



INVESTIGATING THE COSTS  
AND BENEFITS OF THE

# MELBOURNE APARTMENTS PROJECT

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## PHASE ONE REPORT

PREPARED BY THE UNIVERSITY OF MELBOURNE

## INVESTIGATING THE COSTS AND BENEFITS OF THE MELBOURNE APARTMENTS PROJECT

### ABOUT TRANSFORMING HOUSING

This report is developed by the Transforming Housing Research Network, based at the University of Melbourne. Transforming Housing is an action-research project focused on influencing and supporting the transformation of the housing policy and delivery environment in Victoria. It aims to facilitate collaborations with industry, government and philanthropic organisations in order to improve affordable housing outcomes for very low to moderate income households. We advocate for housing that is affordable, well-located, diverse and well-designed.

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# EXECUTIVE SUMMARY

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This report is an interim output commissioned by the Melbourne City Mission with the support of City of Melbourne and Resilient Melbourne. It aims to evaluate the costs and benefits of the Melbourne Apartments Project (MAP), a 34-unit apartment in North Melbourne. The report highlights the costs and benefits associated with current public housing tenants moving out of public housing and into affordable homeownership in the MAP. The report summarises current housing policy settings and identifies recurring rhetoric encouraging homeownership before presenting a summary of existing research on the costs and benefits of secure housing. This report is part of a broader suite of work that will investigate the lived experiences of MAP residents, the policy context of affordable home purchase options in Victoria and the financial and social model applied in MAP.

## KEY FINDINGS INCLUDE:

There is a severe deficit of affordable, available and adequate housing in Australia. The lack of affordable housing in the private market is forcing many households into significant housing stress and is reflected in long waiting lists for social housing and rising rates of homelessness. This situation also constrains the capacity for current social housing dwellers to exit into the private market and move along the housing continuum from renting to ownership.

Policy at both a state and federal level provides funding and support at the ownership end of the housing continuum (Wang, Wilson, & Yates, 2004). Most housing policy and taxation settings in Australia aim to facilitate and promote homeownership and property investment (Yates, 2010). Homeownership confers many benefits, such as security of tenure, control over home modifications and the capacity to build wealth. However, existing mechanisms such as negative gearing, capital gains tax exemptions, first home buyers grants and stamp duty concessions are criticised for disproportionately benefiting higher income households or stimulating demand and house prices increases without generating housing supply (Daley, Wood, & Parsonage, 2016; Yates, 2016). Schemes targeted at reducing initial barriers to entering homeownership and reducing on-going housing payments are one way of supporting lower income households to access the benefits of homeownership.

## PROJECT CONTEXT

MAP is an innovative developer-led housing model in North Melbourne. The project has not attracted any government subsidy or grant. The apartment block has 34 units, 28 of which were sold to former public housing tenants previously dwelling within 4km of MAP. The project supports public housing tenants to purchase an apartment by reducing upfront deposit requirements and mortgage repayments through the use of an interest-free second mortgage or 'MAP Advance' that covers approximately 37% of the market price of the development. This advance reduces by \$15,000 each year for the first 4 years of the project and does not need to be paid by the homeowner until they sell their property.

## ANALYSIS

Existing literature suggests that access to stable and affordable housing confers benefits to individuals and the state. Benefits relate to improved health and well-being, reduced use of justice services, improved education outcomes and improved financial and employment outcomes. In this report, we present findings from a meta-analysis of Australian studies that produced primary research on the costs and benefits of projects that supported movement of vulnerable individuals and households into stable housing conditions. We find the following;

- Australian cost benefit studies of affordable housing projects suggest that **for every dollar invested in housing an at-risk resident in housing, the state government receives between \$1.37 and \$3.25 in benefits.**
- For the Melbourne Apartments Project, we estimate a Benefit Cost Ratio of 2.19:1 with a 95% confidence interval. **Meaning, for every \$1 of cost to the government for this project, the state receives \$2.19 in benefits.** This is mainly due to the capacity for new households to move into vacated public housing units.
- If every public housing unit made available as a MAP participant moved out of their unit and into a MAP apartment were reallocated to a high-needs applicant on the social housing waitlist, **the government could expect \$27,458.22 in cost savings per MAP participant per year.**



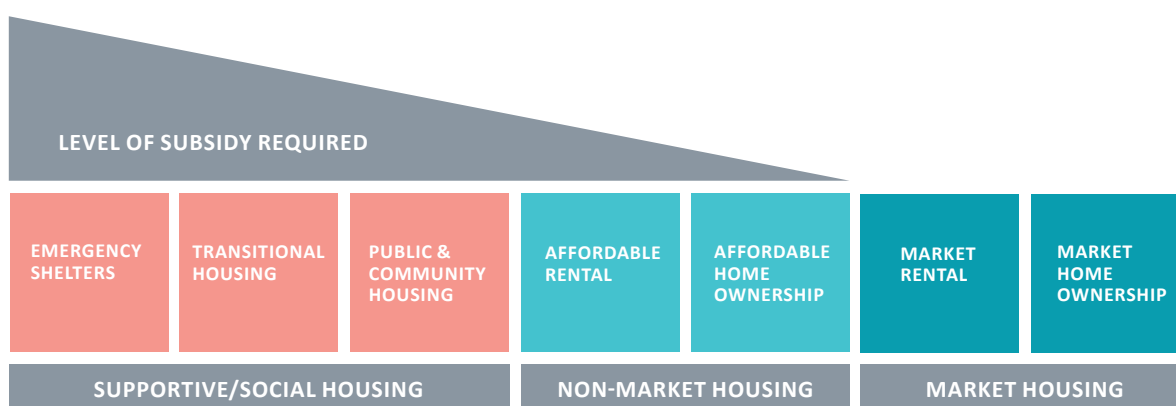
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# ACCESS TO HOUSING IN AUSTRALIA

Low income Australian households face a deficit of housing options that are affordable and appropriate for their needs. This deficit manifests across the housing continuum, from crisis and transitional accommodation, to social housing, affordable rental and home purchase options. Figure 1 demonstrates the housing continuum as it is often conceptualised in Australia.



**Figure 1** illustrates the housing continuum (Whitzman, Newton, & Sheko, 2015)

It is important to consider this range of housing options as inter-connected. Deficits in one area will have implications for the households and providers engaged in accessing and creating housing and support services in other areas.

As shown in Figure 1, both public and community housing constitute social housing in Australia. Public housing is delivered and managed by the state government. Community housing is managed by community housing providers. The term ‘public housing’ is specifically used throughout the document as the dwellings vacated as a result of MAP are public housing stock. When the term social housing is used, it is referring to both public and community housing and is used to discuss the broader needs and policy impacting this portion of the market.

## Access to homelessness services

Service providers in Australia have experienced increasing demand as homelessness increased over the last decade. In 2015-2016, 29% of clients seeking accommodation through specialist homelessness services in Australia did not have their needs met. In Victoria the situation is worse, with 1 in 3 accommodation requests recorded as unmet in 2015-2016 (Productivity Commission, 2016). A street count by the City of Melbourne reported a 74% increase in the number of people sleeping rough in Melbourne between 2014 and 2016 (City of Melbourne, 2016). Recent census data confirms these trends, highlighting a 10% increase in the proportion of people experiencing homelessness between 2006 and 2016 in Australia (Australian Bureau of Statistics, 2017). The Census also reported a more acute crisis in Victoria, where the proportion of people experiencing homelessness increased by 19% over the same period.

The increase in people experiencing homelessness is partially attributable to the loss of ‘last resort’ housing in Melbourne. The city lost 550 rooms in boarding houses to closure between 2011 and 2017 (Witte, 2017). The most common outcomes for people experiencing homelessness include securing accommodation in severely overcrowded dwellings, finding accommodation in supported housing, couch surfing or temporary stays with friends or family, staying in boarding houses and living in improvised dwellings like tents or other temporary lodgings (Australian Bureau of Statistics, 2017). These options all have significant repercussions for health, safety, quality of life, engagement with community and employment opportunities.

### **Access to social housing**

A lack of exit points into social housing exacerbates the crisis of a lack of supportive and transitional housing (Tually, Faulkner, Cutler, & Slatter, 2008). Annually, vacancies caused by voluntary tenant-initiated exits represent approximately 5% of all public housing stock, so there is a relatively low turn-over of residents (Wiesel, Pawson, Stone, Herath, & McNelis, 2014). Social housing now constitutes only 3.5% of Victorian housing stock and there is a waiting list of 43,093 households on the Victorian Housing Register, including 13,375 in the priority access list (Department of Human Services, 2018). This waiting list does not reflect the full number of households in housing stress as many households who would qualify do not apply for social housing. The Victorian Government estimates that the state needs more than 60,000 new social housing dwellings in the next 20 years to address the needs of low income households in Victoria (Victoria State Government, 2017).

### **Access to affordable private market rental and ownership**

A lack of viable alternative options in private rental prohibits households from exiting social housing (Wiesel, Easthope, Liu, Judd, & Hunter, 2012). According to research based upon the 2011 census, Greater Melbourne experienced a shortage of 72,200 rental dwellings affordable and available to households in the lowest two income quintiles (Hulse, Reynolds, Stone, & Yates, 2015). At the same time, house prices have increased at a far higher rate than wages in the last three decades, resulting in substantially less affordable house prices and a growing number of households for whom homeownership will be unattainable (Committee for Economic Development of Australia, 2017). In this context, current market trends offer little incentive or opportunity for households in social housing to transition out of this tenure and there is significant pressure fuelling need for additional social housing.

## **CREATING PATHWAYS OUT OF SOCIAL HOUSING**

There is a great need to increase the supply of social housing in Australia and not just further ration access to this vital infrastructure (Infrastructure Victoria, 2016; Victoria State Government, 2017). However, in the context of constrained supply and large and growing demand, a complementary approach is to ensure there are viable pathways for high capacity social housing tenants to move out of social housing to create opportunities for other, more vulnerable households to occupy these dwellings. We consider high capacity social housing tenants to be tenants with the capacity to meet mortgage repayments (usually through wages), qualify for a loan, gather a deposit of at least \$25,000 and navigate the home purchase process with support from housing officers. There is a limited, though not inconsequential, proportion of tenants that meet these criteria. At 2016, 7.6% of public housing tenants received the majority of their income through paid wages from employment (Australian Institute of Health and Welfare, 2017).

There is a relatively low turnover of residents in public housing with 27% of households remaining in public housing 10 – 19 years and 83% living in public housing for more than two years (Australian Institute of Health and Welfare, 2017). This is largely due to a lack of affordable rental or ownership models in the private market. Existing research into the pathways into and within social housing find that many social housing tenants would like to remain in social housing permanently, often citing the security of tenure and affordability it offers (Phibbs & Young, 2005). However, a significant proportion express a desire to move into private housing and into homeownership. This is usually based on a desire to enjoy a greater sense of control and dissatisfaction with their current home or neighbours in public housing. Many also wish to obtain an asset to leave for their children (Wiesel et al., 2012; Wiesel et al., 2014). Most social housing tenants exiting social housing move into private rental, almost always experiencing far higher rental costs and far less secure tenancy arrangements (Wiesel et al., 2014). However, some public housing tenants do move into homeownership, often after receiving lump sum payments such as an inheritance, or release of superannuation or insurance claim (Wiesel et al., 2014).

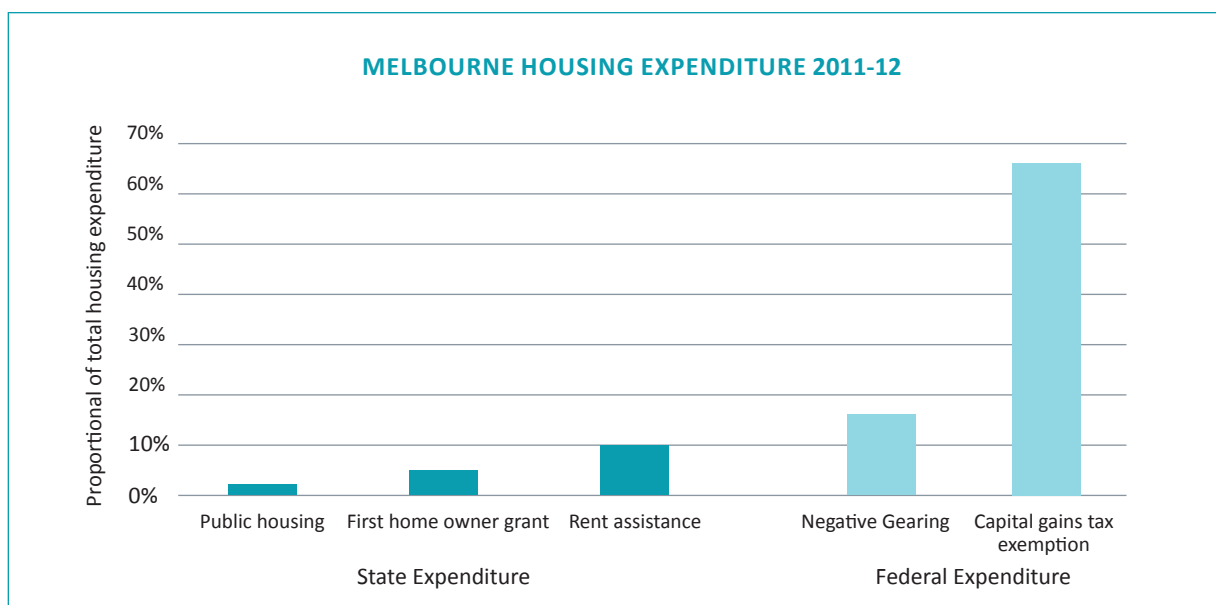
### **The residualisation of social housing**

The proportion of social housing in Australia has reduced from a peak of 8% of all housing stock in 1966 (Hayward, 1996) to just 4.3% in 2016 (Productivity Commission, 2017). From a focus on government-led provision of housing for working-class families in the years following World War II, social housing is increasingly considered an interim solution or a safety net for only the most vulnerable households. The diminishing proportion of social housing has been accompanied by two key narratives; the view that social tenancies encourage ‘welfare dependency’ through a lack of incentives to vacate social housing and an equity argument that promotes targeting scarce housing resources to those in greatest need. Both narratives conceptualise social housing as a “pathway to independence” (State Government Victoria, 2012, p. 24) rather than a long-term destination. This perspective is a relatively new idea, largely driven by the diminishing investment in this

important housing option. The Melbourne Apartments Project, and other initiatives aimed at supporting higher capacity households to vacate public housing, does not diminish the need to continue to provide substantial amounts of social housing for lower income households in Melbourne. Secure, affordable rental housing, whether provided by the State Government or Community Housing providers, is an essential component of the housing continuum.

## HOUSING POLICY AND EXPENDITURE CONTEXT

Australia has a history of ad hoc approaches to housing policy (Whitzman et al., 2015). The government commits a substantial proportion of its expenditure to promoting homeownership and investment, with large tax concessions granted in the form of negative gearing and capital gains tax concessions and in one-off first home buyer grants and stamp duty concessions. These mechanisms have been instrumental in driving investment in housing in Australia. However, many researchers contend that these policies disproportionately benefit wealthy households and inflate housing prices, driving demand for housing without also stimulating supply (Daley & Coates, 2018; Yates, 2016). In the 2011-12 financial year in Melbourne, 83% of housing expenditure in Melbourne was directed to capital gains exemptions and negative gearing. The break down is provided in Figure 2 below.



**Figure 2** illustrates total direct and indirect housing expenditure in Melbourne in 2011-12. Modified from Groenhart (2014, p. 1)

While policy and taxation supports homeownership generally, recent government policy has paid far less attention to targeting affordable homeownership policies at low income households (Hulse, Burke, Ralston, & Stone, 2010). Two exceptions are shared equity schemes and strategies that allow public housing tenants to purchase their own home. This section of the report provides a brief summary of the Australian policy context relevant to affordable home-ownership.



## AUSTRALIAN CONTEXT

Australian public housing policy has a long tradition of encouraging public housing tenants to enter homeownership (Hulse et al., 2010). This was predominantly achieved through sale of public housing rental stock to tenants, based on a taken-for-granted commitment to owner-occupation as the ideal and natural tenure form in Australia (Wulff, 1992). Governments also delivered low-deposit and low-interest loan packages aimed at lower income households. An evaluation of a low-deposit, low-interest home loan scheme offered to low income Victorian households in the 1980s found increases in employment rates and significant financial benefits experienced by participants, influenced by strong housing price growth in the late 1980s (Wulff, 1992). However, since the early 1990s government policy has predominantly focused on supporting first homebuyers to enter homeownership, regardless of their income levels (Hulse et al., 2010).

One exception are the shared equity schemes supported at a state and territory government level in ACT, Queensland, South Australia, Western Australia, Tasmania and Victoria (Raynor, Otter, & Dosen, 2017; Rowley, James, Phibbs, Nouwelant, & Troy, 2017; Victorian Government, 2017). These schemes are aimed at first home buyers and include income eligibility requirements but are not explicitly targeted at social housing tenants. Shared equity involves another entity, usually the government, taking part ownership in a dwelling in partnership with the home buyer (Victorian Government, 2017). Each scheme has variations in their structure including: source of funding for primary loan, owner-occupier requirements, previous owner status, income range and required size of deposit. The consistent rhetoric for offering shared equity schemes is to enable the achievement of the 'great Australian dream' of owning one's own home. This sentiment aligns with MAP's desire to provide options to move along the housing continuum, generating benefits for two key reasons;

- Public housing tenants move out of public housing and achieve the security of homeownership
- Households on the public housing waitlist move into the vacated public housing resulting from MAP.

Separate from shared equity schemes, several state governments have policy allowing the purchase of public housing by current tenants. ACT and Queensland integrate the policy with shared equity incentives and specifically target low income earners with their shared equity schemes (ACT Government, 2018; Queensland State Government, 2016). Victoria and South Australia also allow the purchase of public housing. However, purchasers must source financing through the open market (Government of South Australia, 2017; Victorian Government, 2017). However, these policies often reduce the stock of public housing dwellings available.

## VICTORIAN POLICY

Homes for Victorians, launched in 2017, outlines several policies aimed at encouraging home ownership (Victorian Government, 2017). Policies specifically targeting first home buyers who intend to be owner-occupiers include:

- **Shared equity opportunities for first home buyers**
  - HomesVic provides shared equity solutions (pilot started 2018)
  - Homes for Victorians provides financing to instigate BuyAssist – a shared equity managed by the National Affordable Housing Consortium
- **Housing for first home buyers in key precincts**
  - Helps first home buyers purchase in urban renewal precincts - at least 10% of all properties in government-led developments will be prioritised for first home buyers
- **Rebalancing the market between investors and home buyers**
  - Off-the-plan stamp duty concessions to benefit only owner occupiers
- **First Home Owner Grants**
  - First Home Owner Grants remained as \$10,000 for first home buyers purchasing a newly constructed home in metropolitan areas and doubled to \$20,000 for new homes in regional areas

The HomesVic approach reduces up-front deposit requirements and reduces mortgage repayments for the homeowner. The model is sustainable as the government is repaid their initial investment when the homeowner buys them out or sells their home. It is targeted at individuals with an annual income lower than \$75,000 and couples with an income lower than \$95,000. MAP appears to fit within the recent Victorian Government policy direction of supporting low-income earning, first home buyers into homeownership. There are currently no financial incentives for private companies to deliver innovative financing models aimed at social housing tenants and MAP has not received government funding. The next phase of this research will further investigate this topic to provide further insight into the validity and feasibility of creating policy to support similar projects.

## POLICY CRITICISMS

While homeownership has the capacity to deliver significant benefits to households, it is accompanied by risks, particularly for low and moderate-income households. Hulse et al (2010) canvassed this topic, arguing that benefits included; lower housing costs over lifetime; wealth accumulation via asset appreciation; personal autonomy and ontological security; safety, stability and participation opportunities; and social status derived from homeownership. However, Hulse et al. (2010) also acknowledge the risks of homeownership that disproportionately accrue to low-moderate households including; unexpected and unpredictable housing expenditures, risks of slow increase or a decrease in asset values; stress associated with financial outlays and spatial disadvantage based on potential relocation to cheaper, more poorly-served areas.

Pinnegar, Easthope, Randolph, Williams, and Yates (2009) argue that the shared equity schemes offered in Australia aim to deliver the ideologically promoted, traditional home ownership model favoured in Australia. They argue that, unlike one-off payments like first home buyer grants or stamp duty concessions, shared equity schemes offer the ongoing support often necessary for lower-income households. However, state based policies supporting shared equity arrangements, such as HomesVic, have been criticised for not sufficiently targeting low-income earners (Daley & Coates, 2018). Daley and Coates (2018) suggest income testing for shared equity schemes should be tighter to ensure low-income earners can benefit from the policy. Daley and Coates (2018) and van Lohuizen (2015) caution that, while shared equity schemes provide direct benefits to program participants, they will likely inflate dwelling prices in the housing market further, as they increase demand, without stimulating supply. Pinnegar et al. (2009) similarly warn about facilitating increased demand for homeownership in a housing market with overvalued properties. Most shared equity models compound this outcome as they do not enable affordability in perpetuity as the second mortgagee does not retain interest in the property if it is sold by the first owner (Pinnegar et al., 2009). Therefore, policy supporting homeownership, including shared equity arrangements, must be structured to protect the interests of all parties involved.

There is limited literature reviewing policy related to affordable homeownership models led by developers or not-for-profit actors. This is predominantly due to the innovative nature of this model. Evaluation of the Options for Homes model applied in Canada found that the model they applied reduced the cost of construction for the developer and the cost of purchase for home buyers. However, the model was critiqued for only delivering an affordable outcome for the initial purchaser of each property as there are no covenants on resale to ensure the housing is maintained as affordable in perpetuity (Evenson & Millar, 2005). Similarly, Options for Homes is not linked to tenants releasing their social housing tenancies. However, proceeds from Options for Homes are reinvested in the program, generating further developments and funding a pipeline of affordable homeownership options.

# THE MELBOURNE APARTMENTS PROJECT : AFFORDABLE HOMEOWNERSHIP

The Melbourne Apartments Project (MAP) is a privately funded 34-unit apartment development in North Melbourne, delivered by a private developer. The developer sold 28 units to social housing tenants while selling the remaining six apartments at market rate to cross-subsidise the costs of MAP purchasers. The project offered a range of two and three-bedroom apartments. MAP was undertaken by a private developer with the support of Melbourne City Mission. The development reflects a social mission focused on supporting the movement of high capacity social housing tenants into homeownership and the ‘freeing up’ of their dwellings for new social housing tenants. MAP blends a deferred second mortgage model with strategies that aim to support social housing tenants to vacate their dwellings, thereby creating opportunities for new households to enter social housing. MAP enables this by combining a homeowner’s deposit with a traditional bank loan and a developer second mortgage (an ‘Advance’) to reduce participants’ upfront purchasing costs and ongoing mortgage repayments. The project is similar to the Options for Homes in Toronto, an initiative that has now delivered homes of over 6,000 homeownership units in 20 years (Options for Homes, 2018).

As figure 3 demonstrates, the homeowner must supply a deposit and obtain a loan to cover the development cost of each apartment (approximately 63% of market cost). The remaining non-development costs are carried by the developer.

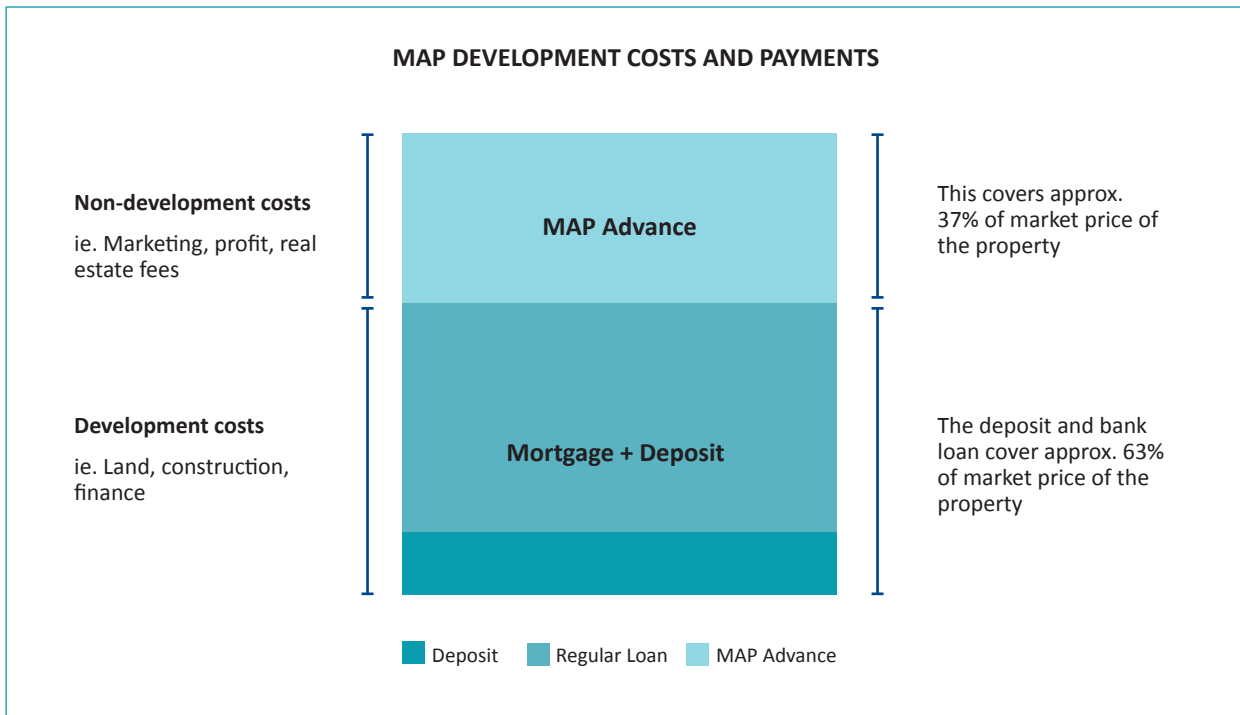


Figure 3 illustrates the components of the MAP advance (MAP, 2017).

The financial structure outlined in Figure 3 is composed of three components:

1. Deposit
  - a. Participating homeowners need to provide a deposit of at least \$25,000. Many purchasers contributed larger deposits.
  - b. Many of the homeowners in the pilot project were eligible for a First Home Buyers Grant of \$10,000. However this amount was not considered as part of the \$25,000 deposit required by MAP.
2. Regular bank loan
  - a. A regular bank loan financed the development cost of the apartment, including the cost of land, construction, holding costs, design and permits. Together, the deposit and regular bank loan constitute approximately 63% of the market price. Each homeowner is assessed individually by a bank and must qualify for a loan based on their income, savings and credit history.
3. MAP Advance
  - a. The MAP Advance covers the difference between cost and sale price, appraised at market value (approximately 37% of market price). As the development was targeted directly at public housing tenants in inner Melbourne, the project benefited from lower marketing costs. Similarly, Melbourne City Mission sought and qualified eligible purchasers, functioning as a broker between prospective home buyers and the developer. Due to the charitable nature of the project there is no requirement to remit GST on the transaction. These savings are captured and then provided to the purchaser through the second mortgage or 'MAP Advance.' The Advance is not subject to interest and is only repaid when homeowner sells their property or after 99 years. Further, the repayable amount of the Advance is reduced by \$15,000 every year for the first four years to encourage purchasers to stay in the property for longer and to help them build equity in the development. While this arrangement supports the homeowner and reduces the likelihood of them selling quickly for a profit in the first four years, it requires the developer to defer access to funds from the second mortgage until the homeowner chooses to sell their home (MAP, 2017).

## PARTICIPANTS

Recruitment for the project included several information sessions on the project hosted in public housing estates and local community centres near public housing estates within inner Melbourne. Potential homeowners were required to submit an expression of interest form, be interviewed by MAP and obtain pre-approval from a bank before paying a minimum of a \$25,000 deposit. Almost all households have an income derived from employment. Participants were supported through this process by an employee of Melbourne City Mission and had access to a free session with an independent financial advisor to support their decision making.

## THE MELBOURNE APARTMENTS PROJECT: POLICY CRITICISMS AND CONCERNS

Housing projects and programs that support lower-income households to enter homeownership via reduced deposit requirements and reduced on-going housing costs receive four major criticisms;

1. The risks of homeownership that are disproportionately experienced by lower-income households
2. The insufficiently targeted nature of many homeownership schemes that do not focus on lower income households
3. The inflationary impacts of schemes like shared equity that stimulate demand without also generating supply
4. The 'one-off' nature of home ownership programs that support one household but do not retain affordability in perpetuity

As mentioned earlier, the risks associated with homeownership for lower-income households include; unexpected and unpredictable housing expenditures, risks of slow increase or a decrease in asset values; stress associated with financial outlays and spatial disadvantage based on potential relocation to cheaper, more poorly-serviced areas (Hulse et al., 2010). MAP households transitioning into homeownership for the first time will encounter costs related to mortgage repayments, water bills, body corporate fees, insurances and rates. MAP reduces on-going housing costs through the deferred second mortgage and mitigates some financial risk by providing access to an independent financial advisor for all home purchasers. MAP also has support mechanisms in place for managing utility costs should homeowners experience financial hardship. Similarly, the well-located and proximal location of MAP means many of the spatial disadvantage concerns raised by other homeownership options are avoided. However, these issues will need to be monitored. Wiesel et al. (2014) and Hulse et al. (2010) argue that lower income households may become tied to a property as they have insufficient equity to move elsewhere. Approximately a third of people who leave public housing experience a substantial deterioration in their financial circumstances, which results in 17% of exits re-entering public housing (Wiesel et al. 2014). The on-going success of this project will depend on the capacity of residents to manage their homeownership obligations.

Problems related to the insufficiently-targeted nature of shared equity schemes or First Home Owner Grants that do not explicitly support low income households are largely ameliorated by MAP. MAP directly targets high capacity social housing tenants, most of whom are low income households. Challenges related to the lack of supply generated by many demand-side stimuli is also not applicable to MAP as it is designed to create new housing and make available social housing supply to further vulnerable households.

The criticism levelled at 'one-off' homeownership models that only support the first purchaser to move into homeownership is applicable in the context of MAP. There is no covenant on the sale of MAP units meaning homes will transition to market rate upon resale and may be rented by homeowners at market prices. While this process allows the homeowner to build wealth, it also represents a missed opportunity to support further affordable homeownership outcomes from the original unit. However, this problem is partially ameliorated by the organisation's commitment to using returning Map Advances to fund future similar projects and other charitable housing projects.

The MAP model and its associated benefits and challenges will be further explored in the next report.

# THE COSTS AND BENEFITS OF THE MELBOURNE APARTMENTS PROJECT

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The costs and benefits discussed below pertain to two inter-related aspects of the development; first, MAP supports a group of higher-capacity social housing tenants to achieve their goal of home-ownership; second, the movement of these households out of social housing creates vacancies in a highly constrained social housing system for new households to benefit from social housing. This section provides a literature review highlighting the costs and benefits associated with vulnerable households moving into the vacated public housing units made available as a result of MAP. The costs and benefits for the homeowners within MAP will be explored in future qualitative research with the homeowners. It begins with a broader literature review, recounting existing research on the costs and benefits of access to appropriate and affordable housing before providing a quantitative analysis of MAP.

## LITERATURE REVIEW

A vast body of literature aims to assess and, in many cases, quantify the benefits and costs associated with vulnerable individuals and households accessing secure, affordable housing. While the methodologies, sample sizes, locations and timing vary across the surveyed literature, there are some commonalities. The major benefits fall into four categories;

- Health and Well-being
- Education
- Employment
- Justice.

### Health and Well-being

There is a well-evidenced connection between secure, affordable and quality housing and improved physical and mental health outcomes. Benefits include reduced stress and anxiety, enhanced ontological security, more regular use of health services (Ravi & Reinhardt, 2011; Zaretzky & Flatau, 2013), reduced hospital presentations (Baker, Zhang, & Howden-Chapman, 2010; Wood et al., 2016) and a shift from crisis medical attention to more preventative care (Mission Australia, 2012). Improvements in health can be attributed to a range of factors including; reduced stress due to security of tenure; ability to purchase and eat better quality food; decreased opportunity for injury in the home; increased self-esteem and; increase in the desire and ability to exercise (Phibbs & Young, 2005).

The health benefits of secure housing are the most apparent when considering individuals moving from homelessness into secure housing, particularly when housing is accompanied by services and other support (Hulse, Jacobs, Arthurson, & Spinney, 2011). This is demonstrated through programs such as the Michael Project performed by Mission Australia which provided case management, accommodation and access to a range of specialist services and support (Mission Australia, 2012). This coordinated approach changed the type of health support required by participants of the program from crisis needs to the community end of the health system and generated an annual saving of \$12,496 per participant (Mission Australia, 2012). Similarly, access to public housing and additional support for people who are at risk of homelessness is estimated to provide a health system cost saving of \$4,846 per person per year in Western Australia (Wood et al., 2016).

### Education Benefits

The educational benefits of secure and affordable housing are wide-ranging and depend largely on the age of the impacted person. Secure housing has been associated with enhanced school performance for children (Ravi & Reinhardt, 2011), higher likelihood of graduation (Haveman, Wolfe, & Spaulding, 1991), greater stability for school age children (Phibbs & Young, 2005) and increased likelihood of further education and training after schooling. These educational benefits were monetised by Ravi and Reinhardt (2011) using mixed

methods research to show an increased earning potential for children living in public housing in Australia, where individuals who finish year 12 can earn \$3,016 per annum more than those who finish year 10. Residents are more likely to complete further education or training as a result of security of housing which Ravi and Reinhardt (2011) show can increase earning potential by \$17,784 per annum. Research conducted in the US found that, controlling for other family characteristics, children living in overcrowded conditions completed less schooling than their counterparts (Conley, 2001). Further, the stress on parents in insecure housing situations may reduce their capacity to help their children with homework and be involved in school activities (Cunningham, Harwood, & Hall, 2010). For adults, access to affordable housing options may improve opportunities to engage in further education and training (Social Ventures Australia, 2010). Of 9,681 public housing tenants and 4,090 community housing tenants surveyed in a study conducted by the Australian Institute of Health and Welfare in 2011, 55% stated that living in social housing had either helped them to start or continue education (Australian Institute of Health and Welfare, 2011).

### **Justice Benefits**

Access to housing can reduce engagement with the justice system, creating benefits for occupants and society more broadly. This is particularly prevalent in homeless populations with Conroy et al. (2014) finding a \$1,977 reduction in justice costs after men experiencing homelessness moved into supported housing in Sydney. This figure is even higher for young people, with MacKenzie, Flatau, Steen, and Thielking (2016) estimating a \$8,242 cost reduction per person per year for homeless youths that moved into secure housing. A study conducted on the Brisbane Common Ground project found that residents experienced a reduction in the number of court appearances, days incarcerated, days on probation and parole orders, and all interactions with police (Institute for Social Science Research, 2015). Access to affordable housing can also reduce the financial and human cost of domestic violence by providing a safe housing option for survivors fleeing unsafe domestic conditions (Think Impact, 2016).

### **Employment and Finance**

High housing prices constrain household's ability to spend money on other essential goods and services, thereby constraining their ability to meet basic needs and reducing economic growth. A study measuring the social value of the community housing sector in Australia found that living in community housing reduced the housing costs by an average of \$2,448 per year, directly increasing their disposable income (Ravi & Reinhardt, 2011). Public and social housing play a vital role in supporting low-income earners. According to HILDA data, approximately a third of people who leave public housing experience a substantial deterioration in their financial circumstances which results in 17% of exits re-entering public housing (Wiesel et al., 2014). More broadly, the Global Cities Business Alliance (2016) estimated that \$3.8 billion in expenditure was foregone in Sydney between 2010 and 2015, due to the dramatic increase in the cost of housing and consequent reduction in expenditure on other goods.

Social housing has been associated with reduced incentive to access employment as rents are typically set at 25% of a household's income. Increases in income can result in increased rental rates, serving as a disincentive to find employment or increase hours of employment. A series of 105 in-depth interviews with recipients of housing assistance in Australia found that social renters paying income-based rents consider how rents change if they go into paid work and factor this into their decisions when considering a job. Often, these calculations reveal that they are better off financially when they are unwaged and serve as a disincentive to finding employment. Research found a significant impact for males but not females in public housing (Dockery et al., 2008). Similarly, individuals on the waiting list for public housing may choose to maintain their income below the income limit to remain eligible for housing, creating a 'welfare lock' and significantly decreasing employment opportunities for this group (Dockery et al., 2008). However, Cigdem-Bayram, Ong, and Wood (2017) contend that public tenants are a severely disadvantaged group with multiple barriers to employment, such as disability, age and access to affordable child care. They argue that these barriers are a more significant consideration than the treatment of rent levels, income support and taxation in public housing. Put another way: the negative employment motivation impacts are marginal compared to the significant and necessary benefits of public housing for many populations seeking stable housing.



# A MODIFIED META-ANALYSIS OF THE MELBOURNE APARTMENTS PROJECT

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The following section outlines the assumptions, methodology and analysis relevant to calculating a cost benefit ratio for the Melbourne Apartments Project.

This analysis finds that:

- » MAP generates social benefits by 'freeing up' public housing dwellings and making them available to new residents, most of whom will be from the social housing priority access list.
- » These social benefits include improved health and well-being, reduced use of justice services, improved education outcomes and improved financial and employment outcomes.
- » While the project received no direct funding from the government, it does represent a cost to the State Government in the form of reduced public housing rental returns as higher income households are replaced with lower income households. Similarly, purchasers received First Home Owner Grants, representing a cost to the State.
- » The Cost Benefit Ratio for the MAP is 2.19, meaning that government gains \$2.19 in benefits for every dollar of government cost

## KEY TERMS

The following terms are used in this section of the report:

**COST BENEFIT ANALYSIS:** all benefits of a project are assigned a dollar value and then directly compared with costs, also measured in dollars (Wood et al., 2016, p.22).

**DISCOUNT RATE:** the annualised rate at which the value of future benefits and costs of a project are discounted to account for a the relatively lower value of future money due to inflation and other factors.

**PRESENT VALUE:** current worth of a future sum of money (produced by applying a discount rate to future money)

**MAP PUBLIC HOUSING RENTS:** the public housing rent amount in dollars paid by MAP participants prior to moving into home ownership

**NEW TENANT PUBLIC HOUSING RENTS:** rent amount in dollars paid by tenants who moved into vacated public housing apartments

**POSITIVE EXITS:** Households who have left public housing and entered the private market as their financial position and security has improved, freeing up their unit for another household

**STAMP DUTY:** land transfer duty (often referred to as stamp duty) that applies when you buy a Victorian property

**HOMEBUYER GRANT:** a \$10,000 grant per household provided by the State Government



## COST BENEFIT ASSUMPTIONS

Calculating costs and benefits required making a standard set of assumptions about the economic and policy climate around the MAP project. Our model assumes that had MAP not occurred, no identical development would have taken place. We overview the key assumptions of our cost benefits model in Table 1.

Assumption/Input	Description
Analysis Timeline	10 Year duration of project impacts.
Discount Rate + Inflation	7% Per Annum per Harrison (2010) and Office of Best Practice Regulation (OBPR).
Stamp Duty-MAP Total	A \$121,612 gain to government.
MAP Public housing rents	\$490,000 per year based on a minimum qualifying income of \$70,000 annually.
New tenant public housing rents	\$330,620 per year based on average welfare incomes.
MAP Apartment Average Value	\$650,000 included to estimate stamp duty.
Homebuyer Grant Per MAP Participant	A \$10,000.00 loss to government.

**Table 1** Key Assumptions of Cost-Benefit Methodology

We selected the federal government recognised discount rate of 7%, including inflation (Harrison, 2010). We also included the stamp duty acquired by the government after accounting for concessions for first homebuyers as a benefit to government under the build scenario, as we assumed no alternative project would be built at the MAP site otherwise.

### Public Tenancy Changes: Demographics, Incomes and Durations

Most of the studies on the benefits of supportive housing focus on individuals, while the benefits from MAP centre on public housing units: MAP “frees up” space in public housing for newer populations in need. Traditionally, about a third of public housing residents remain in their units long term, while the median overall duration of public housing tenancy ranges from 24 to 36 months (Dockery et al., 2008; Wood et al., 2016). Every year, a public housing unit maintains a 5% likelihood of turning over due to a voluntary exit from public housing by tenants, with up to a quarter of tenants voluntarily existing within six years (Wiesel et al., 2014). Our model thus assumes that, in year six of the analysis, 25% of public housing tenants have turned over voluntarily. We assume that after spending half a decade in stable, affordable housing, these voluntary moves continue to accrue the social and personal benefits of public housing stability even after exiting public housing. This, in turn, further “frees up” those units for more households to benefit in those later years. Starting in year six, then, an average of an additional seven households will benefit from MAP. Instead of estimating the number of household-years of benefit as 280 (28 households placed in stable housing over ten years), we thus place it at 315 after accounting for these additional positive exits.

Year	1	2	3	4	5	6	7	8	9	10	HH-Years
Direct Benefits	28	28	28	28	28	28	28	28	28	28	280
Positive Exits						7	7	7	7	7	35
<b>Total: 315</b>											

**Table 2** Counts of Household-Years for Social Benefits by Discounted Year

We do not include the potential revenue impacts of positive exits of MAP movers had MAP never occurred. We make this choice because most MAP residents are very long-term public housing residents who would not have regularly turned over in public housing without the MAP intervention.

We also needed to calculate the loss of revenue to public housing of higher income MAP participants being replaced by lower income individuals coming from the priority waitlist. To estimate rents lost from MAP participants leaving, we assumed the minimum eligible income (\$70,000 per year) for each MAP family. This produced an annualised income loss of \$490,000 for the Department of Health and Human Services (DHHS). For incoming public housing residents, we assumed household demographics would match those of outgoing MAP participants, except we anticipate a small reduction in coupled parents (-2), and a rise in the number of seniors, both single (1) and couples (1). We make this decision based on a shift in the homeless population to older people, particularly older women (McDonald, 2017; Somes, 2017). An inability to access demographic data regarding the current social housing wait list precluded us from basing demographic estimates on the wait list's current household makeup.

Household Demographics			Count	Annual Income	Annual Rent	Total Rent
Parents	Children	Seniors				
1	1	0	9	\$25,161	\$6,290	\$56,612
2	2	0	7	\$39,107	\$9,777	\$68,437
0	0	1	2	\$23,254	\$5,814	\$11,627
2	0	0	2	\$25,298	\$6,325	\$12,649
0	0	2	2	\$35,064	\$8,766	\$17,532
1	2	0	2	\$28,943	\$7,236	\$14,472
2	1	0	2	\$35,306	\$8,826	\$17,653
1	0	0	1	\$14,009	\$3,502	\$3,502
2	3	0	1	\$42,908	\$10,727	\$10,727
			<b>28</b>	<b>\$213,211</b>		

**Table 3:** Income Assumptions for New Public Housing Residents

We find new public housing households will produce roughly \$213,000 in rental income per year, creating an annual loss of \$277,000 in rental income in public housing per annum because of the MAP project. These assumptions and findings inform the cost benefit analysis detailed in the next section of this report.

## CONDUCTING THE META-ANALYSIS

Table 1 summarises a meta-analysis based on the literature review provided above, using only Australian studies and only those that generated primary, quantitative results. We have taken this approach to reduce the place and policy specific variables influencing the data from international studies. We produce a combined estimated effect of social housing on cost savings through a weighted average achieved through two steps. First, we standardised each study in terms of return on investment (ROI). Then, we calculated a weighted average ROI across all studies, weighting each in terms of its sample size. This required us to exclude any studies based on derived or hypothetical data, such as the recent SGS report produced for the Melbourne Sustainable Society Institute (Witte, 2017). We selected this alternative to a traditional quantitative meta-analysis because variance estimation is partly a function of sample size. Weighting study's estimates by sample size enables us to most closely approximate a statistical meta-analysis and monetise the value of social housing.

The data utilised in this report and displayed in table 4 is sourced from both academic studies and programs provided by not-for-profit organisations. Both the studies and programs look at the financial benefits generated by assisting individuals to move from homelessness or insecure housing into more stable accommodation. We use these studies to determine the benefits accrued to the government due to MAP supporting the creation of vacancies in public housing.

Study Characteristics			Costs	Benefits			
Study	Year	Sample size	Cost of delivery per person	Health	Justice	All Benefits per person	Benefits to Cost Ratio
Mission Australia (2012)	2014	59	\$13,957	\$6,567	\$1,877	\$8,444	0.61
Wood et. al. (2016)	2016	277	\$6,462	\$13,273		\$13,273	2.05
Mackenzie et. al. (2016)	2012-2015	394	\$4,381	\$6,744	\$8,242	\$14,986	3.42
Michael Project (2012)	2007-2010	253	\$8,664	\$12,496	\$231	\$12,727	1.47
Think Impact (2016)	2016	51	\$27,448			\$35,098	1.28
<b>Weighted Average</b>							<b>2.31</b>
<b>95% confidence interval</b>							<b>1.37 - 3.25</b>

**Table 4** Summary of Studies Used to Estimate MAP Benefits

**For every dollar invested in housing an at-risk resident in housing, the state government receives between \$1.37 and \$3.25 in benefits, up to a threefold return.** Based on the weighted-average, the benefits to government of supporting someone to move from sleeping rough to social, public or supportive accommodation exceed the costs by a factor of 2.31. Costs in these studies averaged \$7,670.61 per head and benefits averaged \$27,458.22 per head.

Consider if every public housing unit made available as a MAP participant moved out of their unit and into a MAP apartment were reallocated to a high-needs applicant on the social housing waitlist, **the government could expect \$27,458.22 in cost savings per MAP participant per year.**

In practice, many of the studies included above focus on benefits from specialised services and housing for the chronically homeless. These results, while informative, may not directly apply to the traditional public housing entries created by MAP. We thus only used the financial benefit measurements of two studies to estimate the financial benefits from MAP. We chose those studies because the benefits of public and community housing they measure most closely resemble the benefits from MAP: Wood et. al. (2016) which measured the benefits of transitions into public housing, and Think Impact (2016), which measured the benefits of a community housing project serving women. These studies estimated benefits averaged \$24,185.52 per person served. However, the study with a larger sample size produced the lower of the two estimates, and a sample-size weighted average produced a benefit of \$19,879.94. We settled on this number, \$19,879.94 per person per year, as our assumed benefits accrued to government from MAP.

We then applied this \$19,879.94 per person, per year benefit to the 28 public housing units turning over in the first year of the MAP project, to project a year one benefits to government of \$556,638.32. We duplicated this benefit over a ten-year period and applied a 7% per annum discount value. Starting in year 6, we also included an additional seven households to these estimates to account for positive exits induced by MAP (as shown in Table 2 above). **This produced a 10-year present value of MAP’s benefits to state government of \$4,223,683.63.**

The replacement of high earners in public housing with those in need of housing does come at the cost of reduced revenue collected from public housing rents, which are geared to income. To calculate this, we took the difference between the public rents of MAP participating households (roughly \$490,000 per year) and hypothetical public rents of incoming households on minimum Centrelink support incomes as detailed in the methodology section (\$213,000 per year). This produced an annual loss of \$277,000 a year in public housing revenue which, over ten years, costs the state government \$1,702,045 in net present value. We then add the \$10,000 per household in First Home Buyer Grants to produce a final cost to government of \$1,982,045. This produces a public cost-benefit ratio of 2.19 for the Melbourne Apartments Project, as detailed in Table 5. A \$1.98 million cost to government yields a \$4.61 million return, or a net benefit of \$2.63 million.

<b>Cost</b>	
Lost Public Housing Rents	\$1,702,045
First Home Buyer Grants	\$280,000
<b>Total</b>	<b>\$1,982,045</b>
<b>Benefit</b>	
Research Based Meta-Weighted Cost Savings to State Government	\$4,223,684
Stamp Duty	\$121,612
<b>Total</b>	<b>\$4,345,296</b>
<b>Cost Benefit Ratio</b>	<b>2.19</b>

**Table 5** Summary of Cost-Benefit Analysis for MAP

MAP outperforms all but one of the other programs examined in the studies provided in the meta-analysis in Table 1. MAP achieves this outcome because it enables more targeted use of existing public housing units, rather than focusing on achieving construction of brand new public units for new programs. MAP complements existing and emerging programs by providing the option of homeownership to those who have benefited from existing programs.

# CONCLUSION

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This report is part of a broader suite of work that will investigate the lived experiences of MAP residents including the social and economic costs and benefits of ownership, the policy context of affordable home purchase options in Victoria and the financial and social model applied in MAP. This report constitutes the first phase of the work. The current policy demonstrates there is political appetite for continued support for low to medium income earners to purchase their own home. The report established the costs and benefits associated with public housing tenants moving out of public housing and into affordable homeownership in the MAP. The major benefits fall into four categories;

- Health and Well-being
- Education
- Employment
- Justice.

The modified meta-analysis of the Melbourne Apartments Project demonstrates the benefits of the project to the State of Victoria outweigh the costs. If every public housing unit made available as a MAP participant moved out of their unit and into a MAP apartment were reallocated to a high-needs applicant on the social housing waitlist, the government could expect \$19,879.94 in cost savings per MAP participant per year. **The current MAP pilot thus saved the State of Victoria \$556,638.32 in its first year.** Future research will explore the lived experience of the MAP homeowners and assess the scalability and appropriateness of the MAP model in Victoria, including recommendations about the model's applicability in other contexts.

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