the associated lack of long-term private investment and inequality of housing access, and the threat that social exclusion poses to overall social harmony and political stability.

AHURI has led international research on intermediaries and guarantees to improve borrowing conditions for CHOs, which contributed to the establishment of the National Housing Finance and Investment Corporation (NHFIC) in 2018. A guarantee on housing bonds (Lawson, Berry et al. 2014; Lawson 2013) was also promised by the government (Sukkar 2017).

The fourth set of instruments concerns the implicit but nevertheless influential measures that can be used through the tax system. Well-designed incentives steer investment towards desired housing providers and tenant outcomes. Most NFP housing associations are mission-focussed organisations that are tax exempt and must reinvest surpluses in providing more affordable housing. Yet, inappropriate tax incentives can fuel speculation and overinvestment in the housing market, worsening affordability and supply outcomes.

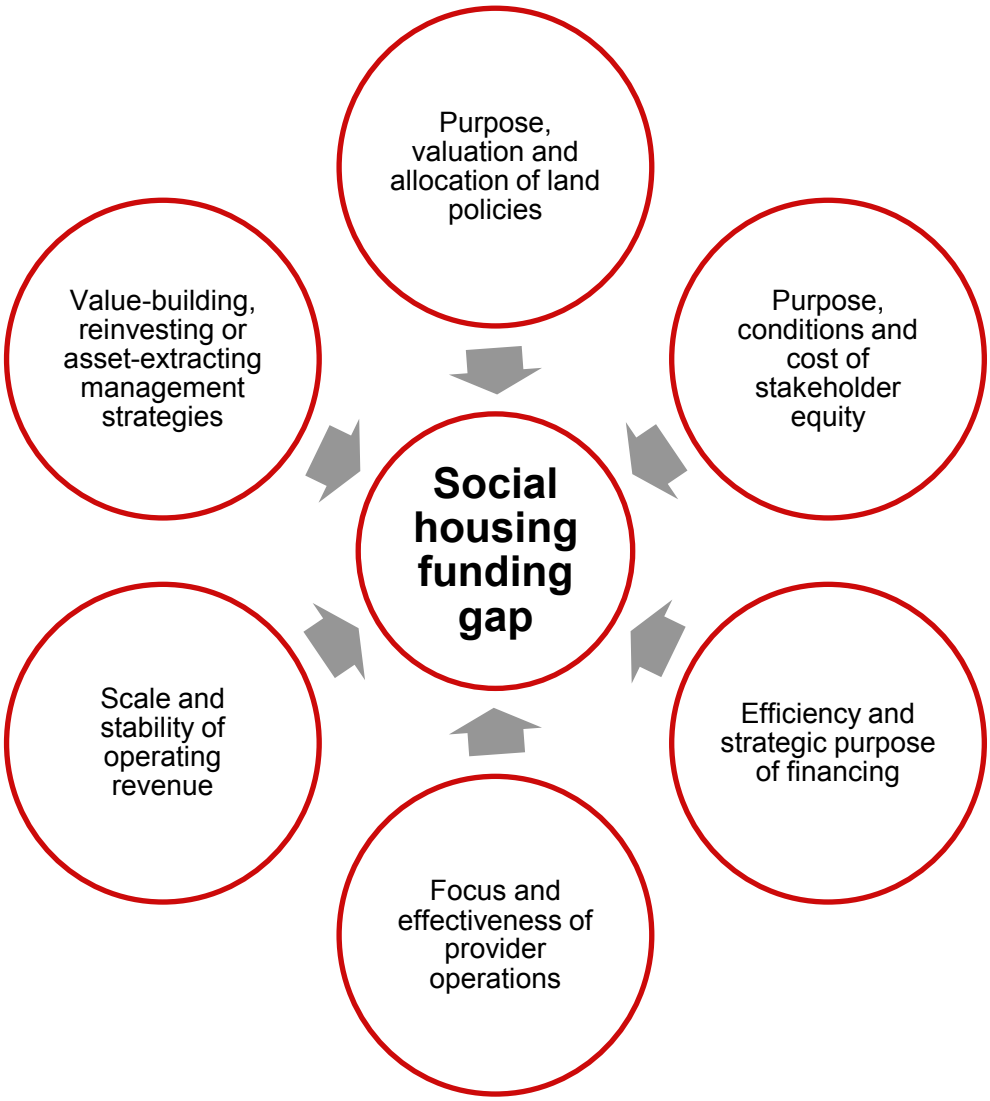
Fifthly, revenue can be used to support investment as well as influence rent policies (cost rent, market rent, etc.). Revenue can also be used to influence the design of rent allowance systems to tenants, plus provide guarantees on rent payments by government and operating subsidies to landlords.

In Australia, as elsewhere, there has been a shift from supply- to demand-side subsidies, which has led to a decline in housing supply outcomes. Across the EU, the proportion of housing assistance spent on housing allowances between 2009 and 2015 rose from 54 per cent to 75 per cent, with the highest share (85%) in the UK (Eurostat 2009- 2015 in NHF 2017). In contrast, total expenditure on housing development in the EU has declined by 44 per cent, from €48.2 billion in 2009 to €27.5 billion in 2015. Many social housing systems, most notably in the UK, have relied on private investment, bolstered by rising rents and deep housing allowances, to address declining upfront public capital investment in social housing (Williams and Whitehead 2015).

Finally, as a consequence of declining equity investment in social housing and value-extractive policies, there has been greater emphasis on asset 'recycling' and mixed public–private redevelopment, as we've seen in Australia. Ring-fenced asset management strategies (Robin

Hood strategies) may also be used to provide surpluses and transparently cross-subsidise social housing.

Figure 5: Policies and market conditions influencing the funding gap



Source: Adapted from Lawson, Pawson et al. (2018).

3.3 Best practice in social housing strategies

Underlying social housing delivery in any country is a commissioning framework, often articulated via a national or regional housing strategy (often integrating jurisdictions in more federalised settings). This is implemented via legislation, policy instruments, budgets and procurement programs involving various levels of government, industry sectors and civil society.

During the course of this Inquiry, the authors examined international best practice in commissioning processes (SGS 2017). These findings are relevant for the development of an Australian strategy and are summarised in the following paragraphs.

Ideally, national strategies should be underpinned by strategic principles, clearly stating overarching goals such as promoting societal wellbeing, improving environmental sustainability or maintaining economic stability. They should provide goal posts and promote unity of purpose,

guiding responsible actors to perform their different roles well. Canada's 10-year National Housing Strategy attempts to transform federal–state relations by providing clear upfront principles, focusing on vulnerable households, using the fiscal strength of the national government, and delivering negotiated agreements with provinces and territories. In other federal states, such as Austria, national governments provide an overarching legislative framework for the use of subsidies for housing and ensure tax settings and funds are available, and regulate providers using those instruments. Under this legislated framework, regional governments design housing programs responding to local needs and priorities.[6] Other national strategies promote accessible housing for all, as in France and Finland, where the right to housing is enshrined, respectively, in legislation and the Constitution.

To inform housing programs, information based on housing needs is vital. Valid national and local data on the nature of housing need and market conditions—and indicators on affordability, adequacy and availability of housing for different households—should be agreed, collected, analysed and regularly reported. Canada has long-established norms around the notion of Core Housing Need, which prioritises efforts to assist low-income households paying more than 30 per cent of their income in housing costs. Further, it should be possible to disaggregate these indicators to regional and local sub-geographical area, offering more meaningful representation of 'need' to inform local decision makers. In the US, evidence of critical housing problems facing low-income Americans is provided annually to Congress, and is regularly updated by the American Housing Survey (US Census Bureau, 2018), funded by the Department of Housing and Urban Development (HUD) and the Census Bureau. The report provides evidence on the affordability, availability and adequacy of housing (HUD 2017) and defines worst-case housing needs confronted by renters with very low incomes—defined as being below 50 per cent of the Area Median Income (AMI).

Such information, indicators and their reporting requirements can inform localised targets for a strategy and underpin well-defined and disaggregated milestones. British Columbia's Housing Matters BC strategy 'report card' for 2006–12 (2012) assessed performance against six strategic objectives, using measurable performance outcomes. Results were presented both aggregated and disaggregated, and supply targets were clearly articulated (see Lawson in SGS 2016). Performance is closely linked to budgetary reporting under the Budget Transparency and Accountability Act and the BC Reporting Principles (BC Housing, 2015)

The Scottish Government provides Housing Need Demand Assessments (HNDAs) to local and regional housing and planning departments to help them formulate joint housing strategies, with realistic performance indicators and clear targets that can be periodically assessed and adapted. The government provides technical assistance is to aid program design, as well as funding, training and access to financing instruments. Local procurement processes, land banking, land-use zoning and planning permission processes are also implemented, alongside the use of strategic development funds.

Some strategies govern procurement systems across public and private social housing providers. In England, smaller registered social housing landlords are encouraged to pool their purchasing efforts to achieve economies of scale and reduce construction and financing costs. In British Columbia, government provides procurement guidance to all NFP providers, to ensure

[6] For example, the city state of Vienna employs a well-established mechanism for commissioning developments on its land corporation sites, applying 'four pillar' principles for development competitions: architectural quality, value for money, ecological quality and social sustainability. Social sustainability refers to the development's role in building positive, inclusive communities, as well as promoting greater diversity and participation in subsidised housing development.

that goods and services commissioned are subject to a transparent, competitive and purposeful tendering processes.

Evaluation is likewise vital to the ongoing effectiveness of a national procurement strategy. In Austria, all providers in receipt of housing supply subsidies must be accountable for their use, and not only undergo three months of monitoring and auditing each year but also report to subsidy bodies, as required in national housing subsidy legislation (see Deutsch and Lawson 2013). In contrast, in the US, NFP landlords are only lightly regulated, while public housing authorities are subject to adequate but not onerous compliance processes and good regulation rather than deregulation.

To ensure adequate resourcing, some national strategies require regular reports on performance, linking the level of resources allocated in their government's housing budget to key objectives and reforms. British Columbia's long-term housing strategy is regularly updated and there is evidence from 2012 and, particularly, 2015 that strategic performance strongly influences outcomes reporting (BC Housing, 2015). A similar reporting ethic can be found with Scottish Parliament's budgetary reporting on housing targets.

In federal systems, complexity of governance and the necessity for resource sharing, negotiation and partnership, provide both barriers and opportunities for comprehensive standards, the design of responsive programs and good housing outcomes. A fuller discussion of this topic can be found in Lawson, Legacy et al. (2016), which contrasted four federal states and their role in housing policies and programs.

3.3.1 Insights from key stakeholders

Through industry workshops, the Inquiry's research recorded the perspectives of stakeholders at the forefront of efforts to grow social housing in Australia. The sessions involved chief financial officers and investment appraisers from New South Wales CHOs and the Clean Energy Finance Corporation (CEFC)[7], who had detailed knowledge of both finance and development issues. Their discussions generated valuable insights, presented in detail in Lawson, Pawson et al. (2018). Stakeholder recommendations for policy development are summarised as follows.

Box 1: Stakeholder recommendations for policy development

- Fund an adequate affordable and green housing program, as exists in similarly developed countries, with balanced supply- and demand-side subsidies to ensure effective supply outcomes.
- Reallocate government revenues, such as stamp duty and capital gains, arising from housing price gains to ensure adequate lower-income rental housing opportunities.
- Ensure savings from any housing-related tax reforms are used to fund new capital investment programs for new (and green) social housing.
- Develop a clear conception of housing need, addressing the backlog of need; and plan for the replacement of run-down social housing assets currently in service.

[7] The CEFC has established an investment strategy to promote green social housing. According to the CEFC, 'New-build community housing should be designed to ambitious energy efficiency standards and the existing stock should be refurbished to improve energy efficiency … Long-term debt finance from the Clean Energy Finance Corporation can help community housing organisations develop and renew community housing dwellings and ensure those properties are built to high standards of energy efficiency.' (2016a: 3).

- Quantify the benefits of decent secure and affordable housing—and the avoided costs of insecure, unaffordable and poorly located housing (borne by the homeless and those in housing stress, as well as governments) in related health, justice and support costs.
- Do not rely on internal cross-subsidisation between current portfolios to grow social housing through redevelopment of existing assets, as this is limited, unsustainable and risky.
- Establish robust agreements on the definition of positive impact measures to drive good performance.
- Reform land valuation policies and practice to acknowledge the residual value of social housing provision.
- Capitalise on closely related investment strategies such as the Specialist Disability Accommodation (SDA) payment scheme[8] and CEFC's financing of energy-efficient community housing.[9]

Source: Industry consultation in Lawson, Pawson et al. (2018).

3.4 More productive approaches

Australian governments once supported a much larger social housing construction program, producing between 8,000 and 14,000 units per year from the 1950s to the 1990s (Troy 2012)—this has declined to fewer than 3,000 units today (Flanagan, Martin et al, 2019). We now rely on the private rental sector, via CRA, to house the poorest households, but this has proven increasingly ineffective in reducing housing stress, especially amongst young people, singles and older single women, reliant on Commonwealth pensions. Evidence for 2017–18 found that 40.4 per cent of all households receiving CRA remain in housing stress *after* receiving CRA (Productivity Commission 2019). Australia's demand-assisted 'solution' is made less effective by the weak rent and tenancy protection afforded by the private rental market (Martin, Hulse et al. 2018; Ey 2016).

This Inquiry necessarily examined alternative best practice in Europe, Asia and the Americas, and found that Singapore, France, Austria and Finland have more effective instruments for steering investment towards desired housing outcomes than currently exist in Australia. These strategies are underpinned by national legislation, with funding programs offering conditional grants *alongside* mission-focussed long-term financing. The schemes are supported by effective regulation, and guided by regional urban policy and local land policies which are 'pro-social'. In contrast with modest social housing supply outcomes in Australia, these governments are making significant headway, as summarised below.

Box 2: International approaches to social housing supply

- UK local authorities and NFP housing associations completed more than 35,000 homes in 2017 (19% of total national housing completions), utilising planning contributions, grants, deep demand subsidies and efficient private financing (including guarantees on loans financed by the European Investment Bank) (MHLGC, 2018).[10] Social housing

[8] See operational guidelines of the National Disability Insurance Scheme's SDA: https://www.ndis.gov.au/Operational-Guideline/SDA

[9] See CEFC Community Housing Program: https://www.cefc.com.au/where-we-invest/community-housing/

[10] Note that the Ministry of Housing, Communities and Local Government (MHCLG) statistics understate the contribution of housing authorities—possibly because of the ambiguity around new builds that are not social housing. For England-specific statistics regarding housing association builds, see NHF (2018).

landlords and municipalities are being called upon to increase production dramatically in 2018, through partnerships and increased municipal borrowing.

- The Austrian limited-profit housing sector continues to supply a steady 14,000 to 16,000 dwellings per year—which is around 30 per cent of all new housing built across the country—and acts as a shock absorber and stabiliser amidst changing private and commercial housing construction (IIBW 2016). Again, facilitative local planning, including land banking, the provision of grants and favourable loans, are used extensively—also to improve energy efficiency and social inclusion.
- In Finland, the production of subsidised dwellings has increased to almost 8,000 per year, providing 22 per cent of all new dwellings. This growth was ensured via conditional provision grants, interest rate subsidies, loan guarantees, and efficient financing provided via a central agency and municipal infrastructure bank (The Housing Finance and Development Centre of Finland—ARA). Finland is arguably the most effective country in Europe in addressing homelessness, with a continuous 30 decline in those surveyed as being homeless (Linden, 2017).
- There has been sustained effort in social housing production across France since the 1990s (Schaeffer 2017), increasing immediately after the GFC to ensure greater economic stability and social harmony with investment in 100,000 social units produced per year. This housing has been assisted via long term mission focussed investment channelled via France's specialist intermediary the CDC. Also notable is the national law on urban planning requiring social housing to account for 25 per cent of all housing in local areas by 2025, with Paris aiming for even higher: 30 per cent by 2030 (Alcade 2018).

What makes these international social housing investment pathways more productive is their combination of policy strategies which shape the supply and allocation of affordable housing and not just the *demand* for it. They use instruments that ensure access to suitable land, invest public equity strategically, ensuring financing is efficient and mission-driven and regulate subsidies effectively.

As shown in the examples above, more productive social housing systems do not rely on demand-side assistance alone—as we see in Finland, with sliding grants, mission-focussed financing and NFP regulation. Very productive systems have been achieved in France via pro-social circuits of savings and finance, tax instruments and inclusionary zoning, and in the UK involving conditional grants, development contributions from planning agreements and deep housing benefits for low income tenants. Excessive reliance-demand side assistance has been resisted in Austria, where the government's aim is to ensure construction levels meet both the need for housing, energy efficient standards and provide for greater economic stability. Strategic use of direct investment aims to catalyse economic activity, spark innovation and solve public problems, thereby laying the foundations for more inclusive economic growth and societal wellbeing.

As we demonstrate later in this chapter, strategic direct investment can also reduce the long-term costs to government, by reducing pressure on service charges and related assistance in other policy areas.

Comparing the costs and benefits of private finance (such as the UK's PFI) with direct public investment, has been a focus of numerous evaluations (NAO 2015, 2018; Hodges and Grubnic 2005; Edwards, Shaoul et al. 2004; Blanc-Brude, Goldsmith et al. 2006; Pollock, Price et al. 2007). These have found the UK's PFI to be particularly costly and complex. Reliance on private financing and providers carries substantial risks for governments who remain responsible for service levels and quality of provision. Large-scale collapses of global service providers, such as construction giant Carillion (NAO 2018a), cost overruns (NAO 2015) and the

tragedy of the Grenfell Tower[11] fire have all led to more critical reflection on PFI approaches, and the scheme was abolished in November 2018. In the main, direct public investment is increasingly considered to be more straightforward and less expensive for governments at a time of low public borrowing costs (NAO 2018; Lawson, Pawson et al. 2018).

Much greater transparency in comparing the cost of capital is necessary in order for policy-makers and program designers to responsibly determine the ideal mix of funding and financing that should be used to address Australia's social housing deficit. This Inquiry aims to inform further deliberations towards a national housing investment strategy.

3.5 Investment required to address needs

To strengthen Australia's capacity in needs-based planning of social housing investment, and in securing and allocating appropriate levels of public funding, the research team set out to measure national housing requirements and associated procurement costs.

To calculate the government capital investment required, it is necessary to estimate:

1. the scale of unmet need
2. the total cost of providing the homes required to meet that need (bearing in mind its spatial distribution)
3. the part of that cost in excess of what housing providers should be able to finance through debt.

In addressing point 1, above, we build on previously published methodologies to estimate the need for social housing over the next 20 years, to accommodate both current unmet need (the backlog) and future projected need, based on a proportionate share of expected future household growth. Three component groups are considered:

- existing social housing renters
- those constituting 'manifest (additional) need' (i.e. homeless populations)
- those constituting 'evident (additional) need' (i.e. those with housing needs unmet by the market, but outside the above groups)—both current and projected.

The third group is operationalised as households on a low income (i.e. in the bottom quintile for the relevant household type) and in rental stress (i.e. in private rental and paying more than 30 per cent of income on rent).

As summarised in Table 4, addressing the deficit and future need will call for the construction of some 730,000 new social housing dwellings over the next 20 years. This equates to an annual average growth of 5.5 per cent over the existing stock.

[11] The fire engulfed a high rise tower of social housing apartments which were cladded in a flammable material, causing the death of 72 people.

Table 4: Summary of current and projected housing need estimates, by need source

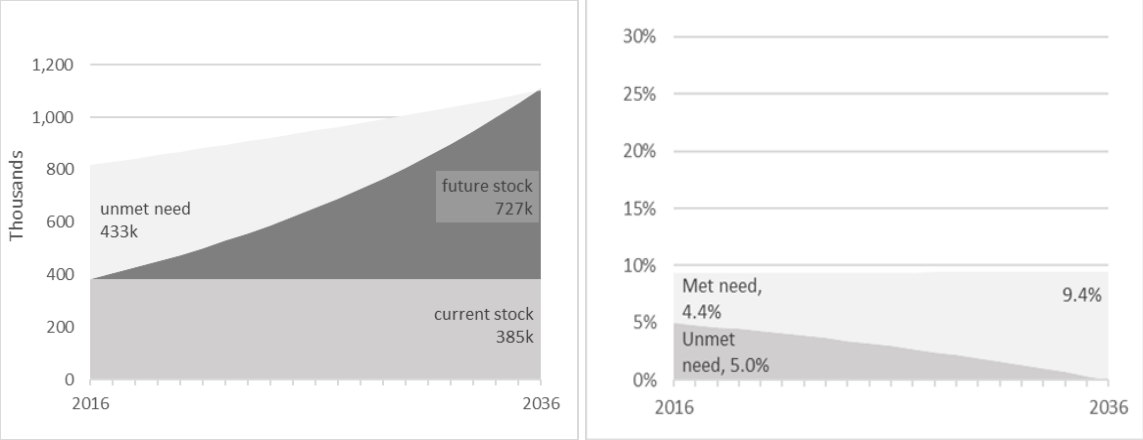
Area of Australia	Social housing share		Manifest need		Evident need		Total need 2016–36
	Current (met)	Projected to 2036	Current	Projected to 2036	Current	Projected to 2036	
	Column a	Column b	Column c	Column d	Column e	Column f	Sum of col's b–f
Greater Sydney	85.4	31.6	11.6	4.3	67.9	25.2	140.6
Rest of NSW	48.3	7.3	3.5	0.5	52.8	8.0	72.1
Greater Melbourne	46.5	20.6	8.2	3.6	65.9	29.2	127.5
Rest of Vic.	21.1	4.1	1.7	0.3	27.0	5.3	38.5
Greater Brisbane	32.3	15.4	3.7	1.8	39.4	18.8	79.2
Rest of Qld	35.3	14.1	5.0	2.0	53.4	21.3	95.7
Greater Perth	24.5	17.0	2.1	1.5	28.2	19.6	68.3
Rest of WA	14.9	6.2	1.5	0.6	7.0	2.9	18.2
Greater Adelaide	33.8	8.5	1.9	0.5	23.7	5.9	40.4
Rest of SA	9.7	0.9	0.6	0.1	7.2	0.7	9.5
Greater Hobart	5.7	1.0	0.3	0.1	4.4	0.8	6.6
Rest of Tas.	6.4	0.6	0.3	0.0	6.1	0.6	7.6
ACT	9.9	4.1	0.6	0.3	2.5	1.0	8.5
Greater Darwin	3.1	1.0	0.7	0.2	0.9	0.3	3.2
Rest of NT	7.7	3.7	4.8	2.3	0.3	0.2	11.3
Australia	***384.6***	**136.2**	**46.6**	**18.1**	**386.8**	**139.7**	**727.3**

Note: All figures are in '000s.

Source: Lawson, Pawson et al. (2018).

Figure 6 shows how this additional growth accounts for both current unmet need (the backlog) and future projected need, based on a proportionate share of future household growth.

Figure 6: Social housing need being met by 2036 (left) and as a proportion of all households (right)



Source: Lawson, Pawson et al. (2018).

Table 5, below, shows the range of total procurement costs for the regions within each of the states and territories—this includes the estimated land and construction costs, estimated professional fees (legal and design services), and local-impact fees/infrastructure contributions.

Table 5: Estimated construction costs and dwelling type distribution

Section of Australia	Share of needed growth (%)	Range of estimated cost/unit ($000s)	Distribution of unit type			
			Detached (%)	Attached (%)	Low-rise (%)	High-rise (%)
Greater Sydney	19.3	210–614	0	21	60	19
Rest of NSW	9.9	173–393	79	21	0	0
Greater Melbourne	17.5	220–442	0	70	13	17
Rest of Vic.	5.3	170–203	100	0	0	0
Greater Brisbane	10.9	208–357	15	61	23	0
Rest of Qld	13.2	179–285	72	28	0	0
Greater Perth	9.4	184–316	0	92	8	0
Rest of WA	2.5	162–265	100	0	0	0
Greater Adelaide	5.6	184–261	0	83	17	0
Rest of SA	1.3	146–157	100	0	0	0
Greater Hobart	0.9	271	100	0	0	0
Rest of Tas.	1.0	172–189	100	0	0	0
ACT	1.2	418	0	100	0	0
Greater Darwin	0.4	256	0	100	0	0
Rest of NT	1.5	186	100	0	0	0
Overall	100.0	146–614	32	44	18	7

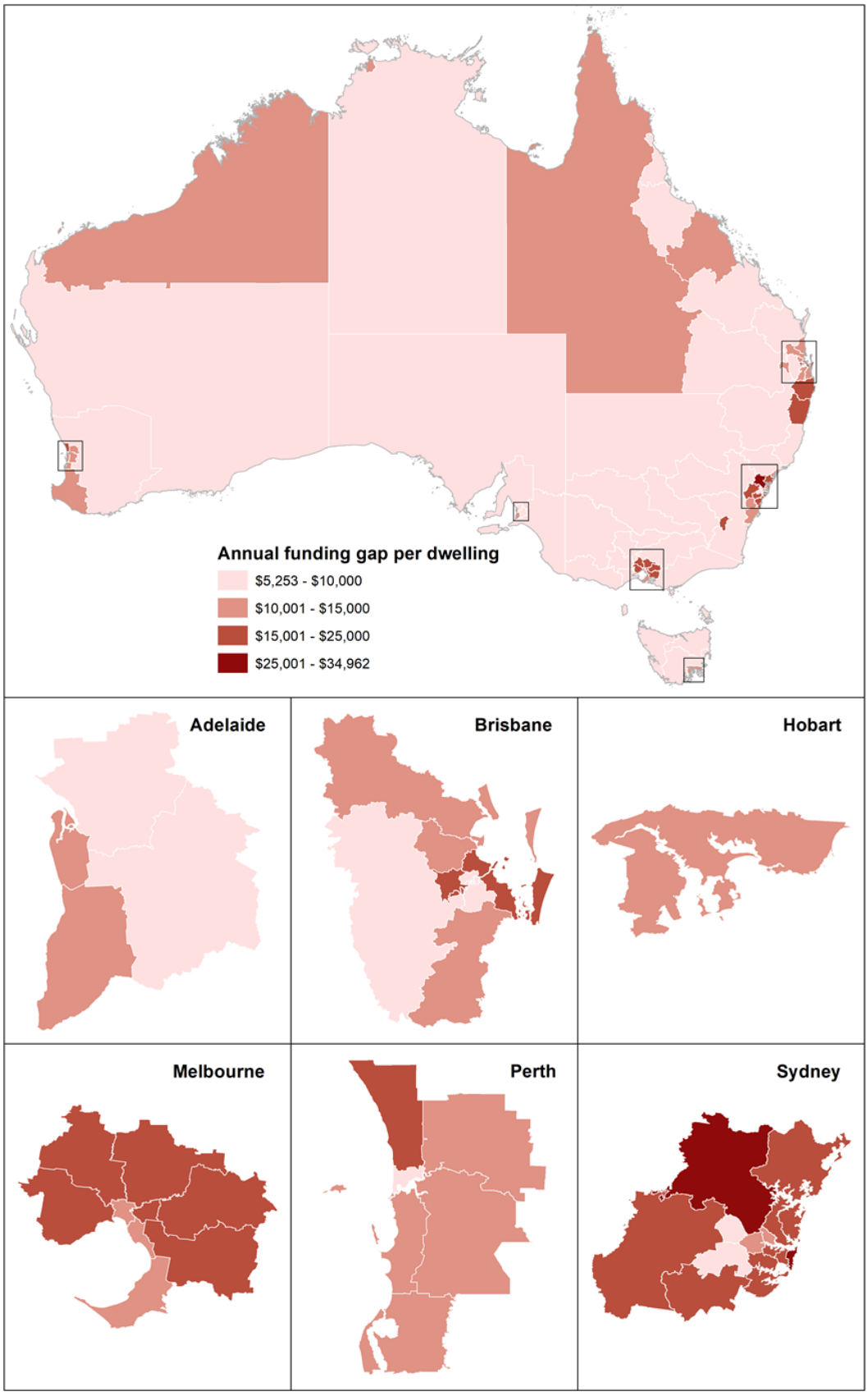
Note: 2017 prices used.

Source: Lawson, Pawson et al. (2018).

3.6 Funding the gap

Affordable rents for low-income households can only cover part of the costs of procuring, managing and maintaining this body of housing (AHWG 2017), and this varies geographically (as shown in Figure 7). This suggests that a one-size-fits-all approach to capital investment must be avoided at all costs. Rather, a more nuanced and strategic effort must be incorporated in allocating processes in order to avoid wasteful misuse of subsidies and the concentration of disadvantage.

Figure 7: Funding gap per dwelling by region



Note: The maps use Statistical Area 4 (SA$) ABS boundaries.

Source: Lawson, Pawson et al, 2018

3.6.1 Cost to government-influenced funding and financing strategy

Following from Figures 5 and 6, it is crucial to note that the overall size of the funding gap, and consequently the cost to government, varies to significant degrees as a result of different funding and financing strategies. To date, modelling the costs of social and affordable housing delivery and the likely 'funding gap' that exists between revenues and costs has largely occurred without reference to need, cost, revenues or geographical context (e.g. AHWG 2017). Our research unpacks this carefully, using evidence and modelling to show how these factors affect project feasibility and the funding gap of affordable housing developments across Australia (Randolph, Troy et al. 2018).

The housing need analysis to 2036 (Lawson, Pawson et al. 2018) established both a quantum of housing required and a tenant income profile by geography, generating a more geographically nuanced assessment of costs and potential rental revenues (summarised in Tables 4 and 5, above). This defined housing need was then input into a reconfigured version of the Affordable Housing Assessment Tool (AHAT) developed as part of previous research (see Randolph, Troy et al. 2018), based on project-level costings of CHO-led developments from across Australia.

The AHAT model assumes a NFP housing developer, so does not include any profit margin within the feasibility assessment. This represents the lowest-cost option, as a for-profit development model would include a profit margin as part of the cost structure. The construction cost component has been based on industry standard costs, so does not make any assumptions about real or perceived differences in costs where building work is undertaken by the private or public sector. However, one of the modelled impacts is the cost of taxation concessions given to the NFP community housing sector, which are not accessible by for-profit developers—again, this would introduce an added cost layer if for-profit models were assumed desirable.

In Australia's multi-provider affordable housing system, social housing is largely provided by the public sector and the community housing sector. There are two critical differences in development feasibility between a public sector NFP developer and a community housing sector NFP. The first is the access to tax concessions (GST, land tax and stamp duties), which, cumulatively, have a substantial impact on the overall costs of development. The second is access to CRA payments, with the current public housing model precluding state housing tenants from receiving CRA payments and in effect limiting the total rent that state agencies can charge.

The reconfigured AHAT model applied the spatially differentiated estimate of need, land and construction costs, based on assessment of local need profiles at the subregional level (using ABS 'SA4' geography) developed in this research. It also detailed operating cost assumptions, such as NFP provision and relevant tax settings. Each investment pathway aims to be cost neutral after 20 years. Five pathways have been modelled to enable a comparison of their costs to government, as outlined in Table 6.

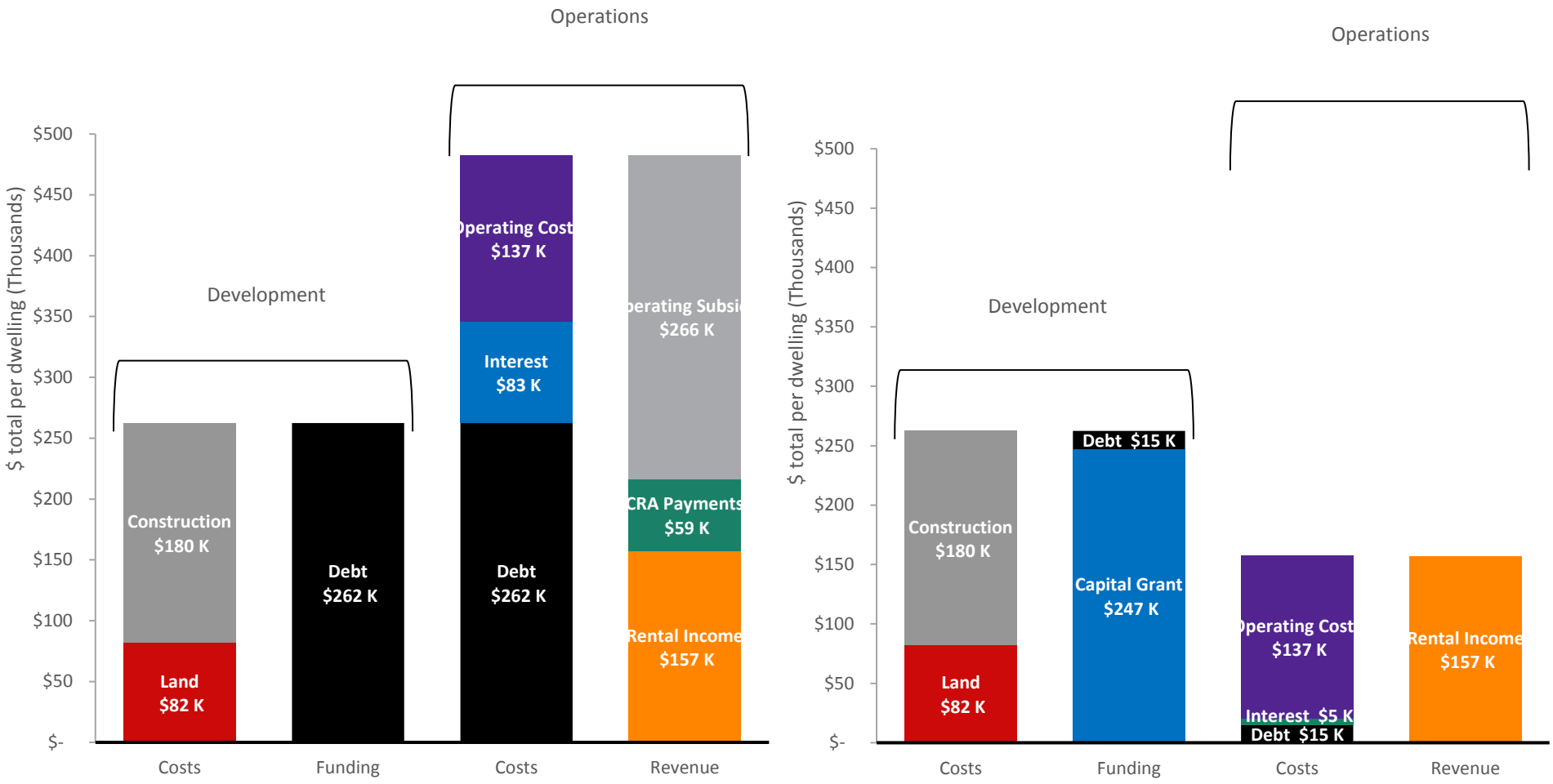
Table 6: Investment scenarios for comparison

Scenario		Definition
1	Operating subsidy	Base case. Funding gap is supported by an annual operational subsidy payment that supports paying for finance (where all the required debt is taken out by the provider in the expectation of future subsidy support).
2	Operating subsidy + NHFIC bond aggregator	Builds on scenario 1, but applies an interest rate deduction on private finance at a rate of 1.5%, which is consistent with estimates of the efficiency gain a bond aggregator on the cost of private finance (Lawson, Berry et al, 2014, EY, 2017, NHFIC, 2019).
3	Upfront capital grant	As an alternative to private debt, a capital fund invests in developments, which reduces the level of required subsidy because it eliminates financing costs.
4	Upfront capital grant + NHFIC bond aggregator	Introduces an interest rate deduction on the capital grant model, similar to that of scenario 2. This reduces the interest rate of finance from an assumed market rate of 5% p.a. to 3.5% p.a.
5	Upfront capital grant + NHFIC bond aggregator, excluding CRA	CRA as a housing support payment is appropriately conceptualised as an operating subsidy. This scenario models the impact of excluding CRA payments from a capital grant model, which increases the capital grant requirement.

Source: Lawson, Pawson et al. (2018).

Figure 8 illustrates the comparison of commercially financed operating subsidy models with upfront capital grant and more efficient NHFIC financing, demonstrating that the costs to governments are substantially reduced when public equity in the form of a capital grant is included in the investment mix and debt is raised in the most efficient manner (via NHFIC).

Figure 8: Costs of operating subsidy model (left) vs. capital investment and NHFIC models (right)



Source: Lawson, Pawson et al. (2018).

As summarised in Table 7, below, debt-financed models significantly increase the necessity for housing provider to drawn on an operating subsidy and/or maximise CRA payment. These costs to governments are substantially reduced when *public equity*, in the form of a capital grant, is included in the investment mix and debt is raised in the most efficient manner.

Furthermore, where the level of capital grant is increased, rents can be kept at affordable levels without tenants (or CHOs) having to rely on CRA.[12]

Table 7: Comparison of five investment pathways

Program Summary (Lifetime cost of Year 1 of program)	Scenario 1: Private financing with operating subsidy	Scenario 2: NHFIC financing with operating subsidy	Scenario 3: Upfront capital grant	Scenario 4: Upfront capital grant + NHFIC financing	Scenario 5: Larger capital grant + NHFIC, excluding cost of CRA
Total development costs (excl. GST and taxes)	$7.0B	$6.4B	$5.8B	$5.7B	$5.4B
Total operating costs	$2.8B	$2.8B	$2.8B	$2.8B	$2.8B
Rental income	$3.2B	$3.2B	$3.2B	$3.2B	$3.2B
Operating/ capital grant	$5.4B	$4.8B	$4.2B	$4.1B	$5.0B
CRA payments	$1.2B	$1.2B	$1.2B	$1.2B	
Government subsidy	**$6.6B**	**$6.0B**	**$5.4B**	**$5.3B**	**$5.0B**
Savings on Scenario 1	**-**	**9%**	**18%**	**20%**	**24%**

Note: Scenario 1 = operating subsidy. Scenario 2 = operating subsidy + NHFIC bond aggregator. Scenario 3 = upfront capital grant. Scenario 4 = Upfront capital grant + NHFIC bond aggregator. Scenario 5 = Upfront capital grant + NHFIC bond aggregator, excluding CRA.

Source: Lawson, Pawson et al. (2018).

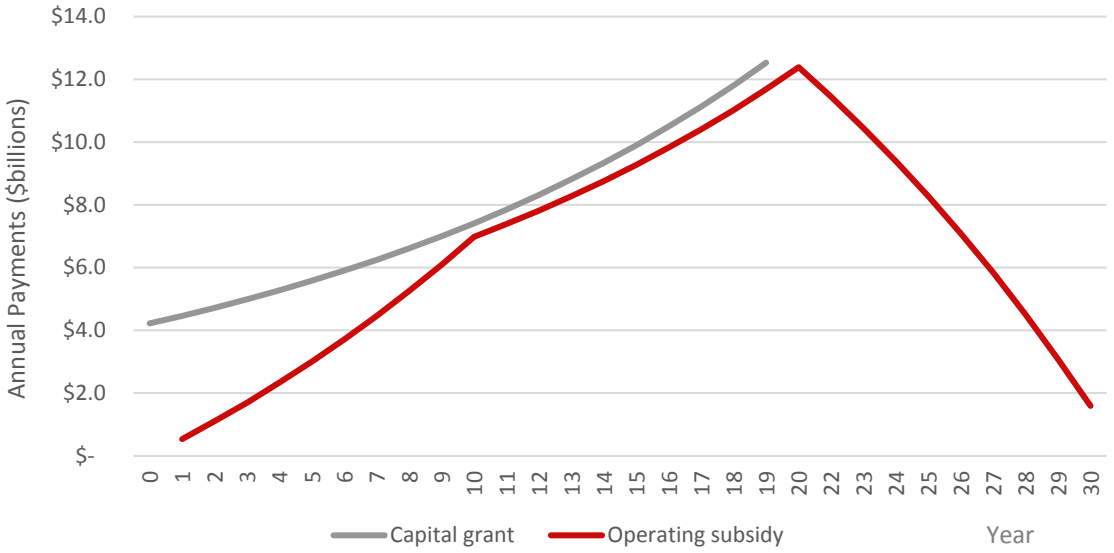
Overall, our modelling reveals that a needs-based capital investment (NBC) strategy is substantially more cost-effective in the short and long term than a commercially financed model that is reliant on an operating subsidy to ensure affordable social tenancies. Indeed, privately

[12] It should be noted that CHOs are able to adjust rent levels to maximise the CRA payments to tenants and are also permitted to claim the entire CRA entitlement. Current CHO rent setting strategies are variably focused on maximising access to CRA payments. Some CHOs are required under agreement to ensure rents do not exceed 25–30 per cent of incomes (as in public housing), income is taken to mean pre-CRA amounts, which is equivalent to a tenant living in public housing who is not entitled to CRA.

financed and subsidised strategies are 24 per cent more expensive in the first year alone and these costs accumulate with each new tranche of privately financed dwellings.

Under privately financed models, recurrent expenses continue for a considerably longer duration, to fulfil long-term financing obligations. This places a heavy burden on public finances and can limit new or alternative infrastructure investments. This finding mirrors that of the UK National Audit Office (NAO) on the abolished PFI initiative (NAO 2015; 2018b). As shown in Figure 9, below, a significant disadvantage of the operating subsidy model comes at the end of Year 20, when operating subsidies would still be required to be paid out on dwellings built in the later part of the program, unlike a capital grant model.

Figure 9: Annual expenditure under capital grant vs. operating subsidy programs



Note: All values are represented as net present value (NPV) and do not include any costs associated with CRA payments.

Source: Lawson, Pawson et al. (2018).

It should be noted that an operating subsidy is a recurrent expense to government—it is not an investment in the public estate, building a portfolio of permanent social housing assets. Unlike recurrent operating subsidies, capital investment in the form of conditional grants or retained equity contributes to the public estate and provides a useful hedge against inflation. This value can later be used to reinvest in renovation or replacement of stock over time.

Upfront capital investment can be even more strategic and purposeful. A nuanced capital investment strategy can address spatially differentiated needs and, importantly, efficiencies in procurement costs (especially land costs). It can also drive innovation in construction and respond to changing market conditions to deliver a range of policy goals, from skilled employment to transport mobility and energy-efficient design.

3.7 The most effective pathway for Australia

The Productivity Commission (2014: 2) stresses the urgent need to reform the way governments invest in Australian infrastructure, calling for better decision-making, funding and financing choices. This imperative applies equally to social housing, where current investment strategies are not only unproductive, they are failing to address current and future needs.

This Inquiry examined diverse investment pathways that generate social housing. Dominant trends in housing policy have favoured demand-side approaches and relied on private financing of landlords and increasingly subsidies to investors. This has proven costly for governments and ineffective in steering supply, maintaining and retaining outcomes, with too many very low-income households left unable to access secure affordable housing, homeless or suffering severe housing stress in the private rental market.

Responding to this need inevitably requires resources and some of these can be derived from more equitable distribution of assistance than is currently the case. Rebalancing both direct and indirect assistance from speculative investors and established home owners to landlords with the well-defined social purpose and their tenants would address widespread concerns about fairness and inequities in Australian tax and housing assistance policies (Groenhart 2014, Duncan, Hodgson et al, 2018). Reforms to capital gains and negative gearing provisions have the potential to provide significant additional resources to address substantial levels of housing need and enable investment to flow towards the maintenance and expansion of social housing (Ecclestone, Verdouw et al. 2018: 34). However, such reforms are far from certain and the case for investing in social housing infrastructure should not depend on their progress.

Unfounded policy assumptions operate as a brake on more effective initiatives to increase the supply of social housing and need to be challenged. These include the belief that transferred assets will allow private investment to generate new social housing supply, thereby reducing public debt and the demand for future subsidies.

Excessive reliance on commercial finance, of short term and high interest, not only increased operating costs for non-government providers in the 2000s, but also increased the Commonwealth subsidy they required to meet their operating costs (Lawson, Berry et al, 2014, Darcy, 2019, Southern Cross Housing, 2018). For growth the primary motor proved to be public equity—most notably and durably under the Social Housing Initiative (KPMG, 2012). During the 2010s, less efficient private financing dampened the productivity of the social housing sector rather than increased it (EY, 2017). Heeding this evidence, the federal government established the NHFIC, which is now issuing bonds to provide more efficient longer-term lower-cost loans. Early experience of bond issuance (NHFIC, 2019) shows real promise—but financing alone is not sufficient to address deep affordability needs.

In the absence of public equity and operating subsidies, the core purpose of social housing provision has drifted ‘upwards’ to serve ‘affordable’ rental tenants and home purchasers (Randolph, Troy et al. 2018). So called ‘affordable’ rents, set at 75% market value, are not affordable to low income households in most metropolitan markets. There are tenants in community housing who remain in housing stress (AIHW, 2018). A subsidy program defining ‘affordability’ in this way may serve Q2 households, as did NRAS, but will leave the much larger group of Q1 households in rental stress (Lawson, Pawson et al, 2018).

Secondly, state and territory land banking, valuation and planning policies, maximising the value of government-owned land, have increased the cost of providing social housing and in turn the subsidies required to produce it. Western Australia shows the way in how land bankers can work more collaboratively with CHOs to ensure affordable housing outcomes, but more could be done on a greater scale and in all jurisdictions (Randolph, Troy et al. 2018).

Further, some state housing authority strategies are encumbering CHOs with the management of public stock that is in poor condition and which in some cases requires sales to cover operating costs (as in Tasmania), which could undermine a potentially productive route to new supply. Finally, growth reliant on self-financed redevelopment involving demolition, densification and sale of units, offers an opportunistic but also finite strategy to increase units of much smaller size and higher density. These strategies, as seen in New South Wales and Victoria, involve significant community displacement and also pose complex development risks.

Overall, recent market-based policy strategies focussing on asset management transfers, densification and mixed redevelopment have failed to deliver a sustainable or productive pathway for Australian social housing.

A change in direction is required which not only builds on best past practices but learns the lessons of international experience. Strategic long-term public investment is the most effective route to boost social housing production. The needs-based capital investment pathway recommended by this Inquiry draws on the tools of Australia's more productive past and builds on promising reforms in efficient and mission-driven financing (via NHFIC and CEFC).

Furthermore, a more effective and joined-up national strategy and regulatory framework can ensure a range of social, economic and environmental policy objectives are also achieved, via well-designed social housing programs that promote more inclusive housing markets, fairer access to opportunities and more energy-efficient living environments.

4 Evaluating long-term investment in social housing

- CBA is widely used to inform infrastructure and policy development, providing an estimate of the net benefit to society of a proposal, including social, environmental and economic benefits. While CBA is not the only determinant of funding and policy decisions, it can provide support in advocating for long-term investment in social housing.
- Methods for applying CBA to social housing are underdeveloped in comparison to those used in infrastructure appraisal, particularly for estimating the willingness to pay (WTP) for the benefits of housing supply. This is due to social housing not being a good freely traded in markets and the prevalence of 'intangible' benefits, such as secure tenure, social inclusion, wellbeing and self-esteem. While not CBA, recent analyses indicate that providing social housing may result in a net savings to government through reduced use of health, justice and welfare services.
- While there is an argument for the development of more detailed methodologies for the appraisal of social housing, if CBA is to be used to support the present arguments for long-term investment in social housing, a pragmatic approach to recommending methodologies is required, drawing on readily available data and techniques.
- Other considerations for recommending CBA methodologies include acceptance from decision makers; resource requirements; the communicability of the arguments; the relationship between the analytical rigor and support for the proposal; and how the method chosen may influence outcomes and prioritisations.
- Given these criteria, we put forward two methods for further investigation as to their efficacy in advocating for long-term social housing investment programs.
  - An avoided costs methodology, which is a financial assessment of net savings to government of social housing provision due to lower frequency of use of health, justice and welfare services.
  - An economic analysis based on the equivalent private market rental value of social housing, predicated on the assumption that the rent represents the WTP for the bundle of goods provided by the housing (including security, social inclusion, health, access to services, amenity and wellbeing).
- These recommendations should be seen as a starting point for further debate within the social housing sector and with government.

In this chapter we draw on insights from infrastructure appraisal and previous economic analyses of social housing, to provide a foundation for the development of suitable methods for governments to appraise the effects of more sustained investment in social housing. This informs a discussion of various approaches to undertaking a CBA of the 20-year housing

construction program outlined in Chapter 3 and recommends useful assessment tools which can be used. The recommendations are based on the associated research into frameworks through which infrastructure CBA processes might be applied to social housing (Denham, Dodson et al. 2019). The selection of CBA as an assessment tool was motivated by the common use of this technique in major infrastructure project investment, which is comparable in scale to a large public housing investment program.

In theory, CBA can account for the economic, social and environmental benefits of social housing, if appropriate methods for monetising the benefits of the program and life-cycle assessments of building costs are applied. However, there have been infrequent and often partial attempts to undertake CBA of social housing programs, as there is no agreement on, or an obvious methodology for, determining the WTP for social housing, or the range of social benefits it delivers. While there is a substantial body of literature on the benefits of social housing, there has been scant attention paid to an economic assessment of these benefits (Buzzelli 2009), and the benefits are both multifaceted and interrelated (Kraatz and Thomson 2016). The consideration of CBA methodologies and monetisation appropriate to evaluation of a long-term housing development program is a central concern of this chapter.

4.1 Cost-benefit analysis (CBA)

Commonly used in public sector decision-making, CBA is a method based in welfare economics and used to capture the net social benefit of proposals. It is concerned with estimating the net benefit to the whole of society as a result of an initiative, accounting for the full (external) costs and benefits of the intervention. It can also be used to assess the worth of the outcome of a large program against a do-nothing option or alternatives. CBA is distinct from financial analysis, which is concerned with investment pathways and the budget impacts of undertaking a program, as discussed in Chapter 3. While both of these aspects are typically included in a business case, financial analysis is generally separate from CBA for public projects because governments typically decide whether to proceed or not based on the prospects of net social benefit rather than profitability. In general, CBA indicates whether a project is worth proceeding with in terms of overall (external) value to society, while financing appraisal assesses how best to assemble the funds required to undertake the project and the (internal) return.

Proponents of CBA posit that this technique can account for economic, social and environmental outcomes through methods of monetising the costs and benefits: it uses economics as a method rather than the focus (Ergas 2009). Monetisation of benefits is based on the concept of ‘willingness to pay’ (WTP) for the good or service provided. The difference between the society-wide aggregate WTP and the amount actually paid is the ‘consumer surplus’, which is compared to project delivery and external costs to derive the key reporting statistics of net present value and benefit-cost ratio. Most CBAs occur over extended time frames, with 30 years standard for infrastructure, such that discount rates are used to reduce the impact of future costs and benefits, reflecting assumed social preferences for consumption today over consumption in the future.

Finally, it should be noted that many forms of social infrastructure, such as schools, justice facilities and hospitals, are not subject to economic appraisal and thus do not provide examples of how social outcomes can be monetised. This observation demonstrates that a business case is not a compulsory step for governments towards funding these facilities. Furthermore, announcements of major transport projects are often made prior to any CBA, indicating that while economic analysis provides support for initiative, political will is an important factor in securing funding. Thus, CBA provides a useful, but not always decisive, input to the political decision-making process around whether to proceed with a given program or project. This caveat would necessarily apply to any government decision to proceed with a major long-term social housing construction program.

4.1.1 CBA methodologies evolve through practice

Business cases and CBA are typically conducted together. A business case sets out the supporting rationale for a project in terms of public policy and financial viability, while CBA contributes to a business case by assessing the net public value of a project. Business cases, and particularly CBA, are complex and intensive technical analyses that have developed over many decades in response to long-term high-value programs of government investment. Today, independent authorities, such as the federal Infrastructure Australia and its state equivalents, rely on these tools to assess project priorities. The structure of business cases is similar across jurisdictions, including problem definition, options assessment, as well as detailed cost-benefit and financial analyses.

There is an important nexus between funding, the development of methodologies for appraisal, and increasing focus on productivity within the ecosystem of public investment appraisal. Infrastructure CBA has been evolving since the 1950s during a period of continual investment in freeway networks and transport systems, having developed frameworks, expertise and stakeholders. This has involved an iterative process of funding, construction, appraisal, and review and refinement of assessment techniques, which has informed parameter and methodological improvement and enabled a body of expertise to develop.

In contrast, there has been underinvestment in social housing since the early-1980s, and there is a corresponding lack of development of relevant methodologies for assessing the economic and social costs and benefits of social housing. In addition, several aspects of social housing make CBA less suitable as an appraisal technique. Unlike a utility or transport link, social housing is not a good that is openly priced or freely traded in markets; social tenants are typically low income and their willingness to pay for housing is necessarily constrained such that this demand cannot be easily estimated through conventional monetisation methodologies. While transport CBA easily monetises the benefits of an infrastructure link via such approaches as travel time savings, the development of clear and appropriate methodologies for monetising the benefits of social housing, while possible, have so far proven elusive. Moreover, the limited demand for their application has meant examples of social housing CBA are rare. The housing sector would be commencing from a position of relative conceptual and methodological deficit if it was to begin applying CBA to social housing as infrastructure.

4.1.2 CBA as an input to decision making

An extensive review of Australian infrastructure business case and CBA processes undertaken for this Inquiry (Denham, Dodson and Lawson, 2019) provides the following insights for social housing.

- Infrastructure appraisal and CBA are custom in nature and designed to fit the initiative being appraised.
- CBA methodologies reflect long-term, iterative development processes.[13]
- Infrastructure appraisal is concerned with individual projects, such as a specific road or rail line, rather than overarching policy positions.
- CBA is only one part of the decision-making process, particularly where there are considerable costs and benefits that cannot be monetised.

[13] For example, central infrastructure and transport agencies maintain and distribute guidelines and parameters for transport appraisal, such as the Australian Transport Assessment and Planning (ATAP) Guidelines.

- Based on the review of infrastructure decision-making, CBA is more frequently used to provide support for decisions already taken, rather than as the basis for changing existing standpoints.[14]

4.1.3 Examples of social housing CBA in Australia

While there is an extensive literature on the benefits associated with adequate housing, and social housing provision, there are few examples of CBA application or the monetisation of benefits as normally required in CBA. This is most likely due to the difficulty of quantifying and monetising the range of non-market traded benefits that accrue from social housing, such as wellbeing, security, participation in education and employment, and social inclusion.

For the appraisal of a long-term social housing project, more detailed methods of CBA can be seen as trading off efficacy for generalisability, as the results are specific to the cohorts involved in the program. As a result, it is likely that monetisation methods for a CBA of a long-term social housing project should be abstract and generalizable—such as the use of market rents as an estimation of housing benefits used in earlier appraisals of social housing (Pugh and Catt 1984; Carter, Milligan et al. 1988).

A summary of CBA methods, of varying scale and scope, which have been applied to social housing, is provided in Table 8.

[14] For example, there is a tendency for major transport projects to be announced by governments, or promised by oppositions, without being subject to rigorous technical and economic analysis (Terrill, Emslie et al. 2016; Terrill and Ha 2018).

Table 8: Summary of social housing CBA methods

Report	Method	Notes
Broad-scale evaluations		
Cost-benefit and financial analyses of public housing in South Australia (Pugh and Catt 1984)	Assumes equivalent private market rental provides a valuation of social housing benefits.	The method is generalisable and based on widely available data.
The Benefits and Costs of Public Rental Housing in New South Wales (Carter, Milligan et al. 1988)		
Housing Allowances in the Australian Context—Market Impacts and Cost Effectiveness (Econsult 1989)[15]	Cost-effectiveness analysis based on the assumption that rental assistance and housing provision provide the same outcomes.	While the overarching assumption is questionable, the conclusion is that housing provision is more cost-effective.
The social value of community housing in Australia (Ravi and Reinhardt 2011)	Uses the social return on investment (SROI) methodology.	While SROI draws on CBA theory and techniques, it is not recommended for use in comparisons of different programs and with different stakeholders (Maier, Schober et al. 2015).
Housing programs		
'Sustaining exits from long-term homelessness' (Johnson, Kuehnle et al. 2014)	Surveys of program participants and control group over 48-month period.	CBA indicates a negative net present value of the program over 4 years, but 'intangible' benefits such as self-esteem and community connectedness are not included. It also notes that there may be additional benefits over a longer time frame.

[15] *Informs Public Housing—Volume 1 Report* (Industry Commission 1993).

Report	Method	Notes
'The case for investing in last resort housing' (Witte 2017)	Uses a range of methods to evaluate health cost savings, improved quality of life, reduced crime costs, increased human capital, avoided property blight and nuisance, volunteering, and economies of scale and scope.	Finds that for every $1 invested in last-resort housing, $2.70 of benefits are generated over the subsequent 20-year period. As last-resort housing, it doesn't include benefits of long-term secure housing.
Aspects of social housing		
Housing Assistance and Employment in Australia (Productivity Commission 2015)	Comparison of data sets for rental assistance and social housing cohorts, over a 10-year period.	Investigates welfare locks—finds no evidence of social housing as an employment deterrent. Notes the importance of unobserved factors in any difference in employment outcomes between the cohorts.
'What are the health, social and economic benefits of providing public housing and support to formerly homeless people?' (Wood, Flatau et al. 2016)	Linked data sets from WA health and social services departments, assessing different frequencies of health service usage.	Estimated health-related savings of $4,486 per person per year in social housing.
Appraisal methodology development		
Valuing Social Housing (Kraatz and Thomson 2016)	Meta-analysis of social housing benefits, results in a 'composite return on investment' (CROI) methodology.	CROI is similar to, but not CBA. This research highlights the complexity of benefits estimation by summing separate analyses, as well as monetising social and wellbeing outcomes.
'Cost offsets of supportive housing: evidence for social work' (Parsell, Petersen et al. 2016)	An avoided costs method, assessing savings to government of providing social housing. Based on linked data on police, prison, probation, parole, courts, emergency department, hospital- admitted patients, ambulance, mental health and homelessness services.	Compares lower service use rates for people in social housing to costs of housing supply. Estimates savings of $13,000 per year per person in social housing.

Report	Method	Notes
Australian Social Values Bank[16] (Fujiwara, Keohane et al. 2017)	Program benefit calculator, monetisation based on subjective wellbeing methods.	Social measures include health, home, education, social and community, drugs and alcohol, crime, employment, reduced welfare payments and increased tax receipts.
'What are the impacts of living in social housing?' (Prentice and Scutella 2018)	Uses an econometrics of program evaluation approach to assess marginal outcomes from a social housing group as compared to a control group.	Highlights the impact of unobserved factors on the study outcomes, as well as how the use of averages in analysis can obscure the extent of benefits to individuals within the cohort.

Source: Summarised from Denham, Dodson et al. (2019).

[16] https://asvb.com.au

Of the examples given in Table 8, the broad-scale analyses are the most applicable to supporting the argument for a long-term social housing program. The use of private market rental values as a measure of the benefits of social housing is straightforward in implementation; however, interviews undertaken for this research indicate that the underlying assumptions may not be accepted by government.

The housing program assessments are the opposite, as they are resource-intensive in implementation, but less abstract in conception. The CBAs of housing programs by Witte (2017) and Johnson, Kuehnle et al. (2014) provide detailed methodologies, but the results may not be generalizable, as required for assessing a nation-wide intervention. This is also the case for the economics of program evaluation approach of Prentice and Scutella (2018), which notes that the results are not widely applicable.

The avoided costs methods are a notable development in mounting arguments for investing in social housing, given their support from within social housing agencies as well as academic literature. The research using this methodology, as summarised here, has been focussed on the government budget benefits of providing housing for the homeless, indicating further research would be required to develop an understanding of how the use of government services changes with different cohorts.

4.1.4 Scale of analysis: moving from projects to programs

The National Disability Insurance Scheme (NDIS) is an appropriate example of program assessment for comparison to this Inquiry's projected housing construction program, due to the scale of both programs and the predominance of expected non-market benefits (Productivity Commission 2017b). To inform the Commonwealth Government's decision to implement the NDIS, the Productivity Commission (2011) undertook an inquiry into disability support in Australia.

The inquiry included a basic plausibility test, in lieu of a full CBA, due to the number of intangible benefits. The plausibility test involves:

- consideration of the costs of the scheme (using the conventional cost-benefit framework for measuring these) and identification of the value of the benefits per scheme participant that would be required to just outweigh these
- making a judgment on whether the measure of benefits derived from the above calculation passes a credibility test, taking into account the wide set of benefits described above (Productivity Commission 2011: 954).

The commission qualitatively considered a range of benefits in detail—including the welfare gain of transfers from the well off to the needy, employment impacts for carers and participants, and reduction in costs to government—and compares them to the estimated cost per participant. The conclusion was that:

> *… the NDIS would only have to produce an annual gain of $3,800 per participant to meet a cost-benefit test. Given the scope of the benefits, that test would be passed easily. (Productivity Commission 2011: 941).*

This example is notable for its use of a method that sidesteps the monetisation of intangible benefits, through a judgement of probability that the proposal will result in net benefits given the costs per participant. It also illustrates the importance of political will in ushering through major social policy, as the NDIS has benefited from bipartisan support in the Commonwealth sphere.

The NBN is another example of a CBA approach used for a major nation-wide public infrastructure investment program. The scheme was initially promoted under Labor, who claimed that an Australia-specific CBA was a waste of time as, '(c)ost-benefit analyses have been performed into broadband networks all round the world and all had been overwhelmingly

positive' (SMH 2010). However, under pressure from the opposition, the government eventually commissioned a CBA for the project in 2014. Four NBN options were included in the analysis: no further rollout, unsubsidised rollout, a multi-technology mix, and fibre to the premises. Choice modelling techniques were used to estimate WTP for different levels of broadband services, as well as for home and commercial uses (Department of Communications and Vertigan 2014).

4.2 Approaches to evaluation

4.2.1 Program scale and market effects

The scale of a proposed social housing program to address both the backlog of need (433,000 dwellings) and needs arising in the next 20 years (727,000) has been outlined in Lawson, Pawson et al. (2018) and summarised here in Chapter 3. Construction would be spread on a proportional and needs basis over the 20-year program, rather than in fixed annual increments.

An annual construction target could be set annually, beginning at 20,000 dwellings in Year 1 and rising over time to 60,000 in Year 20, achieved through a 5 per cent increase in total social housing stock per year. Table 9, below, shows the total cost to government of Scenario 5—involving a capital grant subsidy model with interest rate deductions from NHFIC financing and no CRA—which produces the lowest cost outcome of all scenarios, at $9.0 billion per annum over 20 years, compared with $11.8 billion for Scenario 1.

Table 9: Program-level annual costings for capital grant subsidy model with interest rate deductions and no CRA

Program summary	Year 1 NPV total ($)	Per dwelling average ($)	20-year annual average ($)
Total development costs (excl. GST and taxes)	5.4 billion	268,000	9.7 billion
Total operating costs	2.8 billion	137,000	5.0 billion
Rental income	3.2 billion	157,000	5.7 billion
Capital grants	5.0 billion	247,000	9.0 billion
CRA payments	-	-	-
Government subsidy	5.0 billion	247,000	9.0 billion

Source: Lawson, Pawson et al. (2018).

The scale of the projected housing need adds complexity to the appraisal, as CBA is, '[most] appropriate where the broader environment (e.g. the price of goods and services in the economy) can be assumed to be unchanged by the intervention' (HM Treasury 2018: 21). A large-scale program such as the one recommended here is likely to have an inflationary effect on construction prices, particularly in markets such as Sydney, where the RBA (2018) have reported that the construction sector is reaching capacity and the projected social housing program is for 140,000 dwellings over 20 years. Such a significant addition of housing within the affordable sector may have an impact on rental markets, creating further issues when subjecting such a program to CBA. In addition, for small social housing projects, particularly those that aim to deal with specific sections of the community with housing needs, assumptions of equivalent marginal benefits and costs per dwelling are justified. However, for larger housing construction programs that assumption would not hold: marginal benefits per dwelling would

decline over time as the construction program proceeded and those with less acute needs were provided with housing (Denham, Dodson et al. 2019).

This should not be taken as a criticism of the housing program, rather as a caution that programs of this scale have implications for CBA and the estimation of costs and benefits. A recent development in appraisal methodologies reflects these issues in undertaking CBA for market-shaping programs, recommending mission-orientated appraisals for projects that focus on 'innovation, spill over effects and systemic changes' (Kattel, Mazzacuto et al. 2018: 21). However, this methodology is not currently in use in Australian policy and project appraisal.

4.2.2 Benefit estimation methods

For undertaking a CBA, estimating the WTP for the benefits of social housing requires the use of modelling or experiment techniques. The range of CBA methods, discussed in Section 4.1.3, indicates that there is not a single agreed approach to benefits estimation, with different methods chosen depending on the purpose of the CBA and the data available. Table 10, on the following page, introduces benefit monetisation methods that could be considered for undertaking the CBA of social housing.

4.2.3 Avoided costs

The avoided costs approach to benefit estimation is a financial appraisal method that estimates a budget outcome as a result of housing provision, based on a comparison of the cost of provision with savings through avoiding costs associated with the frequency of use of other services. Research indicates that social housing is likely to provide a net benefit to whole-of-government budgets (Parsell, Petersen et al. 2016; Witte 2017; Wood, Flatau et al. 2016), and signals to treasuries and other agencies the fiscal savings that provision of housing may achieve for other portfolios. Therefore, this approach aligns with government objectives of 'living within their means', as discussed in Chapter 2.

While this may be seen as a positive advance in terms of funding support for the sector, Parsell, Petersen and Culhane (2016: 1549) caution that avoided costs should be used 'to augment more fundamental arguments for ensuring that chronically excluded individuals are able to access secure housing, such as through enabling greater participation in society'. In this regard, they fall short of theoretical, ideal CBA methodology that accounts for social and environmental impacts as well as economic outcomes.

Table 10: Benefit monetisation methods

Method	Description	Pros	Cons
Benefit synthesis	Monetises the range of benefits to tenants of social housing individually.	Conceptually straightforward.	Many benefits are 'intangible'. Difficult to mitigate double counting issues (e.g employment and education benefits). Results may be cohort specific rather than generalisable.
Housing-adjusted life years	Applies the public health 'disability-adjusted life years' method to social housing.	Uses an established methodology to estimate the health and wellbeing benefits of housing.	May require extensive research to develop appropriate parameters.
Stated preference	Uses survey experiments to determine WTP for social housing. May be undertaken with tenants or wider society.	Widely used to determine society's value of non-market assets. May indicate community support for social housing.	Can be expensive and resource intensive to undertake. Results prone to bias if survey instruments are not developed properly.
Revealed preference	WTP is inferred from the market goods required to consume non-market goods.	Less resource intensive than stated preference models.	Depends on identifying associated markets. The lower incomes of social housing tenants and prospective tenants would need to be accounted for.
Market rental values	Estimates of user benefits are based on the price of an equivalent dwelling in the private market.	Uses readily available data and methods, and has been used previously.	Governments and funding bodies may not accept the core assumption.
Imputed rent	Indicates society's WTP for the provision of social housing.	Based on private market rental values, it implies public costs represent the benefits of social housing.	Imputed rent concepts may be too abstract to garner support.

Source: Denham, Dodson Et al. (2019)

4.2.4 Plausibility test

The plausibility test, used by the Productivity Commission for the NDIS, could be used to support the argument for a program of social housing construction. As for the NDIS, the appraisal would be based on the difference between the tangible costs and benefits, as described in the avoided costs model (above). This would provide the basis for a judgement on whether the intangible benefits are likely to result in a net benefit to society. This plausibility test reflects the view expressed by a public servant interviewed for this research, that:

> *… there are aspects that aren't able to be quantified, but it is still very important to apply a rigorous analytical framework to those non-quantifiable benefits and express them in a way that is useful for decision makers so they can weigh them up alongside the results of the more formal CBA.*

This type of approach was also mentioned in interviews by public servants involved in policy analysis. They expressed a view that decisions on projects with unquantifiable benefits were based on a judgement as to whether those benefits were likely to be greater than the difference between costs and the quantifiable benefits. This approach was seen as a way to minimise uncertainty when making a decision.

4.2.5 Strategic assessment

The past year has seen an emerging practice in which strategic assessments are used to offer initial appraisal of infrastructure projects to support announcements by decision makers. These strategic assessments are not as detailed as a full business case, but rather appear designed to offer support to decisions that have already been made by political representatives in advance of a full business case and CBA. In Victoria, two recent major projects have been promoted on the basis of a strategic assessment: the $11 billion Melbourne Airport Rail Link (MARL), and the $50 billion Suburban Rail Loop (SRL). These strategic assessments are essentially a multi-criteria analysis (MCA), used to determine which of the options considered proceeds to an extensive business case and CBA.

The use of strategic assessment as a preliminary step in infrastructure development processes provides a rationale for proceeding with a project prior to the completion of a full business case in which enumeration of the economic costs and benefits is undertaken. Such strategic analyses can be seen as a response to the common criticism of governments committing to and proceeding with projects prior to CBAs. However, as Ergas (2009: 34) astutely observes:

> *… it is difficult to see how one could determine that an MCA assessment was wrong after the fact. This may be a reason why MCA is gaining popularity—as a device for reducing accountability for decisions.*

Strategic assessment may be useful as a preliminary step towards social housing investment, as it clearly demonstrates the pros and cons of options against the key considerations and objectives of the proposal. Therefore, it provides a platform to elucidate the issues associated with the undersupply of social housing, as well as an assessment of the strategic options available to mitigate these issues. The standard process for MCA uses a workshop format, which could provide an opportunity to gather key social housing stakeholders to consider the options, with the prospect that the process will garner additional support for housing investment. Given the current underdevelopment of standardised data and techniques to undertake CBA for social housing, a strategic analysis of the form applied for MARL and SRL may offer a suitable initial grounding for decisions to proceed with major social housing projects.

4.2.6 Additional analyses

A program of works

Given the scale of the proposal and the issues with declining marginal benefits associated with prioritarian allocation of housing, a logical approach to undertaking a CBA would be to assess regions individually, by reframing the proposal from a project to a 'program of works'. CBA would follow the policy decision, which may be informed by a plausibility test or strategic assessment, and provide guidance on prioritising developments. This would tie local-demand information more closely to construction estimates, and also provide insight into the staging of development as each area would have a net present value (NPV) associated with its projected social housing need (taking into account the proposed program targeting of investment where needed and gap finance to suit land and construction costs).

Computable general equilibrium modelling

Computable general equilibrium (CGE) modelling is used to estimate the economic effects of a proposal based on the production relationships between sectors of the economy. As a computationally complex process, CGE modelling of proposals is undertaken by few organisations in Australia. The Centre of Policy Studies' (n.d.) MONASH model has been used in Australia since 1993 and can compare 'with' and 'without' scenarios by industries, commodities, occupations and regions within Australia. The modelling of interactions between industries is useful in that it will:

> *… generate insights into the effects of policies and other shocks in the areas of trade, taxation, public expenditure, social security, demography, immigration, technology, labour markets, environment, resources, infrastructure and major-project expenditures, natural and man-made disasters, and financial crises. CGE modelling is the only practical way of quantifying these effects on industries, occupations, regions and socioeconomic groups (Dixon and Jorgenson 2012: 1).*

CGE is different to CBA, in that it doesn't indicate net social benefit and indicate whether it is worthwhile to proceed, but rather estimates the employment generated and the net change in GDP as a result of the program. CGE is of note in this context as it may provide insights into the cross-sectorial, economy-wide effects of the scale of housing investment proposed.

4.2.7 Economic cost

Regardless of the approach taken to appraise the social housing proposal, estimates for the costs of delivery, maintenance and administration are required in order to calculate the net present value. Estimates of the costs for the program are detailed in Chapter 3. The costs range from $146,000 per dwelling in regional South Australia to $614,000 in Sydney, with an average of $270,000. The cost estimations take into account the expected dwelling type required. Operating costs per unit have been estimated at $6,904. These estimates are based on individual construction rates and do not take into account that a construction program of this size may have inflationary effects. Furthermore, the likelihood that economies of scale may reduce the cost per dwelling to below estimates, and that costs may reduce over time due to increasing efficiencies in materials and production methods, are also not taken into account.

The cost estimate would also need to take into account the deadweight loss of taxation—which is when 'a government's ability to re-distribute income through non-distortionary means is limited, the distributive effects of a government project should be taken into account' (Stiglitz 2000: 274). For example, the NBN CBA above used a deadweight loss of 24 cents per dollar, to reflect the loss in GDP due to additional taxation required to finance the project (Department of Communications and Vertigan 2014).

As it is expected that the construction program would be undertaken over a 20-year period, a proposed schedule of works would be required. The year-by-year construction program, with associated costs by location and maintenance would then have an appropriate discount rate applied, to reflect the social preference of current over future consumption. However, the appropriate discount rate to use in this case is contested, both in terms of methods for calculating and when applied to outcomes (Moore, Boardman et al. 2004; Harrison 2010). In practice, most Australian infrastructure agencies and state treasuries use an SDR of 7 per cent, with sensitivity analysis undertaken at 4 per cent and 10 per cent. The discount rate should also be applied to the benefits as they accrue over time.

4.3 A pragmatic approach

The central question is how to approach a CBA for a long-term investment in a social housing program. As contended in Chapter 2, it is possible to conceptualise social housing as infrastructure, which indicates that investment in housing supply may be argued for through the use of infrastructure evaluation methods. Alternatively, social housing could be seen as a policy position, which may lead to the use of different appraisal methods, as employed by the Office of Best Practice Regulation (2016); or as a public health intervention, in which case statistical measures of the value of life (AIHW 2016) could be applied.

As discussed in more detail in the associated report by Denham, Dodson et al. (2019), the method and conceptualisation for a CBA of social housing needs to take into account:

- the preferences and requirements of the audience for the analysis, and thus its usefulness in increasing funding to the sector
- the need for costs of developing and implementing the methodology to be in proportion to the resources and capacity of the sector
- whether the conceptual basis for the argument is clear and easily communicated
- that the level of analytical rigor required by decision makers appears to be inversely correlated to their degree of support for the proposition
- how the method chosen may affect the outcomes of the appraisal and how it may lead to prioritising certain outcomes over others.

The points are important in determining a way forward, as if governments and treasuries do not accept the analysis, or question the validity of the underlying assumptions, then it is unlikely that the CBA will be an effective advocacy tool. In this respect, it is important that any analysis of a long-term housing development program should form part of a larger advocacy and decision-making process undertaken in conjunction with government agencies.

Given these criteria, the use of avoided cost models may prove the most beneficial, particularly as they have been positively received by state treasuries. They are conceptually transparent, designed to estimate whether providing people with houses costs less than the health, justice and welfare service requirements if they are homeless or living with critical housing needs. As avoided cost models are already in development within state housing departments, the resource requirements would seem to be reasonable. It should be noted, however, that avoided cost models are not a form of economic analysis—they provide a within-government budget outcome, rather than an estimate of the net benefit to society and social housing tenants (as a CBA would).

A further option is a hybrid approach, redolent of the plausibility test used in the Productivity Commission (2011) appraisal of disability insurance, where the results of an avoided cost method could be used to argue for net gains to social welfare based on the likelihood that unquantified benefits are greater than any deficit. This is an example of a pragmatic approach to

CBA, using a method that reflects the information at hand and the need for assurance that the program is of net social benefit, rather than providing a quantified benefit-cost ratio and estimate of net-present value over the expected life of the asset.

There are alternate approaches to developing business cases for social housing. The ‘avoided cost’ approach to social housing business cases that has begun to be used by social housing agencies offers estimates of whole-of-government fiscal savings across portfolios other than housing, as a result of social housing provision, and thus avoids the issues of monetisation of ‘intangible’ dimensions of housing that a CBA would typically seek to calculate. This method has been developed within the social housing agencies and has been positively received by Treasuries. For social housing as a welfare intervention, a conceptualisation as a public health intervention—or considering the value the wider community places on providing housing for those in need—may provide better outcomes than an infrastructure conceptualisation.

If a CBA for a long-term social housing construction program is to be undertaken, then the logical way forward is to utilise the market rental values methodology, with the caveat that government support for this approach would need to be assured. Market rental value methods enable an economic valuation of the infrastructure created as a result of the construction program, regardless of the occupant. This approach would require theoretical exposition but, as noted previously, real estate values and price modelling techniques are widely available. Therefore, this method has the advantage of being ready to implement in the short term, particularly compared to those models that would require further data collection and analysis.

These recommendations are pragmatic, in that the methods proposed can provide timely support for long-term social housing development programs, with minimal need for development of data and methodology. They are provided here as a starting point for debate within the social housing sector and with government. There is need for further development of social housing appraisal methodologies, to ensure that these methods meet the expectations of those who are likely to provide funding for the proposed program.

5 The way forward: policy development

Housing plays a foundational role in our health, security and stability, and enables us to flourish as individuals, enjoy family life and take part in our community. Housing and related policies influence our access to resources and can either strengthen social inclusion or drive inequality and socio-spatial polarisation. Today, many Australian households do not have access to safe, affordable or secure housing. High housing costs and fixed or stagnant incomes have generated considerable housing-related stress. This phenomenon has consequences not only for the individuals involved but also for governments—providing emergency shelter, related health care, as well as remedial education and justice services—and impacts the broader economy. Better access to safe, secure and affordable housing would improve long-term social and economic wellbeing and relieve burdens on social service providers; however, such a far-sighted and holistic view is rarely accounted for in government budgets.

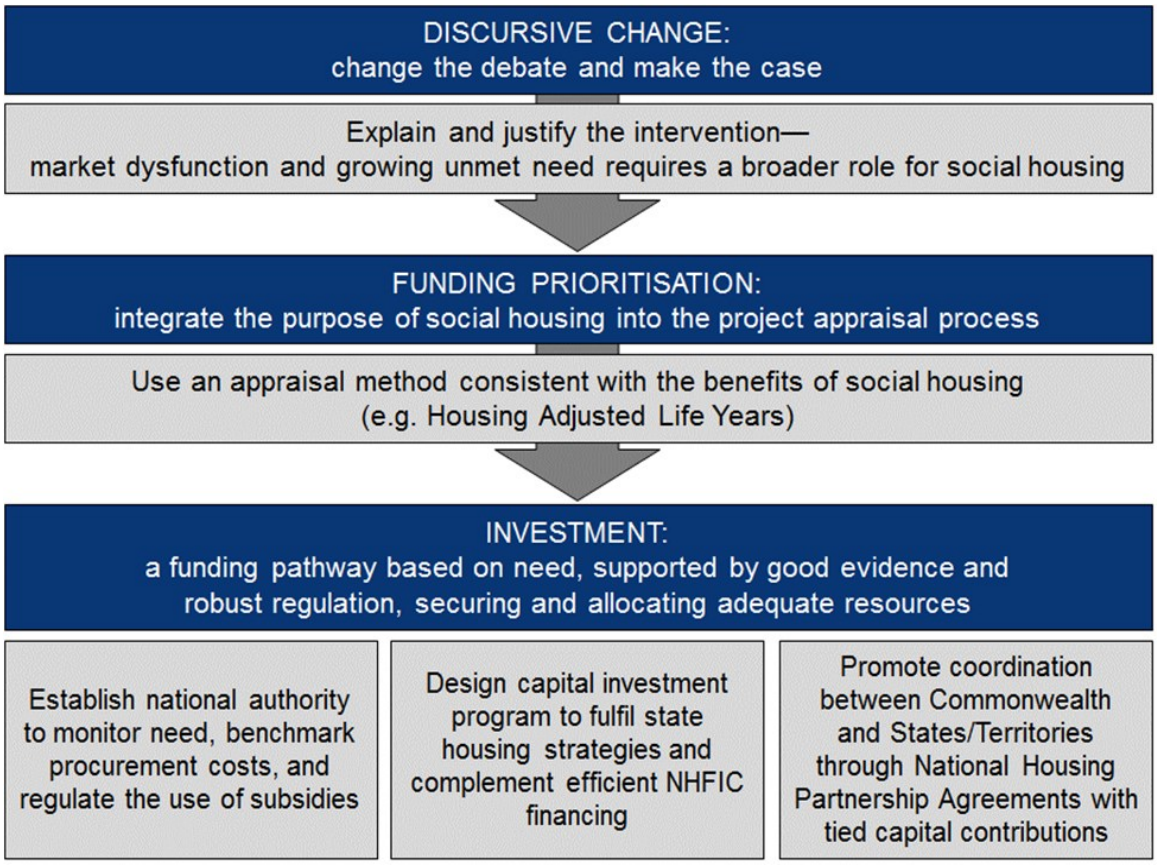
Social housing is an essential form of infrastructure that provides safe, secure and affordable housing on the basis of need. This Inquiry has quantified the level of investment required for social housing to address current and future needs. It established that there is a significant backlog in the provision of social housing (433,400 dwellings) based on evidence of manifest need (homeless households) and evident need (very low-income households paying more than 30% of their income on private rents). Without a major change in market conditions and policy reform, this need is predicted to grow to 727,300 dwellings by 2036.

Addressing the social housing shortfall challenges ambitious governments to shape better housing markets for all. Mission-orientated public investment is a proven and effective tool to drive innovation in housing supply and address the challenge of housing affordability and climate change. Experience of PFI schemes and PPPs has proven them to be costly and inflexible. A needs-based capital (NBC) investment strategy can directly support more inclusive living environments and foster economic stability and growth. As our modelling clearly shows, it is also less of a drain on the public purse.

5.1 The reform process

A national social housing reform process needs to be accompanied by a shift in the ways in which governments and key stakeholders talk and think about housing. As this report has demonstrated, there are significant complexities involved in compiling a robust, costed case for social housing investment. Even if the case for investment were successfully made, there are substantial institutional barriers that would work against a radical change in funding levels for social housing. These barriers include: the established processes by which government budgets are formulated, the politicisation of the budget position (surplus or deficit), reliance on market forces (enabled by tax, credit and land policies) and a bias against more purposeful 'market-shaping' role for government. Despite these barriers, social housing's contribution to social wellbeing, economic stability and sustainability requires a more prominent and firmly assured place in Australian public policy. A more ambitious and positive view of social housing can open up discursive space within which the more technical requirements of changes to processes and institutions may gain traction, as outlined in Figure 10.

Figure 10: Foundations of a national needs-based capital (NBC) investment strategy for social housing



Source: Authors.

5.1.1 Changing the conversation: market shaping to promote social wellbeing

Political leaders, policy-makers and other key stakeholders need to advance arguments that specifically and actively engage with and support direct government involvement in the provision of social (public and community) and affordable housing. The case for, and the cost-effectiveness of, this involvement is set out in earlier chapters of this report. We acknowledge that, to some extent, such a strategy runs counter to faith in the operation of 'free' markets, but these very processes in Australia are undermining both social cohesion and economic productivity. This orthodox thinking relying on market forces that has pervaded Australian housing policy forms one of the barriers to effective institutional change and strategic policy reform. However, there are signs that the discourse which has underpinned a 'hands off' policy role is changing and a more concerted market shaping approach is becoming more acceptable (Commonwealth Government and the State of Victoria, 2018:3-4). In order to better serve the long-term interests of the Australian community, a broader based consensus can be built around the following points.

- Housing in Australia fills a societal purpose. This includes its historical role accommodating the broadest possible spectrum of the Australian workforce, including low-waged workers, but it extends further than this. With stable, secure and affordable housing, all Australians will be able to thrive, socially, economically and culturally, and this is an essential foundation for ensuring Australia's future as a strong, healthy and cohesive society.
- There is manifest housing market failure in many parts of Australia. A widening group of Australians have no reasonable prospect of being suitably accommodated through the

private housing market, for a range of reasons including: affordability barriers, absolute or relative supply shortfalls, discrimination, or requirement for a modified living environment.

- Although the causal mechanisms are complex, housing underpins the achievement of many individual, social and economic goals. Investment in housing must be a priority for governments. Properly directed, such investment has the potential to contribute to national growth and wellbeing at levels that far exceed the perceived benefits accruing from fiscal constraint and budget surpluses.

5.1.2 Purposeful investment: monitor need, fund adequately and regulate well

International organisations increasingly call for more effective public investment and efficient financing of infrastructure, stressing greater capacity in needs-based planning, securing and allocating adequate funds, and designing and implementing programs (IMF 2015). Mission-focussed public investment not only addresses market failure but also creates value (rather than extracts it). It can also stimulate innovation and promote inclusive growth (Mazzucato 2018).

For all Australian governments to play a more effective role in addressing housing needs, procuring funds and ensuring their effective use, it is vital that a national housing body be established within government, which has high-level expertise, legitimate authority and ongoing policy steering capacity.

The role of the national housing authority would encompass the following.

Box 3: The role of a national housing authority

- Compile and disseminate evidence to guide housing policy and assistance reforms to deliver better access to safe, secure and affordable housing, and promote more inclusive, productive and environmentally sustainable cities.
- Provide clear and consistent evidence for the level and type of housing needs in different markets over time to inform supply strategies for all levels of government, industry and communities. This independent public authority would also take advice from an expert advisory council involving civil society, housing industry and social service organisations.
- Develop and update rigorous and reliable cost benchmarks, industry standards to promote decent housing standards, appropriate innovation and effective delivery.
- Use the above data on housing need, land and construction costs to set targets for social housing provision and secure necessary capital investment, to be specified in intergovernmental agreements (e.g. NHHA and bilateral agreements), key performance indicators and task orientated budgetary reports.
- Facilitate best practice in strategic land policy and urban planning that addresses the need for residential land at the metropolitan level and in local communities.
- Join up related policy strategies to maximise social housing outcomes: integrate state planning reforms with NHHA supply targets, calibrate required capital subsidies with costs required for CH and NDIS accommodation to reflect the scale, distribution and complexity of needs, drive down the cost of procurement through more effective land policies; and source more efficient financing via the NHFIC and CEFC.
- Increase government accountability by incorporating progress on the achievement of housing needs and supply targets in budgetary reporting at the federal, state and local level.
- Ensure public investments are used appropriately and effectively via effective regulation of and reporting by state housing authorities, land developers, constructors and CHOs.
- Recommend to government further actions to promote more effective housing outcomes to achieve national housing strategy objectives, based on research and consultation involving consumers and other appropriate stakeholders.

The authority's expertise and capacity to quantify need and procurement costs would provide an informed and transparent foundation for Australian governments to develop, advocate for and implement regional capital investment programs to complement NHHA, NHFIC, CEFC and NDIS funding and financing.

Our Inquiry's assessment methodology provides a geographically disaggregated basis for modelling the relative cost-effectiveness of different approaches to the deployment of government support for housing investment (i.e. different 'investment pathways'). While attempting to build on the work of others, our approach to estimating backlog and newly emerging need was subject to time and resource constraints. Although this Inquiry's model offers a credible approach within these limitations, the refinement of a sophisticated housing needs assessment methodology and its institutionalisation remains an outstanding challenge.

Notwithstanding the fact that the precise magnitude and geography of need requires refinement, heads of treasuries, housing providers and patient investors agree on the existence of a funding gap in social housing created by persistently low rent revenues relative to the cost of provision (AHWG 2017; ISA 2017).

It is widely accepted that more efficient NHFIC financing than has been commercially available, has reduced the cost of debt for CHOs (NHFIC 2019 EY 2017; Lawson, Berry et al. 2014). Yet debt is not a replacement for funding. Governments now appreciate (AHWG, 2017, NSWFHA 2016) that for CHOs to accommodate low income households, there is a real funding gap which must be addressed.

We have demonstrated that this gap can be filled in a variety of ways, from up front public equity, through to long term operating cost payments for privately financed developments. Our research shows that direct and purposeful capital investment can be significantly more cost efficient in both the medium and long term. It is provides the strongest mechanism to influence the scale, location and quality of housing produced. It can also ensure that dwellings remain as social housing over time (compare for example the long term housing outcomes of the SHI with NRAS).

Detailed financial modelling based on real costs (Lawson, Pawson et al. 2018) shows that commercially financed developments, funded via rents, operating subsidies and CRA, are substantially more expensive for governments in the medium to long term. For a social housing program of sufficient scale, privately financed concession payment models present a 24% greater cost to the public purse in the first year alone. Private equity alternatives promoted by some industry funds (ISA, 2017) demand much higher rates of return on equity (8% plus) than public equity, again driving up operating costs and consequently government subsidies.

For low income households adrift in Australia's private rental market, CRA is clearly not sufficient, especially in metropolitan areas.[17] A social housing investment program, which combines cost effective and strategic needs based capital (NBC) and more efficient NHFIC finance, can better address the needs of households for whom the private rental market offers no hope of security or affordability.

Direct investment in social housing ensures there is a secure affordable alternative for vulnerable households. It can address discrimination when age or disability could close the door. It can provide an oasis for households fleeing domestic violence and a stable home for children to flourish and complete their education. Direct investment can also contribute to better design outcomes and ensure economic stability when a market downturn threatens. Further,

[17] In 2015–16, 41.2 per cent of CRA recipients remained in housing stress after receiving CRA (Productivity Commission 2017a: Table GA.27; see also AHURI 2017b).

joined-up strategies can demonstrate how accessible design and energy efficiency can deliver more socially inclusive and sustainable environments (NDIS 2018; CEFC 2016b).

It has been suggested by other AHURI research (Eccleston, Verdouw et al. 2018) that reform of existing housing assistance instruments in the tax system would make available a substantial pool of funding that could be redirected towards delivering more appropriate housing outcomes. This may well be true. However, in any plausible reform scenario, the need for extensive social housing investment will remain—and the deployment of such support should not rest on the generation of savings from other measures.

Given the substantial public investment required for the effective reform of social housing, strong oversight of procurement strategies is vital to ensure that subsidies are invested efficiently, effectively and equitably. National Housing and Homelessness Agreements and their bilateral can provide important frameworks, targets and program guidelines. Investment in well-regulated NFP and public providers inhibits the potential for funds to be extracted for inappropriate purposes. In the Netherlands, Austria, Finland and many other countries with successful social housing systems, NFP legislation enforces the purpose and operating principles of these organisations and the conditions for use of subsidies and tax incentives. More detailed investigations are required to strengthen the ongoing development of Australia's National Regulatory System for Community Housing.

5.1.3 More appropriate appraisal of societal benefits

Business cases, and CBA in particular, are conventionally used to underpin infrastructure investment decision-making, but have rarely been applied to large long-term programs such as social housing. CBA provides an assessment of whether a project is of net benefit to society, including social and environmental outcomes as well as economic ones.

In Australia, the most prominent use of CBA is in the assessment of transport infrastructure, and it is guided by state and federal infrastructure bodies, as well as technical guidelines and parameters published by a central agency. However, CBA should not be seen as the only basis for infrastructure decision-making in Australia. Recent development decisions in the transport sector in particular have been made on political foundations rather than on the basis of CBA. In addition, other forms of social infrastructure, such as schools and hospitals, are not subject to business case assessment or CBA. Further, large-scale interventions and market innovations, such as the NBN and NDIS, are based on wider societal benefits. This indicates that while CBA can provide reassurance to governments of the net benefit to society of a particular project, it tends not to be applied to long-term market-shaping interventions and cannot be expected to change policy positions without the support of other forms of advocacy.

While there has been recent interest in developing methodologies for applying CBA to social housing, methods are underdeveloped in comparison to transport projects. There is no consensus on how best to monetise the benefits of housing. This can be seen as a reflection of the multifaceted and interrelated benefits of social housing, many of which are regarded as 'intangible' within these studies.

Whichever appraisal methodology is developed and applied will influence outcomes and funding priorities. If CBA and business case methodologies are to be used to support the long-term social housing development program, much work will need to be done to establish suitable approaches to the assessment of costs and benefits, and appropriate longitudinal data collected. These approaches must also be acceptable to decision makers and be able to influence funding for the sector. They will need to address the gap in expertise and resources required to develop and implement CBA, and provide the conceptual clarity, analytical guidance and rigor expected by decision makers.

While there are arguments for developing CBA methodologies that directly apply to social housing outcomes (see Denham, Dodson et al. 2019), we propose a more pragmatic approach. This approach assesses appraisal methodologies based on efficacy, resource requirements and the need to provide support for a long-term social housing development now, rather than after years of subsequent research and data collection.

This Inquiry recommends two methodologies for the supporting appraisal of the proposed social housing development program.

- An avoided costs methodology, which is a financial assessment of net savings to government of social housing provision due to lower frequency of use of health, justice and welfare services.
- An economic analysis based on the equivalent private market rental value of social housing, predicated on the assumption that the rent represents the Willingness to Pay (WTP) for the bundle of goods provided by the housing (*including* security, social inclusion, health, access to services, amenity and wellbeing).

These recommendations come with an important caveat, included in the criteria listed above, that it is critical to ensure that the analytical methods and outcomes will be accepted by decision makers and funding bodies.

Support for these recommendations comes from examples of the project appraisals for a national disability insurance scheme (Productivity Commission 2011) and the NBN (Department of Communications and Vertigan 2014). The appraisals of these projects were not detailed analyses, but rather straightforward methodologies intended to indicate whether the proposal was a worthwhile initiative. These examples indicate a relationship between the level of rigor applied to CBA and the political support for the project, highlighting the need for advocacy in association with analysis to change policy positions.

The recommended avoided costs and market rental value approaches are readily implemented, as they are based on available data and existing methodologies. While it is important to consider whether governments will accept the results of such analyses, the outcomes would provide assurance to funding agencies that the long-term social housing construction program represents a value proposition on the basis of budget impacts and of net benefit to society.

5.2 A purposeful and strategic vision for Australian social housing

Given the wider impact of housing market dysfunction on Australian households, political leaders and responsible policy-makers need to articulate a case for social housing that recognises its wider social, economic and cultural purpose, and establishes a clear, credible rationale to treat social housing as a government funding priority. This will inform and consolidate community and political support for more effective, efficient and equitable government intervention in housing markets.

With the leadership of a new national housing authority, the development of relevant capacities at the national and local level, in cooperation with state and territory governments, will mobilise governments' efforts to implement housing strategies and targets. Other national and regional governments are rising to the challenge, and several small nations, such as Finland, now deliver world's best practice in social housing funding, financing and regulation. Australia can learn from these efforts, to strengthen its social housing system and address the considerable and growing need for affordable and secure housing.

All levels of government need to work together to further develop the needs assessment and financial modelling tools presented in this report, in order to effectively measure and evaluate

their community's unmet need for social housing infrastructure. A national housing authority can—in collaboration with national and state policy-makers, mission-orientated financiers, builders, landlords and tenants—undertake the qualitative work needed to deliver social housing on the required scale.

In concert with the newly established NHFIC and CEFC and regulatory reform, a well-governed capital investment strategy would invest in well-regulated public or private social housing providers, adhering to a NFP model and focussed on the societal objective of secure, affordable housing for all Australians.

This Inquiry, and its supporting research projects, shows how well-directed efforts by all stakeholders—including Australian governments, the NHFIC and social housing providers—can contribute towards social wellbeing and inclusiveness, while at the same time improving economic outcomes and providing for stability, prosperity and sustainability. Such a strategy need not involve complex financing instruments or reliance on market or private sector willingness to engage—rather, the most effective, efficient methods available are within the full control of governments. It is time for Australia to take a more productive investment pathway and deliver social housing infrastructure to enhance the lives and wellbeing of all in the community.

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