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Evaluation and learning in public housing urban renewal

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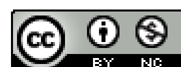

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Acronyms and abbreviations used in this report

ACF	Advocacy coalition framework
AURIN	Australian Urban Research Infrastructure Network
BCP	Better Cities Program
C+	Communities Plus
CBD	Central business district
CCD	Census collection district
CHP	Community housing provider
DCJ	Department of Communities and Justice (NSW)
EOI	Expression of interest
FACS	Department of Family and Community Services (NSW)
GPO	General Post Office
LAHC	Land and Housing Corporation (NSW)
LGA	Local government area
Ln	Natural logarithm
NFP	Not for profit
NHFIC	National Housing Finance and Investment Corporation
NIP	Neighbourhood Improvement Program
NR	Neighbourhood Renewal
NSW	New South Wales
PHRP	Public Housing Renewal Program
PPP	Public–private partnership
RFT	Request for tender
ROC	Registration of capability
ROSAS	Renewing Our Streets and Suburbs
SA1/SA2	Statistical Area Level 1/2
SAHT	South Australian Housing Trust

Executive summary

Key points

This report analyses how evaluation and learning from public housing renewal is informing policy development and delivery to maximise financial returns and socio-economic outcomes. The research was conducted pre-COVID-19.

- **Public housing renewal provides an opportunity for policy makers to give direction to urban reconfiguration processes. Since the 2000s public housing renewal has increasingly become part of a policy discourse that places emphasis on 'unlocking' under-utilised sites (i.e. public housing estates) for jobs, investment and urban renewal. In this intersection with urban renewal processes, mixed-tenure public housing renewal, in practice, becomes public housing urban renewal.**
- **This research highlights a consistency of views across stakeholders (often on pragmatic grounds) regarding 'how public housing renewal works'. It is thus possible to conceptualise learning and evaluation in public housing renewal policy-making within an advocacy coalition framework (ACF).**
- **An ACF framework focuses on the alignment of the beliefs, actions and interest of a range of stakeholders with respect to how policies work, or can work. Our use of the ACF is grounded in a consistency of views about 'how public housing renewal works', given the prevailing institutional and financial constraints, and the implication of this for the role of evaluation and learning, rather than any suggestion of a formal or informal actual coalition, or collusion, in agenda setting or public policy objectives.**

- Interviewees perceived evaluation to be one of several integral parts to the policy formation process. However, evaluations have frequently been summative, rather than formative in nature. In addition, stakeholders also relied on personal and institutional experience to inform policy development and decision-making. These learning dynamics have, over time, reinforced key aspects of the policy core belief within the advocacy coalition.

- The policy core belief guiding public housing urban renewal is characterised by a shared belief in the instrumental role of land values and land value change as a means of reconciling multiple asset- and people-based outcomes, while controlling the cost of public policy to public budgets. Mixed tenure, housing density and the strategic leveraging of land are policies that also extract land value for public housing reinvestment and other public policy goals.

- The central role of land and land value has raised concerns amongst tenants, groups external to the advocacy coalition, but also *some* of the interviewees that public housing renewal is increasingly driven by asset-based viability considerations and reduced government exposure to risk. While risk related to physical reconfiguration (public housing stock renewal) in this respect is reduced, other objectives (such as wider social and economic benefits for tenants) increasingly become shaped *by* – rather than shaping urban reconfiguration processes.

- Core members of the public housing renewal advocacy coalition are state governments and private developers. Additional members are (in some cases) community housing providers (CHPs) and local governments. Policy formation within advocacy coalitions is shaped by multiple factors. This includes evaluations, but also reacting to external events and internal stakeholder dynamics.

- In the contextual analysis in this research, change in relative income is used as an indicator of social and economic reconfiguration. Apart from Adelaide, census collection districts (CCD) subject to public housing renewal experienced little improvement in relative income status (1996-2016).

- **Citywide drivers (such as economic restructuring, urban sprawl containment, population growth) and neighbourhood drivers (such as economic obsolescence, relative incomes) are specific drivers of social and economic reconfiguration. These are evident in all three capital cities, leading to the potential to 'unlock' value through mixed tenure and public housing renewal.**
- **Policy options exist that can unlock more inclusive conceptualisations of value, and shift the reliance on land value in the program logic of public housing renewal. The design of public housing renewal tenders, and strategies for implementation, offer considerable opportunity for policy experimentation; identification and evaluation of assumed causal relationships and benefits. A social infrastructure perspective provides a framework for 'unlocking' additional and renewal project-specific values. A number of tools already exist to estimate the (equivalent) monetary value of wider social and economic benefits.**

The social and economic geography of Australian cities has changed significantly over recent decades. Public housing renewal provides an opportunity for housing policy-makers and planners to provide social housing and affordable housing, but also to give direction to processes of urban reconfiguration (Ruming 2018). In the public housing renewal policies of the three states examined in this report, we observed a connection between mixed-tenure housing development and social and economic reconfiguration. This relationship is centred around an urban renewal discourse that speaks of 'unlocking' under-utilised areas for jobs and investment, while creating development opportunities for private and not-for-profit (NFP) sectors. In this intersection with urban renewal processes, mixed-tenure public housing renewal, in practice, becomes *public housing urban renewal*.

In order to understand how policies such as mixed-tenure developments can facilitate both social and economic returns, this research examined the role of learning and evaluation in the evolution of public housing renewal in New South Wales (NSW), South Australia and Victoria. Specifically, the research aimed to analyse how evaluation and learning from public housing renewal is informing current policy and delivery to maximise financial returns and socio-economic outcomes.

This overarching research aim was guided by four research questions.

1. How has public housing renewal policy defined and reconciled competing objectives, outcomes and success indicators across the range of policy, community and private stakeholder interests?
2. How have social, economic and housing market indicators in public housing urban renewal areas changed in comparison to public housing areas not undergoing urban renewal and/or non-public housing areas undergoing significant housing redevelopment?
3. What program-specific site, neighbourhood and citywide evidence and learning was produced through evaluation activity of previous public housing renewal policies?
4. How has that evidence and learning informed the delivery of social, economic and financial returns in current public housing renewal policy?

Key findings

Conceptual foundations

A key finding of this research is that critical understandings around 'how public housing renewal works' (within the existing financial and institutional constraints) are widely shared across key public, private and NFP sector actors. Thus, public housing renewal policy development lends itself to an advocacy coalition framework (ACF) perspective in terms of the role of evaluation and learning in public policy formation and implementation.

An ACF perspective classifies key actors in the policy formation process into core members and additional members (players and tag-alongs), whose impacts on policy development vary. Core coalition members of public housing renewal in Australia are state governments and private developers, who share a view of land value change as the basic instrument for delivering public housing renewal. In some cases, CHPs are emerging as additional coalition members. The role of local government varies across projects.

Throughout this report we refer to this shared understanding of public housing renewal by key actors as the 'policy core belief'. The policy core belief is characterised by a shared belief in the fundamental role of changing land values to enable public housing urban renewal. One implication of this shared belief is that policy formation is generally built on the learnings and adaptations of multiple stakeholders.

Different types of evaluation play different roles in the policy development process. *Formative* evaluations collect and disseminate data and information for the purpose of modifying or improving policies and programs through 'instrumental' knowledge utilisation.[1] *Summative* evaluations collect and disseminates data and information for the purpose of making summary and descriptive statements and assessments of the value (benefit) of policies and programs, often as part of symbolic policy-making.

In order to contextualise the role and position of public housing renewal within the wider urban dynamics that shape cities and the public policy landscape, this research draws on urban-economics-informed frameworks of urban reconfiguration. A criticism of area-based approaches to addressing socio-spatial outcomes is their failure to fully address the systemic causes generating particular socio-spatial outcomes (Pawson, Hulse et al. 2015). A key framing of this research is, therefore, a contextualisation of the learning environment within the site-specific, neighbourhood-specific and citywide determinants of urban reconfiguration.

Contextualising the policy learning environment

A second key finding of this research is that evaluation is, at best, one of multiple sources of knowledge informing policy development and implementation across key stakeholders. Chapter 3, therefore, provides a brief overview of area-based public housing renewal programs in Adelaide, Melbourne and Sydney (between 1996 and 2016), as well as the spatial characteristics of urban reconfiguration.

Including the current suite of public housing renewal programs (until 2020), there have been, over the past three decades, broadly three phases of area-based renewal in each of the states, representing a gradual evolution of public housing renewal. That is, a shift from a perspective where physical public housing renewal and deconcentration of disadvantage provided the impetus for social and economic reconfiguration, to one where the potential for public housing urban renewal is contextualised within the wider processes that reconfigure urban space more generally.

Notwithstanding important differences between specific schemes, there is, across the current renewal programs (in the three states), a consensus around extractable land values as a vehicle for delivering physical reconfiguration of public housing stock. This emphasis on the economic potential of key renewal sites means a number of renewal aims are conditional on wider urban reconfiguration processes.

1 Knowledge utilisation can be broadly divided into instrumental and symbolic forms (see Section 2.2.1).

The analysis in Chapter 3 highlights the role of citywide and neighbourhood-specific determinants in shaping urban reconfiguration processes. 'Change in relative household income', as an indicator of social and economic change, was selected to be the primary indicator of urban reconfiguration for the study. When controlling for a range of determinants of urban reconfiguration, public housing renewal appears to have limited separate effect on change in relative income status. This is particularly the case for Melbourne and Sydney. In Adelaide there is a positive effect when compared to 1996, but less so for the 2006-2016 period. The learning environment within which key actors in the advocacy coalition gain experience and knowledge is therefore one where wider urban reconfiguration, measured by distance to CBDs and key characteristics of neighbourhoods, may be a critical enabler (generating value to be 'unlocked') of the existing public housing renewal programs – rather than the other way around.

The chapter also considers how public housing renewal programs have been evaluated, and how insights gained have been used to evolve public housing renewal policies. Despite the large number of studies undertaken to assess major urban renewal projects in each of the states, there is little evidence that these evaluations have informed or changed the program logic of successive urban renewal projects, although some process changes were identified (e.g. employing tenant relocation teams).

Does public housing renewal shape urban reconfiguration – or does urban reconfiguration shape public housing renewal?

Framed by current institutional and financial constraints (i.e. minimising costs and risk to the public sector), public and private sector stakeholders shared a core belief that ongoing land value change is a critical enabler of public housing urban renewal. This creates a dual dependency in which neither the public sector nor the private sector can 'unlock' this potential independently.

This shared belief has shaped key policies that characterise public housing renewal in each of the three states. These include leveraging publicly owned land, and capturing land value through tenure mix and increased residential density (particularly in Melbourne and Sydney). Moreover, these policies are instrumental in reconciling physical renewal objectives with area-based social and economic reconfiguration objectives.

Tenure mix and residential density increases enable social reconfiguration and (potentially) expansion of public housing stock in renewal areas, but are also instrumental in meeting viability requirements and maximising the strategic value of land. In this respect, a 30/70 public/private mix rule-of-thumb signals a shared understanding of the market parameters of the public housing renewal process.

The central role of land and land value in policy-making has raised concerns amongst tenants, groups external to the advocacy coalition and *some* of the interviewees that public housing urban renewal is increasingly driven by asset-based viability considerations and reduced government exposure to risk. While risk related to physical reconfiguration in this respect is reduced, other objectives (such as wider social and economic benefits for public housing residents) become increasingly shaped *by* – rather than shaping urban reconfiguration processes.

Moreover, while the program logic of the current renewal model goes some way to reducing public sector financial risk and reconciling multiple area-level social and economic reconfiguration outcomes, it is less clear how, and to what extent, the same is achieved for public housing communities.

Learning processes in public housing renewal

Stakeholders interviewed for this study identified and recognised evaluation as an effective tool for policy formation. However, it was viewed as just one of many sources of knowledge and information feeding into the policy formation process. Evaluations have frequently been summative, rather than formative in nature. In addition to evaluation, stakeholders relied on personal and institutional experience to inform policy development and decision-making around public housing urban renewal.

The policy formation process relies on learning derived from accrued expertise, past and current program experience, and external triggers. Important learning comes from key stakeholders, experts in their own right, who work within the government agencies responsible for public housing renewal. Despite shifts in institutional structures within government over time, many key stakeholders demonstrate a longevity of involvement and a 'shared' learning trajectory, either working in the same organisation over a long period or working on renewal across the public and private domains.

Other forms of information gathering include processes such as expression of interest (EOI), registration of capability (ROC) and request for tender (RFT). These are used for testing of policy assumptions – and the subsequent refinement of policy development – through a negotiated process with stakeholders. They also provide a critical means of assessing renewal parameters against market information and wider urban reconfiguration processes: for instance, the extent to which housing density can operate as a policy lever.

External events can be important catalysts for policy evolution or refinement. This is evident in both Victoria (through the Inquiry into the Public Housing Renewal Program) and NSW, where 'external' events and pressures (notably community pushback and political pressure) have led to demand for reassessment and review.

Policy development options

In all three states, the study identified the fundamental importance of land value change (resulting from urban reconfiguration) as driving a shared policy core belief. Consequently, learning and evaluation activity within organisations has been framed, and constrained, to create a self-reaffirming program logic of public housing renewal based on the policy core belief. The policy core belief acts as a defining characteristic of the public housing renewal advocacy coalition. It is, however, also reflective of a group of stakeholders tasked with the design and delivery of complex policy, within parameters that provide only limited capacity for alternative positions. Wider political settings – reflected in the dominant discourse that public housing renewal needs to be, in effect, 'cost neutral' or 'cost-minimised' to governments – create an environment in which particular policy approaches become engrained.

The learning task for members of the advocacy coalition has become one of ongoing iteration, mostly focussed on system and process improvement, rather than activity that fundamentally interrogates the program logic of public housing renewal and intended outcomes. Under such constraints, the limited capacity for independent evaluation activity and other evidence-based research to influence forward policy development can perhaps be better understood.

At the same time, it is clear that there is also a shared understanding among the advocacy coalition of the limits to the current public housing renewal model (i.e. where it may/may not work). There is also recognition that critiques of the current public housing renewal model may require model adaptation. This is evident in the advocacy coalition's ongoing commitment to innovation and attempts to adapt approaches to public housing renewal. The stimulus and capacity for innovation arise from internal and external pressures on core advocacy coalition members, but also from the increased participation by CHPs in the development and delivery of public housing renewal (representing a broadening of the advocacy coalition).

A number of policy options exist that can, in the terminology of the current public housing renewal model, 'unlock' a broader *conceptualisations* of value.[2]

- Design of public housing renewal tenders, and strategies for implementation, offer considerable opportunity for policy experimentation; identification and evaluation of assumed causal relationships and benefits.

2 A broader conceptualisation of value that can be generated by public housing urban renewal can relate to public sector cost offsets, and individual and community health and wellbeing improvements that currently do not figure directly in the evaluation of development viability assessments,

- A social infrastructure perspective offers one option for adjusting the logic of renewal programs. It provides a framework for 'unlocking' additional and renewal-project-specific value. A number of tools already exist to estimate the (equivalent) monetary value of wider social and economic benefits.

Value and benefits identified and/or 'unlocked' through policy experimentation and innovation can provide an additional source of renewal-specific revenue to support delivery of policy objectives. However, public sector innovation is required to channel additional value to project finances.

The study

This report is a stand-alone Australian Housing and Urban Research Institute (AHURI) project, examining how evaluation and learning from public housing renewal is informing policy and delivery to maximise financial returns and socio-economic outcomes in public housing urban renewal.

Data was collected through a mixed-methods approach, including document analysis and higher-level literature analysis, quantitative and econometric analysis, and a series of key actor interviews.

The document and higher-level literature analysis of evaluation history in Adelaide, Melbourne and Sydney set out to explore public housing renewal activity in each city, collate and examine past evaluation studies, and identify sites of area-based public housing renewal from the 1990s until the present day.

The quantitative analysis examined change in relative household income between 1996 and 2016, as the primary indicator of urban reconfiguration in the three capital cities. Change in the relative household income status of a collection district (CCD) is related to the neighbourhood and citywide urban dynamics that shape urban reconfiguration, and thus provides a contextual setting for determinants of change in land values and the policy learning environment.

Key actor interviews were held in Adelaide, Melbourne and Sydney with individuals involved in public housing renewal activities in each city. Participants were drawn from state government, local government, CHPs, academics and private sector investors and developers. We interviewed a total of 28 actors involved in public housing urban renewal: 13 in NSW, nine in Victoria and six in South Australia.

Interviews were analysed thematically using a common coding frame. In the first instance, analysis was undertaken separately for each state. In the second instance, the analysis included a thematic integration of findings from the three states. The analysis of interview data was framed within an ACF and an urban economics reconfiguration framework.

1. Introduction

- **Public housing renewal provides an opportunity for housing policy-makers and planners to give direction to the processes of urban renewal. Increasingly, public housing renewal discourse is integrated within an urban renewal process, which, in turn – given current financial and institutional constraints – shapes policy approaches and renewal outcomes.**
- **This report examines the role of evaluation and learning in public housing renewal programs in Adelaide, Melbourne and Sydney, and in the evolution of public housing renewal policy since the 1990s.**
- **Overall, the study seeks to understand how key public policies, such as mixed-tenure development, can facilitate both social and economic returns. This requires insight into the context within which policy formation takes place (determinants of urban reconfiguration processes, past evaluations) and the mechanisms shaping policy formation (learning and evaluation, multi-actor policy formation processes).**

1.1 Why this research was conducted

The social and economic geography of Australian cities has changed significantly over the past few decades. Inner-city revitalisation, urban renewal and suburban/peripheral deindustrialisation has led to significant changes in urban land values and reconfiguration of physical, social and economic spaces. Public policies have, to some extent, facilitated these changes (Pawson, Hulse et al. 2015; Burke and Hulse 2015). However, governments have also sought to introduce policies that address particular social justice issues, such as displacement of lower-income households from particular localities and a lack of affordable housing (Davison, Gurran et al. 2012). Nevertheless, housing affordability, particularly for lower-income households, has continued to declined (Daley and Coates 2018).

Public housing renewal provides an opportunity for housing policy-makers and planners to provide social housing and affordable housing, but also to give direction to the processes of urban reconfiguration (Ruming 2018). Among the three states examined in this report, there is a clear connection between mixed-tenure housing development and economic reconfiguration. This relationship is centred around an urban renewal discourse that speaks of unlocking under-utilised areas for jobs and investment, while creating development opportunities for private and NFP sectors. In this intersection with urban renewal processes, mixed-tenure public housing renewal, in practice, becomes 'public housing urban renewal'.

A critical reflection on the current public housing renewal model reveals a predominance of commercial and economic objectives. Australian practice, in this respect, differs from some international practice (e.g. Britain and New Zealand), where social policy objectives (such as addressing housing market failure and poverty/area disadvantage) have played a more central role (Ruming 2018; Gurran and Phibbs 2018). Similarly, area-based renewal policies have frequently failed to appropriately reflect the citywide and global processes that drive urban transitions and shape socio-spatial outcomes (Pawson, Hulse et al. 2015). Recently, the Victorian Inquiry into the Public Housing Renewal Program raised critical questions around key aspects of public housing renewal, such as sale (and financial returns) of public land, and the rationale for underlying mixed-tenure assumptions (Parliament of Victoria 2018).

Such critiques highlight a disconnect between how public housing renewal operates and its ability to reconfigure social and economic outcomes for public housing communities. At the same time, it is clear that public housing renewal programs are evolving. Excluding the those underway as this research is undertaken public housing renewal programs in NSW, South Australia and Victoria public housing renewal have undergone two phases of evolution: the first during the 1990s, and the second in the 2000s.

In order to understand how policies such as mixed-tenure developments, can facilitate both social and economic returns, this research analyses the role of learning and evaluation in the evolution of public housing renewal in NSW, South Australia and Victoria. Specifically, the research **aims to analyse how evaluation and learning from public housing renewal is informing current policy and delivery to maximise financial returns and socio-economic outcomes.**

This overarching research aim is guided by four research questions.

1. How has public housing renewal policy defined and reconciled competing objectives, outcomes and success indicators across the range of policy, community and private stakeholder interests?
2. How have social, economic and housing market indicators in public housing urban renewal areas changed in comparison to public housing areas not undergoing urban renewal and/or non-public housing areas undergoing significant housing redevelopment?
3. What program-specific site, neighbourhood and citywide evidence and learning was produced through evaluation of previous public housing renewal policies?
4. How has that evidence and learning informed the delivery of social, economic and financial returns in current public housing renewal policy?

1.2 Research context

The primary and secondary data collection for this research was carried out throughout 2019 and January 2020. The emergence and impact of COVID-19 was, at the time of the research, not part of the policy context or horizon. During COVID-19 a number of housing related inequalities were accentuated and a range of policy measures addressing rough sleeping and homelessness, and housing security were put in place as temporary measures. In each of the states COVID-19 has led to some rethinking of public housing. For instance, in Victoria the $5.3 billion Big Housing Build announced in November 2020 aims to replace some aging public housing stock and deliver new social and affordable housing, in partnership with industry, community housing sector, local governments and institutional investors.[3] A new government agency, Homes Victoria, was established to manage Victoria's social housing system, focused on fast-tracking social and affordable housing delivery and planning for long-term housing growth.

3 Details of Victoria's Big Housing Build can be found here: https://www.vic.gov.au/homes-victoria-big-housing-build and https://www.vic.gov.au/about-homes-victoria.

This new policy initiative falls outside the scope of this study but can be understood as continuing evidence of external events acting as impulse for policy evolution. The global pandemic can be understood in a similar way to the global financial crisis; acting as a macro-level external trigger for significant policy adjustment. As is show in this report, evaluation and learning does play a role in policy formation, but frequently in a summative manner, rather than as a deliberate assessment of how the program logic of public housing renewal achieve social, economic and financial returns. In the advocacy coalition framework, it is often exogenous changes in social and economic conditions, public opinion and/or the advocacy coalition itself that provides the impetus for policy change (Eising 2013), rather than deliberate assessment and policy experimentation.

It is important to keep in mind institutional and contextual differences, and recent history, when assessing the evidence presented in this report – particularly in Chapters 4 and 5, where the research draws inferences from interview data collected in the separate states about the role of evaluation and learning in public housing renewal policy-making. However, we feel this approach can provide meaningful insight, due to the strong similarities in the processes that shape public policy formation across the three states (as opposed to the particular design elements of state-specific policies) and also in the determinants of urban reconfiguration in each state.

For example, in all three states there is a similar organisational separation of asset and tenant management, and a trend towards renewal interests being led by the asset/land/development teams. There also appears to be a shared emphasis across the states on redevelopment outcomes – and the conditions required to enable redevelopment of renewal sites – over tenant-centred rationales for intervention. The current policy rhetoric is very much framed around seeking positive tenant outcomes, but those positive outcomes are to be enabled through an asset-based redevelopment approach.

1.3 Research methods

This project employs a mixed-methods approach to examine how evaluation and learning from public housing renewal is informing current public housing urban renewal policy. The research focusses on three capital cities: Adelaide, Melbourne and Sydney. Data was collected through document and higher-level literature analysis, quantitative analysis and qualitative analysis (key actor interviews). These methods were used to engage with the public policy development processes (i.e. the role of evaluation and learning) and institutional and urban reconfiguration processes shaping the learning and policy evolution environment. The following subsections introduce each method.

1.3.1 Literature and document analysis

Research question 1 focusses on how public housing urban renewal traditionally has reconciled multiple objectives across different stakeholders. A higher-level literature and document analysis was conducted based on past evaluation experience and documentation. This part of the analysis focussed primarily on Australia.

A number of public housing renewal initiatives over the last 20 years contained, or were accompanied by, some form of summative or formative evaluation activity. This part of our research aimed to identify: firstly, *what* was evaluated; and secondly, whether evaluations aimed to engage with the program logic of public housing renewal – that is, the extent to which key causal assumptions underlying renewal were assessed with respect to program outcomes as a whole.

Unfortunately, we were able to gain only very minimal insight from contractual arrangements and tender documents, due to limited access. In Victoria, some details of the tendering process were revealed through the Inquiry into the Public Housing Renewal Program (hereafter PHRP Inquiry). Tendering documents, however, are considered commercial in confidence and so were not available to the research team. In a number of instances, this also constrained data collection from key actors, as some details around contractual arrangements and finances could not be discussed in detail. This has bearing on how one interprets data obtained through the interviews, as the ability of the research team to contextualise discussion within contractual, legal and financial constraints was restricted as a result. It also relates to how one conceptualises the role of evaluation and learning in public policy formation.

Throughout this report, we use an ACF to conceptualise and contextualise the role of learning and evaluation in public housing renewal.[4] Advocacy coalitions are characterised by shared beliefs around how public policy works (in this case, public housing renewal). A range of sources of knowledge and understanding can support beliefs. However, without insight into key tendering documents and contractual arrangements, it is difficult for researchers to assess the extent to which such beliefs are embedded in the legal frameworks that guide public housing renewal. It is also difficult to assess the extent to which the narratives around public housing urban renewal exhibit confirmation bias (i.e. are self-reinforcing) and/or selective attention.[5]

1.3.2 Quantitative and econometric analysis

A criticism of area-based renewal policies has been their failure to adequately connect area-based outcomes with the citywide and global determinants of socio-spatial outcomes (Pawson, Hulse et al. 2015). Research question 2 aims to contextualise the policy evolution process and urban reconfiguration environment within which evaluations are based, learning takes place and urban renewal operates. It focusses on understanding the role of social, economic and housing market contexts in determining the urban reconfiguration processes in Adelaide, Melbourne and Sydney, including how public housing renewal relates to these.

Our primary indicator of urban reconfiguration is the *change in relative household income* between 1996 and 2016. This indicator draws on urban economics frameworks evaluating the dynamic processes of urban transitions (e.g. Rosenthal 2008). Recent public housing renewal programs in Adelaide, Melbourne and Sydney are situated within an urban renewal discourse that references unlocking economic value and stimulating economic activity. The process of public housing renewal (i.e. stock reconfiguration and deconcentration of public housing) thus increasingly interacts with the economic and socio-spatial determinants of neighbourhood outcomes. While a number of indicators (tenure, occupation, education, housing/land value) provide evidence of area-based social and economic reconfiguration, several of these (occupation, education and housing value) are correlated with income. Other indicators, such as change in public housing (tenure) do not necessarily capture significant social or economic change if this change is accompanied by transfer from public housing to low-income rental (private or community housing). Change in relative income, therefore, provides an indication of the extent to which both social and economic reconfiguration has taken place.

1.3.3 Key actor interviews

A series of key actor interviews were carried out in each of the three capital cities. The majority of interviews were undertaken from September to November 2019, with a small number taking place through December 2019 and January 2020. In Victoria, an external research application was submitted to the Centre for Evaluation and Research at the Department of Health and Human Services (DHHS), with approval obtained on 29 August 2019. Access to key public sector actors in NSW and South Australia was less formalised.

Interview data collection was a more protracted process than initially anticipated. The initial research design envisaged interviewing individuals with knowledge of specific public housing renewal initiatives, as a means of eliciting information around the use of evaluation and its role in learning and subsequent policy development. In practice, the interviews that unfolded were characterised much more by individuals' portfolio experience. Although interviewees had experience of specific renewal initiatives, any identification of links (learning) between specific projects and subsequent policy development was, in many cases, speculative at best. In part, this outcome reflects a dearth of formative evaluation and analysis of public housing renewal experiences in each of the three capital cities.[6] Therefore, the case study approach is not centred on specific initiatives within public housing renewal programs, but focusses more on program-level understandings and evolution.

4 Sections 2.2 and 2.3 provide further details of the framework.

5 Selective attention: due to multiple demands on policy-makers time attention becomes a limited resources. Consequently, selective attention enables focus on particular issues for shorter or longer periods of time, but at the expense of filtering out other issues. This can lead to other issues being ignored or considered of lesser priority.

6 Evaluations can broadly be categorised as 'formative' or 'summative'. These concepts are discussed further in Section 2.

We interviewed a total of 28 key actors involved in public housing urban renewal across the public, private, academic and community sectors in the three states: 13 key actors in NSW, nine in Victoria and six in South Australia. Interviews were transcribed using an online transcription service.

All interviewees signed a consent form, where they could select a desired level of anonymity. When presenting interview excerpts in this report, the research team has opted to identify participants by uniformly, and only by broad sector, role and location (e.g. *Government Official, Victoria*). Interviews comprised a number of open-ended questions (Appendix 3).

1.4 Structure of this report

The report is divided into six chapters. Chapter 2 provides an overview of the key conceptual foundations of the research. These relate to evaluation practices and the role of evaluations in public policy formation. The interaction of public housing renewal with urban reconfiguration processes necessitates a multi-actor perspective on the policy formation process. Chapter 2 therefore also provides a brief introduction to key political science perspectives on public policy formation. A contention throughout this report is that critical understandings around 'how public housing renewal works' are widely shared across public, private and NFP sector actors, and thus public housing renewal lends itself to an ACF perspective in terms of the role of evaluation and learning. Finally, Chapter 2 provides an introduction to an urban economics perspective on the dynamic processes of urban renewal and change.

Chapter 3 provides policy context and overview of previous evaluation research. It provides a brief historic context and overview of public housing renewal phases since the 1990s, an analysis of the spatial characteristics of urban reconfiguration, and discussion of past housing renewal evaluations.

Chapter 4 analyses shared beliefs around how public housing renewal works, and examines key policies (such as strategic utilisation of land values and mixed-tenure developments) characterising the implementation of public housing renewal.

Chapter 5 analyses the role of evaluation and learning in shaping current public housing renewal programs in the three states. Different mechanisms and processes of learning are considered that reaffirm (subject to existing public sector financial and institutional constraints) key aspects of interviewees' shared understanding of how public housing renewal works.

Finally, Chapter 6 draws together key insights from the preceding chapters and implications for policy. These are not conclusions, but rather considered options for reframing the program logic of public housing renewal from an impact and/or social infrastructure perspective. Such a reframing (to some extent already emergent in Australia and internationally) can unlock additional value tied to wider social and economic outcomes and deliverables.

2. Research conceptual foundations

- **Definitions of public policy evaluation assume that public policy programs are based on outcome-producing theories. Public policy evaluation, therefore, needs to both engage with the program logic of policies and accurately measure and describe program outcomes.**
- **Evaluations can broadly be divided into *formative* evaluations, i.e. the collection and sharing of information and data for the purpose of modifying or improving policies and programs through 'instrumental' knowledge utilisation; and *summative* evaluations, i.e. collection and presentation of information and data for the purpose of making summary and descriptive statements and assessments of the value (benefit) of policies and programs. These evaluation types play different roles in the process of public policy formation.**
- **Public housing renewal involves a number of public, private and NFP stakeholders. Public policy formation is a process that seeks to reconcile multiple objectives. Similarly, renewal policies evolve in response to learning and updating of objectives across each of these stakeholders. Public policy frameworks provide a number of conceptual approaches to analysing policy formation from a multi-actor perspective. Throughout this report an ACF is applied. This framework centres on the role that shared, or common, beliefs among stakeholders in the policy formation process play in articulating problems and the ways to solve them.**
- **Public housing renewal provides a policy instrument for shaping urban reconfiguration. However, its efficacy as an urban reconfiguration tool is determined by site, neighbourhood and citywide dynamics that reflect economic, social and institutional drivers of land value change across cities. These processes and drivers are central to understanding, identifying and evaluating public housing urban renewal outcomes.**

2.1 Introduction

Public housing renewal policies provide an opportunity for public policy to give direction to urban reconfiguration. Of central interest to this research is the role of evaluation and learning in shaping public housing renewal policy. However, the role of evaluation and learning in giving direction to (public housing) urban reconfiguration is constrained along two dimensions. First, a political economy dimension that brings together multiple actors with varying converging and diverging interests. This requires a multi-actor perspective on policy formation. Second, an urban mobility dimension (in terms of both households and businesses) that gives rise to interconnected site, neighbourhood and citywide dynamics that both frame and are framed by the political economy dimension. In this section, we briefly set out the conceptual approaches that underpin the analysis in this report.

2.2 Evaluation and learning in public housing renewal

Lester and Stewart (2000), among others, describe public policy evaluation as learning about the consequences of public policy. In their basic form, public policy programs such as public housing or urban renewal aim to create some level of change. Public housing and urban change can be narrowly defined – by aims such as improving the thermal comfort of a set of buildings or enhancing their physical layout. However, they can also be more widely defined as interacting with the processes of urban reconfiguration in such a way as to give direction to the processes themselves. For example, community development may occur through place-making processes and tenant wrap-around services that support the capacity and capabilities of individuals to become more independent agents of change (whether for change of self and/or change of neighbourhoods).

Vedung defines policy evaluation more specifically, as the 'careful retrospective assessment of the merit, worth, and value of administration, output, and outcome of government interventions, which is intended to play a role in future, practical action situations' (Vedung 2017: 18).

Common to both definitions is an assumption that public policy programs embody outcome-producing (causal) theories. The design of public policy evaluation therefore needs to engage with the program logic of public housing renewal (identifying and testing the links between program measures/activities and program outcomes) and accurately measure and describe program outcomes. These two elements of evaluation are sometimes referred to as *formative* and *summative*. Herman, Morris et al. (2011) explain that formative evaluations seek to 'collect and share … information that will lead to the modification or improvement of a program' (p. 42); while summative evaluations seek to 'collect and to present information needed for summary statements and judgments about the program and its value' (p.16).

Vedung's definition highlights that the intended purpose of evaluations includes shaping subsequent and related policy-making. In the 'public policy as rational decision-making' tradition, evaluations produce information to influence the direction of future policy-making (Weiss 1999).[7] Evaluations thus form an integral part of 'policy learning'. This method of policy formation is encapsulated in the five-stage public policy formation model arising from Lasswell's (1956) seminal work, where evaluation is considered an essential component of the policy formation process (Howlett 2011).

Subsequent work has, however, provided a number of alternative perspectives for thinking about the factors that shape public policy formation, and the process of learning in public policy formation. These are discussed in more detail below.

7 A 'rational' model of decision-making follows a number of steps to reach a logically sound decision.

2.2.1 How evaluation and learning shape public policy

Evaluators frequently expect their work to shape the direction of future policy-making; however, the information provided to policy-makers from evaluations only constitutes one of the many factors that inform the policy formation process. Moreover, while evaluations can assist policy-makers and relevant stakeholders to identify the consequences and outcomes of public housing and urban renewal, they do not necessarily provide clear guidance on the 'direction of the system as a whole' (Weiss 1999: 477).

The 'system as a whole' does not only pertain to specific public housing or urban renewal projects, but rather to the process of public policy formation more generally. Public housing renewal projects are but one of many competing potential uses of public funding and resources. Moreover, evidence on the functioning and outcomes of public policy is rarely uncontested; therefore evaluations cannot necessarily be expected to set directions or settle arguments over opposing ways of delivering public policy (Banks 2018). Weiss (1999) provides a typology of factors shaping policy formation processes, which she calls 'the four Is': *i*nterests, *i*deologies, *i*nformation, *i*nstitutions.

- **Interests (multiple stakeholders):** The various organisational structures (public and private) involved in the planning, financing and delivery of public housing and urban renewal have objectives beyond the renewal project. Some of these may not be measured, or even appropriate to measure, as part of a program evaluation, but nevertheless shape ongoing program development (e.g. extending influence, organisational remit or market share, budget allocations, and experience or renown).
- **Ideologies:** Competing ideologies, in the form of systems of belief or values upon which organisations and political parties are based, provide competing systematic ways of understanding cause and effect in the short and long run.
- **Information:** Information provides insight and knowledge about outcomes and how programs may or may not work. Evaluations are a source of such knowledge and insight, but stakeholders in public housing and urban renewal also draw information from a range of other sources. Many stakeholders bring considerable knowledge from past experience/careers working directly with public housing and/or urban renewal. Relevant information can also come through print and social media, professional networks, consultants, other experts, and public forums and agencies. Information gained through evaluation (even where it attains ideological neutrality) still has to compete with multiple other sources of information.
- **Institutions:** Policy-makers and stakeholders operate within organisations and bureaucracies with specific internal and external 'rules of the game'. These rules give direction to permissible and feasible behaviours and processes of decision-making. For instance, procurement rules, budget rules, and organisational delineation (e.g. housing authority versus educational authority) all affect the way in which public housing and urban renewal can be shaped. For this study, as noted in Chapter 1, access to key documents that might reveal details of institutional and contractual workings was limited.

Each of these factors interact to shape public policy. For instance, information can shape the interest of stakeholders or the 'rules of the game'. Information can also result in the updating of values and beliefs. However, many of these 'effects' are slow burning and can take considerable time before they have a practical impact on policy-making (Weiss 1999). The fact that multiple factors shape public policy formation also means that the way evaluations and information are fed in to the policy-making process is often ad hoc and lacks institutionalisation.

The knowledge produced through evaluation thus forms part of a wider set of factors shaping public policy formation. The manner in which knowledge – evaluation based or otherwise – affects the policy formation process also depends on how that knowledge is utilised in the policy-learning process.

Knowledge utilisation can be broadly divided into instrumental forms and symbolic forms. In *instrumental* forms of knowledge utilisation, knowledge is a key source for policy-making. Formative evaluations use instrumental forms of knowledge utilisation and can form part of an information strategy intended to test assumed causal relationships or beliefs around policies. In *symbolic* knowledge utilisation, knowledge is used as a source of legitimation for particular outcomes or agents (Moyson, Scholten et al. 2017: 166). Summative evaluations that document outcomes and/or 'demonstrate' value can form an element of symbolic knowledge utilisation.

While many evaluators and academics regard the instrumental form as the more appropriate use of knowledge utilisation (e.g. Weiss 1999; Banks 2018), other actors' understanding and use of evaluations conform more closely to the symbolic form. For instance, the use of tenant satisfaction surveying, reporting against service-level agreements, and program monitoring can provide information to justify particular contractual arrangements and evidence that a specific program 'works'. In more prosaic terms, the former chairman of the Productivity Commission, Gary Banks, remarked that, 'increasingly, evidence is judged not on its merits, but by who is using it and for what purpose' (Banks 2018).

The manner in which knowledge is utilised in the policy learning process is, according to Dunlop and Radaelli (2013), a function of 'tractability' and 'actor's certification'. *Tractability* refers to the degree of certainty around pay-offs from specific actions. For instance, the tractability of stock replacement (in terms of how many new housing units can be provided as a result of a particular level of investment) is much greater than that of the employment outcome of upskilling or jobs-ready programs delivered as part of a community development component of a public housing or urban renewal program. Where tractability is high, solutions can be handled in a more technocratic or technical fashion. Where tractability is low (i.e. there is a high degree of uncertainty) the efficacy of investment remains contestable and so more political in nature (Dunlop and Radaelli 2013: 602). In such cases, shared beliefs become important.

Actor's certification refers to the authority and legitimacy of particular stakeholders or institutions in the learning process. The key issue here is whether an authority ('teacher') can be identified that enjoys broad social legitimacy (Dunlop and Radaelli 2013: 602). When there is no authority with broad social legitimacy (i.e. no clear hierarchy of who should learn from whom) then learning becomes the outcome of social relations within a community of learning, or network of actors (Dunlop and Radaelli 2013: 607).

2.3 Perspectives on public policy formation

The discussion on evaluation, learning and policy formation in the above section highlights the competing factors that shape public policy-making. Policy formation and learning are both technical and social processes. In this section, we briefly review two perspectives on public policy formation that extend beyond the 'policy as rational decision-making' paradigm and serve as a conceptual basis for situating evaluation and learning experiences in public housing urban renewal.[8] These perspectives take as their starting point an understanding that organisations and institutions manage large amounts of information, engage with highly complex social and economic phenomena (sometimes with low tractability), and are typically time constrained (Zohlnhöfer, Herweg et al. 2015). For these reasons, the organisational and institutional literature often views actors as 'boundedly rational' and as 'satisficers' rather than 'optimisers' (Simon 1997; Williamson 1985).[9]

8 Note: these alternative perspectives of decision-making in the policy formation process do not imply that actors are irrational.
9 In Simon's (1997) work, organisations and decision-makers select solutions based on acceptability standards/thresholds, rather than necessarily searching for optimal or maximising solutions. Bounded rationality (due to cognitive limitations, tractability/complexity of issues and time constraints) additionally constrains optimal or maximising behaviour in decision-making.

2.3.1 Punctuated equilibrium theory (PET)

The punctuated equilibrium theory (PET) asserts that policy often exhibits long periods of policy stability. In this framework policy change occurs in discrete (and rapid) shifts, rather than as the result of an ongoing cycle of problem identification, solution implementation and outcome evaluation (Nowlin 2011). According to Nowlin, PET has become 'a theory of information processing, attention, and policy choice by governments' (2011: 49). Policy formation takes place within an external environment produces a range of information and signals. Information and signals, in turn, are collected, assembled, interpreted and prioritised by governments and policy-makers (Jones and Baumgartner 2005: 8). Shifts in policy attention can be brought about by print and social media coverage, focussing events, or activities that form part of standard democratic processes (e.g. personnel change, inquiries, elections).

However, due to time and resource constraints (in addition to behavioural/cognitive assumptions), and the amount of information/signals produced by the external environment, the processing, attention and choice afforded by policy-makers is not necessarily proportional to the weight of the information produced. This can produce stability, for instance when information and signals pertaining to particular social problems are not prioritised relative to other issues. It can also produce rapid change, when information and signals to the same social problems are enhanced due to specific events. The Grenfell Tower fires in London is an example of a discrete event directing large-scale attention to long-standing issues in social housing management and social justice. COVID-19 provides another example. The process of policy development and change is therefore often characterised by 'attention scarcity, selective attention and attention-driven choice' (Nowlin 2011: 50). In terms of learning, relevant actors do not necessarily 'update their preferences based on information, but attention devoted to one problem or issue becomes dependent on attention devoted to other issues so that responses can range from under to over-reaction' (Eising 2013: 12).

2.3.2 Advocacy coalition framework (ACF)

The ACF perspective centres on the role that shared, or common, beliefs among stakeholders in the policy formation process play in articulating problems and the ways to solve them (Weible and Sabatier 2007; Eising 2013; Howlett, McConnell et al. 2016). An ACF thus 'focusses attention upon the role of ideas, learning, and coalition behaviour in policy-making' (Howlett, McConnell et al. 2016: 2). Actors are considered 'boundedly rational' (Weible, Sabatier et al. 2009) and filter information through belief systems and ideologies. Actors in the policy formation process are therefore classified, based on their belief systems and the alignment of beliefs systems, into advocacy coalitions. An advocacy coalition framework is thus also a conceptual tool for considering the alignment of beliefs and views of different stakeholders and the implication of such alignment for policy formation, and the role of evaluation and learning. Belief systems are organised hierarchically (Weible, Sabatier et al. 2009: 122), as summarised here.

- **Deep core** beliefs are at the top of the belief system. These are broad and typically normative beliefs, such as liberal or conservative values, small or big government. The importance of prioritising fiscal neutrality or minimising public sector expenditure and risk in public housing renewal is an example of a deep core belief. Recognition of actors' deep core beliefs is important to understanding their decision-making processes. In this research, fiscal neutrality/minimising public sector expenditure is taken as an overarching constraint on public housing renewal. Drivers and foundations for this 'belief' are outside the remit of this research.
- **Policy core** beliefs are in the middle of the hierarchy and specific to policy subsystems (e.g. housing, public housing renewal). Policy core beliefs are shared beliefs around causal relationships in a specific policy area and, as such, act as the glue around which coalitions form (Rozbicka 2013). Policy core beliefs are considered resistant to change, but more likely to adjust in response to new information/knowledge than deep core beliefs.
- **Secondary beliefs**, in comparison, are narrower in scope (in terms of both substance and geography), often more empirically based, and can relate to specific aspects of implementation, funding and/or delivery (Cairney 2015). According to ACF, secondary beliefs are more likely to change over time. In public housing and urban renewal policy, secondary beliefs may relate to specific issues such as social mix, or management practices that form part of an overall policy (without necessarily being critical to the policy core belief around public housing or urban renewal). Research in the ACF tradition has tended to find that learning within advocacy coalitions can be self-reinforcing (i.e. exhibits confirmation bias) and that cross-coalition learning is more likely to take place where policy issues are tractable and focus on secondary beliefs (Weible, Sabatier et al. 2009: 130).

According to some of its main proponents, the ACF perspective is particularly useful when considering public policy problems characterised by goal disagreement and/or technical disputes involving multiple actors across public and private sectors (Weible and Sabatier 2007).

Advocacy coalitions are made up of core members, players and tag-alongs, whose impact on policy formation varies. For instance, core members may influence particular elements of policy design to further specific, shared, policy solutions, whereas the influence of other coalition members may be substantially less (Rozbicka 2013). We contend throughout this report that views on how public housing renewal works – within the confines of fiscal neutrality/limited direct expenditure – are widely shared among stakeholders. It is thus possible to conceptualise public housing renewal policy and learning as taking place within an advocacy coalition. Our use of the ACF is grounded in a consistency of views about how public housing renewal works, given the prevailing institutional and financial constraints, rather than any suggestion of a formal or informal actual coalition setting policy agendas.

Core coalition members of public housing renewal in Australia are state governments and private developers, who share a view of land value change as the basic instrument for delivering public housing renewal in partnership. Throughout the report we frequently refer to these stakeholders as the core advocacy coalition. The term advocacy coalition is therefore here used as a short-hand for the alignment of views around specific policies, land values and learning processes in public housing renewal.

Core coalition members bring resources and competencies to public housing renewal without which the policy core belief cannot be sustained. In some cases, CHPs are emerging as members (experience varies somewhat across NSW, South Australia and Victoria), although their role within the coalition is limited and not necessarily essential to sustaining the policy core belief. Other relevant actors are local councils – which control, to some extent, the site of public housing urban renewal (experience here also varies somewhat across the three states) – and tenant groups/local communities.

There is, in Australia and elsewhere, a general tendency within housing policies for erstwhile public sector functions to be delivered through third-sector organisations, or for additional responsibilities to be placed on third-sector organisations as the states retreat from direct provision to arms-length regulation (Wolch 1990; Nygaard, Gibb et al. 2007; Nygaard, Berry et al. 2008). This is also evident in current renewal programs, where CHPs increasingly deliver tenancy management and place-making services.

In the ACF perspective, public policy learning and evolution occurs in response to persistent change in the systems of belief that shape the interpretation of information (Eising 2013). The updating of systems of belief can be the result of experience (e.g. shared lessons from joint participation in public housing or urban renewal) and/or new information (e.g. from evaluations). In stable coalitions, evolution and learning results in adaptations to secondary beliefs, but often on the coalition's own terms – that is, by selecting information *considered* to be relevant and not detrimental to core beliefs that hold the coalition together (Cairney 2015).

However – and this is sometimes regarded as the more important point (Eising 2013: 15) – policy may evolve as the result of exogenous changes in socio-economic conditions, public opinion and/or the advocacy coalition. These changes can trigger punctuations in the equilibrium (a shared feature with PET) by altering the resources available to address issues, or the relative power of competing advocacy coalitions (Weible, Sabatier et al. 2009). Finally, policy change may also follow from internal subsystem events, or from negotiated agreement between two or more advocacy coalitions (Weible, Sabatier et al. 2009: 124).

Arising out of past public housing renewal experience in each of the three states is a broadly similar understanding of how – *within the existing financial and institutional constraints* – current public housing urban renewal works to deliver public housing reconfiguration (see Chapters 4 and 5). This understanding was broadly shared across interviewees from the public, private and NFP sectors. Throughout this report we refer to this shared understanding by key actors as the 'policy core belief'. The policy core belief is characterised by a shared belief in the instrumental role of changing land values to enable public housing urban renewal through a set of specific policies, including:

- demolishing, replacing and modernising current public housing stock to better meet current social housing demand
- increasing the stock of public housing (and affordable housing), creating integrated public–private communities and attractive residential environments
- controlling the cost of public housing renewal policies to public budgets.

2.4 Determinants of urban reconfiguration processes

Throughout the 1990s and 2000s the public policy approach to public housing renewal evolved, but it remained grounded in area-based programs designed to address physical and social challenges associated with public housing estates. A criticism of this approach, in Australia and overseas, is the failure of area-based policies to fully address systemic causes of particular socio-spatial outcomes (Pawson, Hulse et al. 2015). That is, spatial concentrations of both physical (housing) decay, and social and economic characteristics, in cities are typically related to institutional as well as urban and global processes. For public housing renewal in Australia, a constraining legacy remains with respect to enabling social and economic reconfiguration through housing-led approaches. Constraints include: tenure residualisation through allocation policies, and limited financial sustainability of public housing (Hall and Berry 2007);[10] design characteristics setting public housing estates apart from other residential areas; and urban deindustrialisation leading to the spread of public housing estates across both low- and high-demand neighbourhoods (Pawson and Pinnegar 2018).

Urban reconfiguration is a multilevel and interconnected processes. With respect to the physical reconfiguration of housing stock, processes operate across site, neighbourhood and citywide levels that interact with economic, socio-demographic and institutional drivers (see Table 1). For instance, a backlog of maintenance has significantly affected the standard and quality of public housing, some of which is now physically obsolete. Unlike owner-occupied housing, maintenance and reinvestment decisions are not determined by individuals, but by public sector expenditure. Thus in areas dominated by public housing, a change in tenant income would not necessarily generate an improvement in the housing stock, as might happen in gentrifying areas where higher incomes transform the housing stock. In both cases, however, planning and land-use regulation place constraints on how the housing stock is developed.

Housing may also become *economically* obsolete. That is, changes in surrounding areas may spill over to public and private residential areas, generating an impetus for physical reconfiguration. However, here too, tenure and institutional determinants constrain the extent to which reconfiguration can occur. Economic obsolescence is a factor in the current public housing renewal discourse that references 'unlocking' value.

Finally, population growth and economic restructuring generate citywide incentives for urban reconfiguration. This may be exacerbated by growth boundaries and/or other policies that redirect demand to existing built-up areas (e.g. infill development). For areas dominated by public housing, market-driven reconfiguration is highly constrained. On the one hand, this creates a rationale for area-based renewal programs. On the other, it means that the outcomes of renewal programs, in particular social and economic outcomes, are materially conditioned by the interactions (or absence thereof) of the urban reconfiguration context.

10 Tenure residualisation: describes the case that social housing tenants who have the means often choose to exit this tenure, leaving behind 'neighbourhoods comprised of those with least resources and opportunities' (AHURI 2019).

Table 1: Typology of urban renewal and reconfiguration processes and drivers

	Economic drivers	Socio-demographic drivers	Institutional drivers
Site specific	Physical soundness of stock: age and quality of housing, depreciation and reinvestment.	Tenure: maintenance of housing services provided by housing stock (private and public).	Local planning, zoning and building codes: determine the incentives of site owners to reinvest/ adapt sites to changing economic or technological change, or obsolescence.
Neighbourhood specific	Economic obsolescence (including of physically sound stock): increasing land values and capital/land ratio changes.	Relative income: average income change (e.g. influx of prime working age residents leads to rising relative average income over time; increased unemployment or proportion of retirees leads to declining relative average income). Demand for services/amenities changes as a result of average income change. Social interactions: positive (and negative) externalities.	Strategic locational value/activity centres: unlocking value at obsolete sites that have potential transport and amenity value. Land value uplift potential as a vehicle for inclusion of public/affordable housing; densification. Accelerated planning: upzoning and suspension of regular planning channels.
City wide	Intensive and extensive margins: land value shifts throughout the city area. Economic restructuring.	Population growth: natural growth and migration.	Metropolitan strategic plans: urban growth boundaries and densification/ containment strategies. City branding.

Source: Authors.

2.4.1 Urban economics frameworks

In order to contextualise the role and position of public housing urban renewal within urban dynamics processes more widely (i.e. the external environment to policy formation), this research draws on urban-economics-informed frameworks of urban reconfiguration. 'Filtering' type frameworks view physical urban reconfiguration processes as a function of the quality of housing services provided by the housing stock. For instance, in a number of studies by Rosenthal and collaborators (Rosenthal and Helsley 1994; Rosenthal 2008; Brueckner and Rosenthal 2009; Rosenthal 2014), urban renewal is conceptualised as a dynamic process that, subject to the price elasticity of supply (Rosenthal 2014), reconfigures the commercial/economic and socio-demographic dimensions of neighbourhoods and cities. That is, as new housing is built, older housing loses its relative value and thereby becomes less attractive. When older housing becomes physically or economically obsolete, it is replaced by new housing. Since the distribution of housing by age is not random across cities, entire areas and neighbourhoods can be prone to cycles of relative advantage and disadvantage.

A key emphasis in the urban economics literature is the ongoing nature of urban reconfiguration, which results in areas displaying changing degrees of advantage and disadvantage over time (though both social and institutional determinants may inhibit change for extended periods). Thus over longer periods of time, neighbourhoods rise and decline in social status, and so experience a degree of mean reversion over time. However, the extent to which such change happens over time is influenced by a number of additional factors.

First, with respect to public housing urban renewal, the ownership of the existing public housing stock clearly constrains filtering as a source of direct physical (or social) impetus for public housing renewal (turnover of stock does not lead to a change in the socio-economic characteristics of areas). However, indirectly, filtering processes may generate impetus for reconfiguration in areas adjacent to public housing estates, which change the latent value of public housing land.[11] A discourse of under-utilised economic potential of renewal sites in this respect relates to concepts of economic obsolescence – that is, where the income-generating potential of new developments exceeds the income stream of existing properties, including physically sound properties.

Economic obsolescence is related to area/neighbourhood changes, such as increasing amenity value following gentrification or average income change (Brueckner, Thisse et al. 1999), or rezoning of land for different uses (institutional drivers). However, economic obsolescence may also follow from citywide dynamics such as population growth and productivity gains, or containment and densification policies that limit the extensive margin of cities, alongside incentives to develop in existing areas (institutional drivers).

Second, social interactions, locational advantages and political economy (Rosenthal 2008; Nygaard and Meen 2013; Hilber and Robert-Nicoud 2013) can also generate considerable path dependency in regards to the extent (and direction) of urban reconfiguration. In terms of the cyclical nature of neighbourhood status, these determinants may serve to reproduce the status quo, or existing advantages. Here too, though, issues of economic obsolescence may arise. The public policy imperative for urban renewal arises when these processes no longer operate as expected, or when the processes result in socially undesirable outcomes (Davis and Whinston 1961). In both cases, public policy can play a role in providing an impetus for urban renewal – for instance, through public investment that raises area attractiveness (e.g. by generating land value uplift).

Public policy can also play an important coordinating role that enhances the economic potential of urban reconfiguration. For example, where existing or new landowners are unable to capitalise on the potential benefits from redevelopment that are available to all (also those not in the development), the scale or quality of new development may be suboptimal. In such cases, public policies, such as public housing urban renewal, rezoning or master planning, can be instrumental in reducing the transaction costs of development coordination, thereby enabling higher-quality and better value development. This 'coordinating' role is, to some extent, evident in current public housing renewal in Australia, where the institutional drivers configuring urban renewal are addressed through upzoning (increasing the zoning density of an area) and accelerated planning – with a strong emphasis on area-based development through a nexus of job, transport and housing channels, and unlocking strategic locational value (Gurran and Phibbs 2018).

2.5 Policy development implications

This conceptual chapter has identified the ACF as particularly useful for understanding public policy development relating to public housing urban renewal processes in Australia.

- Evaluations can be summative or formative in nature. Summative evaluations collect and present information for the purpose of making summary and descriptive statements and assessments of the value (benefit) of policies and programs. Formative evaluations collect and share information for the purpose of modifying or improving policies and programs However, knowledge gained through evaluation only forms part of a wider set of factors shaping public policy formation. Moreover, the manner in which knowledge affects the policy formation process depends on how knowledge is utilised in the policy-learning process (i.e. through instrumental versus symbolic forms).

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11 The extent to which filtering-induced urban renewal delivers across the social policy dimension is, however, contested. A key condition to enable downwards filtering of properties is that net new dwelling supply exceeds the rate of household formation (Grigsby 1963; Galster 1996). However, this dynamic condition is additionally shaped by dwelling-specific conversion costs that determine the extent to which properties filter down or up (Rothenberg, Galster et al. 1991; Galster 1996). The empirical literature finds that the direction of filtering often is conditioned by neighbourhood characteristics, resulting in increased polarisation (Somerville and Holmes 2001; Yates and Wood 2005; Skaburski 2006). Yates and Wood (2005) find that areas with a higher concentration of low-rent housing tend to increase their proportion of low-rent housing. Social interactions in low-rent areas, including areas with public housing, may then induce downward filtering – and vice versa in higher-income areas.

- Advocacy coalitions form around policy core beliefs – that is, shared understandings of how policies work. In later chapters we argue that the consistency of views across key (not all) public and private stakeholders regarding how public housing renewal works (within existing financial and institutional constraints), allows us to characterise public housing renewal as taking place within an advocacy coalition. The policy core belief guiding public housing renewal policy can be described as: a belief in the instrumental role of land value change as a means of reconciling multiple asset- and people-based outcomes, while controlling the cost of public housing renewal policies to public budgets and incentivising private sector development of renewal sites.
- The implication for evaluation and learning in public housing renewal policy is that policy formation takes place as a result of learning and adaptation across multiple stakeholders. Evaluation can play a role, but evaluation insight constitutes just one of many sources of knowledge, and it competes, in terms of attention and weight, with knowledge produced through individual experiences, shared experiences and networks, and is filtered by interests, ideologies and institutions.
- Area-based policies have been criticised for failing to situate socio-spatial outcomes within the urban and global processes that shape urban transitions and reconfiguration. The success/failure of renewal policies (and, more generally, the feedback generated by them) is thus conditioned by a series of determinants external to the programs themselves.

3. Policy context and previous research

- **Since the 1990s there have broadly been three phases of area-based public housing renewal in the three states examined in this research.**
- **This chapter provides a brief overview of these phases in the 1990s and 2000s, before a more detailed overview of the policy context in the 2010s. This includes contextualising social and economic reconfiguration in public housing renewal areas against neighbourhood and citywide determinants of social and economic reconfiguration.**
- **Over successive renewal programs, a gradual evolution is apparent. Physical (stock, estate) and social reconfiguration (including public housing de-concentration) are evident throughout all phases. However, increasingly the potential to renew public housing is contextualised within the wider processes that reconfigure urban space more generally. That is, policies emphasising 'unlocking' site-specific value tied to changes in land values.**
- **In this Chapter, change in relative area-income status is used as an indicator of economic and social reconfiguration. Apart from Adelaide, and particularly earlier public housing renewal areas (1996-2006), census collection districts (CCD) subject to public housing renewal experienced little improvement in relative income status (1996-2016). Citywide and neighbourhood specific drivers of social and economic reconfiguration are evident in all three capital cities, leading to the potential to 'unlock' value through mixed tenure and public housing renewal.**
- **A number of evaluation studies have provided detailed assessment of tenants' experiences of renewal programs, including measures of social connectedness, relocation experience, and integration of socially mixed communities. However, assessments of the ways in which processes of public housing renewal are tied to (or cause) economic restructuring are more limited, due to a lack of access to information about project finance (e.g. how much developers paid the government for land and how much they profited).**

3.1 Introduction

Across each of the three states analysed in this research, state governments have recently announced new public housing urban renewal initiatives: Communities Plus (C+) in NSW (2016), Renewing Our Streets and Suburbs (2015) and Our Housing Future 2020–2030 (2019) in South Australia, and the PHRP in Victoria (2017). The research thus took place within a public policy formation process that is ongoing and evolving. This chapter provides a brief overview of key area-based renewal initiatives across the three states since the 1990s, the urban reconfiguration context within which learning takes place, and evaluation activity accompanying past initiatives. Our focus throughout is on area-based initiatives, rather than ongoing maintenance and refurbishment activity that forms part of regular estate management.

3.2 Public housing renewal: a brief overview of the 1990s and 2000s

Public housing renewal provides an opportunity for housing policy-makers and planners to give direction to the processes of urban renewal. In Australia, public housing stock tends to be spatially concentrated (Arthurson and Darcy 2015) and is, due to a long period of underinvestment and increasingly selective allocation strategies, characterised by problematic social and physical conditions (Pawson and Pinnegar 2018). The physical and social challenges concentrated in areas dominated by public housing increasingly became a focus of state and territory governments in the mid-1990s (Pawson and Pinnegar 2018).

Commencing with early place-based regeneration initiatives under the Commonwealth-led Better Cities Program (BCP) in 1991, subsequent state-led public housing renewal programs have frequently been situated within a context of enabling local economic reconfiguration through the construction and refurbishment of housing stock, and development of under-utilised government land.[12]

Table 2 provides a brief summary of key characteristics of BCP projects and subsequent state-led public housing renewal programs in the 1990s and 2000s in Adelaide, Melbourne and Sydney. Additional detail is provided in Appendix 1.

While the programs share certain characteristics, such as physical reconfiguration of housing as a stimulus for social and economic reconfiguration, there is variation in the integration of public housing renewal programs with local economic reconfiguration objectives. For instance, the Neighbourhood Improvement Program (NIP) in Sydney in the 1990s retained a distinct focus on dealing with physical regeneration and reconfiguration (stock renewal and de-Radburnisation)[13] – wider social and economic reconfiguration was not an explicit objective. In contrast, the Victorian Neighbourhood Renewal (NR) program in the 2000s, while also improving physical housing and estate layouts, additionally contained a more explicit social reconfiguration objective. For instance, NR aimed to reduce inequality between communities in renewal areas and the rest of the state (DHS 2005).

Throughout the 1990s and 2000s a gradual evolution is apparent across all three states. That is, a shift from a perspective where physical public housing renewal and deconcentration of disadvantage provided the impulse for social and economic reconfiguration, to one where the potential for public housing urban renewal is contextualised within the wider processes that reconfigure urban space more generally. In recent renewal programs (detailed below) there is a growing emphasis on 'unlocking' latent value related to the spatial positioning of public housing estates (Pawson and Pinnegar 2018).

12 The Better Cities Program (renamed the Building Better Cities Program in 1992) was a 'general purpose capital assistance program' intended to improve urban development by enabling economic growth, social justice, institutional reform and improving urban environments (ANAO 1996; Bryant 2016), rather than a specific public housing urban renewal program. The BCP nevertheless encompassed a number of housing directions that subsequent public housing renewal programs have continued. These include: residential densification; means of delivering affordable housing (Ultimo, Sydney [not considered in this research]; Rosewood Village, Adelaide); and reconfiguration of public housing estates (Rosewood Village, Adelaide; Preston and North Melbourne, Melbourne).

13 Radburn design results in houses located 'back-to-front' with backyards facing onto streets and cul-de-sac pathways, as well as front doors accessed from footpaths and open public space (Arthurson 2012: 44).

Table 2: Public housing urban renewal program summaries: Adelaide, Melbourne and Sydney

Period	Adelaide	Melbourne	Sydney
1990s	**Better Cities Program (BCP)*** • Asset renewal and replacement of obsolete housing. • Deconcentration of poverty and increasing home ownership. • Tenant relocation. • Increase value of detached dwellings, densification.	**Better Cities Program (BCP)*** • Area-based strategies: integrated urban planning. • Mix of public and private housing through joint ventures with the private sector. • Replacement and reconfiguration of obsolete/ aged housing; physical return to traditional streetscape. • Economic reconfiguration: economic development, labour mobility, increased population and housing density, and improved public transport.	**Neighbourhood Improvement Program (NIP)** • Asset improvement and estate redesign of streetscapes; subdivision and property reconfiguration. • Remove stigma associated with public housing estates; ensure visual comparability with other residential areas. • No large-scale 'redevelopment' or tenant relocation. Meet broader social and urban policy goals beyond renewal sites, not a specific policy objective per se.
2000s	**Better Neighbourhoods Program (BNP)** • Self-funded through sale of housing allotments to the open market. • Replacement of aged social housing with more appropriate homes. • Housing that meets the specific needs of tenants. • Maintenance of social housing inventory levels. • Improvements to Adelaide's housing infrastructure and residential streetscapes. • Community development, employment development and training.	**Neighbourhood Renewal (NR)** • Place-based strategy: physical regeneration and community development practices. • Breaking-up concentrations of disadvantage. • Decreasing levels of inequality between public housing communities and the rest of the city. • Streetscape improvements, housing upgrades/ backlog maintenance, and improved/new community infrastructure. • Public–private partnership (PPP) mixed-tenure renewal.	**Estate-based physical redevelopment** • Demolition and reconfiguration of estates. • Rebuild according to social mix principles – majority of new homes available for private sale. **Building Stronger Communities (BSC)** • Build strong, vibrant and sustainable communities. • Create better urban and social environments, services provision; and increase jobs, skills and levels of employment. • Partnership working and community involvement.

* *See footnote 12.*

Source: Authors.

3.3 Public housing renewal programs in the 2010s

Throughout the 1990s and 2000s a gradual evolution in public housing renewal occurred. Physical (stock, estate) and social (public housing deconcentration) reconfiguration were evident throughout this period. Increasingly, there has been a focus on the economic potential of key public housing sites. This has changed how public housing is contextualised. Whereas physical and social reconfiguration were the key drivers of renewal policies in the 1990s, throughout the 2000s additional emphasis was placed on unlocking site-specific value. In this intersection with urban renewal processes, public housing renewal becomes public housing urban renewal – a process in which renewal outcomes and possibilities are shaped *by*, rather than impact *on*, urban reconfiguration. Current renewal programs across Sydney, Adelaide and Melbourne (introduced below) reflect this shift, and provide examples of how physical reconfiguration is enabled by citywide urban reconfiguration processes.

3.3.1 NSW and Sydney: Communities Plus (C+)

The current public housing estate renewal program, C+, is a part of the NSW Government's broader Future Directions for Social Housing strategy. C+ is a 10-year, $22 billion investment program to deliver 23,000 new and replacement public housing dwellings, 500 affordable housing dwellings and 40,000 private dwellings, across a range of major and neighbourhood sites, by 2025 (LAHC 2020). The redevelopment of reconfigured estates aligns with principles of providing a tenure mix of 70 per cent private and 30 per cent social housing. Many existing programs have been realigned under C+, with major sites including Waterloo, Telopea, Ivanhoe and Riverwood. Alongside these large-scale redevelopment sites, a series of viable development projects, involving sites with a range of development potential (from 20 to 300 units), are being brought to market for private-sector developers and NFP CHPs as neighbourhood renewal projects.[14]

In NSW, C+ is spearheaded by the Land and Housing Corporation (LAHC). LAHC holds responsibility for the state's social housing 'assets' (both for the maintenance of existing stock and for making better use of assets) and the land on which it sits, as part of its role in helping to deliver the Future Directions strategy. LAHC currently reports to the Department of Planning, Industry and Environment. The other core element of the housing portfolio – tenancy management – sits within the Department of Communities and Justice (DCJ) – previously the Department of Family and Community Services (FACS).

Dividing assets and people across different government agencies makes sense regarding wider policy and delivery alignment. However, the process can become somewhat awkward in terms of the comprehensive intertwining of those two concerns in relation to estate renewal (as well as public housing more generally). Key projects and programs have seen their institutional owners change because of realignments and reshuffles – as seen in the involvement of Landcom (formerly UrbanGrowth) in a number of renewal sites in metropolitan Sydney.[15] The umbrella provided by C+, and by the wider Future Directions strategy, counters concerns regarding this fragmented framework by providing a cross-government policy that helps agencies central to housing and other stakeholders, and delivers better community outcomes by working towards a shared set of aims and objectives.

3.3.2 Victoria and Melbourne: Public Housing Renewal Program (PHRP)

The current Public Housing Renewal Program (PHRP) is part of the state government's Homes for Victorians strategy – a $2.6 billion plan for renewing and increasing public housing and addressing homelessness. The PHRP, as originally announced in 2017, involved the sale of publicly owned estate land through commercial relationships with the private and community housing sectors (Victoria State Government 2017a: 33). Land value is established by the Valuer-General Victoria, with a payment from each sale made to the Victorian Government, as approved by the Victorian Government Land Monitor in line with established policy (Parliament of Victoria 2018: 8). The Department of Housing agreed to pay the direct costs of design and construction of social housing on each estate; additional costs of the new social housing would be enabled through redirecting the proceeds from sales of 'under-utilised' land and strategically leveraging $185 million in government funding to ensure the PHRP remained cost-neutral to government (DHHS 2017: 18). The original procurement process required a minimum 10 per cent increase in social housing dwellings on each estate (Victoria State Government 2017a: 45).

Within the DHHS, the renewal team is line-managed by the Property and Asset Services department. The urban developmental basis for the funding model is summarised in the Victorian Government's submission to the response to the Legal and Social Issues Committee PHRP Inquiry.

14 Information about C+ is available from: https://www.communitiesplus.com.au/
15 Landcom is the NSW Government's land and property development organisation. Established in 1976 (as the Land Commission of NSW), the organisation's main purpose 'was to acquire land for present and future urban development and other public uses, with sales to be made at the "lowest practicable price"'. (See https://www.landcom.com.au/organisation/about-landcom/)

> Mixed communities … enable the government to obtain a return from the sale of private dwellings, which can be reinvested, together with substantial government investment, into the development of new social housing. This means that the government can leverage the underlying land value on each site to attract investment from the private and not-for- sectors that delivers better social and economic outcomes from its investment (Victoria State Government 2017b: 6).

The model is based on maximising financial returns and minimising funding commitments by increasing the development density at each estate and introducing private housing into public housing estate environments (Parliament of Victoria 2018: xi). The rationale for redevelopment of public housing is based on the age of some existing buildings (built over 50 years ago), poor suitability of existing housing for residents with mobility issues (e.g. lack of lifts affects the elderly, parents with children and persons with a disability), lack of internal and external amenity, and high maintenance costs (Victoria State Government 2017a: 3; Capire Consulting Group Pty Ltd 2016: 10). The proposed changes to the housing profile on the estates aim to enable government to better meet the current demand for smaller 1–2 bedroom dwellings.

3.3.3 South Australia and Adelaide: Renewing Our Streets and Suburbs (ROSAS) and Our Housing Future 2020–2030

At the end of 2019, the South Australian Government released its Our Housing Future 2020–2030 strategy. The strategy builds on the 2015 Renewing Our Streets and Suburbs (ROSAS) initiative, which aims to renew all pre-1968 South Australian Housing Trust (SAHT) homes within 10 kilometres of the Adelaide CBD by 2020. Further renewal is also scheduled for the broader metropolitan area. The 2015 program included a $65 million public housing stimulus package to accelerate ROSAS and stimulate the construction sector (Department for Communities and Social Inclusion 2016). The program of renewal ranges from renovations to complete redevelopments, and includes the relocation of tenants, as well as the transfer of SAHT tenant and property management to CHPs (Government of South Australia 2019; Renewal SA 2019).

The Our Housing Future strategy aims to deliver 20,000 affordable housing outcomes (including social housing) in collaboration with NFP housing providers and the residential development industry (Government of South Australia 2019: 14). The strategy includes a $54 million neighbourhood renewal program to deliver 'new social, affordable and open market homes' over a five-year period (Government of South Australia 2019: 14). The renewal program is to be led by the SA Housing Authority, which will also be responsible for supporting job creation and economic growth through the Affordable Housing Initiative (Government of South Australia 2019: 14). Financing of the housing strategy is, in part, underpinned by developing under-utilised government, NFP and private land; as well as by leasing SA Housing Authority assets to the CHPs to enable CHP asset expansion. Organisationally, Renewal SA and CHPs lead these two policy elements, respectively.

While South Australia has not experienced the same population growth or housing affordability pressures as Melbourne or Sydney, it nevertheless has a considerable backlog of ageing public housing properties and a shortfall of affordable housing options for low- and moderate-income households (Leishman and Baker 2019). The contextual difference is reflected in how the renewal model works. Sydney and Melbourne can, to a greater extent, unlock latent land value through densification, while South Australia, through Renewal SA, relies on a combination of greenfield developments and block subdivision to cross-subsidise the delivery of public housing renewal. As with developments in Melbourne and Sydney, mixed tenure is a core policy element underpinning public housing renewal in Adelaide.

3.4 Public housing urban renewal: spatial characteristics and urban reconfiguration processes

In assessing the legacy of area-based and housing-led renewal initiatives, the Australian research tends to conclude that these have often failed to fully address the urban, national and global policies and processes that generate spatial variation in the concentration of advantage and disadvantage (Rae 2011; Pawson; Hulse et al. 2015). This is reflected in the extent to which urban reconfiguration has taken place. Tables 3, 4 and 5 consider relative income change in neighbourhoods (here defined by census collection districts in 1996), comparing the extent of reconfiguration for all neighbourhoods with those experiencing area- or estate-based renewal initiatives.

'Reconfiguration' essentially means that areas change relative to other areas. As areas become more, or less, attractive places to live, their social and economic characteristics also change. For example, Australian and international evidence suggests that property prices in the vicinity of public housing renewal sites may increase following renewal (Ellen, Schill et al. 2001; Schwartz, Ellen et al. 2006; Wood and Cigdem 2012). Land values and property prices are a function of people's willingness to pay for housing and locational benefits. Urban reconfiguration that alters the social and economic characteristics of areas is therefore also expected to change land values, as higher-income individuals displace existing residents or become a larger proportion of the local population.

'Change in relative income' provides a measure of the extent to which, for instance, spatial inequality might have changed, and the extent to which social and economic reconfiguration has taken place. Since the early 2000s economic and commercial development aims – such as unlocking under-utilised economic potential and partnering with for-profit and NFPs for redevelopment – have become increasingly explicit and are key tender allocation criteria. Public housing renewal thus interacts with the physical, social and economic spaces of public housing sites and neighbourhoods. In shaping or reconfiguring these spaces, public housing renewal, in practice, becomes an element of urban renewal. That is, it becomes 'public housing urban renewal'.

Tables 3–5 present the change in relative income for public housing areas (CCDs) that experienced urban renewal, compared with areas that did not (whether containing public housing or not). The data is disaggregated into income quartiles. The diagonal (highlighted) provides a quick summary of change. For areas *not* subject to public housing urban renewal (the vast majority), the diagonal shows that for many low-income areas relative income increased (i.e. these areas *did* experience social and economic reconfiguration). In contrast, 80–90 per cent of lower-income areas *that were* subject to public housing renewal did not see an increase in relative income (i.e. they *did not* experience significant social and economic reconfiguration). For areas in the low–mid income quartile and subject to public housing renewal, there was a tendency for relative income to worsen over time.[16] In Melbourne, a third of low-income areas subject to public housing renewal did increase their relative income. However, two-thirds of renewal areas in the low–mid income category worsened their relative income position. Overall, while there are cases of renewal areas improving their relative income position, public housing renewal areas typically did not.

Figures 1, 2 and 3 provide an overview of the location of public housing renewal sites in each capital city (1996–2016). In each case, renewal initiatives encompassed a large number of 1996 census collection districts (CCDs). (Tables 3–5 provide the number of affected CCDs.)

16 Spatial concentration of public housing estates typically renders them low-income areas. Sample numbers of mid-to-high income CCDs with public housing and renewal activity are hence very low.

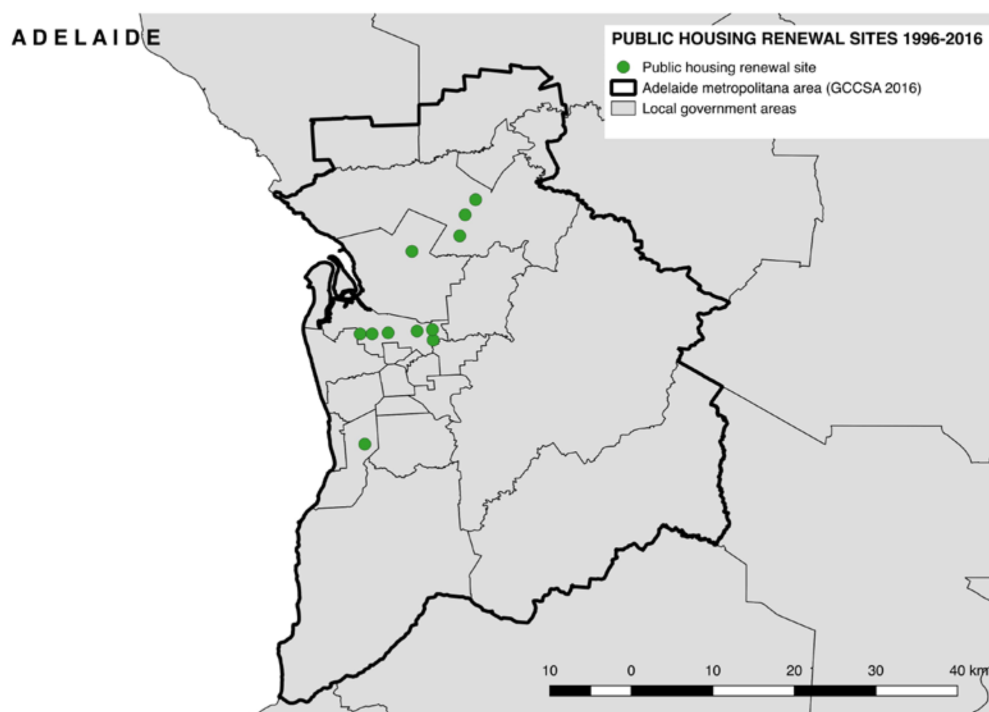
Table 3: Relative income status transition tables for PHR and non-PHR CCDs, 1996–2016: Adelaide

		Relative income quartile 2016								
	Relative income quartile 1996	1 (low)		2 (low–mid)		3 (mid–high)		4 (high)		Total
Non-PHR sites (CCDs) (1996–2016)	1 (low)	242	(50%)	141	(29%)	73	(15%)	25	(5%)	481
	2 (low–mid)	138	(26%)	205	(38%)	134	(25%)	61	(11%)	538
	3 (mid–high)	94	(17%)	126	(22%)	170	(31%)	169	(30%)	556
	4 (high)	17	(3%)	65	(12%)	169	(31%)	301	(55%)	552
	Total	491	(23%)	534	(25%)	546	(26%)	556	(26%)	2,127
PHR sites (CCDs) (1996–2016)	1 (low)	56	(74%)	13	(17%)	7	(9%)	1	(1%)	77
	2 (low–mid)	10	(56%)	6	(33%)	2	(11%)	0	(0%)	18
	3 (mid–high)	0	(0%)	4	(80%)	1	(20%)	0	(0%)	5
	4 (high)	0	(0%)	0	(0%)	1	(100%)	0	(0%)	1
	Total	66	(65%)	23	(23%)	11	(11%)	1	(1%)	101

Note: Error in percentages is due to rounding. PHR = public housing renewal sites.

Source: Authors' calculations based on CDATA96 and TableBuilder 2016 (spatial merges between 1996 CCDs and 2006 CCDs and 2016 SA1s).

Figure 1: Public housing renewal sites, Adelaide 1996–2016



Note: Appendix 2 provides a list of renewal areas.

Source: Based on policy and literature review.

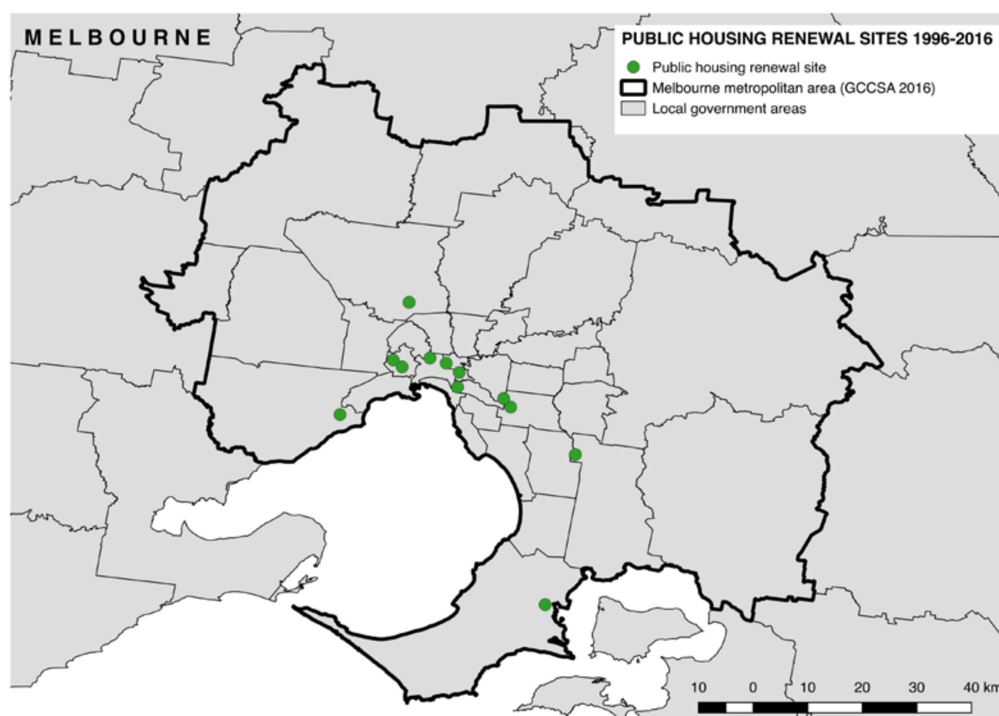
Table 4: Relative income status transition tables for PHR and non-PHR CCDs, 1996–2016: Melbourne

		Relative income quartile 2016								
	Relative income quartile 1996	1 (low)		2 (low–mid)		3 (mid–high)		4 (high)		Total
Non-PHR sites (1996–2016)	1 (low)	573	(46%)	329	(26%)	249	(20%)	102	(8%)	1253
	2 (low–mid)	385	(29%)	360	(27%)	346	(26%)	223	(17%)	1314
	3 (mid–high)	203	(15%)	357	(27%)	394	(30%)	357	(27%)	1311
	4 (high)	93	(7%)	267	(20%)	330	(25%)	644	(48%)	1334
	Total	1254	(24%)	1313	(25%)	1319	(25%)	1326	(25%)	5212
PHR sites (1996–2016)	1 (low)	51	(70%)	14	(19%)	6	(8%)	2	(3%)	73
	2 (low–mid)	17	(89%)	2	(11%)	0	(0%)	0	(0%)	19
	3 (mid–high)	5	(83%)	0	(0%)	1	(17%)	0	(0%)	6
	4 (high)	2	(100%)	0	(0%)	0	(0%)	0	(0%)	2
	Total	75	(75%)	16	(16%)	7	(7%)	2	(2%)	100

Note: Error in percentages is due to rounding. PHR = public housing renewal sites.

Source: Authors' calculations based on CDATA96 and TableBuilder 2016 (spatial merges between 1996 CCDs and 2006 CCDs and 2016 SA1s).

Figure 2: Public housing renewal sites, Melbourne 1996–2016



Note: Appendix 2 provides a list of renewal areas.

Source: Based on authors' policy and literature review.

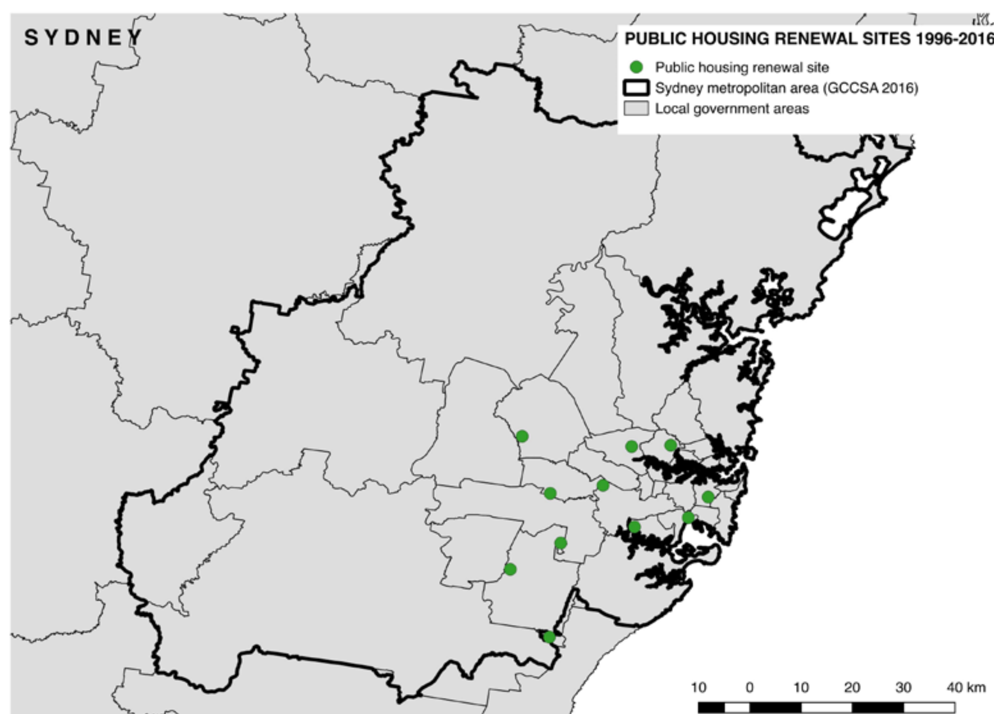
Table 5: Relative income status transition tables for PHR and non-PHR CCDs, 1996–2016: Sydney

		Relative income quartile 2016								
	Relative income quartile 1996		1 (low)		2 (low–mid)		3 (mid–high)		4 (high)	Total
Non-urban renewal sites (1996–2016)	1 (low)	869	(56%)	436	(28%)	196	(13%)	57	(4%)	1558
	2 (low–mid)	387	(24%)	601	(38%)	407	(26%)	200	(13%)	1595
	3 (mid–high)	166	(10%)	415	(26%)	583	(36%)	453	(28%)	1617
	4 (high)	119	(7%)	157	(10%)	431	(27%)	912	(56%)	1619
	Total	1541	(24%)	1609	(25%)	1617	(25%)	1622	(25%)	6389
Urban renewal sites (1996–2016)	1 (low)	47	(89%)	5	(10%)	1	(2%)	0	(0%)	53
	2 (low–mid)	30	(97%)	1	(3%)	0	(0%)	0	(0%)	31
	3 (mid–high)	0	(0%)	6	(100%)	0	(0%)	0	(0%)	6
	4 (high)	0	(0%)	1	(100%)	0	(0%)	0	(0%)	1
	Total	77	(85%)	13	(14%)	1	(1%)	0	(0%)	91

Note: Error in percentages is due to rounding. PHR = public housing renewal sites.

Source: Authors' calculations based on CDATA96 and TableBuilder 2016 (spatial merges between 1996 CCDs and 2006 CCDs and 2016 SA1s).

Figure 3: Public housing renewal sites, Sydney 1996–2016

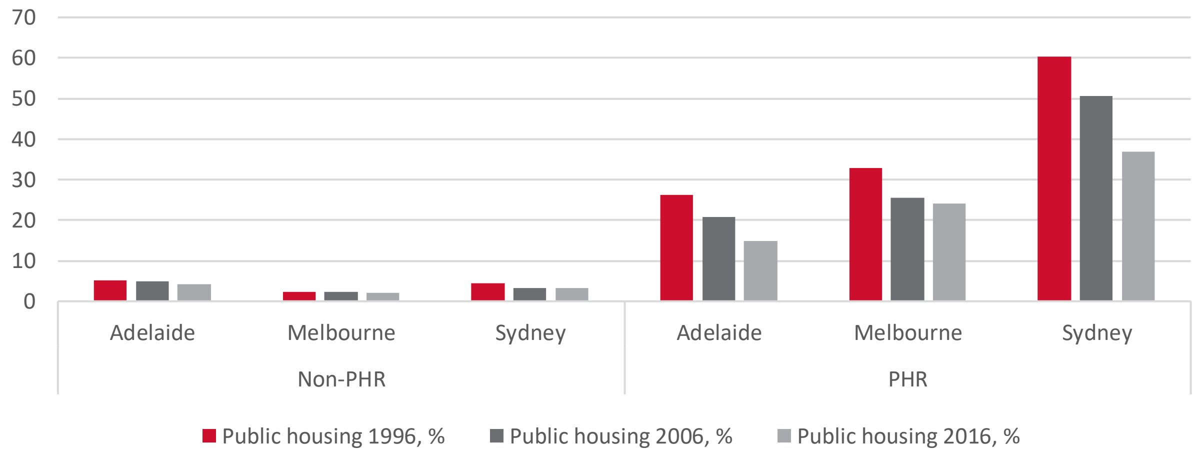


Note: Appendix 2 provides a list of renewal areas.

Source: Based on authors' policy and literature review.

Throughout the period, significant deconcentration of public housing is evident. Figure 4 shows the change in percentage of public housing stock for renewal and non-renewal sites. A marked decline in the concentration of public housing is evident across all of the public housing renewal sites. This deconcentration of public housing implies considerable social reconfiguration; although, as the transition tables (Tables 3–5) make clear, this was not accompanied by similar economic reconfiguration.

Figure 4: Change in average percentage of public housing: renewal sites and non-renewal sites, 1996–2016



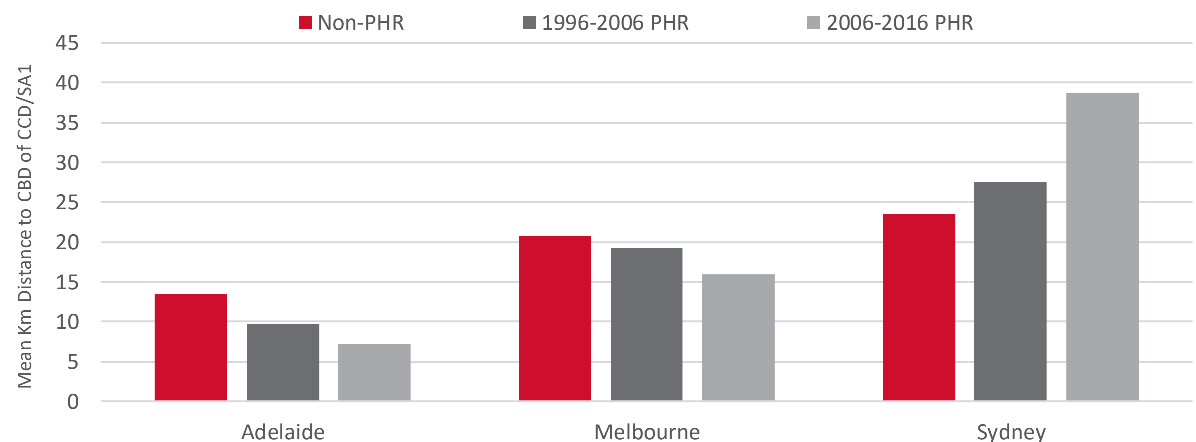
Note: PHR = public housing renewal sites.

Source: Authors' calculations based on CDATA96 and TableBuilder 2016 (spatial merges between 1996 CCDs and 2006 CCDs and 2016 SA1s).

Figure 5 compares the location of renewal sites in 1996–2006 and 2006–2016. In Adelaide and Melbourne, a shift is evident towards public housing renewal in areas where the adjacent land values are higher (i.e. closer to the CBD). For Sydney, the trend in the 1990s and 2000s is the opposite. This reflects Sydney's latest place-based renewal strategy, which has a marked emphasis on unlocking under-utilised sites for social and economic reconfiguration. The econometric analysis suggests that unlike Adelaide and Melbourne, the relationship between distance to the CBD and *change* in relative income status in Sydney in the period 2006-2016 shows a degree of radiating out from the CBD. This citywide reconfiguration process alter land values (generate sites where value can be unlocked through redevelopment) also at further distance to the CBD (see Appendix 2).

Notwithstanding important differences in public housing renewal programs, there is, in the latest iterations across all three states, a shared focus among stakeholders on extractable land values as a vehicle for delivering physical reconfiguration of public housing stock. Moreover, the emphasis on the economic potential of key renewal sites increasingly places public housing renewal *as* public housing urban renewal.

Figure 5: Public housing renewal sites: average distance to the CBD, 1996–2016



Note: PHR = public housing renewal sites. 'Non-PHR are public housing sites that have not undergone renewal.

Source: Authors' calculations based on CDATA96 and TableBuilder 2016 (spatial merges between 1996 CCDs and 2006 CCDs and 2016 SA1s).

A criticism of area-based policies has been that they neglect wider city and global processes shaping socio-spatial outcomes (Pawson, Hulse et al. 2015). As will be discussed in Chapter 5, key actors in the formation of public housing renewal policies draw on a range of experiences and sources of learning. Many have been involved in public housing delivery, renewal and/or real estate development over a considerable period of time. The transition tables above illustrate that considerable reconfiguration of urban space has occurred in recent decades. However, it is also clear that these processes have not substantively reconfigured areas subject to public housing renewal to the same degree.

In contextualising the advocacy coalition's policy core belief, it is therefore important to consider how specific policies draw on, or interact with, specific determinants of change (discussed further in Chapter 4). This matters for two reasons. First, from a perspective of evaluating public housing renewal's capacity to deliver social and financial returns, the causal link between policy aims and policy outcomes (or policies and ends (objectives)', as we refer to them) is critical. That is, policy core beliefs are a representation of how Intervention A (e.g. mixed tenure) is related to Outcome B (e.g. extractable land value for renewing public housing stock) or Outcome C (social integration).

Second, from a perspective of the applicability of the policy core belief, the relationship between specific policies employed and outcomes is influenced by numerous factors. That is, the way in which Intervention A relates to Outcome B is, in complex urban dynamics, necessarily dependent on a range of determinants. These will vary across the urban landscape. This has the rather mundane implication that policy core beliefs are not equally applicable everywhere. However, and more importantly, it also has the implication that contextualising policy core beliefs within the complex determinants of urban change provides a clearer framework for evaluation and policy innovation.

Table 6 summarises the direction and statistical significance key determinants of urban reconfiguration in Adelaide, Melbourne and Sydney (1996–2016). Results are organised in accordance with the typology in Table 1. The dependent variable is change in relative income status. This provides a summary measure of extent to which social and economic reconfiguration has taken place. The full spatial regression estimates are provided in Appendix 2.

Specifically, the econometric analysis provides insight into the ways in which areas with public housing renewal projects in the two periods (1996–2006 and 2006–2016) changed in comparison to other areas (research question 2). Notably, the econometric analysis is not sufficiently detailed (in its differentiation of public housing renewal initiatives) to provide an evaluation of public housing renewal *per se*. What it does, is to place public housing sites and public housing renewal sites within the context of urban change more generally. In terms of considering public housing renewal as a way of giving direction to social and economic reconfiguration, this places public housing renewal within a framework of citywide and neighbourhood specific determinants of urban reconfiguration. In terms of shaping policy core beliefs, the results provide a context for situating the advocacy coalition's public housing urban renewal model and policies for 'unlocking' under-utilised sites in relation to urban reconfiguration more generally.[17]

Table 6 shows that across the three capital cities there are key similarities, but also some critical differences, with respect to which factors determined their respective urban reconfiguration processes. First, in all three cities the citywide urban reconfiguration processes are critical determinants of change (i.e. distance from CBD and income change in adjacent areas) at CCD level. Inner-city revival, employment growth and economic restructuring all contributed to this process. For the period 1996-2016, relative incomes rose more rapidly in inner city locations, with consequences for land and property values. In Melbourne and Sydney there is an additional spillover effect from income changes in adjacent areas that additionally drives urban reconfiguration at CCD level.

17 Appendix 2 provides details on estimation strategy, variable selection and estimation results for Adelaide, Melbourne and Sydney. The estimations are based on a spatial lag and error model of relative income change.

Table 6: Determinants of change in urban reconfiguration and public housing renewal in Adelaide, Melbourne and Sydney, 1996–2016 (select indicators)

	Adelaide	Melbourne	Sydney
Site specific: public housing renewal	▲ **1996–2016**	━ **1996–2016**	━ **1996–2016**
	▲ 1996–2006	━ 1996–2006	━ 1996–2006
	━ 2006–2016	▼ 2006–2016	▼(━) 2006–2016
City wide	▼ Distance from CBD	▼ Distance from CBD	▼* Distance from CBD
	━ Income change adjacent areas	▲ Income change adjacent areas	▲ Income change adjacent areas
Neighbourhood: socio-economic characteristics before change	▼ Relative income '96	▼ Relative income '96	▼ Relative income '96
	▲(━) Public housing	▼ Public housing	▼ Public housing
	▲ Australian born	▲ Australian born	▲ Australian born
	▲ Owner occupation	▲ Owner occupation	▲ Owner occupation
	▲ House prices	▲ House prices	▲ House prices
	▲ Education	▲ Education	▲ Education
	━ Population density	━ Population density	▲ Population density

*Note: Symbols represent whether the indicator is correlated with social and economic reconfiguration (i.e. change in relative income): ▲ = positively correlated; ━ = not correlated; ▼ = negatively correlated. Symbols are based on a 5% level of statistical significance. Symbols in brackets indicate the average total marginal effect (where this differs from the direct effect). Total marginal effect combines direct and indirect effects. Indirect effects are generated by spatial lag/spatial dependence in the dependent variable, and some independent variables (measured prior to the change period). * For the period 2006-2016 the distance from the CBD coefficient in Sydney is not significant, suggestive of relative income growth radiating out from the CBD. This resonates with Figure 5 and citywide urban reconfiguration enabling urban renewal at greater distances to the CBD.*

Source: Authors' analysis. Appendix 2 provides details on estimation strategy and full results.

Second, the impact of public housing renewal (1996-2016) on urban reconfiguration is mixed. In Melbourne and Sydney CCDs experiencing public housing renewal show no improvement in relative income over the period as a whole (1996-2016). For the period 2006-2016 there is a negative change in relative income for CCDs experiencing public housing renewal. Adelaide is an exception, with public housing renewal areas in the 1990s experiencing growth in relative income. This trend is also seen in CCDs with public housing more generally. However, also in Adelaide there is some evidence that public housing urban renewal had less impact in the period 2006-2016. Some interviewees in Adelaide noted a change in public housing renewal policy between these two phases (see Chapter 5:60). Arthurson (1998) and Baker and Arthurson (2007) notes a focus in the 1990s (in SA) on deconcentrating public housing through relocations, new construction for market sale, and selling of public housing (e.g. the Parks Urban Regeneration Project, Appendix 1). Figure 4 shows that concentrations of public housing in Melbourne (1996-2006) and Sydney (1996-2006, 2006-2016) too declined, but without a corresponding improvement in relative income.

Notably, these findings do not imply that public housing renewal initiatives as a whole, or in specific periods, did not deliver intended or desired outcomes. What they suggest is that public housing renewal component, particularly in Melbourne and Sydney, provided little impetus for stimulating social and economic change at CCD level.

Third, the socio-economic characteristics of a neighbourhood before any public housing renewal activity took place is a key determinant of subsequent change in relative neighbourhood income status.

In each of the three cities relative income status changes over time with a clear tendency towards upwards and downwards mobility. Neighbourhoods with higher relative incomes in 1996 typically declined in income status relative to all other areas, and vice a versa. This degree of cyclicality is expected as the population ages in place, incomes increase (for younger income groups) or declines (for older income groups) or spatial sorting takes place. Importantly, the extent of dynamic change is anchored in the socioeconomic characteristics of neighbourhoods in 1996. For instance, neighbourhoods with a greater degree of social capital (measured by the proportion of

educated individuals and rate of owner-occupation) and higher house prices tended to improve their relative income position. Areas with larger shares of public housing, on the other hand, experienced less relative income improvement. The exception is Adelaide, where the share of public housing in 1996 had little effect on economic reconfiguration (*once spatial interdependencies are factored in*). The combined influence of the socio-economic characteristics suggests that urban reconfiguration processes, in addition to citywide and global processes, are significantly shaped by neighbourhood social interactions and that these local interactions in turn generate persistence in broader spatial patterns of relative income. Variable selection and theory is additionally discussed in Appendix 2.

The inflow of higher income households and demand for more central locations has led to social and economic reconfiguration in inner city locations, and increased land and property values throughout each of the three cities (again particularly in inner city locations). However, CCDs experiencing public housing renewal have not experienced similar reconfiguration. Particularly in Melbourne and Sydney, public housing renewal does not appear to have similarly resulted in social and economic reconfiguration. Adelaide, particularly for areas experiencing public housing renewal in the 1990s is an exemption. Both public housing renewal areas and public housing areas outside renewal areas experienced an improvement in relative incomes. Adelaide based interviewees commented on changes in the approach to public housing renewal following the 1990s (Chapter 5).

Land values on many public housing estates has changed significantly over the last few decades, but the results in Table 6 underscores that this change is primarily driven by citywide and global determinants, rather than by changes to or on the estates themselves. In terms of area level social and economic reconfiguration, the neighbourhood dynamics, as captured in Table 6, provides a rationale for mixed tenure developments as a policy mean for 'unlocking' under-utilised areas. It does, however, not capture whether public housing tenants are direct beneficiaries of this type of public housing renewal.

Overall, therefore, the results in Table 6 suggest that urban reconfiguration may be a critical *enabler* of the existing public housing renewal model – rather than the other way around. In terms of the drivers of urban reconfiguration set out in Table 1, economic obsolescence resulting from neighbourhood and citywide changes generate the potential for extracting additional site specific (public housing) value. Value that public housing renewal, 1996-2016, typically did not enable. In order to initiate and give direction to public housing urban renewal, public authorities are therefore reliant on entering into 'bargaining' or dual dependency relationships with private sector actors. Access to negotiated land rents, in turn, compensates private sector actors for site and neighbourhood-specific risk factors. A co-dependency therefore exists where state authorities rely on private sector actors to deliver public housing renewal.

3.5 Past evaluation experience: a higher-level review

Throughout the 1990s and 2000s public housing renewal policies in each of the three states evolved. A key aspect of this change was the increasing reliance on unlocking the economic value of renewal sites (Pawson and Pinnegar 2018) as a vehicle for enabling physical reconfiguration of the public housing stock. This shift has shaped how public housing renewal programs are designed how sites are selected. Each of the three states makes reference to unlocking latent value associated with, in particular, well-serviced centrally located public housing estates. As subsequent chapters (Chapters 4 and 5) make clear, the role of changing land values, and social and economic determinants external to the renewal site itself, shapes key policies with respect to the ways in which public housing urban renewal is delivered.

The current suite of public housing renewal programs lay bare a degree of evolution (refinement) in how the urban processes that shape socio-spatial outcomes can also deliver physical reconfiguration. That is, key policies logically connect with citywide urban reconfiguration processes to enable stock reconfiguration and small increases in public housing stock. However, these policies do not (necessarily) connect in a similarly logical way with aims such as reducing inequality, or improving social and economic outcomes for public housing communities.

The following subsections provide a summary of public housing renewal evaluations in Adelaide, Melbourne and Sydney, looking at how renewal programs have been assessed and what evidence was produced through previous evaluation. Chapters 4 and 5, then, in greater detail analyse how evaluation and learning informed later policy development.

3.5.1 Evaluations of NSW urban renewal programs

The trajectory of evaluation activity in NSW tracks the historical evolution of renewal initiatives and programs themselves. An evaluation of the 1995–98 NIP was conducted at its completion (Judd, Randolph et al. 2001). There have also been a number of retrospective studies considering outcomes of specific estate upgrades undertaken as part of the NIP (Bijen and Piracha 2012 [Riverwood]; 2017 [Dunbar Way]). An influential SGS report (2000) included a number of NIP project case studies (Waterloo, Bellambi), and – echoing conclusions drawn by Judd, Randolph et al. (2001) regarding the need for greater means of comparison across individual NIP projects to better determine actual effectiveness of spend – reoriented debate towards a need for social cost-benefit analysis tied to investment decisions associated with housing renewal. An Australian Research Council project conducted by The University of New South Wales (UNSW) in conjunction with Housing NSW was tasked with helping put in place more consistent and systematic evaluation frameworks for the department's asset-based, as well as community-focussed, renewal activity. Early outputs from this research were published (see, for example, Ruming 2006), as were later outputs tied to PhD students involved in the work (Groenhart 2013); however, the final research report was not publicly released.

In the early to mid-2000s, evaluative activity took place alongside a number of the estate-specific renewal projects; notably Minto, for which a series of reports sought to capture the initial impacts of redevelopment decisions requiring many existing residents to relocate. *Leaving Minto*, published as a research partnership between the Minto Resident Action Group, the University of Western Sydney and local NGOs (Stubbs 2005), offers a powerful insight into a community experiencing significant change, and highlighted a mismatch between perceived best practice in urban renewal and the actual drivers shaping Minto's redevelopment. The Housing NSW Living Communities team embedded the importance of long-term evaluation activity into the aims and objectives of the Bonnyrigg PPP project, which called for EOIs in 2006 and was awarded in late 2007. As part of the conditions specified in the PPP, the successful tenderer (Bonnyrigg Partnerships) was required to have an independent research partner who would conduct a longitudinal study of people- and community-based outcomes over the life of the renewal process.

The first wave of the Bonnyrigg longitudinal study (Pinnegar, Liu et al. 2013) involved interviews with around 100 Bonnyrigg residents (both owner-occupiers and tenants) – including a number of former tenants who had relocated away from the neighbourhood as a result of renewal plans. The research was published soon before the PPP fell into abeyance. A second wave of the study (delayed because the renewal process only geared up again in 2016) was conducted in 2018. In 2014, UNSW also undertook a formative evaluation of the Riverwood North Urban Renewal Project led by PAYCE Consolidated and St George Community Housing. This involved a survey and focus groups with residents in the new redevelopment, former tenants displaced from the estate due to demolition, and residents of the remainder of the estate not directly impacted by the physical renewal. To date, the final report has not been published by DCJ.

In May 2019 it was announced that a consortium led by the Melbourne Institute of Applied Economic and Social Research, and including the Cultural and Indigenous Research Centre Australia, RMIT University and Monash University, would undertake a multimillion-dollar evaluation of the strategy and programs of Future Directions for Social Housing, which includes the C+ program. This signals a step change by the NSW Government and shows a commitment towards transparent and appropriately resourced evaluation activity – moving beyond useful but partial external evaluation activities constrained to people- and community-focussed outcomes, and facilitating a more systematic and layered interrogation of fundamental cost-benefit considerations and delivery of wider urban policy objectives. Such an approach to public housing renewal is already evident in some international jurisdictions, including New Zealand.

3.5.2 Evaluations of Victorian urban renewal programs

An audit of urban renewal initiatives under the BCP, undertaken by the Victorian Auditor General's office (ANAO 1996: 60), found that the redevelopment increased the quality of public housing both in terms of what was previously available and in comparison to other estates throughout Melbourne. However, the audit also noted that the usefulness of the model for future public housing redevelopments was dependent on policy reforms then under deliberation by the Australian Government, which emphasised financial rather than social aspects of public asset management (ANAO 1996: 60).

The NR program was designed as an eight-year initiative, with a unique biannual qualitative evaluation framework guiding its implementation. Evaluation of the program was made through university-designed community surveys in conjunction with government data, and focussed on individual and community-based social outcomes and opportunities related to wellbeing, pride, belonging, cohesion, safety, and future prospects. The NR scheme addressed neighbourhood amenity issues through streetscape improvements, housing upgrades, and improvements to community infrastructure (i.e. open space and community gardens). However, the focus of the initiative was on improving outcomes and opportunities for residents and local communities through improvement of social, political, and economic disadvantage.

Further to the formal government-led evaluation, a range of independent academic evaluations were undertaken to measure additional aspects of the NR program. Wood and Cigdem (2012) applied an alternative mixed-method approach to evaluate the program using quantitative techniques to measure social and physical outcomes in economic terms, finding that the effect of neighbourhood renewal on reducing negative externalities in renewal areas had generated a significant price premium in five out of the seven case studies. The authors concluded that 'neighbourhood renewal can help reverse negative housing externalities', but that such benefits can 'push up house prices and exacerbate housing affordability stress' (Wood and Cigdem 2012: 25). Kelaher, Warr et al. (2010) evaluated the health and wellbeing outcomes of the policy for public housing residents compared to other residents in the same Local Government Area (LGA). They found that while neighbourhood renewal interventions were successful in improving the health and life satisfaction of people living within the renewal area, there were no health benefits for other residents of the LGA, raising questions as to the scale and reach of such interventions when measuring their success (Kelaher, Warr et al. 2010: 866).

The Kensington project piloted a 50:50 social-mix model to inform future estate redevelopment projects in Melbourne via a PPP approach (Jama and Shaw 2017: 2). In 2004, a Social Impact Study was undertaken by Swinburne University to monitor and assess the social outcomes of the estate redevelopment project on residents and local communities (Hulse, Herbert et al. 2004). The study found evidence of a lessening of social connectedness for residents, loss of socio-economic and cultural diversity in the wider neighbourhood, negative impacts for local services and businesses, and the dispersal of existing community networks (Hulse, Herbert et al. 2004). Further studies found that only 20 per cent of public housing residents returned to the neighbourhood after being relocated, that there was an overall loss of 260 public housing units on the estate, and that the private developers involved in the project collected profits of more than 37 per cent (Kelly and Porter 2019; Shaw, Raisbeck et al. 2013). The resulting built form of the estate was block-by-block, rather than a salt-and-pepper mix, with separate entrances for public and private residents, which minimised opportunities for interaction between residents of different tenures (Jama and Shaw 2017: 10).

Evaluations of PPP initiatives following the Kensington pilot similarly found a disconnect between program aims and key urban reconfiguration processes as articulated under the NR program (e.g. community building and decision-making). A study of the Carlton redevelopment (Arthurson, Levin et al. 2015; Levin, Arthurson et al. 2014) found a lack of tenant involvement in decision-making within redevelopment processes, and symbolic and physical boundaries for public and private tenants in accessing on-site spaces. It also found that the form of social mix on the estate was used as a means of extracting land value rather than as a tool for social inclusion. Similarly, design principles guiding redevelopment, compromised by economic interest, were not conducive to social interaction between public and private residents.

The Victorian context suggests an increased role for independent academic evaluations of public housing redevelopment projects, in the absence of publicly available government evaluations and limited access to tender documentation. However, in 2019 the Victorian Government committed to undertake a range of social and economic evaluations of the Public Housing Renewal Program to inform future projects (Victorian State Government 2019). Similar to NSW, this demonstrates a commitment towards more transparent and appropriately resourced evaluation activity with systematic interrogation of the fundamental principles guiding public housing renewal.

3.5.3 Evaluations of South Australian urban renewal programs

South Australia's housing renewal programs have seen a number of independent evaluations. One of the first public housing redevelopments in South Australia was Rosewood Village at Elizabeth, which was evaluated as a case study of the social impacts of the relocation process on existing tenants and how best to involve communities in defining and affecting the outcomes of the areas being redeveloped. Researchers evaluating this project argued that the strategies focussed on relocating the poor to improve the environment, rather than on benefiting the existing community (e.g. Peel 1995; Arthurson 1998).

In the late 1990s, several evaluations (e.g. Biggins and Hassan 1998; Carson, King et al. 1998a; 1998b; Arthurson 1998; Rogers and Slowinski 2004) reviewed the social outcomes of various urban renewal projects (e.g. Mitchell Park, Rosewood, Northfield). Ruming (2006: 51) argues that although these evaluations were descriptive and relatively simple in their methodologies, their role in measuring qualitative features related to community and social capital was critical in influencing the design of future methodological approaches to evaluations of urban renewal projects of social housing.

One of the most evaluated projects in South Australia is the Salisbury North Urban Improvement Project (SNUIP) (Ruming 2006). The program, which ran from 1998-2010, included both asset and non-asset objectives (e.g. crime reduction, economic rejuvenation, integration of estate with surrounding area, acceptance levels, tenant satisfaction, housing asset sustainability). The City of Salisbury and SAHT initiated the SNUIP aiming to improve the amenity and quality of the physical environment and the condition of housing, renew community infrastructure and support local communities through community development initiatives (Ruming 2006: 51). Studies evaluating this program included Arthurson (1999), who examined the first stage of the program and concluded that its objectives were being met. This was followed by a study by Randolph and Judd (2000), which offered a framework 'for monitoring and evaluating the social, economic and physical outcomes of the project' (Ruming 2006: 53).

Several independent studies, including Kupke (2008), Baker and Arthurson (2007) and Arthurson (2010), have examined the outcomes of social mix and residential satisfaction after relocation due to urban renewal. For example, Arthurson's (2010) study investigated how urban renewal projects in the South Australian suburbs of Mitchell Park, Hillcrest and Northfield have operationalised social mix. Methods included qualitative data collection of 40 in-depth interviews with residents in the three suburbs, which provided a 'rich source of empirical data' around 'residents' understandings of reputation and neighbourhood stigma' (Arthurson 2010: 56).

As with Victoria, SA's history of evaluation methods demonstrates a leading role for independent academic evaluation over government-initiated evaluation. The SA government's latest housing strategy, Our Housing Future, includes an action to use Unit Cost Modelling to 'improve understanding of program costs to support enhanced budgeting, decision making, program evaluation and sector benchmarking' (Government of South Australia 2019), suggesting future program evaluation will be focused on economic rather than social outcomes.

3.6 Policy development implications

This contextual chapter has presented a brief overview of public housing renewal programs in Adelaide, Melbourne and Sydney, as well as broad brush trends in how public housing renewal programs have evolved in these cities. In recent years, renewal programs have shifted their orientation towards a stance where physical reconfiguration of public housing is enabled by citywide urban reconfiguration processes.

- Throughout the 1990s and 2000s a gradual evolution in public housing renewal is apparent. Physical (stock, estate) and social (public housing deconcentration) reconfiguration are evident throughout this period. However, the economic potential of key public housing sites has become increasingly important. This has changed how public housing is contextualised.
- The spatial analysis suggests that urban reconfiguration is a critical *enabler* of the existing public housing renewal model – rather than the other way around. That is, under the model examined in this research, the key drivers of urban reconfiguration (and so value to be 'unlocked') are linked to citywide and neighbourhood dynamics, rather than the public housing renewal component itself. In terms of policy formation, this preferences decisions relating to 'unlocking' and enhancing asset-based (land/locational) values. This aspect of public housing renewal is examined in greater detail in Chapters 4 and 5. The policy focus on 'unlocking' additional value through public housing renewal also opens up other policy innovation opportunities. These are explored in further detail in Chapter 6.

The role of evaluation and other evidence-gathering research in shaping policy evolution is, however, less clear.

- Despite a large number of studies over two decades undertaken to evaluate major urban renewal projects in each of the states, there is little evidence that these evaluations have informed or changed the track of successive urban renewal projects.
- A number of evaluation studies have provided detailed assessment of tenants' experiences of renewal programs, including measures of social connectedness, relocation experience, and integration of socially mixed communities. However, assessments of the ways in which processes of estate renewal are tied to (or cause) economic restructuring are more limited, due to a lack of access to information about project finance (e.g. how much developers paid the government for land and how much they profited).
- Where evaluation studies have been published – for example Hulse, Herbert et al.'s (2004) Social Impact Study of the Kensington redevelopment in Victoria – findings have seemingly had limited breakthrough in challenging dominant policy settings. The aforementioned study highlighted the loss of social and economic diversity in the neighbourhood, reduced social connectedness among residents, and the dispersal of existing networks. Despite these learnings, the Carlton redevelopment project (which commenced in 2006) was shaped in a very similar way to the Kensington project in terms of its financial, physical and social design, and therefore resulted in similar outcomes.

4. Does public housing renewal shape urban reconfiguration – or does urban reconfiguration shape public housing renewal?

- **Many interviewees – inside and outside government – shared a view that ongoing land value change is a critical enabler of public housing urban renewal. This view is, in some respects, grounded in an urban systems perspective where spatial outcomes are the result of neighbourhood and citywide urban reconfiguration determinants (1996–2016) in Adelaide, Melbourne and Sydney.**
- **This creates a dual dependency between private and public stakeholders, but also a shared belief around how public housing urban renewal works. While the view is far from uncontested, it is sufficiently widely held (often on pragmatic grounds, related to institutional and financial constraints) to generate a shared understanding of how renewal issues are articulated and solved.**
- **Key policies , such as leveraging publicly owned land and capturing land value through tenure mix and increased residential density, are instrumental in reconciling physical, social and economic area-level reconfiguration objectives surrounding urban renewal. However, the extent to which they also reconcile social and economic objectives for the remaining public housing component, and its residents, is less clear.**
- **Tenure mix and residential density uplift enable social reconfiguration and public housing stock expansion in renewal areas, but are also instrumental in meeting viability requirements and maximising the strategic value of land. In this respect, a 30/70 public/private mix rule-of-thumb signals a shared understanding of the market parameters of the public housing urban renewal process.**

- **The central role of land and land value has raised concerns amongst tenants, groups external to the advocacy coalition and some interviewees that public housing urban renewal is increasingly driven by asset-based viability considerations and reduced government exposure to risk. While risk related to physical reconfiguration in this respect is reduced, other objectives become increasingly shaped *by* – rather than impact *on* – urban reconfiguration processes. Notably, higher-level public sector fiscal considerations set the direction and reinforce the asset-driven renewal model.**
- **The contextual dependency of key policies highlights the limitations of a land-value centred model of public housing urban renewal. From a policy evolution perspective, this creates a clear role for policy experimentation, innovation and evaluation.**

4.1 Introduction

> I think more and more our renewal projects are about minimising the exposure and the risk for us, and maximising and leveraging off the value of the land. That's not possible on the fringe of Adelaide, and a lot of the public housing was built on the fringe, particularly in the north. But we've got three or four projects now where we're looking at the public housing ownership, which is within 10 kilometres of the city, and we fully know that they're going to be as much about maximising return, increasing density, leveraging off the value of the land to get the private sector or the not-for-profits to actually fund the development. Our contribution will be the land. (Government Official 1, South Australia).

In this chapter, we interrogate the basis of fundamental policy core beliefs regarding public housing estate renewal which have become embedded and reinforced over the last two decades in Australia. Following on from the spatial analysis in Chapter 3, we examine the role of two particular policies in delivering public housing urban renewal: the treatment of public sector land, and mixed-tenure developments.

- **Treatment of public land.** The value of land is a fundamental component of the public policy development process. This is no less so in public housing estate renewal. Expectations relating to capturing value through redevelopment are key drivers of current renewal policy settings in each of the three states. For government, the land on which public housing sits is an asset to be maximised to help meet a range of housing, as well as wider, policy objectives. With public funding otherwise constrained, leveraging this asset has become – within the advocacy coalition's renewal model – crucial to the policy core beliefs that shape both the renewal process and the expected outcomes of redevelopment.
- **Mixed-tenure development.** There are a number of assumptions tied to the use of mixed-tenure development as a means to facilitate social mix and social integration, as well as private sector (and private household) access to public housing estates. The concept of introducing tenure mix into previously predominantly public housing estates has been a consistent, guiding feature of urban renewal policy in Australia over the last two decades. Moreover, tenure mix practices in public housing renewal programs have given rise to enduring rules of thumb about the appropriate level of mix.

These two policies underpin a shared narrative, across both public and private sector interviewees, that latent land values can fund the renewal of (some) public housing stock. However, these values can only be captured if private sector demand for central locations can be transferred to public housing estates. This belief is, therefore, inherently tied to citywide reconfiguration processes that have seen land values in central locations increase. This highlights the dual dependency that exists between public and private/NFP sector organisations.

Across our interviews, the consistency of views was such that it is possible to conceptualise key stakeholders in public housing renewal as having the characteristics of an advocacy coalition. 'Advocacy coalitions' form around shared perceptions and understandings of causal relationships in specific policy areas, and how specific objectives can be delivered (Rozbicka 2013). They need not be formal coalitions; although, through public housing renewal programs, contractual arrangements may formalise specific aspects of policy core beliefs. Furthermore, characterising key stakeholders as an advocacy coalition does not imply that the different actors or organisations have the same end goals in mind. Instead, there might be a recognition that a particular set of causal relationships can deliver multiple organisational outcomes. Importantly, the identification of a set of shared beliefs framing discourse should not indicate that the narrative is uncontested within the advocacy coalition. While our interviewees articulated policy aims, and their roles and interests, within the discursive frameworks described above, many did so whilst recognising limitations within, and questioning assumptions (deep core beliefs) underpinning, those policy settings.

The notion of an advocacy coalition is thus a pragmatic adjustment to constraints imposed by fiscal (public) considerations and the determinants of urban reconfiguration. While public housing renewal has not strongly shaped urban reconfiguration (Chapter 3), there nevertheless is an underlying program logic with respect to improving public housing (and delivering associated/bundled quality/sustainability standards and place-making outcomes).

4.2 Treatment of public land: a strategic asset in a dual dependency

The contextual analysis in Chapter 3 highlights the central role that citywide reconfiguration processes, along with local and social capital factors, have played in shaping urban reconfiguration in Adelaide, Melbourne and Sydney. It also shows the positive impact that urban configuration in one area can have upon another area. This interaction (spillover) underpins the ability to 'transfer' demand in adjacent areas to latent demand on public housing estates. Land value and proximity to central cities has been intimately linked to citywide dynamics over the last few decades.

Over the last 30 years, labour markets and the economic geography of Australian cities have changed (Stimson 2011; Terrill and Batrouney 2018). Although jobs growth has been dispersed across metropolitan regions, central parts of capital cities continue to account for a large (and, in the case of Melbourne and Sydney, increasing) proportion of employment (Terrill and Batrouney 2018). Moreover, higher-income jobs tend to be more spatially concentrated than lower-income jobs (Hulse, Reynolds et al. 2019). An increase in centrally located jobs has been accompanied by an increase in populations in those areas. This has led to gentrification, either through the incremental 'upgrading' of former working neighbourhoods, or through development of new (higher density) residential districts primarily geared towards investor markets, inner-city professionals and students. As a result, land value change in inner cities has tended to outpace land value change in outer regions of capital cities.

Remaining inner-city public housing estates are firmly embedded within these changed market and land dynamics. The land upon which the social housing stock sits firmly ascribes to classic 'rent-gap' theory (Smith 1978) – that is, its current use is seen as a significant under-utilisation of its potential highest and best use. For governments, the land on which public housing sits is thus an asset that can be utilised to fund and deliver a wide range of housing, as well as wider, policy objectives. Leveraging this asset has become – under the prevailing renewal model – crucial to the policy core beliefs that shape both the renewal process and the expected outcomes of redevelopment. Several interviewees commented on the strategic role that public sector land plays as a result of changing land values and in extracting resources for public housing renewal.

4.2.1 Land ownership: leveraging land value for public housing urban renewal

As shown in the spatial analysis in Chapter 3, areas experiencing public housing renewal appear, to date, to have shaped local reconfiguration only to a limited degree. That is, with the exemption of Adelaide (1996-2006), public housing renewal areas have not experienced significant urban renewal (social and economic reconfiguration). However, the 'unlocking' under-utilised areas for jobs and investment (urban renewal aims) is contingent on social and economic reconfiguration taking place. Policy features that underpin private demand – such as rezoning and/or sale of land ; and design, location and place-making initiatives – capitalise on latent land value to enable public housing renewal (including expansion of public housing, and provision of public spaces and infrastructure to support communities) and social and economic reconfiguration that relate to 'unlocking' areas for jobs and investment. The PHRP, for example, specifies that tenderers need to: provide integrated social and private high-quality housing; co-locate community and commercial developments; utilise space to enhance social housing benefits; and develop innovative ways to foster integrated communities (*CHP Manager 3, Victoria).*

In high-demand markets, governments have something that developers want: large, well-located sites. In return for access to valuable land resources, replacement of public housing can be provided as part of the redevelopment.

> Not having to buy the land in one of the most expensive real estate markets in the world is a key facilitator and, particularly for us, that's something we've got to leverage. To get support for mixed-tenure renewal we've got to get out there, we've got to talk to industry – for example, through UDIA [Urban Development Institute of Australia], through PCA [Property Council of Australia], through any channel that we can – to say, 'We're here, we're unlocking an opportunity for the sector to participate in large-scale mixed-tenure development in well-serviced locations, but this is where we're coming from. We're structuring arrangements to help drive the renewal of our portfolio, and these are the things that we're going to be interested in if we're going to work together in this space.' (Government Official 6, NSW)

> We had some money from government, but the rest of it had to be paid for out of the value of the land. (Government Official 1, Victoria)

Interviewees identified how the strategic value of public land changes significantly in relation to the urban context. Sites at greater distance from the CBD, or in weaker housing market contexts, provide fewer opportunities for delivering public housing renewal in this fashion, as their land value might not afford a sufficiently large surplus to both deliver public housing stock renewal and meet private sector profit and returns expectations. In all three cities, distinct price gradients can be seen. The density–land value assumptions that help deliver feasibility in inner-city areas look different in lower-value markets. Interviewees recognised this key dependency as underpinning the current reconfiguration model.

> I think both south and north of the city where … we've got a lot of older stock, the private sector can't step in because the land values are so low. There's no financial return for them to knock over some houses and replace them, it's just not viable for them … We're probably down to our last half-a-dozen areas and the state government's asked us to focus on redevelopment within 10 kilometres of the city. That's an initiative they called Renewing Our Streets and Suburbs … That works better for us because there's inherent land value there. (Government Official 1, South Australia)

Moreover, the relative bargaining relationship between what the public sector can offer and what the private sector requires is also determined by housing market cycles. In a declining market, commercial and financial expectations are significantly affected. This, in turn, weakens the ability of the public sector to leverage land ownership against public policy objectives. Interviewees in NSW reflected on the progress of a number of projects, including the C+ site at Ivanhoe, noting that the time between initial scheme proposals, sign-off and commencement on the ground can see significant changes in terms of feasibility and viability, and lead to delays.

> We can deliver when the market is in a strong uplift position. When the market's the other way around, the project metrics don't stack up, as evidenced through the lack of delivery to date. And this can be exacerbated through government seeking maximum dollar returns on their land assets, which I can understand. However, in a downturn market, where the developments rely on the sale of private housing to pay for the social and affordable housing, it's just not working. You can't get your margins to work considering all the risk and long-term nature of the projects and, as such, the program has stalled. (CHP Manager 1, NSW)

In less favourable conditions, developers struggle to make their margins stack up and meet the social housing numbers looked for by government.

> There was also a bit of a market downturn, which resulted in the land values that we would have been able to realise under the development agreements being much lower than originally estimated in the business cases. (Government Official 3, Victoria)

While citywide and neighbourhood-specific reconfiguration processes shape changing land values, institutional determinants are central to understanding the extent to which market processes can reconfigure physical and economic space. Public sector authority to change permissible uses not only increases leverage value, but also gives shape to the subsequent development.

> We did some assessment on these sites … to actually look at what might be feasible. So, my group – the planning area – did all the initial work, the business case, and then it took the sites through a planning process. One of the aims was to take these sites and generate the uplift prior to contracting them. So, we needed to get a development plan approved. And we did a lot of sites in one hit. (Government Official 1, Victoria).

Concomitantly, this policy measure relies on the extent to which local housing markets have been reconfigured through citywide and neighbourhood-specific processes. For instance, in developing feasibility assessments for the Heidelberg PHRP project in Melbourne, market feedback led to shelving of the proposed renewal (i.e. high-density development/apartments). Feasibility assessments also resulted in the bundling of the Flemington estate with Brighton and Prahran, in order to draw on the more 'favourable' local housing market context in those suburbs to achieve renewal in Flemington.

4.2.2 Treatment of land: recalibrating policy through innovation

Public ownership of land, and the treatment of land holdings during the development phases of a major project, can provide benefits for public and private stakeholders alike, in terms of significantly reducing upfront land acquisition and holding costs and, in turn, increasing project return and yield. Public ownership of land allows a degree of flexibility to be introduced: reducing some costs and de-risking others, with the aim that these benefits will aid feasibility and in turn provide improved leverage for government to secure desired outcomes.

> In large mixed-tenure developments, government retains ownership of the land throughout the development. That provides great security for government, so we get the outcomes we're aiming for and can release stages at appropriate times. For the private sector, it means there are no extraordinary costs of purchasing the land, holding costs, interest, finding the money to do it, those sort of things, and it means we can leverage a better financial arrangement to get better outcomes. (Government Official 5, NSW).

The treatment of public land in this way is, however, not without controversy. On the one hand, it may generate 'artificially' high internal rates of return, which can skew the perception of who benefits from projects and lead to inflated expectations of value-sharing (Government Official 4, South Australia). On the other hand, the roll-out of sites and schemes to reflect current market conditions and context has led to criticism of the elevated centrality of the 'land as an asset' view in current public housing urban renewal narratives.

This perception has driven wider community concerns that question the actual value realised (i.e. a view that land has been 'sold' to developers far below its actual value) and challenge the principle of selling off public land at all. The former might be countered by the advocacy coalition on a case-by-case basis. However, the latter – challenged with some authority through the PHRP Inquiry in Victoria – interrogates the policies that enable the policy core belief. Taken far enough, the basis of the model itself is questioned. That is, concerns are not limited to whether the government secures the best price for, or maximises leverage of, the land asset; rather, they extend to the broader principles tied to the sale of public land.

The response to such critiques, in the context of retooling the PHRP, is instructive in terms of the innovation which emerges when core beliefs and assumptions are challenged. Interestingly, public ownership of the land remains key, but its treatment, and how it is leveraged, has been recast. As such, PHRP tendering and negotiation processes have shifted away from the sale of public land, and now aim for lease arrangements, whereby ownership of land remains with the public sector and full control of land and housing assets are returned to the public sector in due course.

> We're looking at an option where we retain ownership of the land. So, more of a lease option. A bit like a 'build to rent', but we get it all back at the end of a defined period. So, that's what we're aiming for there. Which is, again, a further iteration on the business case. And really, because we had so much criticism, I guess, about the selling [of] the land. (Government Official 1, Victoria)

At first sight, this restructured protocol signifies a significant reworking of the policies that support the policy core belief. However, the underlying mechanisms, or business case, that will enable this new approach to work, remain tied to housing and land market contexts.

> So, the ground lease approach means that you don't sell government land; that it stays in the ownership of the Director of Housing, particularly in key areas like Flemington, Prahran, Brighton as well. They're all reasonably affluent suburbs to a degree and they're all close to the city. [So,] it's not just, 'sell the government land and buy a big block of land out past Pakenham somewhere'. (Government Official 2, Victoria)

The new approach entails a shift in how the business case and feasibility calculations are structured by developers. The revised settings change the developers' role from property seller to manager of build-to-rent products. Interviewees felt that such changes could be accommodated within the existing renewal model, and identified potential positives as well as negatives.

On the positive side, a number of interviewees noted that a shift towards a build-to-rent market may reduce the risks associated with having to sell products across a number of stages and over an extended period of time – particularly where the release of private sector stock was determined by the completion of phases of social housing replacement, rather than when might be best to bring them to market. It may also provide developers with access to different market sectors. Of concern, however, is the fact that this form of development – which creates large concentrations of rental stock (albeit targeted at a diverse range of households, with different providers) – is novel in the Australian context. It therefore comes with a degree of uncertainty for developers. Build to rent creates a necessity for longer-term involvement and interest in renewal outcomes.

> So, what's interesting, if you're looking at the sale versus the lease, is there is a different perspective creeping in. So, it's not so much driven by what [developers are] going to be able to sell [properties] for, it's about—the leasing is a different kind of dynamic, if you know what I mean. So, it's quite interesting to see the differences in the process. (Government Official 1, Victoria)

For property managers, ensuring long-term sustainability and maintaining the desirability of rental products over the length of the ground lease becomes pivotal. This may further incentivise good design outcomes, and drive amenity and place-making standards. Place-making in this respect serves a number of aims. By raising the quality of architecture, design and local amenities ('city living' and green spaces), additional private sector demand may

be encouraged. As an example of this, interviewees in South Australia referred to the 'Westwood Advantage': an incentive scheme for buyers, jointly funded by government and the private sector that paid for landscape and streetscape packages (see Chapter 5 for details). For CHPs, place-making also serves as an infrastructural base for enabling whole community integration, enhancing tenant services, and providing an environment in which social capital can be nurtured and delivered. However, a tension between asset-based and people-based priorities is detectable. CHP interviewees referred to a tension between cost considerations (often emanating from Treasury) and the resources required to support tenant services, community integration and place-making.

4.3 Capturing land values through tenure mix and density uplift

> The only thing in my mind that's been continuous over the past 20 years or so, has been the 30 per cent/70 per cent public/private mix. That's the only thing that's helped. (Former Government Official, NSW)

The second fundamental policy guiding public housing renewal policy in Australia over the last two decades has been the promotion of social and tenure mix. Tenure mix is sometimes portrayed as a policy for generating positive neighbourhood effects that can promote social and economic opportunities (COAG 2009: 7). While the argument and evidence for such positive effects remains controversial (Darcy and Gwyther 2012; Arthurson 2013; Pawson, Hulse et al. 2015), tenure mix remains an important policy for two different and interconnected reasons. First, tenure mix is essential in enabling the transfer of demand in adjacent areas to public housing estates. Second, the degree of social mixing plays a critical role in maximising (extracting) latent land values.

In regard to tenure mix – as a defining component guiding the advocacy coalition – a shared discourse among policy-makers, partners and stakeholders has consolidated around multiple claims. Those claims are used to emphasise the benefits of bringing private sector housing – and private developers – into renewal frameworks in order to foster new investment to disadvantaged areas and stimulate 'area effects' in reconfigured neighbourhoods.[18]

First, redevelopment enables more efficient use of land (greater utilisation of assets), not only facilitating the modernisation of stock but also the provision of significant numbers of private dwellings, thus helping meet citywide housing targets. Second, it enables leveraging of public sector resources (land and planning) to bring in private sector finance for public housing stock modernisation. Physical reconfiguration also aligns well with policy narratives tied to introducing greater diversity into the social housing portfolio (e.g. less three- and four-bedroom properties, more one- and two-bedroom apartments). Third, re-profiling local income characteristics through physical (and thus social and economic) reconfiguration can help sustain a greater range of shops, services and facilities.

From a developer's perspective, inclusion of any social housing in a project might be seen as a risk compared to a standard development. This raises a critical question around the appropriate level of tenure mix or market 'tolerance' – that is, the level and/or degree of public housing provision in renewed estates that can be achieved without negatively affecting land values.

> A large project that was done a number of years ago at Golden Grove – that was a joint venture between government and the private sector, Delfin did that – the project framework required us to participate at 25 per cent. It ended up being about 22 per cent, but that one worked. And so, in some respects, that's been a bit of a benchmark for us – around the 20 to 25 per cent is tolerated. But there's no hard and fast rule, really, and you're caught between that marketability versus demand for replacement housing. (Government Official 1, South Australia)

18 Area effects refer to the effects on individuals or households of residing in a particular neighbourhood.

> The market response sort of led to that 30/70 sort of split. Unfortunately, also by introducing the private element – it's not unfortunate, it's just market forces – the market is telling us that about a 25 to 30 per cent social proportion on the site is about what the private market's willing to live in and around. That if you go too heavy the other way, like 50/50, it presents a challenge – it reduces the uptake of the private element. (Government Official 2, Victoria)

Given the complexities of urban renewal, not least the long timeframes involved, there was a shared sense among many of our interviewees that a simple ratio rule of thumb helped both define and shape external responses to the policy. Some interviewees shared the view that a consistent narrative of '30/70' (to designate the ideal public/private split) presents relatable shorthand and an understood benchmark for stakeholders involved. It signals to prospective partners a shared understanding of the parameters that will guide renewal options. A benefit of this shorthand is that it acts to reduce transaction costs of development coordination by reinforcing and reaffirming shared beliefs. Thus, it serves as a marker from which considerations regarding development viability and feasibility flow. In this respect, it also becomes a self-fulfilling prophecy. It provides a *tractable* element around which other tractable elements can then unfold, in terms of density, dwelling type and necessary price points for the private market apartments provided in the redevelopment.

> One of the things we learnt from Minto is that, when renewing an area for mixed tenure, when you declare at the start of the development what the mix will be it's important to deliver on that commitment.(Government Official 5, NSW)

Such a framework supports the certainty developers require, but this means that the rationale for 30/70 – and through it, the wider program logic of social mix – has come to be perceived as, first and foremost, a developer-led, viability-driven imperative. This view can be seen internally, within the advocacy coalition, but has primarily been a focus of external critique. Internally (particularly in more 'tenant-focussed' teams), acceptance of the broader demands linked to project viability and strategic objectives of public housing renewal was balanced with reflection on the need to work with, and understand, inherent strengths within existing communities and embedded networks of support. Stakeholders also perceived there to be a conflict between policy interests and best practice, with the two seemingly pulling in opposite directions. While tenure mix leads to tenant dispersal by design, provision of layered and integrated support services for tenants who require it is often best delivered through intensive place-based approaches that benefit from concentration.

> So, it is a community, and I think sometimes when we talk about engineering what we're going to do for people, you've got to sit and pause and actually see that community. And sometimes, it's about supporting what's there, rather than forever changing it. (Government Official 2, NSW)

> I think [the evidence] is yet to be seen. It'll be interesting to see how it works because tenants like to be amongst tenants, even though people do fight and don't get on. But it'll be interesting to see how public housing, or social housing tenants, and affordable housing and private owners all come together. (Government Official 3, NSW)

The tractability of the 30/70 framework in estate renewal creates an inevitable tendency towards measuring success as defined within the parameters that contribute to, and follow on, from this tractability. In the face of other complex, grey, more *intractable* characteristics underpinning the policy narrative of tenure mix, those elements that flow from development feasibility calculations – helping determine what kind of housing product can be delivered, or what kind of residential density is required, in order for the scheme to be economically viable – take precedence.

Similarly, in specifying tender scope, physical outcomes are easier to establish, and thus become a focus for architectural/design proposals and discussions. Parameters around integration of public and private residents into mixed communities are less easily defined.

> So, the Homes for Victorians policy was all this commitment to build new social housing dwellings… There was just very little written in detail about what they thought integrated communities were. It's not defined throughout. (CHP Manager 3, Victoria)

While the program logic of the 30/70 approach goes some way to reducing public sector financial risk and reconciling social and economic reconfiguration outcomes, it is less clear that the same is achieved for the existing public housing community. There is also a risk that public housing renewal objectives are increasingly shaped by urban reconfiguration processes – rather than public housing renewal shaping the reconfiguration of existing neighbourhoods.

4.4 Policy implications

In this chapter, we have considered the shaping of key beliefs around how public housing estate renewal 'works' and can be made to 'work' in Australian capital cities.

- The role of latent land values as an enabling factor in public housing renewal generates a shared set of beliefs across public and private actors around 'how public housing renewal works'. Beyond the enabling role of land value change, these beliefs extend to the treatment of public sector land, mixed tenure and residential densification.
- In a policy context where the public sector aims to minimise its direct financial exposure to the process of renewal, these shared beliefs generate a dual dependency. That is, neither the public nor private sector can independently extract, under the prevailing institutional arrangements, the inherent land value. Key public and private sector actors in public housing renewal therefore take on the characteristics of an (informal and pragmatic) advocacy coalition. Notably, this higher-level constraint (financial exposure) is also a choice variable – governments can choose to relax this constraint, thereby altering some of the dynamics of the advocacy coalition, as well as the model of public housing renewal.[19]
- The policy treatment of public sector land, mixed tenure and densification enable the advocacy coalition to reconcile public sector objectives (including public housing renewal, quality standards and local amenities) and private sector objectives (profitable housing development). Rules of thumb – such as the 30/70 public/private mix – signal a shared understanding of the internal program logic public housing renewal processes.
- The enabling role of land value change also acts as a limitation on the applicability of the current renewal model. Clearly, land values and citywide dynamics do not facilitate the leveraging of land for physical reconfiguration to the same extent across all metropolitan areas. Here, public sector innovations – for instance, drawn from impact investment approaches – may provide alternative program-related value. However, with respect to economic reconfiguration, non-spatial policies – for example, targeting incomes (or the income distribution) and skills (education) – may also provide effective (though also less directive) stimuli for urban reconfiguration.
- The centrality of extractable land values in reconciling multiple objectives increases the risk that public housing renewal is increasingly shaped *by* urban reconfiguration, rather than acting as a policy *for* giving direction to urban reconfiguration.

19 Examination of this higher-level (deep core belief) constraint falls outside the objective of this particular research. The focus here is on the role of evaluation and learning in informing current public housing renewal with respect to maximising financial and social outcomes through mixed tenure. The issue of higher-level constraints is, in this respect, clearly related, but taken as a starting point for how policy formation is taking place.

5. Learning processes in public housing estate renewal

- **Interviewees were able to reflect on the role of evaluation as an integral part of the policy process and identify previous studies they had been involved in, or used, in their work. However, evaluation insight is perceived as simply one of many sources of evidence feeding into the policy formation process.**
- **Institutionalisation (flow-through) of evaluation insight into forward policy development was often limited and ad hoc.**
- **Learning also comes from the role of key stakeholders as experts in their own right. Despite shifts in institutional structures within government over time, many key players demonstrate a longevity of involvement and a 'shared' trajectory – either working within the same organisation over a long period or working on estate renewal across the public and private sectors.**
- **It is therefore important to position evaluation activity within a broader spectrum of learning processes underpinning delivery of public housing estate renewal. Other practices of learning come from accrued expertise, past and 'live' program experience, and external triggers.**
- **Preparation of EOIs, ROCs and RFTs (and similar processes) acts as a vehicle for information gathering, testing of policy assumptions and subsequent refinement of policy development, through a negotiated process.**

- **By their very nature, advocacy coalitions are characterised by persistent and self-reaffirming policy core beliefs, and demonstrate a selective application of knowledge to reinforce and justify particular decisions or choices. Increasingly, the fundamental importance of land value uplift enabled through neighbourhood reconfiguration is a driving policy core belief across all three states.**
- **The tendency to learn through a circular affirmation of policy core beliefs does not mean that the coalition is intransigent. Internally (within the advocacy coalition), a sense of ongoing iteration was expressed, particularly in terms of improving systems and processes. Externally, events such as political or community pushback may also trigger policy adjustments. Similarly, external events (such as COVID-19) can be triggers for change.**
- **Evaluations play different roles, depending on whether they are summative or formative in nature. Our findings suggest that evaluations often link to symbolic forms of knowledge utilisation, which lends itself less to policy innovation and more to managerial monitoring. Both roles are important, but the relative lack of formative evaluations that engage with program logic of public housing renewal (in terms of assets, people and area outcomes) is not conducive to enabling policy and institutional learning.**

5.1 Introduction

In this chapter, we discuss the role of learning and evaluation in the formation and evolution of public housing renewal programs. Evaluation activity plays an important role in producing information about the nature and workings of public policy. However, knowledge production through such activity is but one part of a broader set of mechanisms that shape learning and which compete within the realities of program implementation over time. In this context, we can perhaps more pragmatically understand, on the one hand, academic criticism regarding seemingly half-hearted commitment to evaluation by policymakers, and, on the other, the frustrations expressed by policymakers tied to the practical and timely usefulness of evaluation reports when they are produced.

Chapter 5 captures our interviewees' insights regarding their experience of previous evaluations, recognising that learning takes place in myriad ways, mediated by organisational, team and advocacy coalition dynamics. First, career-long expertise – resulting from direct experience on a range of different programs over a number of decades – is common among stakeholders currently involved in major estate renewal activities. Second, day-to-day involvement in projects, as they are delivered, acts as an ever-present source of feedback and learning. This includes iteration during engagement with prospective partners at information sessions and EOI/RFT activity. Crucial forms of learning – and often those which have the most immediate impact – can also arise as a result of external factors. For example, political or community response to a proposal or roll-out of a program, or a significant change to broader economic or market factors upon which program viability depends, act as learning events which can trigger reassessment and review.

In exploring these processes, we seek to tease out the pervasiveness and self-reinforcing nature of the policy core beliefs, and examine the assumptions guiding the shared narrative and frameworks within which organisational learning takes place. Understandably, stakeholders valorise learnings in areas they deem important and necessary based upon operational parameters when in the day-to-day realities of project delivery rather than broader questions and considerations that may raise challenge to program logics of public housing renewal themselves.

5.2 A coalition of stakeholders with a wealth of renewal expertise

5.2.1 Institutional memory

Although the institutional structures within government responsible for public housing estate renewal have shifted and evolved over time – and indeed in some cases have been back and forth between departments – many key players in the sector demonstrate an important longevity of involvement and a 'shared' trajectory. For some, this manifests in staying with the same organisation for a long period. Their contribution and leadership over time, and across projects and programs in their various iterations, in many cases acts as the institutional memory regarding renewal activity. Many interviewees could trace a career-long involvement, with expertise continually evolving through policy and program shifts.

> I've been working for the Housing Trust for over 30 years. I started at the same time we did our first foray into urban renewal at Mitchell Park back in the mid-1980s … I'm probably one of the last people involved that has a memory of the different projects we've worked on. (Government Official 1, South Australia)

Longevity within a single organisation helps underpin the experience and insight upon which the advocacy coalition is built, but can also act as an important internal sense-check regarding contemporary policy settings. The latter may manifest in terms of the weighting given to particular issues (for example, emphasis on tenant outcomes) in current renewal models, or reflections regarding more effective practice of past programs.

5.2.2 Cross-sector synergies

While public housing estate renewal approaches and programs have evolved, and many players involved in earlier government initiatives move on and leave the public sector, expertise tends not to stray far. Indeed, the movement of key employees between public, private and NFP sectors not only reflects the changing structure and nature of partnership working in terms of the design and delivery of renewal activity, it also underpins a continuing thread of core values and beliefs among this broader community of stakeholders. Rather than renewal policy teams being hindered by frequent staff (and therefore knowledge) churn, as might be presumed, there is, in a sense, a shared matrix of experience. The movement of experience across sectors has been influential in guiding the parameters of preferred partnership working models in contemporary renewal programs in all three states. As one of our Victorian developers reflected when commenting on their background skills:

> Probably the best way for me to answer that is to talk about my own experience working in government. (Developer 1, Victoria)

Movement of actors from government housing agencies into the community housing sector has been particularly significant; however, transfer of expertise can be seen in all directions. Key actors with a background in property development are increasingly prominent within the public sector. This reflects shifts within government as to where public housing renewal responsibilities 'sit', and also changing expectations tied to land and property agencies, such as Landcom in NSW and Renewal SA in South Australia. In NSW, LAHC has also played an important role as landowner. With an ever-increasing focus on asset maximisation through land value-enabled redevelopment, the knowledge and expertise required to pursue complex large-scale, market-dependent projects has become more, and necessarily, privileged.

> I've worked in both public and private sectors. So, property background, but more the application to larger, more complex, government projects, and certainly the delivery of the portfolio and the renewal of the portfolio, and LAHC fits within those arrangements. (Government Official 5, NSW)

Many interviewees reflected on the importance of insights gained from working internationally – notably in the UK, where there is a longstanding history of estate renewal. Opportunities for policy translation are particularly significant in the community housing sector, where program settings and principles of partnership working have been influenced through the in-flow of international expertise over recent years.

> The MD, the general manager of housing, myself, have all lived and worked in Scotland or England and been part [of comparable programs]. And if England is 20 years in front in some ways, like funding and scale, there are those ideas [we can use here]. (CHP Manager 3, Victoria)

The diffusion of experience and knowledge across constituent parts of the advocacy coalition serves to both strengthen policy core beliefs and provide a means whereby partnerships can evolve and be configured to deliver renewal tied to those beliefs. These cross-cutting synergies also help build understanding of the respective roles played by each member of the coalition in the design and delivery of wider program objectives; again, this helps reinforce a shared understanding within which processes are framed and learning feedback understood.

5.2.3 Deepening team expertise to reflect program and project complexity

The growing complexity of large renewal projects has helped encourage a wider range of skills and expertise within policy teams. Although 'core' housing, property development and urban policy skills remain prominent, project management and infrastructure delivery skills have grown in importance for program implementation. The multi-layered nature of desired renewal outcomes – including wider community and sustainability goals – has also encouraged inclusion of broader social and environmental expertise within program teams. For example, the C+ team at LAHC in NSW has a team member with a psychology background and significant interest in how people-based outcomes are tied to social mix. Another recent addition to the team – from the private sector – is an architect with expertise in sustainability and people-centred design.

> My qualifications are in architecture, and so all about sustainable architecture but with a focus on whole person-centred design. So: what is it like for the people in the space? What experiences do they have? And that combination of sustainability and a focus on people's experiences led me to community housing and being here. (Government Official 8, NSW)

> I entered LAHC to support tendering and consistency in the tenders, but while I've been here that focus has shifted onto the effects, I suppose, the social outcomes associated with renewal. Looking at some of the evidence around that and social outcomes for tenants. So the psych[ology] research has come in a little handy there. (Government Official 7, NSW)

5.3 Internal learning mechanisms

> I don't have any scientific research behind it, other than my 30 years' experience in the sector. I worked in crisis organisations providing crisis accommodation, transitional housing management, housing associations, small/big providers. A lot of it is observing and watching what works, what doesn't. (CHP Manager 1, Victoria)

Interviewees readily identified ongoing learning integral to everyday work practice – whether from an individual or broader organisational perspective. Those working in specialist roles for many years often expressed a sense of continual, iterative improvement and of getting systems working well over time. The relocations team in NSW, for example, has established a strong understanding of how best to stage, manage and support tenants who are required to move as part of estate renewal activity. Across all three states, many interviewees talked through contemporary policy settings with reference to previous programs that they had been involved in. These initiatives frequently provided something of a benchmark for replicating positive processes and outcomes, and avoiding less successful aspects.

5.3.1 Learning through 'benchmark' renewal projects: Westwood, South Australia

Among our South Australian interviewees, Westwood – a renewal project involving a partnership between state government, local government and a private developer (Urban Pacific) – was almost universally mentioned, with positive process and outcomes lessons in the institutional memories of all three partners. For example, key lessons were drawn from the challenges tied to delivering mixed-tenure development in lower-land value markets, where entry-level private-sector products are generally relatively affordable. Rather than drop price points to align with the neighbourhood's previous social housing 'brand', the scheme added value for potential buyers through the Westwood Advantage, an initiative jointly funded by government and the private sector, which paid for landscape and streetscape packages, driveways and fencing. The Westwood Advantage exemplifies the role of place-making and design in realising the strategic value of land and location.

Lessons learned in pitching to this competitive end of the market can be seen in current Playford Alive developments in the 'Peachey Belt' in north Elizabeth, where similar 'on-costs' are included in the purchase.

> The other thing we do, which again is learning from previous projects, and I'll jump back to Westwood, because it does have an impact, but what we found at Westwood was because of the amount of social housing there, and as that has an impact on the brand … a decision was made not to drop the pricing to align with the brand of the suburb, but to add value … which actually serviced the marketability of the project. (Government Official 3, South Australia)

Renewal settings need to respond to local market context, and organisational and partner learning has evolved through implementation – by seeing what works and what is required, and working within the envelope of development feasibility. The benchmarks defining success revolve around the ability to sell private sector product: without that, wider aims and objectives tied to public sector renewal, and indeed tenant outcomes, cannot be delivered.

5.3.2 Learning across the advocacy coalition

In Victoria, a government official highlighted, as a useful parallel to the internal institutional memory, the important role played by advisors and consultants – and, in turn, their place within the wider advocacy coalition. A number of external consultants currently working with the government's PHRP have brought with them insight from their involvement in Carlton's renewal.

> One of our advisors, or in fact two of our advisors, were involved in the Carlton [renewal project] – or had some lessons learnt/work that was done at the end of the Carlton [project]. Carlton is still going on, but from that procurement process and the contract engagement process, consultants that were involved at the time … have been engaged in the program now to bring those lessons in. (Government Official 1, Victoria)

Learning arising from previous renewal activity can also be seen among partner organisations who work alongside government. A number of developers and CHPs identified that their involvement in earlier projects provided a strong platform (and the necessary skill set) to engage in current proposals and bids. Many stakeholders, having invested significant time, effort and resources in responding to public housing renewal opportunities (which often demand different models to their more standard projects) – and having seen what worked, and what did not – are keen to maximise that initial upfront investment and tender for further projects as they arise. Much of the learning that occurs is between the partner entities themselves, who, having undergone a shared learning curve through their collaboration on the previous projects, redeploy those partnership arrangements to form consortia across a number of bids.

> [Through] good management, and working and investing in community development, public housing renewal can be done really well. So that, to me, was a great learning – and … that was one of the main reasons behind the organisation, and also my board, being supportive of putting our hand up for another one. Because we've done it before and we know it works and we know how to manage it. (CHP Manager 1, Victoria)

> We have acquired a range of learnings through previous projects and relationships with CHPs, and subsequently selected architects that we considered appropriate to site-specific locations, who have a successful history of developing good urban renewal outcomes. It is then a matter of building on those learnings and harnessing other strategies, consultation and relationships to continually improve project outcomes along the way as well. (Developer 2, Victoria)

Stakeholders also draw insight through awareness of comparable renewal projects elsewhere in Australia and overseas. Seeing projects that (at least appear to) share similar goals – for example, in terms of mixed tenure and built form outcomes – provides powerful endorsement and reinforcement of policy core beliefs.

> You hear it everywhere you go. I would say in that sector, where you're saying stimulation of social and affordable housing development, it's the same ideas. (Developer 1, Victoria)

5.3.3 Learning through the tendering process

Working in partnership with the private and NFP sectors has been an integral and embedded component of policy and programs across all three states over the last 20 years (Pinnegar, Liu et al. 2013). Enabling those partnerships to work – that is, providing a framework whereby policy outcomes can be delivered alongside private sector feasibility, and rate of return requirements are met – has been a key determining feature in shaping and refining policy settings and design. Strengthened internal expertise has assisted in this regard, notably through greater emphasis on land asset and property development skills within policy teams over time.

However, the process of 'going out and testing the market', through conducting industry soundings, or putting out a call for EOIs or RFTs, has provided a key interface with prospective partners and formed a crucial part of the learning process. Such interactions provide capacity for iteration and innovation as partners raise issues, ask questions and explore potential approaches. This, in turn, further strengthens policy awareness of market requirements, identifies potential constraints and helps clarify expectations.

> You start with a fairly high-level view of how the outcomes might fit within the domains of the human services outcomes framework, but then, as we have to consider what's workable, we're getting that feedback from tender responses, CHPs and the negotiation process and the research that's happening. And gradually that tightens up into something that's operable. I think that's probably another pretty critical aspect of the learning that's happening at the moment. (Government Official 7, NSW)

Feedback garnered through these processes has helped policy teams clarify where necessary adjustments are required, for example highlighting the need for EOI/RFT documentation needs to avoid over-specification in order to give tenderers the space to demonstrate innovation in meeting policy objectives.

> That comes from market feedback and sounding in the beginning. We're dealing with developers and that's the way they want to see it. They don't want to deal with a telephone book for an RFP [request for proposal] at the end of the day; they want to say, 'What is it that you're looking for, clearly?' Future Directions gives us the objectives there, so we say, 'Fill in and give us the innovation across those criteria … We set objectives that basically say, 'How can you use innovation in sustainability and other things to benefit social housing tenants? How can you link this renewal to Future Directions and the drivers?' (Government Official 6, NSW)

Expectations around innovation raise questions regarding intellectual property (IP), whereby tenderers may be cautious in terms of 'giving too much away'.

> Part of the process we're running on our current tender process is to get some of that information from market … So, we are trying to capture their IP … unfortunately we're going to have to let two sets of IP go and take one tenderer, but we can learn from the others in future ones, definitely. (Government Official 2, Victoria)

In Victoria, feedback through ROC processes also helps develop a better understanding of expectations tied to latent land values and development feasibilities on different sites and in different market contexts. Having initially identified nine areas for inclusion in the PHRP, early consultations with the developers revealed that the model – and so the involvement of private sector finance – would not work in some parts of Melbourne.

> We weren't able to get a contract for Heidelberg. You couldn't get a proposition there. So, we were … back to the drawing board there, which surprised us a little bit. So, the market is pretty much saying, the developers are saying, there's not a market for apartments – that many apartments – in Heidelberg at the minute. (Government Official 1, Victoria)

Issues arising through pre-tender discussions and information sessions, notably the involvement of CHPs, also helped in refining policy direction and partnership protocols in Victoria's PHRP. Participants interviewed explained that, initially, the government did not specify any involvement of CHPs, although developers – who had been invited – had the option to bring on board CHPs as partners within a consortium bid. Through these iterative conversations at an early stage, the government recognised the added value CHPs could bring to the program. As one of our Victorian interviewees acknowledged:

> I think, when we first went out with the renewal program, there was a lot of just, 'What is this whole thing about: is it public housing, is it community housing?' We weren't able to land a clear direction on that. So, we couldn't really go out saying we want a community housing involvement. So, it was a little bit, 'Let's see what we get'. We were pretty sure that we would get community housing involvement, because we thought the developers would want to have a community housing kind of badge to the management. (Government Official 1, Victoria)

Each of these frames for internal learning occur 'live' in the immediacy of program delivery. While they may be reflected upon over time, they contribute to ongoing practice and insights gained – both positive and negative – and have a direct impact, in that they aid or hinder immediate tasks to hand for the program implementation teams involved. Understandably, this practical learning is important in helping refine the roll-out of stages in the 'delivery of renewal', rather than for providing ongoing feedback on the settings in place, or on the in-the-distance outcomes that might ensue. As such, these iterative, continual lessons tied to project management contribute a significant, constituent part of organisational learning.

5.4 Where does evaluation fit within the learning context?

Within broader frameworks of organisational learning, the role of policy and program evaluations –in particular, those evaluations commissioned by government to be undertaken by an external party – is a key interest in this research. This section focusses on experience among our interviewees of evaluation activity, and application of findings derived through the evaluation process in ongoing program implementation and forward policy development. As noted above, our discussions almost universally highlighted an awareness of, and value placed on, insights provided through these activities.

However, the impacts of that evaluation activity – in terms of published material and demonstrable feedback loops identified in current policy settings – would suggest a more selective and less systematic institutionalised commitment across all three states. While evaluators and academics voice frustration with the limited translation of their evaluation research into public policy evolution, there is, nevertheless, evidence (in some learning environments more so than others) that this work is clearly enabling policy evolution within advocacy coalitions.

5.4.1 Experience of evaluation activity

Most of our government interviewees perceived evaluation to be an integral part of the policy process, and could identify previous studies that they had been involved in or had read and used in their work. As discussed in Chapter 3, some of the evaluations cited were summative in nature, rather than testing program logic of specific public housing renewal initiatives (why and how a program produces outcomes, for what purpose, and for whom). That is, they have primarily focussed on offering insight into tenant experience and deliverables. Tenant advisory groups, consultative (or engagement) groups, and retrospective studies of tenants and contextual (area-based) data analysis constitute inputs in this context that enable policy-makers to track and, where appropriate, provide documentation and evidence to support past policy decisions.

In reflecting on previous examples of evaluation activity, interviewees framed their understanding of the value provided by such studies in terms of enabling change from baseline positions to be tracked, thereby offering insight as to whether key program aims and objectives were leading to desired policy outcomes.

> With the projects in the past … we've always talked to the community, identified what the objectives were, set up a program that – when it's being delivered –we would test the project against those objectives. Often we'd engage someone on an annual basis to go and have a look at performance compared to the objectives and then, at the end of the project, we would do a final evaluation that would involve talking to all the stakeholders – the community, those that left the area – and [asking how] it's been for them and those that have come to the area. (Government Official 1, South Australia)

> We've done baseline testing, surveying, with our social housing tenants, so that when we do get a few years down the track and we've got them in place and operating, and in an integrated community, we can re-interview our tenants on each of the estates – both the private and the public and the affordable and the mix of people that are in there … [We can assess,] How does this compare to the baseline? Has this been a good outcome? What are the learnings? What's working? (Government Official 1, Victoria)

With estate renewal activity increasingly delivered through partnership arrangements, a number of non-government interviewees highlighted the importance of gaining early feedback from their initial engagement in a scheme. This provides a way of building organisational interest and confidence to consider further opportunities. A number of developers and CHPs had engaged in their own learning processes to determine the potential benefits and risks of involvement, given the departure of such partnership opportunities from standard business models. A manager from one of the CHPs in Victoria highlighted significant investment made, and insight gained, in working with the community over a five-year period:

> It's a quite interesting project … for the reason that not only was it the first public housing renewal that I know of in Victoria that has happened, but the actual journey of it over the five years. We got an independent consultant to actually do a review, sort of surveying residents, tenants, people living in that area, over five years. Every single year. And we finished it last year … the findings were actually quite remarkable … And we used that as an example of how, by good management and working and investing into community development, public housing renewal can be done really well. (CHP Manager 1, Victoria)

CHPs also referenced the PHRP Inquiry as a source of learning (CHP Manager 3, Victoria). Despite generally positive reflections on organisations' use of evaluation activity, some interviewees described a more fragmented record of engagement – whether in terms of the inherent limitations and restrictive parameters placed on the scope of research, or the wax and wane of commitment among policy teams over time. This, in part, captures the prevailing ethos of the wider learning environment within organisations at particular times, and what type of learning was privileged. It might also reflect shifts of policy 'ownership' within and across organisations: prior learning dissipates or might get lost in translation as leadership tied to estate renewal activity within government transfers to different teams, across agencies and even changes department.

> I think we probably haven't done [evaluations] much before because we've really looked at it as a redevelopment: a property project, not a people project, you know. And I think, if anything, our experience through this process taught us that whilst, intuitively, we thought all we were doing was a really good idea, we didn't have anything to say, 'and this is what people in these estates are saying, and this is what they want' … That's why we ended up doing the survey approach and doing that – because we realised we had nothing except our own perceptions. (Government Official 1, Victoria)

5.4.2 Making use of insights and evidence gathered through evaluations

> I think it was probably 2003 or thereabouts, where we wrote up a scope for an evaluation. We went through a select tender process, got three solid proposals for evaluating Minto, and [they] involved things like telephone surveys to understand what was happening in the community, clarification of program logics; understand how the whole thing was supposed to fit together, etc. We selected someone, we sent a brief up to the Chief Executive, whose response was, 'We're working on Bonnyrigg now, we'll learn everything we need to know from Bonnyrigg,' and dismissed it. (Former Government Official, NSW)

The benefits of evaluation activity can only shape policy evolution when institutional cultures, practices and dispositions to use and value such information are embedded and given due weight. Although most interviewees were able to identify examples of evaluation research and flag headline insights, there was also shared acknowledgement that the flow-through of institutional knowledge was hampered due to limited structural and systematic capacity for information to fundamentally inform ongoing delivery or forward policy development. Whilst many of our interviewees could trace their involvement in renewal programs over many years, and have built up their own individual lessons from previous schemes, there was a shared sense that the trajectory of institutional learning is more stilted and circular.

> We've always undertaken an analysis of our projects during and afterwards in the evaluation process but, generally speaking, they collect dust in the cupboard. And when there's an initiative, for whatever reason it is, it's almost a relearning of the process of what works and what doesn't work. (Government Official 1, South Australia)

> I had a role around research and evaluation, an internal role, and one of the things that we did was commission a number of studies on aspects of redevelopment projects. So, in Minto, for example, we [conducted] a project around people whose homes were being upgraded and living in the redevelopment zone. It was: What were their experiences, What can we learn about how they need support? Or another one was in-depth and qualitative interviews with people – their homes weren't being upgraded but [they] were living through the redevelopment … So, we had these sorts of studies that we conducted. No one took any great interest in them. (Former Government Official, NSW)

While the policy environment evolves and carries some learning insight from earlier initiatives, we observed that there is a tendency to largely start afresh when developing new policy directions, and to focus on looking forward rather than reflecting on past lessons.

This general sense, among interviewees, that translation of evaluation learning into future practice was limited, was punctuated by more concrete examples of instances in which insights from evaluation work *had* fed back and helped improve process. With people-focussed outcomes often the focus of longitudinal studies – such as those undertaken for Bonnyrigg in NSW, and Kensington in Victoria – participants noted that insights tied to the impact of tenant relocation had helped refine move protocols and, in turn, influenced consideration of project staging and decanting.

> There's the Bonnyrigg longitudinal study, [and] Riverwood North, and they were done in particular waves. And I think that because a large part of the focus of those studies was on relocations, that has actually fed back into a different part of the organisation to change the way that they work. I suppose the story around relocations, initially, what those studies draw out, is the stress for tenants through going through multiple relocations. And then it's actually fed back into the practices around how to relocate tenants, and the staging of projects, to ensure tenants only get relocated once. So, although those people are connected, or those groups are connected, to Communities Plus, that interplay between those groups, based on those studies, it's definitely – it's been a mechanism for organisational learning I think. (Government Official 7, NSW)

5.5 Learning cultures and organisational change

Organisations, both in the public and private sector, are not unitary wholes, but rather comprise a range of teams and delivery units, often cutting across a number of departments and agencies, which will go through periods of learning and change in response to the different drivers and imperatives facing those particular teams. This can lead to learning outcomes becoming compartmentalised within those teams, and narrowly focussed on their specific remits. Difficulties in establishing a shared evidence base across teams are further compounded by wider organisational and agency restructures, which see the policy 'home' of public housing estate renewal within government structures move over time.

5.5.1 Recalibrating policy core beliefs

> There was a time when the organisation was prepared, essentially, to forfeit some of the potential returns for other key objectives. So, a number of projects, as I said, were [in] areas that were well known for having a very low [socio-economic] index – all the indicators suggested that it needed intervention, and it needed to be addressed from a physical, social and economic perspective. And often, the objectives in projects covered all of those areas, and often, they sort of conflict with each other. (Government Official 1, South Australia)

Across all three states, interviewees reflected on organisation and agency restructures that have occurred in parallel with (and helped reinforce) the repositioning of public housing renewal within wider government housing and urban policy over the last 15–20 years. Government policy teams act as a hub that draws together other government agency interests, from both within and outside the 'lead' department. Some of those interests relate to aspects of delivery – for example, relocation teams, local housing districts, place managers, and those providing household-level support. Other agency interests align renewal activity with a broader set of government objectives – for example, in helping meet targets set in other departments in terms of health, education or economic participation.

Although renewal programs have rolled out over different time frames in South Australia, Victoria and NSW, and have been varied in their program objectives (as discussed in Chapter 3), shared trends regarding the positioning of this 'hub' can be identified.

- There has been a long-term shift from public housing estate renewal being led by policy teams with an essentially 'tenant-focussed' remit – and typically located within housing/community services departments – to being led by teams focussed on assets and property, often sitting within state government land corporations or their equivalents.
- This shift reflects the repositioning of renewal policy, from a place where renewal policy acted as an impulse for physical and social reconfiguration, to a place where wider urban reconfiguration processes, including broader government aims (in terms of housing supply targets and economic growth objectives), have become an impulse for public housing renewal.

This repositioning of renewal policy was commonly observed by interviewees who had been involved in renewal policy and delivery over many years and were thus able to chart the trajectory of programs and interventions back as far as the mid-1990s.

In South Australia, responsibility for public housing renewal has gone through a number of iterations, with the relative interests of local governments, the SAHT and renewal authorities represented to varying degrees within renewal programs. In Victoria, much of the policy drive has moved from the people-focussed Housing Pathways and Outcomes division to the Property and Asset Services division within the DHHS. In NSW, a switch in emphasis from people to assets was also noted, with a number of our interviewees having observed the trend across a breath of initiatives from the late 1990s (e.g. NIP in Sydney's south-west) to present day (current C+ programs).

> The purpose of redevelopment changed, in a sense. Initially it was about the tenants … it was about creating better lives for the tenants with the social mix and everything like that. And increasingly it was becoming more about getting yields, renewing the asset. It was all asset driven. (CHP manager, NSW)

While many longstanding actors remain involved in renewal activity (whether still within government teams or now as external 'partners'), the organisational frameworks in which they work have changed over time. As these relative positions and emphases shift – in policy teams as well as across the wider policy coalition – it not only impacts how renewal policies evolve (i.e. which imperatives gets further reinforced and which are 'demoted'), but has implications in terms of the value placed on learning cultures and whether learning environments are supported (or not).

Alongside observations regarding broader trends in this regard, a number of interviewees highlighted programs and initiatives where a strong, positive learning environment was in place. As mentioned previously, the pioneering partnership approach seen in the Westwood project was acknowledged by a number of our South Australia interviewees as an effective learning environment. This success was facilitated by governance arrangements that guided partners towards shared community outcomes whilst providing capacity to respond and be flexible in their approach as the renewal rolled out. The contribution and role that place-making, architecture and design can make to producing inclusive and attractive urban environments is also clearly of central importance in the ongoing tendering process in Victoria. In NSW, the mid-2000s is recognised as an important period in terms of policy innovation, due to the establishment of, and approach taken by, the Strategic Projects team and the Living Communities initiative (see Box 1).

With the shift in renewal policy core values, there has also been a shift in the relative influence of key stakeholders. State governments and developers have emerged as core members of the advocacy coalition, whereas local authorities increasingly play subordinate roles. This is particularly notable in South Australia where, historically, local governments have played a strong role – including making significant financial commitments – in partnerships with state agencies and the private sector. With some potential for private sector cross-subsidy in Adelaide's land and housing markets, the cost of infrastructure renewal as a proportion of total project budgets has meant that local governments have historically had more 'skin in the game'. Interviewees highlighted the ongoing strength of partnership working between state and local governments in relation to the Playford Alive development, on the northern fringe of the metropolitan area. However – aside from this flagship project – concerns were voiced that state government priorities based on place-based coordination had diminished and, with this, binding social and community renewal commitments.

Reflecting these changes, stakeholders in the coalition understandably privilege evaluation information and feedback that assists in the task at hand. As estate renewal has become framed, first and foremost, as a partnership delivery model guided by maximising the potential of land values, evidence that helps make preferred renewal models 'work' offers more immediate value than insights that contribute to delivering less assured, long-term community outcomes.

Box 1: Living Communities (NSW)

In 2004–05, a Strategic Projects division was established within Housing NSW, primarily to design and deliver the state's first social housing PPP at Bonnyrigg. The team sought to bring together previously disparate responses by the department, in terms of tackling social and physical conditions on disadvantaged housing estates, through a strong emphasis on tenant and wider community engagement. While Bonnyrigg was the first project to carry the Living Communities brand (Coates, Kavanagh et al. 2008), in time, Minto was also brought under the Living Communities umbrella.

> I think history has been rewritten a little bit. At the time, it wasn't that there were positive lessons from Minto going to Bonnyrigg. Bonnyrigg was the new shining light and, if anything, [there is] a sense that some of the lessons from Bonnyrigg retrospectively feed back into Minto. (Former Government Official, NSW)

As well as representing a more collaborative, integrated approach to housing renewal, the Strategic Projects approach also offers valuable insights in terms of the learning culture and innovation within the organisation. Importantly, there was a commitment to improving process through engagement, working with key stakeholders (through the Living Communities Consultation Committee), conducting research, interrogating international best practice, and liaising with housing academics regularly and extensively. This more open policy approach also translated into sharing evidence and insights, and making research available to others – whether at housing forums and conferences, or through publication of discussion papers and reports.

The initial phases of the Bonnyrigg project stand out as a time when research and evidence-gathering was regarded as a fundamental tenet of broader policy development and delivery processes. Following on from this, much of the project documentation was made publicly available at the time of awarding the PPP to the successful consortium in 2007. A requirement of the tender was the need for a longitudinal study of tenant experience and outcomes, and this was embedded within the contract.

The project faltered in 2012, with the development partner (Becton) going into administration. There was a loss of key personnel within the Strategic Projects division, and with them a loss of influence and status within the wider organisation. This led to a discernible shift in terms of commitment to the Living Communities approach.

> Some of the sort of 'favoured status' was disappearing, and some of the learning that had come from Minto, Bonnyrigg and other projects [was] starting to be stripped away, because we [didn't] have money to do that sort of work. It became a more instrumentalist approach: 'Our job is to redevelop, and this is what it should look like.' It became standardised, and I think, in that, some of the learning was lost. (Former Government Official, NSW)

5.6 Learning in an era of hardened policy core beliefs: C+ and the PHRP

The recent trajectory of public housing renewal policy across all three states has seen a shift from a people-focussed process to one where renewal activity is more firmly positioned within broader government aims and objectives, with the enabling role played by land value change. A key characteristic of current settings is the positioning of renewal activity within wider strategic planning and urban policy imperatives in fast-growing metropolitan areas. This alignment – which brings forward renewal and estate land assets as key strategic spaces helping government manage growth and facilitate housing supply targets – has followed the evolution of estate renewal activity from a site-focussed exercise led by housing teams to a whole-of-government endeavour. This transition is evident in all jurisdictions, but is perhaps best illustrated by the roll-out of C+ in NSW and the PHRP in Victoria.

5.6.1 NSW Future Directions and Communities Plus (C+)

> [Communities Plus] is not necessarily the solution and it's not perfect. [But] to me, Communities Plus just makes common sense. It's called leveraging your assets to their best ability. And it's LAHC being able to say, 'Well, look, we're building a thousand – well, 750 – extra dwellings and it's not costing us anything'. And that's good because they don't have any money. All they've got is their assets, right? (Former Developer, NSW)

The NSW Government in 2016 launched the Future Directions for Social Housing strategy. It provides a 10-year vision, encompassing policies guiding homelessness reduction, the provision of more social housing, and provision of support for tenants to transition out of the social housing system, if possible. Within this broader framework, C+ acts as the principal vehicle for public housing estate renewal activity (both large and smaller-scale sites) across the state.

The institutional memory flowing into C+ reflects the sector's increased emphasis on property, development and 'leveraging assets'. For example, a number of key actors leading the C+ team at LAHC previously worked at Landcom – interviewees reflected on the renewal experience they gained there, in particular with the Minto development in south-west Sydney. 'DNA' from the Strategic Projects division is less present within the C+ team. However, many practitioners from the division remain in aligned teams across the department, and have carried learnings from that time into their current roles. In addition, many former Housing NSW employees now work on renewal within the CHP and NFP sectors.

The organisational context for policy development, program delivery and learning reflects this more centralised, coordinated positioning of renewal within the government apparatus. The interviews identified a number of strengths and potential risks of this approach. For some participants, Future Directions offers a consistent framework and point of reference for associated teams, agencies and partners working towards shared goals. For others, however, it signals a more centralised and top-down approach, which teams and partners respond to and help deliver, rather than fundamentally help to shape.

> We work closely with government and I think that's one of the things that has been important through the learnings. Even having a program such as Communities Plus means that there's a policy in place. It talks about working closely with education, working closely with transport and those things. (Government Official 5, NSW)

> Communities Plus sits under Future Directions – so Communities Plus is an idea, it's something that the government wants to achieve, mixed communities … I think it's bigger and broader than what we do, so we can't really manipulate or make any changes to that. All we can do is support that, and just whatever internal policies that we have that just need to be relooked at, then that's what we do. (Government Official 3, NSW)

An overarching framework, such as Future Directions, offers a guiding narrative and set of shared objectives that help embed and reinforce policy core beliefs across constituent partners working alongside the central policy and delivery team. In so doing, it aligns those teams – whose respective remits might focus on tenant wellbeing, or relocation requirements, for example – with policy settings primarily shaped by matters of land value and development feasibility.

This is not to suggest that people-focussed renewal objectives are less important; but their contribution is increasingly understood in terms of how those aspects contribute to broader government objectives for public housing renewal delivered through market-led redevelopment in partnership with the private sector. This is, for instance, reflected in the role of place-making and design in renewal, as discussed by interviewees in relation to tenure mix and strategic value of land (see Chapter 4).

Alignment and integration of estate renewal objectives with broader government and strategic planning objectives also cements the program logic of public housing renewal that underpins the shared narrative around estate renewal. This approach considers 'what works', as part of a wider, holistic government response, and focusses more on internal organisation processes, and methods of program delivery, rather than on the lived experiences of residents. In this context, there is a risk that the assumptions guiding policy core beliefs may go unchecked through any learning activity.

5.6.2 External impacts on learning: community pushback

External events can be important catalysts for policy evolution or refinement (as discussed in Chapter 2). This is evident in both Victoria and NSW, where 'external' events (notably community pushback and political concerns) have led to demand for reassessment and review.

In Victoria, our interviews captured the reactive landscape that has shaped the roll-rout of the PHRP since its inception in 2017. A government official explained that when the PHRP was announced, the government was not ready for the public backlash received:

> We sort of knew when we set out that this was going to be big. We were doing a lot of things at once. But I don't think, I certainly hadn't anticipated the negativity around it. I think that drove us to – we were constantly having to adapt. (Government Official 1, Victoria)

Public and wider stakeholder concern has been captured through the PHRP Inquiry (Parliament of Victoria, 2018), which was highly critical of key aspects of the policy: notably the selling of public land (and the price at which it was sold) as a necessary component of the partnership development model; assumptions regarding social and tenure mix; and tenant engagement and relocation practices. These criticisms challenge policy core beliefs and assumed 'settings.'

Interviewees recognised a need to respond and address these concerns. Importantly, the need for a response was not seen as simply a political measure. Rather, the need to change policy direction was underpinned by the renewal partners' responses to these evolving signals and expectations.

> But when we go to our community consultation meetings, when we talk to our key stakeholders – Federation of Community [Legal Centres], legal services and VPTA [Victorian Public Tenants Association] and others – selling government land is a really big problem for all of them: for the neighbours through to other people in government, for example. Everyone's got a real concern with it. (Government Official 2, Victoria)

> And really because we had so much criticism, I guess, about the selling the land. That was actually put back to us, because we were in a market process, and the proponents came back with that idea: 'How about trying this?' So, we're trying it. And that required us to go to government and say, 'This is really different now. It's not what we originally planned to do. Are you supportive of us pursuing this?' Which they were. (Government Official 1, Victoria)

The PHRP Inquiry and subsequent ongoing debate is significantly reshaping public housing renewal policy. Its impact, in terms of enacting change, illustrates the importance of actor's certification, whereby the authority and legitimacy of a parliamentary inquiry is hard to ignore (Dunlop and Radaelli 2013). This, of course, raises questions as to whether feedback and institutional learning would have been acted upon as decisively had that external pressure not taken place.

In NSW, external interest and concern has recently escalated in the context of C+ plans for the Waterloo Estate in Sydney. The area has long been subject to prospective renewal plans, predating current policy settings. However, the government's current master plan for redevelopment of the site, released in 2019 and developed by Landcom in partnership with LAHC, is a flagship project of the C+ portfolio.

While advocacy groups (e.g. REDwatch) have long expressed concerns regarding intentions for Waterloo, the release of the C+ master plan exacerbated concerns around proposed densities, built form, and impact on the local community. In response, the City of Sydney prepared an alternative plan, which unpacks core tenets of estate renewal policy and the shared narrative supporting State government's preferred model of redevelopment. The alternative plan reflects the interests of the local council, whose focus is on improving built form, minimising overshadowing, and reinstating a more legible street morphology. It also encompasses the findings of research undertaken by the City of Sydney, who established an expert working committee, hired academics to conduct a review of the social mix evidence base, and commissioned urban economists to test alternative development feasibility frameworks capable of supporting a 50 per cent social, 20 per cent affordable and 30 per cent market (private) housing mix.[20]

This external challenge, in the form of an alternative master plan, is particularly interesting as it seeks to unpack policy core beliefs by directly engaging with them and demonstrating that better – but nonetheless still feasible – outcomes can be delivered. The City of Sydney's approach acknowledges that density uplift is required and that economic viability is fundamental, but it mobilises a competing advocacy coalition to promote this alternative vision. While grounded in a land value-related program logic, it nevertheless questions and examines how 'value' is shared among different stakeholders, including low-income communities in inner Sydney.

In late 2019, the Department of Planning, Industry and Environment returned consent authority powers to the City of Sydney. At the time of writing late-2020), the overall precinct has been broken into three sections, with amended plans for the southern section (Waterloo South) submitted to council. The revised plans offer a degree of moderation in terms of residential tower heights (responding to some of the city's concerns), although the extent to which C+ program logics have been fundamentally revisited is not clear at this stage.

Therefore, in both cases – NSW's C+ and Victoria's PHRP – the advocacy coalition's preferred model has come under significant external pressure. The immediacy of this 'feedback', particularly where concerns are political, can lead to the significant recalibration of policy settings. In the case of the PHRP, this led to a questioning of a fundamental policy belief: the sale of public land. In consequence, this asset can still be leveraged (through selling off development rights), but the renewal response, in terms of type of product delivered, is quite different from what was originally proposed.

5.7 Policy development implications

Although evaluation of government-led renewal projects has been conducted over the last 15–20 years, a blunt assessment would be that their scope and remit – and resulting outcomes and policy formation value – has been limited. Past evaluations have typically focussed on tenant experience (not outcomes), with modest interrogation of wider aspects of policy design and delivery, including whether the program effectively and efficiently delivers against core policy aims and objectives. There has been limited success to date in evaluating program logics, or the role of neighbourhood and citywide dynamics in shaping wider housing and tenant outcomes.

- Evaluation outputs struggle to carry sufficient authority to test either the core policy objectives, and the assumptions driving those objectives, or whether the policy has in fact 'worked' and for whom. The relative organisational value of evaluation is reflected in limited research budgets and a lack of transparency: only a small proportion of material produced through publicly funded research on public housing renewal commissioned by governments over the last two decades has been published.
- Evaluation activity constitutes just one of many sources of information in the policy formation process, competing against the immediacy of on-the-ground project feedback; stakeholder interests; community, market and political reactions; and evolving government directives.

20 The report City of Sydney (2019) that these statistics draw on is no longer in the public domain. See instead: https://news.cityofsydney.nsw.gov.au/videos/a-better-way-for-waterloo-housing-estate.

- The increasing prominence, within renewal teams, of staff members from property development backgrounds is reflective of the drivers that have helped consolidate the role of public housing renewal within wider policy settings and discourse. It also serves to reinforce a shared narrative in which renewal is seen primarily as an asset-driven, essentially self-funded redevelopment task enabled by changes to land values.
- In parallel to this trajectory, policy core beliefs have demonstrated resilience (at least up until the recent external challenges discussed above). However, they have evolved, deepening to offer clarity, certainty and a shared narrative within which partners can work. Flexibility and refinement within the advocacy coalition has also been accommodated. For example, with the increased involvement of the CHP sector, whose inclusion is enabling innovation around access to (co-)finance – specifically Commonwealth Rent Assistance, state-specific funding, and National Housing Finance and Investment Corporation (NHFIC) financing.
- Organisational learning has reaffirmed the policy core beliefs, and helped consolidate urban renewal's role within wider strategic policy settings, by privileging tractable aspects of a highly complex task. Learning tied to development viability (incorporating quality, design and place-making components) and facilitating better processes is more highly valued than insight on less tractable measures which often manifest as partial and highly caveated outcomes. For policymakers, there is an understandable desire for feedback focussed on issues of process that help deliver projects, rather than insight which, when finally reported in independent evaluations, feels somewhat detached, partial, and untimely.

In summary, public housing renewal policies evolve through the learning mechanisms of the advocacy coalition. Furthermore, the accumulation of individual and shared experience tends to reinforce specific processes rather than challenge fundamental program logics of public housing renewal. A change of direction would require that beliefs around how renewal works and delivers across multiple objectives are updated across the advocacy coalition – or the emergence of a competing advocacy coalition championing an alternative policy core belief.

6. Policy development options

- **Physical reconfiguration of public housing stock is currently enabled by citywide reconfiguration processes. In order for public housing renewal to achieve both social and economic outcomes through mixed-tenure development, a clearer framework for how specific policies deliver specific policy outcomes is required. A clearer evidence base for how trade-offs are valued and reconciled is also needed.**

- **The current renewal model is centred on a range of explicit and implicit causal relationships – for example, assumptions regarding social mix, mixed-tenure and tenant-focussed outcomes. Formative evaluation and evidence collection through experimentation provide mechanisms for testing and evaluating impact. This perspective is beginning to inform current policy, but requires access to information that can prove challenging to obtain.**

- **Prevailing policy settings place an overriding emphasis on extracting land value as integral to public housing urban renewal. Within the current framework of cost neutrality/low-risk financial constraints, this approach will inevitably remain. However, these settings – and the parameters used to evaluate this renewal model – fail to adequately accommodate a broader conceptualisation of 'value'.**

- **A social infrastructure perspective provides a framework for 'unlocking' additional and renewal-project-specific values. A number of tools already exist to estimate the (equivalent) monetary value of wider social and economic benefits. This value *can* provide an additional source of renewal-specific revenue to support delivery of policy objectives.**

- **Public sector innovation is required to channel 'unlocked' additional value to project finances.**

6.1 Introduction

The learning and adaptation of policy that has taken place over successive public housing renewal programs has served to strengthen the policy core belief of the advocacy coalition – that is, the ability of extractable land values to reconcile multiple social and economic objectives. Chapter 4 showed how the interlinkage between urban reconfiguration determinants and policy core beliefs influences how physical reconfiguration (public housing stock renewal), as well as social and economic reconfiguration, works. Chapter 5 showed how multiple sources and processes of learning take place within the advocacy coalition. Over time, shared views on how public housing works (given existing financial and institutional constraints), and the processes of learning in public policy formation, have gradually sharpened an asset-based (or extractable-land-values based) approach to public housing urban renewal. This has implications for policy development.

It is clear there is a shared understanding across stakeholders of the limits of the dominant urban renewal model (i.e. where it may/may not work). There is also recognition that the current public housing renewal model requires further adaptation. Across the three states considered in this report, there is evidence of ongoing innovation and attempts to adapt the advocacy coalition's approach to public housing renewal.

- In South Australia, where aspects of the asset-driven renewal model are, in some respects, more binding, the public sector has emulated the role of private sector actors by relying on greenfield and mixed-tenure developments to cross-subsidise asset renewal. Melbourne and Sydney have utilised densification in addition to mixed tenure.
- In South Australia and Victoria, the extension of the advocacy coalition to more explicitly include CHPs provides another impulse for learning and adaptation to deliver additional people-focussed and place-making outcomes.
- The announcement of a comprehensive evaluation of the Future Directions strategy can be seen as an important step-change by the NSW Government, in terms of commitment to evaluation and learning. (A researcher from the successful consortium reflected favourably upon the state's tender documentation and supporting material, including the evaluation budget.)
- Interviewees in Victoria commented on the need to build up a better evidence base around the value, or impact, created by public housing renewal.

In this chapter, we draw together insights from the analysis in the report to propose two policy development options. These policy options are not conclusions to the research, but instead provide an opportunity to reflect on how – while taking deep core policy beliefs and constraints (cost-minimised/low-risk development) as fixed – public housing renewal policy can be evolved. First, we translate a range of renewal issues discussed by interviewees into a stylised 'policies and ends (objectives)' relationship (Figure 6). From an evaluation perspective, this schematic brings together a range of implied causal relationships to inform the parameter-setting of future evaluations. Second, we link a social infrastructure perspective, and monetising of wider social and economic impacts, to development options within the existing dominant renewal model.

6.2 Policies and ends: a framework for evaluation of renewal activity

Vedung's (2017) definition of public policy evaluation (discussed in Chapter 2) highlights the summative and formative components of public policy evaluation. Under the current renewal model, the outcomes of government intervention are highly contingent on the dynamics of the advocacy coalition and the extractable land value of relevant public housing renewal sites.

The current model of public sector urban renewal can be portrayed as a series of policies that come together to extract land values (generated by wider city and global processes) and deliver public housing renewal. In establishing a framework for evaluating public housing urban renewal, the conditional nature of public policy needs to be recognised, as it shapes the trade-offs between different outcomes.[21] It also shapes what is achievable, and highlights that identification of direct effects of policy decisions is difficult. In practice, policy-making requires input from various stakeholders – including commercial and financial information – across the different policy elements.[22] A stylised version of how policies and ends are related, based on the authors' interpretation of discussions with interviewees, is presented in Figure 6. The schematic indicates that the design of public housing renewal tenders, and strategies for implementation, offer considerable opportunity for policy experimentation; identification and evaluation of assumed causal relationships and benefits.

In Figure 6 public housing urban renewal outcomes are divided into asset-based (physical expansion/renewal) and people-based (tenant) outcomes ('ends').[23] Asset-based outcomes relate to renewal of existing public housing stock (including reconfiguration of streetscapes and other estate infrastructure), expansion of public housing stock, and expansion of privately owned or rented housing stock. People-based outcomes are not quite as easy to generalise, but include income, health, education, employment, social and wellbeing outcomes, as well as supports and services for tenants with more complex needs and to sustain tenancies. In line with the discussions in Chapter 4, many of the policies centre on, and contribute to, physical reconfiguration objectives. The links between policy means and tenant outcomes was less clear.

A shared policy core belief (sometime on primarily pragmatic grounds) is that under the prevailing constraints, extractable land values (green in Figure 6) can reconcile asset- and people-based outcomes in a manner that reduces public sector budgetary costs (compared to direct financing of public sector asset renewal). Under the prevailing financial and institutional constraints, the sometimes tacit acceptance of this policy core belief also beyond the core advocacy coalition must also be considered a reason for the absence of any significant alternative advocacy coalition. The figure reflects the fact that public sector finance supplements private sector finance, in relation to public/social housing specifically.

For instance, the Victorian Social Housing Growth Fund and the Social and Affordable Housing Fund in NSW provide additional avenues for accessing finance. At Commonwealth level, NHFIC may provide access to discounted funding. The public sector may also contribute a service payment or fees (for instance, to ensure availability of stock to targeted tenant groups as well as other service considerations), but with a view to minimising public expenditure through maximising the private sector rental stream.[24] NHFIC provides a venue for accessing lower-cost finance for social and affordable housing delivery. The extension of the advocacy coalition to CHPs additionally enables access to tenants receiving Commonwealth Rent Assistance (CRA), and thus a somewhat higher rent contribution (revenue stream) to finance additional housing stock and/or tenant services.

21 For instance the share of private and public sector tenants in mixed-tenure developments, and extractable land values to finance renewal.

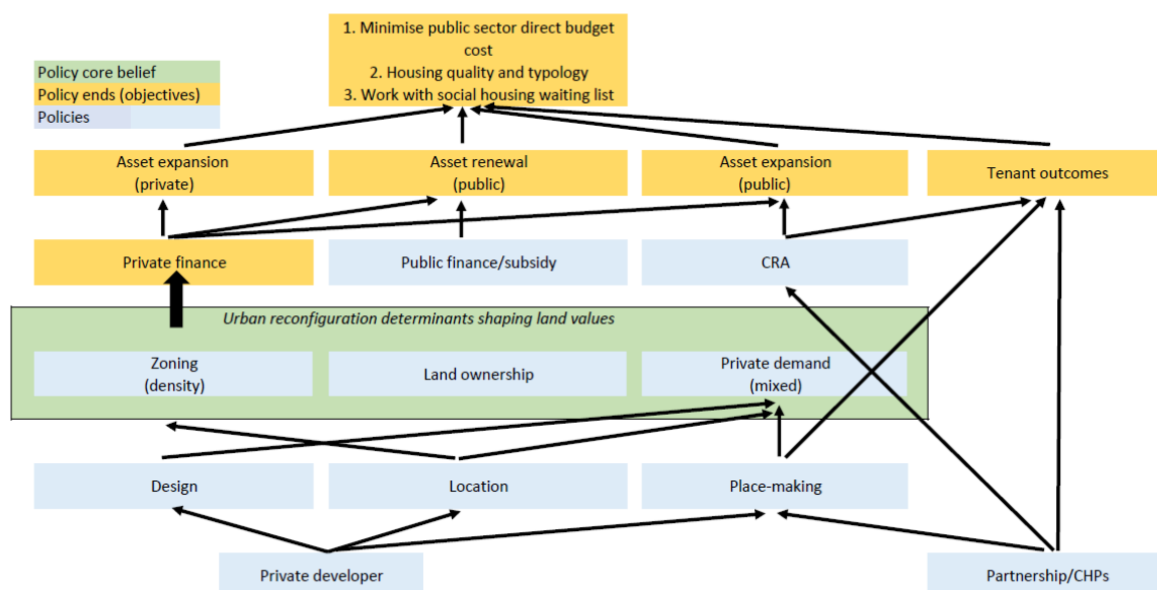
22 It is clear from this research and earlier AHURI/academic research that access to critical financial information and contractual parameters is typically not available to researchers. Key renewal aspects can, in many cases, therefore only be inferred through discussion with interviewees. They cannot be separately contextualised within the legal or financial parameters that determine how individual aspects relate to each other; or how individual aspects are (or can be) traded off against each other.

23 Our people-based focus is, implicitly, on public housing tenants, but the case clearly also extends to new residents in erstwhile public housing dominated areas – particularly where redevelopments provide a mix of public, affordable and 'regular' market rental housing.

24 The issue of land ownership is complex. When selling public land, government receives income that (in principle) can be reinvested into new housing stock, either at the same site or some alternative site, taking advantage of potential arbitrage opportunities – e.g. high-value areas versus lower-value areas. Under a ground lease model, private sector developers design, finance, construct, operate and maintain the developed stock in its entirety – including any social housing components (which may or may not be managed by a CHP) – for a period of time, before the stock is potentially returned to public sector ownership. This means that the financing model is contingent on ongoing rental payments (made by private and social housing tenants) alike, rather than on the potential for direct equity injection (following sale of public sector land).

All of these financial elements are, in varying degrees, evident in ongoing public housing renewal programs. They are important contributions and innovations with respect to achieving physical reconfiguration objectives, including expanding the stock of social and affordable housing. They do not, however, extend or modify the underlying asset-driven program logic of the renewal model, or unlock additional sources of project 'value' in a manner that gives direction to the renewal model itself.

Figure 6: Policies and ends (objectives)': public housing urban renewal



Source: Authors.

To evolve public housing renewal policy and more appropriately manage downside and upside risks, additional evidence on causality and impacts is required.[25] Formative evaluations can be institutionalised as a means of broadening the assessment base around investment decisions and public sector 'value-for-money' considerations. An evaluation framework for public housing renewal therefore needs to consider the following.

- **Delivery of public housing urban renewal programs through a series of policies**. The advocacy coalition has considerable experience and expertise in honing and delivering the prevailing renewal model. However, as the model is applied to areas where urban reconfiguration processes are generating less extractable land value, there are further requirements for understanding how the different policies maximise extractable land values.
- **The assumed causal effects that are to deliver tenant based outcomes.** There is a predominance of summative evaluation around tenant outcomes – seeking to capture tenants' views, satisfaction and issues relating to renewal logistics-processes (such as tenant relocation). However, additional knowledge is required on how better-quality housing stock, tenant services, local procurement, employment programs and place-making measures can translate into better tenant outcomes. Some of these elements have informed New Zealand's approach to rebuilding its public housing stock (Howden-Chapman 2019) – specifically, quasi-experiments to identify health benefits associated with better-quality housing (using indicators such as hospitalisation, respiratory disease, cardiovascular disease). Cost-benefit analysis can also be used to assess the value of policy and service innovation.

25 Asset-based outcome possibilities are often framed in terms of development viability. However, the key determinants of land value embodied by many public housing estates vary significantly. While downside risks (such as concerns around private demand) are reflected in the renewal either not going ahead or the tenure-mix being geared more strongly towards the private sector, the processes by which upside risks (e.g. very high private demand) translate into additional public housing stock are anchored in the local rule of thumb and this is only slowly beginning to move.

6.3 A social infrastructure perspective can 'unlock' additional project resources

One option for public policy development is to draw more extensively on an understanding of public housing (and social and affordable housing more generally) as social infrastructure (Lawson, Denham et al. 2019). This perspective already informs public housing renewal in New Zealand. It is also evident in Infrastructure Australia's 2019 infrastructure audit, in which social housing is included as essential infrastructure to support economic growth and quality of life. Similarly, the Productivity Commission's *Mental Health* report (2019) identified social housing as a platform for preventing some public sector costs.

A social infrastructure perspective seeks to account for wider social and economic effects when making investment decisions and trade-offs. This requires more detailed evidencing on how program logics of public housing renewal, including mixed tenure, place-making and tenant support services, translate into people-based outcomes. Some of the CHPs involved in this research use tools such as the Australian Social Values Bank to evidence and monetise the impact of their programs, and refine program delivery to maximise the social value of their investment or program. The evidencing of 'impact' was referenced by a number of public and NFP sector interviewees, who described how it is driven, in part, by the parameters of tendering. For instance, in the most recent tender process for PHRP in Victoria, tracking and evidencing of people-based outcomes was enshrined and formed part of the tender-evaluation methodology.

In this regard, a social infrastructure perspective can provide a rationale for increasing public sector investment in public housing (a view echoed by some interviewees). While any direct increase in public expenditure may be contentious (given financial and institutional constraints), a social infrastructure perspective can provide additional sources of 'extractable value'. For instance, much of the current urban renewal discourse references 'unlocking' value. Typically, this relates to extractable land values and the economic potential of sites. A social infrastructure perspective extends this to also 'unlocking' wider social and economic values linked to public housing tenants and redeveloped communities.[26]

There are a number of tools (e.g. Australian Social Values Bank) from the field of social impact investment that can be adapted to public housing urban renewal and the provision of social and affordable housing more generally (Muir, Michaux et al. 2018). Some of these tools are already in use by CHPs. These tools *can* provide a means of addressing project finance/viability issues by establishing additional sources of revenue. Notably, such tools would supplement the current renewal model, rather than replace it.[27]

A risk identified in the social impact literature pertaining to the efficacy of such tools is a lack of baseline data and evaluation to assess project-specific investment risks (Muir, Michaux et al. 2018: 57). For instance, models based on payment-by-result require documentation of project-related outcomes. While payment-by-result models draw on summative evaluation, they also require formative evaluation to ensure that the outcome targets underpinning payment projections align with the program logics (why and how a program produces outcomes), so that programs and policies can be adjusted and refined.

In relation to the Future Directions strategy, this approach to integrating program logic of public housing renewal, impact and evaluation appears to enjoy considerable institutional support.

26 Nygaard (2019) provides a review of various estimates of wider social and economic impacts of social and affordable housing.
27 Similarly, there are tools from the field of green impact investment that can be drawn on.

> They [FACSIAR] indicated that they were interested to do something. It's not experimental in the sense that you randomly allocate people to a house and not to a house – that was not the case – but they were interested in experts using their methodologies to get something that was quasi-experimental; pseudo-random approaches … It was not, like, you just take some people, you look at them now and you look at them in a year's time, you just take the difference and be done. They really said, 'No, we want something where you have a proper comparison group and take into account the starting point, but also what the hypothetical alternative outcome would have been'. (Academic 1)

A social infrastructure framework can provide policy options that serve to modify and/or broaden the spatial applicability of the advocacy coalition's policy core belief. However, this would require considerable institutional (public sector and finance) innovation in order to extract wider social and economic benefits, and channel these into delivery of public housing renewal projects. Moreover – notwithstanding the role of blended finance and, potentially, of capital market mechanisms – returns to investors would remain underwritten by public sector finance.[28]

For instance, public housing investment may generate public sector savings across a range of departments, but there are no institutionalised mechanisms for transferring finances between departmental budgets or underwriting returns. Social impact investment methods currently in use in Australia do not draw on institutionalised and routinized mechanisms for their operation, but are typically based on public sector experimentation.

Therefore, policy and contracting innovation is required to enable extraction of savings embodied in public housing investment – directly or via some form of capital market intermediation – to support the cost of constructing, operating and maintaining public housing renewal and/or expansion (i.e. ensure development viability).

6.4 Concluding remarks

This research set out to understand how evaluation and learning from public housing renewal is informing current policy and delivery to maximise financial returns and socio-economic outcomes. The analysis was guided by four research questions. In this final section, we provide brief, summary answers to these questions.

1. How has public housing renewal policy defined and reconciled competing objectives, outcomes and success indicators across the range of policy, community and private stakeholder interests?

A higher-level review of select evaluation literature, policy documentation and key actor interviews, revealed that the advocacy coalition holds a shared *policy core belief*. That is, a belief in the ability of latent land values to reconcile public and private sector asset- and people-based outcomes, given the current institutional and financial constraints (i.e. to minimise public sector financial costs and risk).

2. How have social, economic and housing market indicators in public housing urban renewal areas changed in comparison to public housing areas not undergoing urban renewal and/or non-public housing areas undergoing significant housing redevelopment?

28 Blended finance: is a model of financing whereby different investors can invest alongside each other in the same undertaking, but while achieving different objectives (for instance, social and environmental impacts, financial returns).

The analysis here drew on a typology of urban reconfiguration drivers and processes to test whether areas undergoing public housing renewal exhibited any positive or negative effects on their relative income status over time (using income as an indicator of overall social and economic status). The evidence suggests that past renewal activity has had only a minimal impact on the relative income status of the areas undergoing renewal. One implication of this is that urban renewal, driven by neighbourhood and citywide drivers, functions as an enabler of the current public housing renewal model. This provides an impetus for focusing attention towards policies that ‘unlock’ value generated by these drivers.

3. What program-specific site, neighbourhood and citywide evidence and learning was produced through evaluation activity of previous public housing renewal policies?

Although most interviewees were able to identify evaluation research they had read or been involved with, and flag headline insights, the studies cited typically focussed on tenant experiences, with little interrogation of wider aspects of policy design and delivery – including whether policies effectively and efficiently delivered against core aims and objectives. It is evident, from the interviews, that undertaking more formative evaluations could provide policy-makers with additional policy options.

4. How has that evidence and learning informed the delivery of social, economic and financial returns in current public housing renewal policy?

There was shared acknowledgement, among interviewees, that the flow-through of institutional knowledge was significantly hampered due to limited structural and systematic approaches to stewarding and valuing information produced through evaluations. Furthermore, evaluation was perceived as only one of many sources of evidence feeding into the policy formation process. Across the advocacy coalition, processes of internal learning – arising from involvement in public housing renewal and partnership working – were evident.

In both NSW and Victoria there was evidence of external drivers of public housing urban renewal as well (notably community pushback and political pressure). In terms of learning relating to social, economic and financial returns, it is apparent across the three states that a more focussed framing of renewal as an asset-led process has resulted in greater privileging of evidence that helps deliver projects, rather than consideration of ‘softer’ issues, including tenant outcomes.

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Appendix 1: Public housing programs 1990s to present

Public housing programs since the 1990s, for NSW, Victoria and South Australia, are outlined below. These are summarised in Table A1.

NSW (Sydney)

Public housing estate renewal in NSW can be broadly categorised into three phases since the mid-1990s. The first, the Neighbourhood Improvement Program (NIP) (1995–1998), focussed on asset improvement and estate redesign in areas of concentrated social disadvantage and where ongoing management and maintenance costs were high (SGS 2000; Judd, Randolph et al. 2001). A key objective of the NIP was 'to remove stigma associated with public housing estates and to ensure that they look and operate in a way comparable with other residential areas' (Ruming 2006: 28). Estate remodelling focussed on the subdivision of Radburn super lots, improvement of streetscapes and reconfiguration of properties, but did not involve large-scale 'redevelopment' or necessitate tenants being relocated. Helping meet broader social and urban policy goals beyond renewal sites was not a specific objective, even though one of the objectives of the NSW 1985 Housing Act was to encourage social mix in existing and disadvantaged communities (Woodward, cited in Randolph and Wood 2003: 27).

A two-pronged second phase, during the 2000s, can be identified. The first direction captured a number of estate-specific interventions – arguably instigated more in response to ministerial direction than as the result of well-developed policy with clear aims and objectives beyond dismantling concentrations of disadvantage. Renewal activity in neighbourhoods including Claymore and Minto in south-west Sydney had challenging starts – with the former put on hold and only reinitiated in recent years. In Minto, wholesale restructuring of the neighbourhood – with Landcom facilitating redevelopment – involved demolition of existing stock, reconfiguration of the estate and rebuilding according to social mix principles, with a majority of the new homes/sites made available for private sale. The low level of new social housing stock provided feels significant, with the 1,100 pre-existing Housing NSW properties replaced by around 350. As a result, many households were displaced and relocated elsewhere.

Bonnyrigg, also in south-west Sydney, was identified as NSW's first (and to date, only) fully-fledged social housing PPP. In late 2007, the successful tenderer, Bonnyrigg Partnerships (comprising Westpac, Becton, Spotless and St George Community Housing), was awarded the 30-year contract for the redevelopment and subsequent ongoing management of the neighbourhood. The estate renewal master plan set out a program for redevelopment involving 18 stages, rolled-out over 13 years, and envisaged a mixed-tenure community with social and private housing provided across the neighbourhood in a salt-and-pepper tenure-blind manner. The low-density Radburn layout would be reconfigured and density increased across the estate, with a target final mix of 70 per cent private and 30 per cent social housing (Pawson and Pinnegar 2018). However, the PPP broke down in 2013 (following the collapse of the developer, Becton), leading to a cessation of renewal activity beyond Stage 3. In 2016 the NSW Government put in place Landcom to help facilitate delivery of Stages 4–7 of the original plan. There has been no confirmation to date as to whether redevelopment will continue beyond Stage 7.

Other estate-specific renewal programs have been undertaken ay Riverwood North – in partnership with PAYCE Consolidated and St George Community Housing – where the first stage has seen the replacement of 150 dwellings with 650 mixed-tenure units, including seniors housing. The incremental redevelopment of the Airds Bradbury area – originally intended to follow the PPP model of Bonnyrigg – is ongoing and being delivered under more traditional contracting arrangements.

In parallel to these physical-redevelopment-focussed initiatives, more community-development-focussed programs were also initiated, most significantly Building Stronger Communities (BSC), which ran from 2007 to 2011. BSC was a $66 million initiative by Housing NSW, launched in 2007, which set out to regenerate 18 social housing estates in NSW, including almost 10,000 dwellings in Housing NSW's portfolio. It aimed to facilitate long-term positive change by building strong, vibrant and sustainable communities through the implementation of locally developed strategies. The stated outcomes included: creating better urban environments and better social environments; providing appropriate services in areas where they were needed; and increasing jobs, skills and levels of employment. The initiative represented a new way of operating for Housing NSW, as it involved the agency working in partnership with other government agencies, local organisations and communities.

The third phase of renewal encompasses current directions under the Communities Plus (C+) program, which sits within the NSW Government's broader Future Directions for Social Housing strategy. C+ is a 10-year, $22 billion investment program to deliver 23,000 new and replacement dwellings, 500 affordable housing dwellings and 40,000 private dwellings across a range of major and neighbourhood sites by 2025 (LAHC 2020). Redevelopment of reconfigured estates aligns with principles of providing a tenure mix of 70 per cent private and 30 per cent social housing. Many pre-existing programs have been realigned under C+, with major sites including Waterloo, Telopea, Ivanhoe and Riverwood. Alongside these large-scale redevelopment sites, a series of viable development projects, involving sites with a range of development potential (from 20 to 300 units), are being brought to market for private-sector developers and NFP CHPs as neighbourhood renewal projects.[29]

Victoria (Melbourne)

Urban renewal in Melbourne since the 1990s is characterised by three broad phases: the BCP (commenced 1991); the Neighbourhood Renewal (NR) program (early 2000s), complemented by a PPP estate redevelopment program (mid-2000s); and the ongoing Public Housing Renewal Program (PHRP) (commenced 2017).

Implementation of the BCP in Victoria included improvements to a range of urban services, including energy, water, public housing and public transport systems, as well as to amenities and services at activity clusters. With the aim of enhancing urban planning and development to improve the quality of urban life, the program took a holistic view of infrastructure planning and provision through area-based strategies for urban renewal. Included in the approach was the redevelopment of public housing estates in North Melbourne, East Preston, and Norlane (Geelong). Importantly, the redevelopment of public housing in East Preston and Norlane aimed to introduce a mix of public and private housing through joint ventures with the private sector (ANAO 1996: 83). Key objectives of the BCP at national level, such as economic growth, micro-economic reform and more liveable cities, extended beyond site- and neighbourhood-specific reconfiguration drivers to citywide determinants. These objectives were articulated through the development of an Area Strategy for each individual project that specified how each project task was aligned to the overall objectives of the BCP. In the Victorian context these included: economic development; increased labour mobility; development of under-utilised land; increased population and housing density, and improved public transport (ANAO 1996: 29).

29 Information about C+ is available from: https://www.communitiesplus.com.au/.

The Victorian Government's NR program was launched in 2002 as a whole-of-government place-based strategy to address disadvantage in neighbourhoods of concentrated public housing (DHS 2005: 3). Through balancing physical regeneration and community development practices, the program aimed to address social, economic and political inequality in disadvantaged neighbourhoods. The focus on breaking up concentration of disadvantage (thought to characterise low-income public housing communities) led to a range of initiatives focussed on strengthening social cohesion, improving socio-economic outcomes (i.e. income, education and employment), and improving quality of housing and service provision (Wood and Cigdem 2012: 1). In the Victorian context in the early 2000s, this led to a range of place-based public housing policy initiatives aimed at decreasing levels of inequality between public housing communities and the rest of the city (Wood and Cigdem 2012: 3).

Between 2000 and 2013 in Victoria, six large public housing estates were partially or fully redeveloped through PPP mixed-tenure renewal strategies, and these have been the focus of significant academic evaluation and research. While the redevelopments in Kensington and Carlton included full-scale renewal of the entire estate, including walk-up dwellings and high-rise buildings, the renewal projects in Richmond, Fitzroy and Prahran included only components of the estate environment, with the remaining estate subject to master planning for any future redevelopment.

The current direction for public housing renewal in Victoria is the PHRP. Announced by the Victorian Labour Government in March 2017 as part of the Homes for Victorians housing strategy, the program has assigned $185 million to redevelop 2,500 public housing dwellings across metropolitan and regional areas. Stage 1 of the program involves redevelopment of 1,100 public housing dwellings across nine inner-Melbourne sites (Brunswick, North Melbourne, Heidelberg West, Clifton Hill, Brighton, Prahran, Hawthorn, Northcote and Ascot Vale) with additional funding allocated to redeveloping public housing in two additional suburbs (Flemington and Preston). The PHRP is to be delivered via a 'real estate development model' (Kelly and Porter 2019: 7), through PPP between the state government, private market developers and the community housing sector.

South Australia (Adelaide)

The South Australian Housing Trust (SAHT) was established as Australia's first state housing authority in 1936 to build housing supply for the growing population of the state. In 2004, the delivery of its services changed: SAHT kept ownership of houses, while maintenance and tenant relations were delivered by Housing SA (a division of the Department of Human Services). From the early 2000s, renewal projects were delivered by Renewal SA. In July 2018, Housing SA and Renewal SA merged to become the SA Housing Authority. The SA Housing Authority is responsible for social housing renewal for the Government of South Australia.

Urban renewal in Adelaide since the 1990s has been characterised by three major programs. First, the BCP, which ran from 1991 to 1996 (although some of the projects under the BCP umbrella actually started in the late 1980s and lasted longer than the program itself). Second, the Better Neighbourhoods Program (BNP) (2001–02), which included smaller projects. Third, the Renewing Our Streets and Suburbs (ROSAS) program, in 2015, which explicitly focussed on redevelopment of housing stock close to the CBD (within a 10 km ring). South Australia announced its new Our Housing Future 2020–2030 strategy during the research period – this strategy builds on the ROSAS initiative.

In the 1990s, urban renewal projects in South Australia focussed on asset renewal and obsolete housing replacement, as housing stock was old and not appropriate for dwelling (SGS 2000). In the 2000s, there was a shift to a more comprehensive approach, to deal with the problem of public rental areas, including a focus on social issues, community development, employment development and training. In these projects, a major focus was on social mix, deconcentration of poverty, and increasing home ownership. Recent projects focus on asset renewal and improvement, infrastructure improvement. It also focuses on incentivising private land owners to renew/redevelop existing poor quality housing (Renewal SA 2019).

One of the first public housing redevelopments in South Australia was Rosewood Village at Elizabeth (commenced 1991). The main objectives of this urban renewal project were to improve the rundown assets and physical environment of the area, and to deconcentrate poverty and increase home ownership rates. The project was evaluated as a 'case study of the social impacts of the relocation process on existing tenants and how best to involve communities in defining and affecting the outcomes of the areas being redeveloped' (Arthurson 1998:35). Researchers evaluating the project (e.g. Peel 1995) argued that the strategy focussed 'on relocating the poor to improve the environment, rather than on benefiting the existing community' (in Arthurson 1998:36).

Arthurson (1998) argues that, in South Australia, the principal aim of such early projects was to break up the concentration of poverty and problems associated with it (e.g. high crime levels), and to reach a more balanced mix of social classes. These projects aimed to reduce the concentration of public housing in the targeted areas. As such, many existing public housing tenants were relocated to other neighbourhoods, and houses were sold to attract new, higher-income residents into the area. In other words, the benefits that came from redevelopment only benefitted some of the original tenants.

One of the most evaluated projects in South Australia is the Salisbury North Urban Improvement Project (SNUIP) (Ruming 2006). The program, which ran from 1998–2010, included both asset and non-asset objectives (e.g. crime reduction, economic rejuvenation, integration of estate with surrounding area, acceptance levels, tenant satisfaction, housing asset sustainability). 'The SNUIP was initiated by the City of Salisbury and the South Australian Housing Trust to address the needs of a disadvantaged community by improving the amenity and quality of the physical environment, upgrading the range and condition of housing, renewing community infrastructure and supporting local communities through community development initiatives' (Ruming 2006: 51).

Another major project was The Parks Urban Regeneration Project (later renamed Westwood), which encompassed the five suburbs of Woodville Gardens, Mansfield Park, Ferryden Park, Athol Park and Angle Park, and part of Woodville – in total covering an area of 5 square kilometres. The project aimed to address the area's significant social issues and to 'upgrade and replace the ageing public housing' (Government of South Australia 2000 in Baker and Arthurson 2007:31). The Parks Urban Regeneration Project commenced in 2000 and involved the demolition of some 2,000 public housing units, and rebuilding of some 2,400 new units – of which 500 were public housing units. The Parks Urban Regeneration Project also refurbished some 500 public housing units, but only retained half of these for public housing (the remainder sold on the private market). Overall, the Parks Urban Regeneration Project reduced the public housing concentration from some 60 per cent to around 25 per cent (Baker and Arthurson 2007:31).

Similarly, redevelopment that took place in the suburbs of Mitchell Park, Hillcrest and Northfield from the mid-1990s, over a period of about 15 years, also decreased concentration of public housing through demolition, sale of public housing, and urban infill – with new housing designed to attract home owners or investors (Arthurson 2010).

The 1000 Homes in 1000 Days initiative, commenced in 2016, aimed to stimulate (and generate confidence in) the housing construction sector, support local job creation and improve outcomes for SAHT tenants. Sale of surplus land and ageing SAHT stock funded the building of new public housing dwellings on existing government-owned land (SAHT 2016). It involved $208 million over three years to help stimulate the housing and construction industry (SAHT 2016). By the end of June 2019, the initiative had generated 970 new homes, including 100 disability housing units, and approximately 1,000 new employment opportunities.[30]

The Better Neighbourhoods Programme (BNP) was initially developed by the SAHT, and was transferred to Renewal SA for management in 2012. It aims to create a self-funding program through sale of housing allotments (created for sale to the open market); to renew neighbourhoods through the replacement of aged social housing with upgraded housing; and to improve Adelaide's infrastructure and residential streetscapes (Government of South Australia 2015).

30 Details about the 'One thousand homes in 1000 days' available from: https://renewalsa.sa.gov.au/projects/social-housing-renewal/.

Table A 1: Public housing urban renewal sites 1996–2016

Melbourne		Adelaide		Sydney	
Suburb/estate	Start	Suburb/estate	Start	Suburb/estate	Start
Norlane	1992	Mitchell Park	1990	Waterloo	1995
North Melbourne	1991	Rosewood Stage 1	1992	Bellambi	1995
East Preston	1992	Rosewood Stage 2	1994	Riverwood	1995
West Heidelberg	1996	Hillcrest	1995	Macquarie Fields	1995
Broadmeadows	2001	Salisbury North Urban Improvement Project	1996	Airds	1995
Maidstone and Braybrook	2001	Woodville Gardens	1999	Bidwill	1995
Werribee	2001	Mansfield Park	1999	Mt Pleasant	1995
Ashburton	2001	Ferryden Park	1999	Claymore	2007
Ashwood and Chadstone	2001	Athol Park	1999	Bidwill	2007
Doveton-Eumemmerring	2001	Angle Park	1999	Blackett	2007
Fitzroy	2001	Westwood	2000	Dharruk	2007
Collingwood	2001	Kilburn South	2002	Emerton	2007
East Reservoir	2001	Hawksbury Park	1998	Hebersham	2007
Heidelberg West	2012	Elizabeth Park (Northway)	2008	Lethbridge Park	2007
Kensington	2000	Windsor Gardens	2003	Shalvey	2007
Carlton	2006	Playford Alive	2008	Tregear	2007
Prahran	2010			Whalan	2007
Richmond	2010			Willmot	2007
Fitzroy	2010			Macquarie Fields	2007
Westmeadows	2008			Minto	2002
				Bonnyrigg	2007
				Airds	2012

Source: Identification of public housing urban renewal sites across the three capital cities was based on analysis of the literature, public documentation and reports, researchers' own knowledge of particular sites and assistance from colleagues across the AHURI network. The authors would like to thank Prof. Gavin Wood, Dr Melek Cigdem and Prof. Christine Garnaut for providing valuable assistance in identifying intervention sites. Any errors are those of the authors.

Appendix 2: Quantitative analysis

Determinants of urban reconfiguration: Adelaide, Melbourne and Sydney

Public housing urban renewal is sometimes portrayed as a vehicle for social and economic neighbourhood reconfiguration. At the same time, public housing urban renewal remains just one element within the wider citywide dynamics that shape housing and labour markets. Previous analysis of area-based initiatives to address socio-spatial outcomes in Australia has concluded that these programs often fail to fully engage with the urban, regional and global determinants that configure neighbourhoods socially and economically (Pawson, Hulse et al. 2015: 3). While remaining public housing estates, the social and economic configuration of place is largely a function of institutional determinants – allocation policies and national income transfer policies, as well as state-level investment and maintenance strategies – as is the physical condition of public housing stock. However, neighbourhoods in Australian cities have, as a result of a range of determinants, reconfigured over the past 30 years. A key characteristic of this reconfiguration is the increase in employment and number of residences in the core of cities, and deindustrialisation throughout middle and outer rings. As a result, land values in inner cities have increased dramatically, sometimes reinforced through public policy and infrastructure investment.

A key question in terms of the role of evaluation and learning in public housing renewal policies is, therefore, how public housing renewal relates to these wider urban reconfiguration processes. In order to provide a contextual setting for the framing of current public housing urban renewal programs, research question 2 asks how reconfiguration processes over the period 1996–2016 have played out across public housing renewal and non-public housing renewal areas. Our focus is on relative household incomes.

There are a number of socio-economic and housing indicators that can be used to track the socio-economic characteristics of areas over time. However, a key insight from the discussion in Section 2.4 is that site-specific and neighbourhood-specific determinants of physical, social and economic characteristics frequently reflect household incomes. Higher-income households have greater capacity to maintain their quality of (physical) housing and frequently have higher levels of education. Furthermore, demand for housing is typically 'income elastic', so that higher-income areas typically also have higher property prices. Income, therefore, provides a measure of both social and economic characteristics from which (to some extent) physical characteristics can be deduced as well.

Relative household income is measured as the median household income at the 1996 collection district (CCD) level, relative to the median household income for each of the three capital cities, respectively. For instance, for CCD *i* in Adelaide, the relative household income in 1996 is calculated as:

> Relative household income CCDi in 1996 = median household income CCDi 1996 / median household income Adelaide 1996

A value smaller than 1 indicates that the income for any give CCD is below that of the capital city as a whole; conversely, a value greater than 1 indicates that the CCD is affluent compared to the capital city as a whole.

In order to enable comparison, the 2006 and 2016 census geographies were concorded to correspond to 1996 CCD boundaries. The geographic reach of each of the capital cities was set to its 2016 boundary. Each variable was concorded individually due to the small number of missing values being different for different variables.

Change in relative household income is measured as:

> Change in relative household income i 1996–2016 = relative household income i in 2016 / relative household income i in 1996

A value below 1 indicates that for any given CCD, household incomes have fallen behind those of the capital city as a whole; a value greater than 1 indicates that household incomes in the area have improved relative to all other CCDs in the capital city. The change indicator is calculated for the periods 1996–2006, 2006–2016 and 1996–2016.

Of particular interest in this analysis is: firstly, the role of social housing estates on the overall reconfiguration processes in Adelaide, Melbourne and Sydney; and, secondly, the impact of public housing renewal initiatives on urban reconfiguration processes.

Section 4 provides a descriptive and econometric analysis of change in relative household income status. Further details on the spatial concordance, data construction, data manipulation and econometric specification is provided in Appendix 1.

Over time, levels of income change. In order to test the extent to which urban reconfiguration is taking place, we follow Rosenthal's (2008) basic model of urban decline and renewal. Decline and renewal is thus measured as the change (negative and positive) in the relative income of areas. For this research, all area data was coded and concorded to 1996 CCD boundaries. We estimate this model within a spatial lag and error framework to additionally control for neighbourhood spillover effects, citywide urban dynamics, and modifiable areal unit issues arising from use of area-based data and harmonisation of census geographic units.

The general estimation framework (Eq 1) is:

$$\ln\left(y_{i,t+k}/y_{i,t}\right) = b_0 + b_1 lny_{i,t} + b_2 ur_{i,t1,t2} + b_3 X_{i,t} + b_4 dist_i + b_5 \ln\left(y_{i,t}/y_{i,t-k}\right) + \rho WC\ln\left(y_{i,t+k}/y_{i,t}\right) + \rho WCX_i + \rho WCur_i + e_i, \quad e_i = \lambda WDe_i + v_i \quad (1)$$

Where *y* is the relative income of area *i* in period *t* (t_0=1996, t_1=2006, t_2=2016). *ur* is a dummy variable that indicates whether a CCD was subject to public housing urban renewal between 1996–2006 and 2006–2016. *X* is a vector of socio-economic and demographic variables measured in 1996 and in 2006. The discussion in Section 2.4 highlights that political economy, social interactions and demographic characteristics also condition how neighbourhoods change over time. For instance, political economy (local land use decisions/planning rules) may be a function of residents' social capital. Owner occupiers, residents with higher education and workers who are likely to experience income growth/career progression may in this respect be expected to bring different capabilities and motivations for maintaining desirable neighbourhood characteristics, including physical quality of the housing stock. *X* therefore captures the owner occupation rate, per cent of residents with bachelor degree or higher, and the average age of residents. Intra-city relocation patters are also determined by neighbourhood effects that in turn may reinforce spatial patterns of income status, such as spatial patterns of ethnicity and race and/or presence of public housing. *X* therefore also captures the percentage of public housing and Australian-born residents. Finally, *X* also contains population density, providing a measure of land use intensity and urban form, which may additionally condition demand for different locations. *dist* measures the centroid-to-centroid distance from each CCD to the CCD containing the city's (historic) general post office (GPO). *W* is a spatial weighing matrix that captures citywide dynamics ($WD=d_{ij}^{-1}$; inverse distance between CCD centroids) and neighbourhood effects (WC=1/s is the weight of *j* where s is the number of CCDs (*j*) that share a boundary with *i*; all other areas have a weight of 0).[31]

31 We also controlled for Statistical Local Area fixed effects (e.g. hierarchical modelling), spatially lagged of *ur*, and interactions of *ur* with centrality measures. These were typically not statistically relevant and were therefore dropped.

The inclusion of a spatial lag of the dependent variable – that is, a measure of whether changes in relative income status in one area affect the rate of relative income change in nearby areas – has two important implications. Firstly, what goes on within each neighbourhood has a direct effect on the neighbourhood for instance, urban renewal interventions, population growth and social interactions. Secondly, what goes on in nearby neighbourhoods has an indirect effect each neighbourhood. This secondary effect can amplify the direct effect, but it can also reduce the effect of any neighbourhood-specific intervention or change (Lesage and Fisher 2008). Income growth in adjacent areas may hasten economic obsolescence in the area of interest.

Our estimation strategy also includes spatial lags for key explanatory variables. While the spatial lag of the dependent variable captures spatial interdependency in how relative incomes change over time, the spatial lags of explanatory variables – measured at the start of each change period – capture spatial interdependency in the characteristics that explain future change. All variables in the *X* vector are measured at the start of each change period to minimise simultaneity.

The basic structure of Eq (1) allows us to test a number of the reconfiguration processes discussed in Section 2.4. Specifically, the coefficient on relative income at the start of the period (b_1) is a measure of *mean reversion* or *long-run relative* neighbourhood status (this provides a test for stability in neighbourhood status *conditional* on neighbourhood socio-economic and demographic factors). The coefficient on relative income change in the period preceding the change period (b_5) is a measure of serial correlation or the degree of cyclicality around the long-run average status. Together b_1 and b_5 provide an indication of the extent to which neighbourhood-specific and citywide dynamics (relative income trends, central city employment reconcentration) condition processes of urban reconfiguration in each of the three cities.

The impact of public housing renewal programs is captured by (b_2). A positive (negative) effect here would indicate a convergence (divergence) from the overall level of income in each of the cities. That is, a positive (negative) effect would imply that an area experiencing public housing urban renewal experienced social and economic reconfiguration *sufficiently (insufficiently) to change its socio-economic status relative to all other areas.* b_3 provides a measure of the extent to which socio-economic and demographic characteristics condition changes in neighbourhood relative income status over time. For instance, a positive effect on percentage of owner occupation would suggest that such areas have improved their relative income status vis-à-vis areas with lower levels of owner occupation.

Eq (1) answers two questions.

1. How do neighbourhood and citywide processes of urban renewal and decline condition the urban reconfiguration processes in Adelaide, Melbourne and Sydney?
2. How do public housing renewal, when controlling for other social and economics determinants, affect urban reconfiguration and change outcomes?

Eq (1) is estimated three ways.

1. Based on change between 2006 and 2016, with socio-economic and demographic variables set to 2006. Change in relative income status between 1996 and 2006 is included as a measure of serial correlation (b_5). Determinants of the average income status are based on variables measured in 2006. For the purposes of interpretation, the 2006 measures must largely be considered contemporaneous with the change period and so indicate correlation, rather than causation. This specification draws on Rosenthal (2008) for neighbourhood change, with the inclusion of spatial dynamics.
2. As above, but without serial correlation, and with base variables set to 1996, in order to address the issue of endogeneity in neighbourhood status. This rests on the assumption that socio-economic status in 1996 was independent of site/neighbourhood change between 2006 and 2016, but allows 1996 conditions to condition change in the latter period. Long lead times around urban development arguably weaken this assumption. This modelling strategy typically had the lowest model fit.

3. Based on change between 1996 and 2016, with socio-economic and demographic variables set to 1996. This allows for a longer change period, but the assumption of independence in 1996 neighbourhood status is now weak and is best interpreted as contemporaneous (endogenous). Relative income status in 1996 is included to control for mean reversion – that is, the extent to which changes (shocks) in any particular neighbourhood dissipate over time (b_1). This specification draws on Lesage and Fisher (2008) for spatial dependence in local growth models, and includes determinants of relative income status taken from Rosenthal (2008).

Data assembly and spatial concordances

The quantitative methodology is based on compiling a panel census and related indicators at appropriate small-area levels for NSW, Victoria, and South Australia. Assembling this data required us to source census data and boundaries from multiple sources, and undertake two key tasks.

- Develop spatial concordances (merges) of comparable small areas across census years using geographic information system (GIS) queries, and from this, compute consistent spatial units and weights based on the degrees of overlap between regions over time.
- Compile and derive comparable census indicators across each year.

The task of compiling long-term small-area census data across multiple years and from different formats is challenging, in that data collections are not typically undertaken to support this kind of use – the smaller the area, and the further back in time, the less consistent boundaries and terminologies tend to be. Some time was taken in assessing and comparing options for the methodology. Spatial merges were completed in GIS using intercept queries at two levels of spatial resolution.

- At the smallest-area (roughly, block) level (for NSW, Victoria, South Australia): CCD 1996 to 2006 CCD; and then 2016 Statistical Area Level 1 (SA1) boundaries. This produced a fine-grained index covering three points in time: 1996, 2006 and 2016. Some of the degrees of overlap in boundaries at this level are less consistent and will require care in use.
- At the larger (roughly, neighbourhood) level (for NSW, Victoria, South Australia): Census Postal Areas (POAs) (Statistical Local Areas were also trialled but POAs produce a better match over time) – 1996 merged to 2006 Statistical Area Level 2 (SA2) and then to 2016 SA2.

Spatial intercepts produce consistent spatial units over time, which can be joined to census data using weights based on their relative size. In practice, the missing observations across different variables was not always consistent, so spatial merges had to be completed separately for individual variables.

Obtaining access to 1996 census data was based on utilising CDATA96 facilities provided by a number of libraries in Victoria.[32] However, while the data catalogues still contain the software resources, most libraries have updated their hardware resources, making access to the data more complicated. This extended the assembly period by a couple of weeks.

Assembling comparable measures from later years of census data at small-area level included the use of Australian Bureau of Statistics (ABS) census data packs (Time Series Community Profiles) and TableBuilder online. Time Series Community Profiles (via data packs) have proven useful sources – only at the SA2 level – as they include median figures (median incomes, median rents) across three census years with ABS-provided concordances across years.

32 CDATA96 is an ABS/MapInfo Australia software package that uses a Geographic Information System (GIS) to map 1996 census data.

Data manipulation

Collating data across different census years, one encounters issues of inconsistency in the structure of data reporting. CDATA96 provides data on median age, individual income and median household income. However, TableBuilder, which was used to download census indicators for 2006 CCD and 2016 SA1 data, does not publish equivalent median figures. Thus, median figures for incomes and other indicators were arrived at by locating the mid-point observation for all records of a particular variable. In both cases (CDATA96 and TableBuilder), several of the variables are based on bands (e.g. $100–$199 income per week) – for these variables the mid-point was used (e.g. $150). Table A2 provides descriptive statistics for the variables used in estimation.

Table A 2: Descriptive statistics

	Adelaide		Melbourne		Sydney	
Variable	Mean	Std dev.	Mean	Std dev.	Mean	Std dev.
Relative income change 2006–2016	2.99	3.54	1.05	0.26	0.94	0.26
Relative income change 1996–2006	1.09	0.33	1.25	0.39	1.12	0.38
Relative income change 1996–2016	1.02	0.26	1.04	0.31	1.16	0.42
Relative income 2006	1.05	0.35	1.02	0.35	1.15	0.45
Relative income 1996	1.05	0.30	1.00	0.26	1.00	0.29
Population density 2006	1,917	1,027	2,737	3,513	4,338	5,996
Population density 1996	1,858	944	2,746	3,558	4,002	5,056
Median age 2006, years	38.75	6.40	37.24	5.89	36.43	5.85
Median age 1996, years	36.25	6.41	34.67	5.88	34.50	5.93
Social housing 2006, %	5.57	10.49	2.68	7.97	3.96	10.51
Social housing 1996, %	6.18	10.37	2.95	9.62	5.32	13.97
Australian-born residents 2006, %	70.39	8.81	64.17	13.14	60.41	15.78
Australian-born residents 1996, %	74.80	7.59	70.20	12.25	67.77	14.51
Owner occupation 2006, %	71.20	17.33	71.91	17.61	66.95	19.94
Owner occupation 1996, %	57.65	21.33	60.20	19.89	41.60	16.55
Gender 2006: male, %	48.73	3.31	48.93	3.16	49.11	3.26
Gender 1996: male, %	48.60	3.63	48.88	3.14	49.12	3.59
Residents with Bachelor degree+ 2006, %	12.69	8.48	17.20	10.62	16.58	10.30
Residents with Bachelor degree+ 1996, %	22.64	13.72	28.95	15.05	26.95	14.03
Average house price 2006, $	316,433	98,127	430,441	208,486	638,801	364,329
Average house price 1996, $	119,989	37,202	156,101	72,877	256,745	135,829
Public housing renewal 1996–2016, 1=yes	0.05	0.21	0.02	0.14	0.01	0.12
Public housing renewal 1996–2006, 1=yes	0.04	0.19	0.01	0.10	0.01	0.07
Public housing renewal 2006–2016, 1=yes	0.02	0.15	0.02	0.13	0.01	0.11
Distance to CBD, metres	13,379	9,158	20,717	15,075	23,541	18,518
Number of CCDs	6,480		5,312		2,228	

Note: Measurement of variables across census period not always fully comparable. Variations across years are affected by these measurement differences. In estimation, this has little implication. Our interest is in the socio-spatial distribution in each based year, rather than change between years. The exemption is income and social housing measure. Income is described additionally below. Public housing is consistently measured as rented from state housing authority.

Source: Authors' calculations based on CDATA96 and TableBuilder.

A further issue in preparing census data arises due to differences in how variables are reported. For instance, median household income in 1996 is reported in seven categories. However, household income in 2006 and 2016 is reported in 16 and 20 categories, respectively. In terms of extracting the median household value, the difference in reporting structure between 2006 and 2016 was of little consequence – the categories spanning the weekly income range from $0–$3,999 are largely the same, so the median is unaffected by this. Concording 2006 and 2016 spatial boundaries to 1996 boundaries resulted in an income measure with a lot of variation. For the econometric analysis, this is a desirable property. The 1996 median income data, on the other hand, exhibits very little variation (due to the small number of categories). For the econometric analysis, the lack of variation turned out to be of limited consequence (see below), but for the transition matrices in Section 3, the small number of categories in 1996 meant that quartiles could not be properly defined.

To address this issue, median household incomes in 1996 were imputed by estimating Eq (2). The imputation rests on the assumption that the *within* household income-band variation (i.e. whether a CCD is systematically located towards the lower or higher end of the household income band) can be explained by individual income, age and household size.

$$HHYm_i = \alpha + \beta_1 IYm_i + \beta_2 Age_i + HHsize_i + \varepsilon_i \text{ (2)}$$

Where *HHYm* is median household income (from original household income bands) in CCD *i, IYm* is median individual income, *Age* is the median age of all individuals and *HHsize* is the average household size. 'Table A3 presents a summary of the median household income regressions for the three states.

Tables A4–A15 provide details on the regression results for each of the capital cities. *Note: in the econometric analysis, this imputation only affects the 1996–2016 relative income variable. As a robustness test we also estimated Eq (1) using the original medians from CDATA96. There is no material difference to the econometric results presented in Tables A4–A15 as a result of using either version of median household income in 1996.* The chief effect of this imputation is therefore to enable construction of the transition matrices. Transition matrices were produced for the periods 1996–2016 and 2006–2016 (unaffected by imputation).

Table A 3: Median household income regressions 1996

	Melbourne	Sydney	Adelaide
Median ind. income 1996	1.797 (0.022)***	1.964 (0.019) ***	1.559 (0.035) ***
Median age 1996	5.415 (0.382) ***	8.257 (0.399) ***	3.572 (0.467) ***
Average household size 1996	234.774 (4.502) ***	282.383 (4.508) ***	228.894 (7.497) ***
Constant	-667.39 (23.755)***	-951.20 (24.256)***	-537.24 (29.740)***
Adj. R^2	0.632	0.655	0.660

*Note: */**/*** is significant at 0.05/0.01/0.001 levels. Standard errors in brackets.*

Source: Authors' calculations based on CDATA96 and TableBuilder.

Property values were collected at SA2 level for 1996 and 2006 via the Australian Urban Research Infrastructure Network (AURIN) portal and matched to SA1 locations. Median rents/rent bands and mortgage payments are otherwise included in census data as property indicators. Eq (1) includes both incomes and property values. In order to address issues of collinearity in the estimation strategy follows a method sometimes applied in growth studies (Papyrakis and Gerlach 2003). Following this method, the correlation between income and house prices was removed by estimating Eq (3):

$$HP_i = \alpha + \beta Y_i + \varepsilon_i \ (3)$$

Where HP is the geometric mean price for properties sold by auction and private treaty in CCD *i*, and *Y* is the median income in CCD *i*. Eq (3) was then used to predict the house price $(\widehat{HP}_i)$ in each CCD. By subtracting the predicted HP from the observed house prices we obtained a measure of house prices independently of median household income (Eq 4):

$$Residual\ HP_i = HP_i - \widehat{HP}_i \ (4)$$

Eq (1) – full regression results

Adelaide

Table A 4: Eq (1) regression Adelaide

	Relative income change 2006–2016		Relative income change 2006–2016		Relative income change 1996–2016	
	Base 2006		Base 1996		Base 1996	
	Coef.	Std err.	Coef.	Std err.	Coef.	Std err.
Relative income change 1996–2006	-0.0327	0.0235				
Relative income base year	**-0.6347**	**0.0308**	**-0.7144**	**0.0231**	**-0.7694**	**0.0197**
Population growth since base year	-0.0074	0.0146	-0.0068	0.0118	0.0071	0.0125
Distance to GPO	**-0.0273**	**0.0115**	*-0.0282*	*0.0148*	**-0.0389**	**0.0124**
Population density base year	*-0.0265*	*0.0154*	**-0.0423**	**0.0130**	-0.0205	0.0136
Ln median age base year	**-0.1478**	**0.0323**	**-0.0745**	**0.0321**	**-0.1979**	**0.0277**
Public housing base year, %	**0.0024**	**0.0006**	**0.0018**	**0.0007**	**0.0015**	**0.0006**
Australian born base year, %	**0.0027**	**0.0006**	**0.0018**	**0.0007**	**0.0033**	**0.0006**
Owner occupation base year, %	**0.0044**	**0.0005**	**0.0033**	**0.0004**	**0.0053**	**0.0003**
Male population base year, %	**0.0043**	**0.0014**	**0.0054**	**0.0013**	0.0010	0.0011
Urban renewal 1996–2006, 1=yes	**0.0723**	**0.0311**	**0.0809**	**0.0296**		
Urban renewal 2006–2016, 1=yes	-0.0500	0.0389	-0.0006	0.0368		
Urban renewal 1996–2016, 1=yes					**0.0820**	**0.0216**
Bachelor degree+ base year, %	**0.0065**	**0.0011**	**0.0019**	**0.0006**	**0.0045**	**0.0005**
Ln house price base year	**0.2528**	**0.0303**	**0.2002**	**0.0317**	**0.2783**	**0.0267**
Ln CCD size	-0.0057	0.0166	**-0.0271**	**0.0138**	0.0047	0.0147
Constant	**1.2099**	**0.2264**	**-1.1265**	**0.4404**	0.5372	0.2134
Spatial lag: contiguity						
Public housing base year, %	-0.0004	0.0012	*0.0026*	*0.0014*	**-0.0018**	**0.0009**
Relative income base year			**0.2201**	**0.0416**		
Relative income change	-0.0185	0.0190	-0.0201	0.0196	*-0.0925*	*0.0521*
Spatial lag: inverted distance						
Relative income change	**6.8258**	**1.3370**	**3.4218**	**0.7212**	**3.5623**	**0.6430**
Pseudo R^2	0.4091		0.3973		0.6041	

Note: % coefficients are semi-elasticities. **Bold** *figures are significant at 5% level, italic figures are significant at 10% level.*

Source: Authors' calculations based on CDATA96 and TableBuilder.

Table A 5: Marginal average direct effects Eq (1), Adelaide

	Direct effect		Direct effect		Direct effect	
	dy/dx	Std err.	dy/dx	Std err.	dy/dx	Std err.
Relative income change 1996–2006	-0.0327	0.0235				
Relative income base year	**-0.6348**	**0.0308**	**-0.7148**	**0.0231**	**-0.7700**	**0.0198**
Population growth since base year	-0.0074	0.0146	-0.0068	0.0118	0.0071	0.0126
Distance to GPO	**-0.0273**	**0.0115**	*-0.0282*	*0.0148*	**-0.0389**	**0.0124**
Population density base year	*-0.0265*	*0.0154*	**-0.0423**	**0.0130**	-0.0205	0.0136
Ln median age base year	**-0.1478**	**0.0323**	**-0.0745**	**0.0321**	**-0.1980**	**0.0277**
Public housing base year, %	**0.0024**	**0.0006**	**0.0018**	**0.0007**	**0.0015**	**0.0006**
Australian born base year, %	**0.0027**	**0.0006**	**0.0018**	**0.0007**	**0.0033**	**0.0006**
Owner occupation base year, %	**0.0044**	**0.0005**	**0.0033**	**0.0004**	**0.0053**	**0.0003**
Male population base year, %	**0.0043**	**0.0014**	**0.0054**	**0.0013**	0.0010	0.0011
Urban renewal 1996–2006, 1=yes	**0.0723**	**0.0311**	**0.0809**	**0.0296**		
Urban renewal 2006–2016, 1=yes	-0.0500	0.0389	-0.0006	0.0368		
Urban renewal 1996–2016, 1=yes					**0.0821**	**0.0216**
Bachelor degree+ base year, %	**0.0065**	**0.0011**	**0.0019**	**0.0006**	**0.0045**	**0.0005**
Ln house price base year	**0.2528**	**0.0303**	**0.2002**	**0.0317**	**0.2785**	**0.0267**
Ln CCD size	-0.0057	0.0166	**-0.0271**	**0.0138**	0.0047	0.0147

Note: % coefficients are semi-elasticities. **Bold** *figures are significant at 5% level, italic figures are significant at 10% level.*
Source: Authors' calculations based on CDATA96 and TableBuilder.

Table A 6: Marginal average indirect effects Eq (1), Adelaide

	Indirect effect		Indirect effect		Indirect effect	
	dy/dx	Std err.	dy/dx	Std err.	dy/dx	Std err.
Relative income change 1996–2006	0.0004	0.0005				
Relative income base year	0.0086	0.0087	**0.1715**	**0.0320**	**0.0496**	**0.0264**
Population growth since base year	0.0001	0.0002	0.0001	0.0002	-0.0005	0.0008
Distance to GPO	0.0004	0.0004	0.0004	0.0005	0.0025	0.0016
Population density base year	0.0004	0.0004	0.0006	0.0006	0.0013	0.0012
Ln median age base year	0.0020	0.0021	0.0011	0.0012	*0.0128*	*0.0069*
Public housing base year, %	-0.0003	0.0009	0.0018	0.0010	**-0.0013**	**0.0006**
Australian born base year, %	0.0000	0.0000	0.0000	0.0000	*-0.0002*	*0.0001*
Owner occupation base year, %	-0.0001	0.0001	0.0000	0.0000	-0.0003	0.0002
Male population base year, %	-0.0001	0.0001	-0.0001	0.0001	-0.0001	0.0001
Urban renewal 1996–2006, 1=yes	-0.0010	0.0011	-0.0012	0.0012		
Urban renewal 2006–2016, 1=yes	0.0007	0.0009	0.0000	0.0005		
Urban renewal 1996–2016, 1=yes					-0.0053	0.0032
Bachelor degree+ base year, %	-0.0001	0.0001	0.0000	0.0000	*-0.0003*	*0.0002*
Ln house price base year	-0.0034	0.0035	-0.0029	0.0029	*-0.0179*	*0.0098*
Ln CCD size	0.0001	0.0002	0.0004	0.0004	-0.0003	0.0010

Note: % coefficients are semi-elasticities. **Bold** *figures are significant at 5% level, italic figures are significant at 10% level.*
Source: Authors' calculations based on CDATA96 and TableBuilder.

Table A 7: Marginal total effects Eq (1), Adelaide

	Total effect		Total effect		Total effect	
	dy/dx	Std err.	dy/dx	Std err.	dy/dx	Std err.
Relative income change 1996–2006	-0.0323	0.0232				
Relative income base year	**-0.6262**	**0.0312**	**-0.5433**	**0.0352**	**-0.7204**	**0.0307**
Population growth since base year	-0.0073	0.0144	-0.0067	0.0116	0.0066	0.0118
Distance to GPO	**-0.0269**	**0.0113**	*-0.0278*	*0.0145*	**-0.0364**	**0.0116**
Population density base year	*-0.0262*	*0.0152*	**-0.0416**	**0.0128**	-0.0192	0.0127
Ln median age base year	**-0.1458**	**0.0320**	**-0.0734**	**0.0317**	**-0.1853**	**0.0271**
Public housing base year, %	**0.0021**	**0.0010**	**0.0037**	**0.0010**	0.0002	0.0008
Australian born base year, %	**0.0027**	**0.0006**	**0.0018**	**0.0007**	**0.0031**	**0.0006**
Owner occupation base year, %	**0.0044**	**0.0005**	**0.0032**	**0.0004**	**0.0049**	**0.0003**
Male population base year, %	**0.0043**	**0.0014**	**0.0053**	**0.0013**	0.0009	0.0011
Urban renewal 1996–2006, 1=yes	**0.0713**	**0.0307**	**0.0797**	**0.0292**		
Urban renewal 2006–2016, 1=yes	-0.0493	0.0384	-0.0006	0.0362		
Urban renewal 1996–2016, 1=yes					**0.0768**	**0.0201**
Bachelor degree+ base year, %	**0.0064**	**0.0011**	**0.0019**	**0.0006**	**0.0042**	**0.0005**
Ln house price base year	**0.2494**	**0.0297**	**0.1973**	**0.0312**	**0.2606**	**0.0259**
Ln CCD size	-0.0057	0.0164	*-0.0267*	*0.0137*	0.0044	0.0138

Note: % coefficients are semi-elasticities. **Bold** *figures are significant at 5% level, italic figures are significant at 10% level.*
Source: Authors' calculations based on CDATA96 and TableBuilder.

Melbourne

Table A 8: Eq (1) regression Melbourne

	Relative income change 2006–2016		Relative income change 2006–2016		Relative income change 1996–2016	
	Base 2006		Base 1996		Base 1996	
	Coef.	Std err.	Coef.	Std err.	Coef.	Std err.
Relative income change 1996–2006	-0.0069	0.0134				
Relative income base year	**-0.5675**	**0.0156**	**-0.5908**	**0.0121**	**-0.7720**	**0.0148**
Population growth since base year	-0.0013	0.0071	-0.0026	0.0054	-0.0072	0.0080
Distance to GPO	**-0.0752**	**0.0054**	**-0.0593**	**0.0078**	**-0.0929**	**0.0089**
Population density base year	0.0073	0.0088	**-0.0104**	**0.0051**	-0.0124	0.0092
Ln median age base year	**-0.1656**	**0.0197**	**-0.0462**	**0.0179**	**-0.1756**	**0.0204**
Public housing base year, %	-0.0006	0.0004	*-0.0006*	*0.0003*	**-0.0022**	**0.0004**
Australian born base year, %	**0.0037**	**0.0003**	**0.0023**	**0.0003**	**0.0047**	**0.0003**
Owner occupation base year, %	**0.0040**	**0.0003**	**0.0017**	**0.0002**	**0.0042**	**0.0002**
Male population base year, %	**0.0024**	**0.0008**	0.0008	0.0008	0.0008	0.0009

	Relative income change 2006–2016		Relative income change 2006–2016		Relative income change 1996–2016	
	Base 2006		Base 1996		Base 1996	
	Coef.	Std err.	Coef.	Std err.	Coef.	Std err.
Urban renewal 1996–2006, 1=yes	0.0523	0.0331	0.0361	0.0316		
Urban renewal 2006–2016, 1=yes	**-0.0545**	**0.0272**	**-0.0535**	**0.0263**		
Urban renewal 1996–2016, 1=yes					0.0097	0.0132
Bachelor degree+ base year, %	**0.0065**	**0.0006**	0.0030	0.0003	**0.0063**	**0.0003**
Ln house price base year	**0.1668**	**0.0125**	**0.0368**	**0.0138**	**0.1896**	**0.0150**
Ln CCD size	**0.0298**	**0.0092**	0.0086	0.0054	**0.0232**	**0.0096**
Constant	**0.5656**	**0.1251**	-0.0077	0.2162	**0.8276**	**0.1502**
Spatial lag: contiguity						
Public housing base year, %	**-0.0046**	**0.0009**	-0.0010	0.0007	**-0.0042**	**0.0008**
Relative income base year			**0.4225**	**0.0252**		
Relative income change	**-0.2215**	**0.0517**	**0.7218**	**0.0605**	**0.3358**	**0.0286**
Spatial lag: inverted distance						
Relative income change	**5.2582**	**0.5967**	**2.8081**	**0.4580**	**3.7614**	**0.3237**
Pseudo-r^2	0.3948		0.2520		0.5578	

Note: % coefficients are semi-elasticities. **Bold** figures are significant at 5% level, *italic* figures are significant at 10% level.

Source: Authors' calculations based on CDATA96 and TableBuilder.

Table A 9: Marginal average direct effects Eq (1), Melbourne

	Relative income change 2006–2016		Relative income change 2006–2016		Relative income change 1996–2016	
	dy/dx	Std err.	dy/dx	Std err.	dy/dx	Std err.
Relative income change 1996–2006	-0.0070	0.0134				
Relative income base year	**-0.5698**	**0.0160**	**-0.5911**	**0.0131**	**-0.7808**	**0.0147**
Population growth since base year	-0.0013	0.0071	-0.0028	0.0058	-0.0073	0.0081
Distance to GPO	**-0.0755**	**0.0055**	**-0.0632**	**0.0082**	**-0.0939**	**0.0089**
Population density base year	0.0074	0.0089	-0.0112	0.0055	-0.0125	0.0093
Ln median age base year	**-0.1663**	**0.0198**	**-0.0493**	**0.0192**	**-0.1776**	**0.0207**
Public housing base year, %	-0.0005	0.0004	**-0.0008**	**0.0003**	**-0.0024**	**0.0004**
Australian born base year, %	**0.0037**	**0.0003**	**0.0025**	**0.0003**	**0.0047**	**0.0003**
Owner occupation base year, %	**0.0040**	**0.0003**	**0.0018**	**0.0002**	**0.0042**	**0.0002**
Male population base year, %	**0.0024**	**0.0008**	0.0009	0.0008	0.0008	0.0009
Urban renewal 1996–2006, 1=yes	0.0525	0.0332	0.0385	0.0337		
Urban renewal 2006–2016, 1=yes	**-0.0548**	**0.0273**	**-0.0570**	**0.0280**		
Urban renewal 1996–2016, 1=yes					0.0098	0.0133

	Relative income change 2006–2016		Relative income change 2006–2016		Relative income change 1996–2016	
	dy/dx	Std err.	dy/dx	Std err.	dy/dx	Std err.
Bachelor degree+ base year, %	**0.0065**	**0.0006**	**0.0032**	**0.0003**	**0.0064**	**0.0003**
Ln house price base year	**0.1675**	**0.0125**	**0.0392**	**0.0147**	**0.1918**	**0.0151**
Ln CCD size	**0.0299**	**0.0092**	0.0091	0.0058	**0.0235**	**0.0097**

Note: % coefficients are semi-elasticities. **Bold** *figures are significant at 5% level, italic figures are significant at 10% level.*

Source: Authors' calculations based on CDATA96 and TableBuilder.

Table A 10: Marginal average indirect effects Eq (1), Melbourne

	Relative income change 2006–2016		Relative income change 2006–2016		Relative income change 1996–2016	
	dy/dx	Std err.	dy/dx	Std err.	dy/dx	Std err.
Relative income change 1996–2006	0.0010	0.0019				
Relative income base year	**0.0807**	**0.0172**	-0.0070	0.0556	**-0.2568**	**0.0292**
Population growth since base year	0.0002	0.0010	-0.0033	0.0069	-0.0024	0.0027
Distance to GPO	**0.0107**	**0.0025**	**-0.0759**	**0.0177**	**-0.0309**	**0.0042**
Population density base year	-0.0010	0.0013	*-0.0134*	*0.0070*	-0.0041	0.0031
Ln median age base year	**0.0236**	**0.0057**	**-0.0592**	**0.0283**	**-0.0584**	**0.0103**
Public housing base year, %	**-0.0029**	**0.0006**	**-0.0026**	**0.0013**	**-0.0049**	**0.0008**
Australian born base year, %	**-0.0005**	**0.0001**	**0.0030**	**0.0007**	**0.0016**	**0.0002**
Owner occupation base year, %	**-0.0006**	**0.0001**	**0.0021**	**0.0005**	**0.0014**	**0.0002**
Male population base year, %	**-0.0003**	**0.0001**	0.0011	0.0011	0.0003	0.0003
Urban renewal 1996–2006, 1=yes	-0.0074	0.0050	0.0462	0.0414		
Urban renewal 2006–2016, 1=yes	*0.0078*	*0.0042*	**-0.0685**	**0.0367**		
Urban renewal 1996–2016, 1=yes					0.0032	0.0044
Bachelor degree+ base year, %	**-0.0009**	**0.0002**	**0.0038**	**0.0008**	**0.0021**	**0.0002**
Ln house price base year	**-0.0237**	**0.0050**	**0.0471**	**0.0207**	**0.0631**	**0.0089**
Ln CCD size	**-0.0042**	**0.0016**	0.0110	0.0074	**0.0077**	**0.0034**

Note: % coefficients are semi-elasticities. **Bold** *figures are significant at 5% level, italic figures are significant at 10% level.*

Source: Authors' calculations based on CDATA96 and TableBuilder.

Table A 11: Marginal average total effects Eq (1), Melbourne

	Relative income change 2006–2016		Relative income change 2006–2016		Relative income change 1996–2016	
	dy/dx	Std err.	dy/dx	Std err.	dy/dx	Std err.
Relative income change 1996–2006	-0.0060	0.0116				
Relative income base year	**-0.4891**	**0.0174**	**-0.5981**	**0.0624**	**-1.0376**	**0.0336**
Population growth since base year	-0.0012	0.0061	-0.0061	0.0127	-0.0096	0.0107
Distance to GPO	**-0.0648**	**0.0045**	**-0.1392**	**0.0230**	**-0.1248**	**0.0118**
Population density base year	0.0063	0.0076	**-0.0245**	**0.0123**	-0.0166	0.0123
Ln median age base year	**-0.1428**	**0.0174**	**-0.1085**	**0.0465**	**-0.2360**	**0.0294**
Public housing base year, %	**-0.0033**	**0.0006**	**-0.0034**	**0.0014**	**-0.0073**	**0.0008**
Australian born base year, %	**0.0032**	**0.0003**	**0.0055**	**0.0009**	**0.0063**	**0.0004**
Owner occupation base year, %	**0.0034**	**0.0002**	**0.0039**	**0.0007**	**0.0056**	**0.0004**
Male population base year, %	**0.0020**	**0.0007**	0.0020	0.0019	0.0011	0.0012
Urban renewal 1996–2006, 1=yes	0.0450	0.0285	0.0847	0.0746		
Urban renewal 2006–2016, 1=yes	**-0.0470**	**0.0235**	**-0.1255**	**0.0635**		
Urban renewal 1996–2016, 1=yes					0.0130	0.0177
Bachelor degree+ base year, %	**0.0056**	**0.0005**	**0.0071**	**0.0010**	**0.0085**	**0.0005**
Ln house price base year	**0.1438**	**0.0121**	**0.0863**	**0.0344**	**0.2548**	**0.0216**
Ln CCD size	**0.0257**	**0.0080**	0.0201	0.0130	**0.0312**	**0.0130**

Note: % coefficients are semi-elasticities. **Bold** *figures are significant at 5% level, italic figures are significant at 10% level.*

Source: Authors' calculations based on CDATA96 and TableBuilder.

Sydney

Table A 12: Eq (1) regression Sydney

	Relative income change 2006–2016		Relative income change 2006–2016		Relative income change 1996–2016	
	Base 2006		Base 1996		Base 1996	
	Coef.	Std err.	Coef.	Std err.	Coef.	Std err.
Relative income change 1996–2006	**-0.1745**	**0.0185**				
Relative income base year	**-0.3547**	**0.0237**	**-0.4816**	**0.0192**	**-0.4780**	**0.0190**
Population growth since base year	**0.4565**	**0.0097**	**0.3119**	**0.0089**	**0.4670**	**0.0101**
Distance to GPO	0.0095	0.0100	**0.0243**	**0.0079**	**-0.0246**	**0.0113**
Population density base year	0.4635	0.0127	**0.2280**	**0.0111**	**0.4681**	**0.0131**
Ln median age base year	-0.1115	0.0326	**-0.1615**	**0.0339**	**-0.3410**	**0.0324**
Public housing base year, %	0.0003	0.0006	-0.0006	0.0004	**-0.0013**	**0.0004**
Australian born base year, %	**0.0038**	**0.0005**	**0.0018**	**0.0005**	**0.0057**	**0.0005**
Owner occupation base year, %	**0.0035**	**0.0004**	**0.0026**	**0.0003**	**0.0040**	**0.0003**
Male population base year, %	0.0002	0.0013	**-0.0039**	**0.0012**	**-0.0030**	**0.0012**
Urban renewal 1996–2006, 1=yes	0.0126	0.0629	-0.0141	0.0698		

	Relative income change 2006–2016		Relative income change 2006–2016		Relative income change 1996–2016	
	Base 2006		Base 1996		Base 1996	
	Coef.	Std err.	Coef.	Std err.	Coef.	Std err.
Urban renewal 2006–2016, 1=yes	0.0662	0.0511	-0.0447	0.0558		
Urban renewal 1996–2016, 1=yes					0.0051	0.0437
Bachelor degree+ base year, %	**0.0054**	**0.0009**	**0.0017**	**0.0005**	**0.0050**	**0.0005**
Ln house price base year	**0.2015**	**0.0191**	*0.0288*	*0.0163*	**0.2283**	**0.0231**
Ln CCD size	**0.4281**	**0.0134**	**0.1845**	**0.0119**	**0.4436**	**0.0141**
Constant	**-3.1546**	**0.2123**	**-1.5528**	**0.3168**	**-1.9675**	**0.2204**
Spatial lag: contiguity						
Public housing base year, %	**-0.0067**	**0.0010**	**-0.0022**	**0.0009**	**-0.0070**	**0.0008**
Relative income base year			**0.4071**	**0.0330**		
Relative income change	**0.1913**	**0.0326**	**0.4833**	**0.0369**	**0.1259**	**0.0317**
Spatial lag: inverted distance						
Relative income change	**5.9454**	**1.4300**	**11.6370**	**0.7620**	**4.9708**	**0.7883**
Pseudo-r^2	0.4126		0.3375		0.4600	

Note: % coefficients are semi-elasticities. **Bold** *figures are significant at 5% level, italic figures are significant at 10% level.*

Source: Authors' calculations based on CDATA96 and TableBuilder.

Table A 13: Marginal average direct effects Eq (1), Sydney

	Direct effect		Direct effect		Direct effect	
	dy/dx	Std err.	dy/dx	Std err.	dy/dx	Std err.
Relative income change 1996–2006	**-0.175**	**0.019**				
Relative income base year	**-0.356**	**0.024**	**-0.472**	**0.019**	**-0.4787**	**0.0190**
Population growth since base year	**0.458**	**0.010**	**0.320**	**0.009**	**0.4678**	**0.0100**
Distance to GPO	0.010	0.010	**0.025**	**0.008**	**-0.0246**	**0.0114**
Population density base year	**0.465**	**0.013**	**0.234**	**0.011**	**0.4688**	**0.0131**
Ln median age base year	**-0.112**	**0.033**	**-0.166**	**0.035**	**-0.3416**	**0.0325**
Public housing base year, %	0.000	0.001	*-0.001*	*0.000*	**-0.0013**	**0.0004**
Australian born base year, %	**0.004**	**0.000**	**0.002**	**0.000**	**0.0057**	**0.0005**
Owner occupation base year, %	**0.004**	**0.000**	**0.003**	**0.000**	**0.0040**	**0.0003**
Male population base year, %	0.000	0.001	**-0.004**	**0.001**	**-0.0030**	**0.0012**
Urban renewal 1996–2006, 1=yes	0.013	0.063	-0.014	0.072		
Urban renewal 2006–2016, 1=yes	0.066	0.051	-0.046	0.057		
Urban renewal 1996–2016, 1=yes					0.0051	0.0438
Bachelor degree+ base year, %	**0.005**	**0.001**	**0.002**	**0.000**	**0.0050**	**0.0005**
Ln house price base year	**0.202**	**0.019**	*0.030*	*0.017*	**0.2287**	**0.0231**
Ln CCD size	**0.430**	**0.013**	**0.190**	**0.012**	**0.4443**	**0.0140**

Note: % coefficients are semi-elasticities. **Bold** *figures are significant at 5% level, italic figures are significant at 10% level.*

Source: Authors' calculations based on CDATA96 and TableBuilder.

Table A 14: Marginal average indirect effects Eq (1), Sydney

	Indirect effect		Indirect effect		Indirect effect	
	dy/dx	Std err.	dy/dx	Std err.	dy/dx	Std err.
Relative income change 1996–2006	**-0.029**	**0.007**				
Relative income base year	**-0.060**	**0.013**	**0.213**	**0.036**	**-0.0499**	**0.0141**
Population growth since base year	**0.077**	**0.015**	**0.184**	**0.023**	**0.0488**	**0.0133**
Distance to GPO	0.002	0.002	**0.014**	**0.005**	**-0.0026**	**0.0013**
Population density base year	**0.078**	**0.015**	**0.135**	**0.017**	**0.0489**	**0.0133**
Ln median age base year	**-0.019**	**0.007**	**-0.095**	**0.024**	**-0.0356**	**0.0106**
Public housing base year, %	**-0.006**	**0.001**	**-0.003**	**0.001**	**-0.0059**	**0.0006**
Australian born base year, %	**0.001**	**0.000**	**0.001**	**0.000**	**0.0006**	**0.0002**
Owner occupation base year, %	**0.001**	**0.000**	**0.002**	**0.000**	**0.0004**	**0.0001**
Male population base year, %	**0.000**	**0.000**	**-0.002**	**0.001**	**-0.0003**	**0.0002**
Urban renewal 1996–2006, 1=yes	0.002	0.011	-0.008	0.041		
Urban renewal 2006–2016, 1=yes	0.011	0.009	-0.026	0.033		
Urban renewal 1996–2016, 1=yes					0.0005	0.0046
Bachelor degree+ base year, %	**0.001**	**0.000**	**0.001**	**0.000**	**0.0005**	**0.0001**
Ln house price base year	**0.034**	**0.007**	*0.017*	*0.010*	**0.0238**	**0.0068**
Ln CCD size	**0.072**	**0.014**	**0.109**	**0.015**	**0.0463**	**0.0127**

Note: % coefficients are semi-elasticities. **Bold** *figures are significant at 5% level, italic figures are significant at 10% level.*
Source: Authors' calculations based on CDATA96 and TableBuilder.

Table A 15: Marginal average total effects Eq (1), Sydney

	Total effect		Total effect		Total effect	
	dy/dx	Std err.	dy/dx	Std err.	dy/dx	Std err.
Relative income change 1996–2006	**-0.204**	**0.022**				
Relative income base year	**-0.416**	**0.031**	**-0.258**	**0.041**	**-0.5286**	**0.0256**
Population growth since base year	**0.535**	**0.017**	**0.505**	**0.026**	**0.5165**	**0.0154**
Distance to GPO	0.011	0.012	**0.039**	**0.013**	**-0.0272**	**0.0125**
Population density base year	**0.543**	**0.019**	**0.369**	**0.023**	**0.5177**	**0.0176**
Ln median age base year	**-0.131**	**0.038**	**-0.261**	**0.057**	**-0.3772**	**0.0377**
Public housing base year, %	**-0.006**	**0.001**	**-0.004**	**0.001**	**-0.0073**	**0.0007**
Australian born base year, %	**0.004**	**0.001**	**0.003**	**0.001**	**0.0063**	**0.0005**
Owner occupation base year, %	**0.004**	**0.000**	**0.004**	**0.001**	**0.0045**	**0.0004**
Male population base year, %	0.000	0.001	**-0.006**	**0.002**	**-0.0033**	**0.0014**
Urban renewal 1996–2006, 1=yes	0.015	0.074	-0.023	0.113		
Urban renewal 2006–2016, 1=yes	0.078	0.060	-0.072	0.090		
Urban renewal 1996–2016, 1=yes					0.0057	0.0484
Bachelor degree+ base year, %	**0.006**	**0.001**	**0.003**	**0.001**	**0.0055**	**0.0006**
Ln house price base year	**0.236**	**0.023**	*0.047*	*0.026*	**0.2525**	**0.0255**
Ln CCD size	**0.502**	**0.021**	**0.299**	**0.024**	**0.4907**	**0.0186**

Note: % coefficients are semi-elasticities. **Bold** *figures are significant at 5% level, italic figures are significant at 10% level.*
Source: Authors' calculations based on CDATA96 and TableBuilder.

Appendix 3: Interview guide

1. What is your organisation's role in the current public housing renewal program?
2. What is (or has been) your role within your organisation?

Regarding the public housing renewal program:

3. What is your understanding of the aims/goals/deliverables of the program? What do you think the program is trying to achieve?
    a. …in terms of social, economic and financial returns/outcomes for sites or wider neighbourhoods?
4. What do you think has informed the program's aims/goals/deliverables? E.g. is there any evidence base or previous learnings that have appeared to inform current policy, in similar or different contexts.
    a. …aware of any concrete examples of evaluation/learning that have informed policy-making?
    b. …examples of past success and failures that have resulted in changes to how the program is now being implemented?

Regarding the interviewee's (or organisation's) role:

5. What are the specific aims/goals/deliverables of your organisation for participating in the program? What is your organisation trying to achieve through participation in the program?
    a. …how do these goals/deliverables relate to wider social, economic and financial returns/outcomes of public housing renewal?
6. What are the relations between your organisation's aims and other stakeholders' aims? What are the relations between your organisation's aims and the program's aims? Are they complementary or trade-offs?
    a. …is there a hierarchy of outcomes when planning/designing participation in public housing renewal?

Regarding the role of evaluation in shaping organisation/program aims:

7. What role does evaluation and learning play in shaping ongoing policy development and roll-out of programs/initiatives?
    a. … does evaluation/learning, or project design/delivery, reflect the different scales that public housing urban renewal engages with, e.g. the site itself and/or the neighbourhood?
8. How would you describe institutional commitment/interest in informing your organisation's approach? How is evaluation activity scoped/undertaken/commissioned?
9. Can you give us examples of evaluation and learning that have informed your organisation's aims/objectives/ways of doing things?
10. Can you explain what has been evaluated and why? [for example, financial/design/built form/sustainability/people-based and place-based outcomes]
11. Have you found that the evaluation approaches and mechanisms used have adequately captured the core factors/considerations underpinning policy/program aims and objectives?

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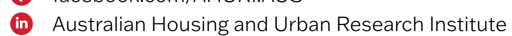
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