

## CITY OF MELBOURNE HOUSING NEEDS ANALYSIS

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**FINAL REPORT**  
JULY 2019

Prepared for  
City of Melbourne

Independent  
insight.

**Certified**



**Corporation**



Independent  
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# ABBREVIATIONS AND KEY TERMS

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Abbreviation	Term
BCR	Benefit Cost Ratio
CBA	Cost Benefit Analysis
FAR	Floor Area Ratio
FAU	Floor Area Uplift
NPV	Net Present Value
RLV	Residual Land Value
SAH	Social and Affordable Housing

Housing Type	Description
Emergency Shelters / Crisis Accommodation	Very short term accommodation, which includes additional support for the resident during their stay.
Transitional Housing	Medium-term accommodation, which often includes support services for residents.
Supported Housing	Long-term accommodation for people with high needs for support/care (e.g. people with disability or elderly)
Social Housing	Long-term accommodation, including both public housing (government owned) and community housing (housing association owned).
Affordable Rental Housing	Rental housing which is affordable (within 30% of income) for households on a moderate income or lower

# SUMMARY

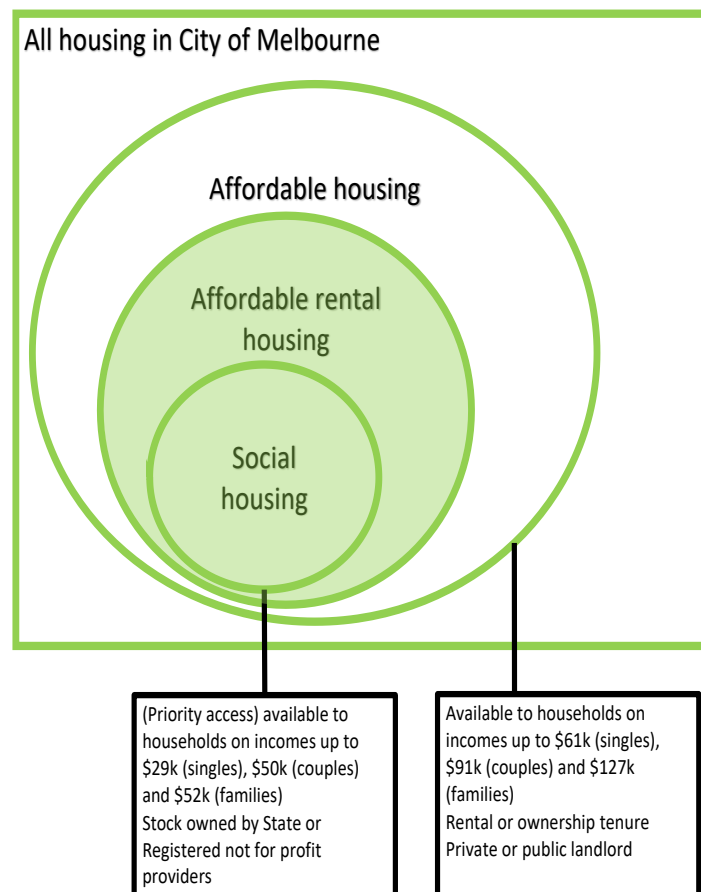
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## What is affordable housing?

This report focusses on the current and projected need for affordable rental housing in the City of Melbourne (CoM). Also investigated are the Inner Metro Partnership (IMP) and the Inner Melbourne Action Plan (IMAP) plus Moonee Valley regions.

The definition of affordable housing used in the report follows that set out in the Planning and Environment Act, except that home owning or home buying households are excluded.

As shown in the following diagram, the scope of affordable housing adopted here includes but extends beyond social housing but is nonetheless limited to very low, low and moderate income rental households.



## There is an alarming shortfall in affordable rental housing in the City

There is a current aggregate need for social and affordable housing in the City of Melbourne for at least 9,436 units. This largely excludes student households and can, therefore, be regarded as a lower bound estimate.

Current supply, measured by the stock of social housing in the City of Melbourne, is around 3,970 units. Therefore, the City of Melbourne has a deficiency in its social and affordable

housing infrastructure of some 5,500 units. At a nominal acquisition cost of \$0.5 million per unit, this represents a \$2.75 billion infrastructure deficit.

As with any other form of infrastructure, the need for social and affordable in the City of Melbourne will increase with population growth. Future need will also be affected by property market trends and patterns of income growth. SGS estimates that if there is no addition to the City's social and affordable housing stock, the shortfall in these dwellings will grow to between 16,900 and 29,700 units by 2036 depending on the share of metropolitan growth in affordable housing need which is assigned to the Melbourne local government area (LGA).

Our estimates of social and affordable housing need separately identify the requirements of 'Key Workers'. Depending on the share of the metropolitan pool of required Key Worker housing which is assigned to the City of Melbourne, the projected need for this sector of rental accommodation in the City in 2036 ranges between 2,500 and 7,900 dwellings.

To meet total projected demand for social and affordable housing in the City of Melbourne, between 13.3 per cent and 21.5 per cent of the City's total dwelling stock in 2036 would need to be affordable rental housing as per the definition in the Planning and Environment Act. Currently, affordable rental represents less than 6 per cent of all housing in the City of Melbourne.

### The City of Melbourne has a special role to play in meeting this need

The City of Melbourne has undergone transformative change since the 1990s transitioning from being largely a location for business and workers to a thriving hub of cultural, social and economic activity. This change, while positive, has held consequences for the affordability of housing across the municipality. Those who cannot afford the rising housing costs are forced to relocate to more affordable locations, increasingly causing a spatial patterning across metropolitan Melbourne according to wealth and socio-demographic status. For many who continue to live in the City of Melbourne (for a variety of reasons including, work, education, social connections etc.), the rising cost of housing places increasing pressure on their health and wellbeing.

By addressing affordable housing need in the City of Melbourne, Council can generate several key benefits for its community by:

- Mitigating existing and future issues related to key worker retention in the central city, thereby strengthening local business and overall economic efficiency.
- Achieving deeper and more genuine diversity through the provision of a greater range of housing types, tenures and prices. This is anticipated to attract creative talent (and business) and enhance Melbourne's global reputation as a cultural and creative hub.
- Enhancing opportunities for innovation by providing housing suitable for early career entrepreneurs and research workers within education and research agglomerations.
- Addressing social injustice and enhancing equity resulting from locational disadvantage and spatial socio-economic segregation.

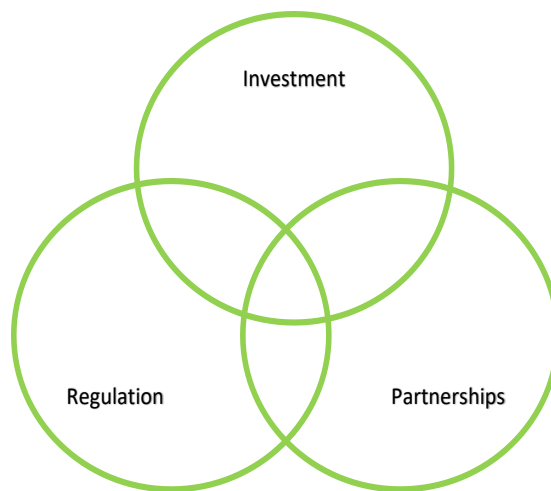
### There are several policy levers available to Council but no quick fixes

To address the considerable and rapidly growing shortage of social and affordable housing in the City of Melbourne, Council would need to resolve these policy questions:

- **What role to play**, from hands-off advocacy through to direct investment in social housing?
- **Who to target** with this policy effort, from those in or at risk of homelessness through to 'key' and creative workers?

- **How to deliver** the adopted social and affordable housing aspirations via regulatory, partnership and investment levers?

The levers which Council might apply to advance affordable housing supply in the City of Melbourne can be grouped into three overlapping categories.



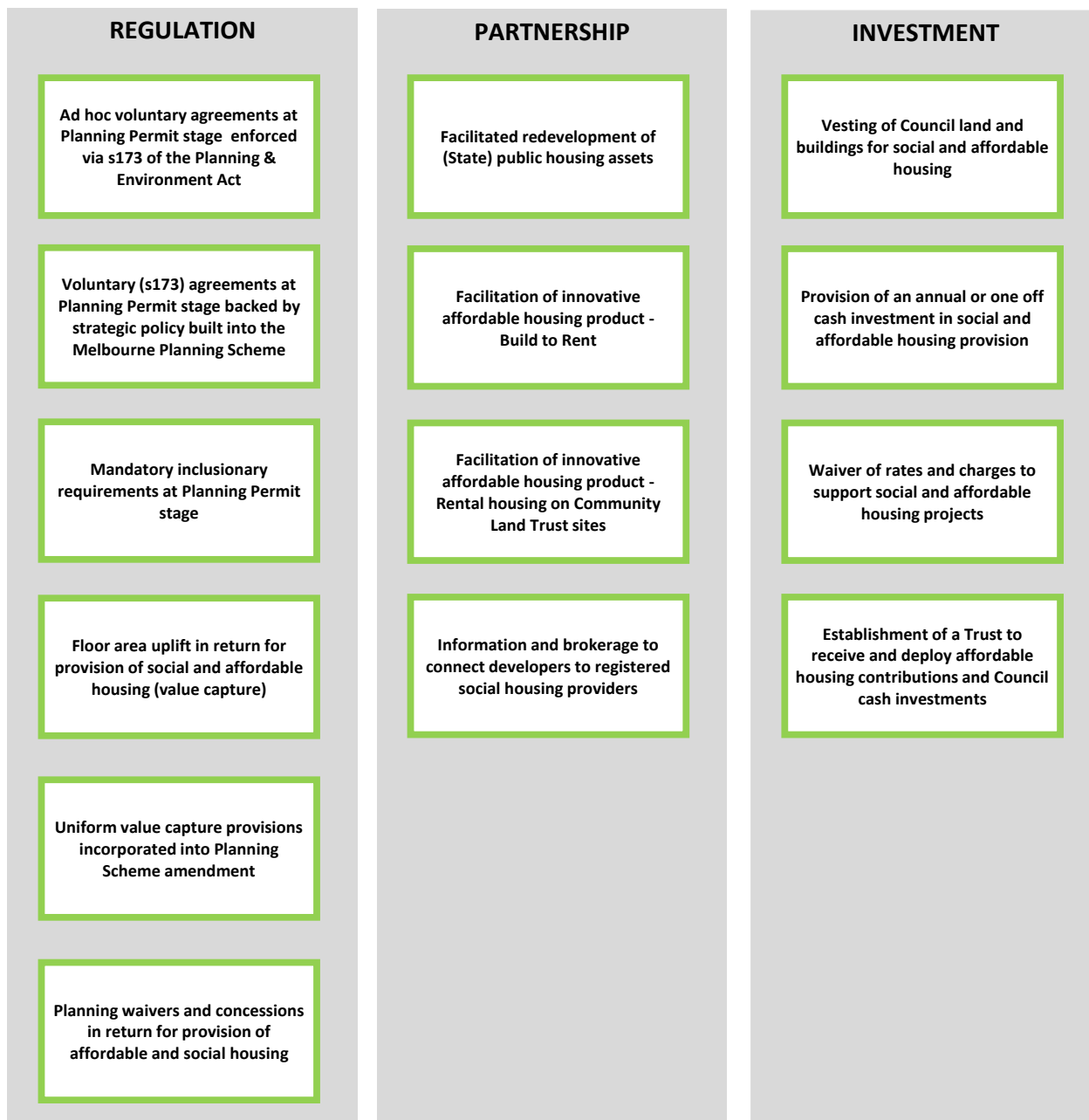
The **‘regulation’** group of interventions includes various mechanisms available to Council under the Planning and Environment Act. These cover both voluntary and quasi-mandatory arrangements whereby proponents provide affordable and social housing units or cash in lieu in return for the awarding of development rights.

In the **‘partnership’** group of interventions, Council would work with the private sector or community sector proponents to help them achieve affordable and social housing outcomes. Examples include brokerage of partnerships between corporate developers and registered community housing providers where the former are self-motivated to include affordable housing in their projects. Similarly, Council might assist private sector proponents trial or demonstrate innovative projects which improve affordability, like build to rent housing or providing affordable rental on community trust land. Another important example is where Council works with the State Government to improve the housing yield from public housing assets.

The **‘investment’** group of interventions would see Council applying its own assets – whether this be cash, land or underwriting capacity – to directly generate an expansion of social and affordable housing in the City. By way of example, Council has, in the past, provided buildings for permanent or temporary use as homeless accommodation. Providing relief from rates and various council charges (including infrastructure and open space contributions) is another form of ratepayer investment in affordable and social housing.

Specific mechanisms in each of these groups are summarised in the following chart.



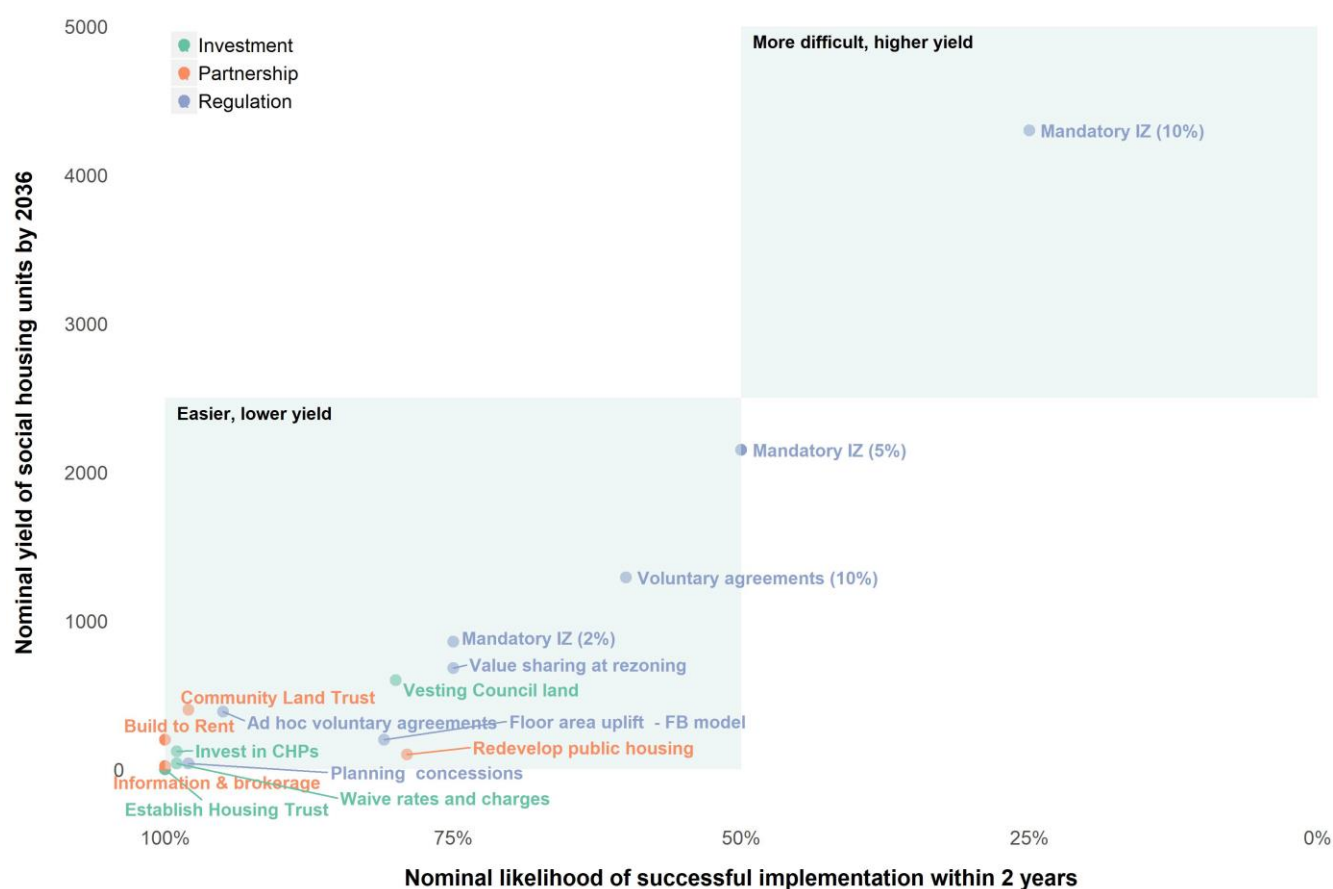


Some of these mechanisms are relatively readily applied in the City of Melbourne because Council has the authority to move in its own right. Others are dependent on the State Government and other parties providing the required authorising environment. For example, there is no current mechanism in the Victoria Planning Provisions for the enforcement of *mandatory* inclusion of affordable housing in new developments in the City of Melbourne, although several policy statements suggest the State Government may consider enabling reforms in this area.

As well as their capacity for successful implementation within a reasonable period (say two years), the mechanisms can also differentiate in terms of the quantum of affordable housing they are likely to generate over. The chart below shows SGS's assessment of housing yield versus ease of implementation for each of the listed mechanisms.

The array of policy levers open to Council is extensive, but no single mechanism can be expected to make a major dent in the level of need by itself. While the State Government has clarified the planning system can and should have a role in affordable housing provision, it is

yet to endorse mechanisms such as mandatory inclusionary zoning and development licensing arrangements that could bolster the flow of social and affordable housing in Melbourne.

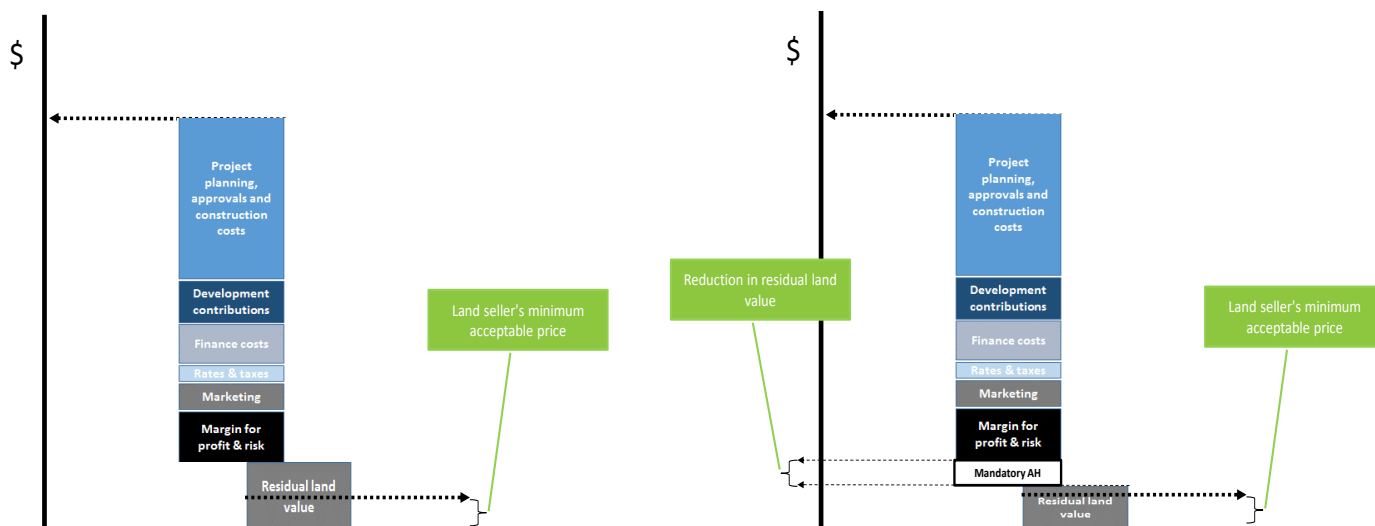


### Intervention by Council is economically warranted

If Council had a means of enforcing affordable housing contributions via the planning system, and it chose to apply such a tool, the impact on the local property market would depend on the scale of the mandatory requirement.

Developers establish the maximum price they are willing to pay for a site by deducting their required margin for profit and risk plus all their costs, including development contribution liabilities, from their expected disposal value for the newly constructed dwellings and other floorspace in the planned project. So long as this 'residual land value' (RLV) is greater than the land seller's minimum acceptable price, the project is viable and will proceed (see left-hand panel in the diagram below).

Developers are 'price takers' not 'price makers'. If confronted with a mandatory inclusionary zoning requirement, developers will reduce their offer price for the sites in question. After this reduction, if the RLV is still greater than the land owner's minimum price, the project will remain viable. Conversely, if the land price is pushed below the seller's minimum acceptable price, the project will not be feasible on that site and the proponent will need to look elsewhere for a suitable development opportunity (see right-hand panel in the diagram below). Over time, as dwelling prices increase, developers may be able to pay higher prices for land and bring some sites, which were previously unviable for development, back into consideration.



Introducing mandatory inclusion of affordable housing in the City could see the withdrawal of a proportion of sites that would otherwise be available for development. The question is whether there would be sufficient sites still available for viable development to fulfil projected total housing requirements in the City.

SGS's analysis shows that a mandatory requirement of up to 10 per cent could be supported without choking off the required housing supply.

The analysis also shows that while some landowners will suffer a loss of value in their property, mandatory requirements would deliver a strong net benefit for the whole community.

SGS performed an economic evaluation of mandatory inclusionary affordable housing, on a per dwelling basis, using conventional cost benefit analysis as prescribed in the State Government state public finance guidelines. On the cost side, the analysis considered dwelling construction costs, maintenance and operating costs and reduction in RLV. The offsetting benefits included health cost savings, reduced domestic violence, reduced costs of crime, enhanced human capital, worker retention, educational benefits, improved community pride and social justice, retained cultural value, enhanced social capital and the gain in housing services.

Over 20 years and using a commercial discount rate of 7 per cent the analysis returned a benefit cost ratio of more than 3:1. That is, community benefits valued at more than \$3 were generated for each \$1 of cost incurred by all parties in the implementation of mandatory inclusionary requirements.

In this sense, this intervention is economically warranted.

### Council requires an ambitious but achievable target for its policy efforts

Depending upon its appetite for involvement in the social and affordable housing supply problem in the City of Melbourne, Council will be working in partnership with other spheres of governance to greater or lesser degrees. A supply target for Council's efforts as part of any wider response may be required.

This supply target can be set in one of two ways; as a residual of what the other levels of government deliver versus measured need; and extrapolation of precedents from other local government policies. Given the scarcity of new supply known to be coming from the State and Commonwealth Governments, the former approach would leave Council with a very high target of almost 23,000 additional affordable housing units by 2036. The latter (extrapolation of precedents) approach yields a range of targets the upper end of which is 8,800 additional

units by 2036 for social and affordable housing. This would seem to be both ambitious and realistic, given the leadership role and endowments of a capital city council. In addition, this report proposes that Council adopt a target for crisis and transitional housing provision of 1,423 beds by 2036.

Broken down by housing type, the targets for the City of Melbourne are summarised as:

- ***Social housing*** (owned and operated by the State or registered community providers, and accommodating mainly low and very low income households with marginal involvement in the workforce)
  - **7,527** additional dwellings by 2036
- ***Affordable housing*** (supplied by a number of different providers and various models and housing low to moderate income households, including Key Workers, with relatively shallow subsidies)
  - **1,273** additional dwellings by 2036
- ***Crisis and transitional housing***
  - achieve a stock of **1,423** beds in the City by 2036

Assuming an affordable housing provision rate of 10% operated via some form of mandatory requirement and further assuming an implementation ramp up period that sees this policy taking effect from 2021, we have estimated that Council could deliver in the order of 4,300 affordable dwellings via this inclusionary approach. The balance of the 8,800 additional units might be met via floor area uplift mechanisms, direct investment or through Registered Housing Associations leveraging gifted stock to acquire additional dwellings.

The task of responding to the need for social and affordable housing in the City is significant. We have estimated the aggregate requirement for the City of Melbourne local government area in 2036 as almost 30,000 (additional) dwellings. The combined efforts of Council and other spheres of government are required to address this challenge.

# 1. INTRODUCTION

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This section of the report describes the policy context for this study, outlines the scope of our work and provides an overview of the report's structure.

## Background

### New housing policy for Melbourne

The City of Melbourne (CoM) is continuing to evolve its suite of planning, investment and advocacy policies for the housing 'system' of the municipality. Council wants to see housing outcomes in line with its vision for a sustainable, inclusive and prosperous Melbourne.

The City's flagship housing policy document – *Homes for People* – is due for review, with its nominated tenure – 2014-2018 – now expired. There have been significant changes in context since Council adopted this policy. For example, the State Government released the first ever integrated housing policy for the state – Homes for Victorians (HfV) – in March 2017. The refreshed metropolitan planning strategy – Plan Melbourne – includes a strong focus on social and affordable housing, committing government to a more proactive use of the planning system in generating affordable and social housing supply. The *Planning and Environment Act 1987* (the Act) has duly been amended to put beyond doubt that land use and development regulation in Victoria may be applied to this purpose. As part of this reform, clear definitions of affordable housing have been disseminated, with relevant income bands nominated. We are now beginning to see these reforms in practical planning practice. Amendment C270 (Am C270) to the Melbourne Planning Scheme and GC81 covering Fishermans Bend variously contain a mix of value capture and voluntary mechanisms whereby development proponents contribute to social and affordable housing outcomes.

It is fair to say that the housing policy 'ship is beginning to turn' in Victoria and Australia. However, policy settings, and more importantly, investment in social and affordable housing, at the Commonwealth and State levels remain grossly inadequate.

### Commonwealth and state context

The contemporary framework for providing social and affordable housing is vastly different from that which held sway in Australia and Victoria for many decades following the first Commonwealth State Housing Agreement struck in 1945. Commonwealth capital funding for providing social housing has all but withered, with Canberra implicitly favouring 'safety net' programs and rental assistance. State Government policy has followed a similar trajectory. It is only since the adoption of the HfV package (and subsequent election promises from the current government) that we have seen renewed interest in social housing by the State Government.

With the virtual cessation of investment in (net) social housing expansion in the mid 1980s – save for a temporary surge during the post global financial crisis (GFC) stimulus program of the Commonwealth – Victoria's and Melbourne's housing supply has become dangerously unbalanced. By any measure – waiting lists, levels of post-rent poverty and the proportion of social housing to total housing – the shortage of affordable housing in the state is now counted in the many tens of thousands. To the ordinary citizen, this manifests in escalating rates of extreme homelessness, i.e. sleeping rough. But this is only the tip of the iceberg, with large numbers of households suffering dislocation from education and job opportunities, stress-related mental health illnesses and, indeed, violence.

The prospective framework for a revitalised social and affordable housing policy for Melbourne and the state more generally is starting to become clear, based on the reforms and initiatives noted above. We can expect or, perhaps, hope for:

- A gradual increase in the direct investment by the State and Commonwealth Governments in social housing provision focussed, initially, on households in extreme need, for example, those exposed to the risk of family violence
- Reinstating models like NRAS, which seek to leverage private investment in affordable housing by bridging the 'return gap' between rents within the means of moderate and lower income groups and commercially viable rents
- Growing use of new commercial models which enable more affordable and secure rents premised on a change in the cost base, for example, build-to-rent and various land trust arrangements
- Greater use of value capture arrangements such as Am C270 and the GC81 social housing uplift requirements whereby proponents must purchase additional development rights above nominated thresholds, through the provision of social housing and other public benefits
- Greater use of affordable housing targets 'with teeth' as per the 6 per cent goal in Fishermans Bend (also applied via GC81), and, perhaps
- Applying broad based, mandatory inclusionary zoning, pending the lessons from the State Government's piloting of the impacts of such requirements on its own land.

## Purpose of this study

The City of Melbourne's planning for a just, sustainable and prosperity-supporting housing system in the City needs to anticipate this new policy environment. A good place to start is to understand the current and projected need for affordable (including social) housing in the City. With this key parameter established, Council can contemplate the appropriate targets for affordable housing in the City, the various means by which the targets might be advanced and the consequences – both positive and negative – of reaching or falling short of these targets.

The brief issued by Council for this study called for research on these issues, to establish a sound evidence base on which a new municipal housing policy might be developed.

## Principles guiding SGS's approach to the study

SGS's approach to the brief was, in part, guided by the principle that affordable housing should be treated as a form of *essential infrastructure* in the planning and city building process. That is, it should *not* be characterised as a discretionary social or welfare program.

Affordable housing, including social housing, is critical to the functionality of local labour markets and it is a pre-requisite for neighbourhoods and cities that are sustainable (in the social dimension of that word) and resilient. Accordingly, planning for affordable housing should follow similar disciplines as those applied to other forms of social and economic infrastructure. It should be based on projected needs taking a suitable long term view.

A second principle guiding our approach to the brief is that of *subsidiarity* in delivering this essential infrastructure. As a pre-eminent planning authority for its jurisdiction, the City of Melbourne must play a key role in identifying, measuring and locating the need for affordable housing, in the same way it does for other forms of infrastructure. However, how this need is fulfilled is a shared responsibility across the three spheres of governance.

As outlined above, the housing policy landscape has shifted significantly over the past decade. The array of affordable housing supply tools available to Council and the actions expected of it have expanded. This is particularly so in respect of planning mechanisms covering value capture and various versions of inclusionary zoning. This does not mean, however, that the



City of Melbourne can be expected to fully meet identified affordable housing needs from its policy levers and resources. Ideally, it would play a support role to re-invigorated and greatly expanded social and affordable housing programs operated by the State and Commonwealth Governments.

## Structure of the report

The report is set out in six chapters. Following this introduction, **Chapter 2** provides an assessment of the need for social and affordable housing in the municipality of Melbourne, as derived from an analysis of need at the metropolitan level. This discussion covers definitions of housing need and the assumptions and analytical methods applied by SGS to arrive at a range of discrete estimates of the shortfall in social and affordable housing in the municipality as at 2016 and 2036.

Having measured aggregate need for social housing in the City, **Chapter 3** explores the rationale for Council involvement in meeting this need, recognising that this has not been a mainstream function of local government in Victoria in the past. This rationale is examined from many perspectives including the value that can be created for the wider City of Melbourne community were the City to bring about a greater stock of social and affordable housing versus what might happen under a passive policy scenario. Also canvassed is City of Melbourne's special obligation to create opportunities for the most marginalised in the community given that the City is the beneficiary of disproportionate taxpayer investment in infrastructure and services. Finally, Chapter 3 outlines the types of households that would benefit most from a pro-active and escalated City of Melbourne policy on social and affordable housing provision in the City.

**Chapter 4** examines the policy levers and tools Council could apply were it of a mind to advance affordable and social housing provision in the City. The chapter covers:

- an overview of each mechanism/tool
- the benefits, scale of impact and drawbacks of each tool
- the household types most likely to be benefited by each tool
- how the tools might be implemented by Council under current legislation and state policy settings, and
- the subsidy (if any) required to enable the tool to work for various household types.

In contemplating whether, and to what extent, these tools might be applied, Council will be interested in their impact on development activity in the City and whether they would generate a net community benefit, that is, the value they create for the City of Melbourne community and the state as whole is greater than the costs they would generate. These questions are taken up in **Chapter 5** of the report.

Assuming that Council is interested in meeting housing need in the City, while recognising this need has been allowed to grow to extreme proportions by the State and Commonwealth Governments, the question arises as to the target the City of Melbourne might adopt (driven by its own efforts) in expanding this stock of housing in the City by 2036. Various methods by which the aggregate need identified in Chapter 2 might be scaled down to form a target for Council's housing policy are canvassed in **Chapter 6**. This final chapter also discusses the types of packages of levers and mechanisms Council would need to apply to meet either a high or modest municipal target for social and affordable housing.

## 2. MEASURING AFFORDABLE HOUSING NEED IN MELBOURNE

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This section provides an assessment of the need for social and affordable housing in the municipality of Melbourne, as derived from an analysis of need at the metropolitan level. This discussion covers definitions of housing need and the assumptions and analytical methods applied by SGS to arrive at a range of discrete estimates of the shortfall in social and affordable housing in the municipality as at 2016 and 2036. The Inner Metro Partnership (IMP) area and Inner Melbourne Action Plan (IMAP) plus Moonee Valley region are also examined.

### 2.1 Scope and definitions

#### Focus on rental affordability

The focus of this study is the need for affordable and appropriate rental accommodation for very low, low, and moderate income households in the City of Melbourne.

Mortgage stress and opportunities for households to gain affordable access to home ownership are not within the scope of this report. This is not to diminish these issues. Rather this scope delineation recognises the greatly different types of policy responses required to support home ownership as distinct from securing an adequate supply of accommodation for households that are effectively confined to the rental market for the time being if not indefinitely.

A need or a unit of 'demand' for social and affordable housing arises when a moderate or lower income household confronts moderate or severe rental stress, as elaborated in the text box below. A state of homelessness, including marginal accommodation, signifies a need for social and affordable housing. Households in existing social housing must also be included in the demand for this form of housing, particularly in the contemporary context where, because of severe shortages, social housing is effectively reserved for households on very low incomes that would otherwise face serious rental stress in the private market.

#### Transitional versus permanent demand for social and affordable housing

Some households may find themselves in temporary or intermittent rental stress pending their employment and income circumstances. Others may suffer prolonged or indefinite rental stress. The measure of demand for affordable and social housing at any given point in time will include both those in permanent and temporary need. Discounting the measured requirement for social and affordable housing to account for households in transitional need would provide misleading results. Those exiting a situation of rental stress will be replaced by those entering this situation; in other words, a cross-sectional snapshot of demand for social and affordable housing drawn from, say, Census data on rental stress, embodies the dynamism in the housing careers of individual households.

That said, a degree of minor discounting – say 5 per cent or 10 per cent – may be justified in recognition that some households in rental stress at any given time *may* have options to autonomously relieve that stress, for example, by relying on their wider family to provide long term accommodation.

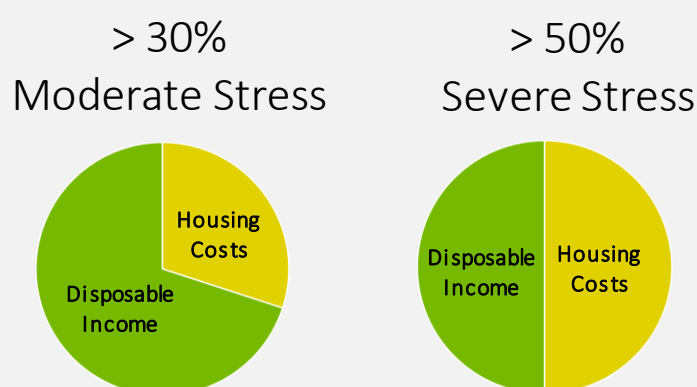
## What is rental stress?

Rental stress is the situation where a moderate (or lower) income household's rental payments are so high that they must sacrifice on life's necessities such as food, health care, or education.

**Moderate** housing stress is when a household must spend more than **30 per cent** of their income on rent.

**Severe** housing stress is when a household must spend more than **50 per cent** of their income on rent.

Affordable housing is appropriate for **very low, low and moderate-income households** in rental stress. It is not appropriate for high-income households because high housing costs are unlikely to impact their ability to pay for necessities.



Source: SGS Economics and Planning, 2019

## Definition of affordable and social housing and relevant income bands

The definition of affordable and social housing used in this report is consistent with that set out in the *Planning and Environment Act 1987*:

*“affordable housing is housing, including **social housing**, that is appropriate for the housing needs of very low, low, and moderate-income households”.*

“Social housing”, in turn, is defined in the *Housing Act 1983* as housing that is owned by the Director of Housing (public housing) as well as housing that is owned or managed by registered housing agencies (community housing).

Community housing providers are also registered and regulated by the state government through a regulatory framework overseen and implemented by the Registrar of Housing.

The bands constituting the very low, low and moderate income households cited in the *Planning and Environment Act 1987* are established each year by order published in the Government Gazette. The applicable ranges at the time of writing are set out in Figure 1 overleaf.

FIGURE 1 OFFICIAL INCOME RANGES – ELIGIBILITY FOR AFFORDABLE HOUSING GENERATED UNDER THE PLANNING AND ENVIRONMENT ACT 1987

**Greater Capital City Statistical Area of Melbourne**

	Very low income range (annual)	Low income range (annual)	Moderate income range (annual)
Single adult	Up to \$25,220	\$25,221 to \$40,340	\$40,341 to \$60,510
Couple, no dependant	Up to \$37,820	\$37,821 to \$60,520	\$60,521 to \$90,770
Family (with one or two parents) and dependent children	Up to \$52,940	\$52,941 to \$84,720	\$84,721 to \$127,080

**Rest of Victoria**

	Very low income range (annual)	Low income range (annual)	Moderate income range (annual)
Single adult	Up to \$18,380	\$18,381 to \$29,400	\$29,401 to \$44,100
Couple, no dependant	Up to \$27,560	\$27,561 to \$44,100	\$44,101 to \$66,160
Family (with one or two parents) and dependent children	Up to \$38,590	\$38,591 to \$61,750	\$61,751 to \$92,610

*Note: Tables 1 and 2 are derived from annual area median income from the Australian Bureau of Statistics 2016 Census of Population and Housing and indexed using the Australian Bureau of Statistics Housing Group of the Consumer Price Index.*

Source: Victoria Government Gazette No. S 256 Friday 1 June 2018

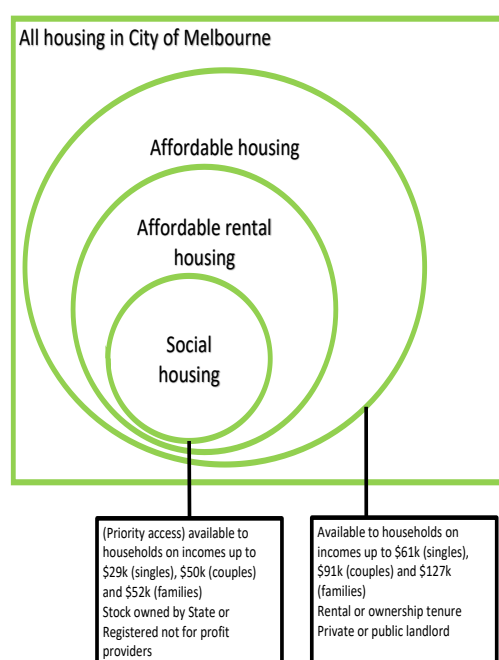
Social housing has its own set of income eligibility criteria, enabled by the *Housing Act 1983*. These apply state-wide and are reproduced in the following table. Social housing eligibility limits are somewhat tighter than those for the broader category of ‘affordable housing’ as defined in the *Planning and Environment Act 1987*, especially where priority access to accommodation is being sought by the applicant (see Figure 3).

FIGURE 2 ELIGIBILITY LIMITS – SOCIAL HOUSING

<b>For inclusion on the general social housing wait list (register)</b>	<b>Annual income</b>
Single adult	\$52,156
Couple, no dependants	\$79,820
Family with one or two parents and dependent children (2)	\$107,640
<b>For priority access</b>	
Single adult	\$29,172
Couple, no dependants	\$50,440
Family with one or two parents and dependent children (2)	\$52,260

Source: Housing Vic ( <https://housing.vic.gov.au/social-housing-eligibility#eligibility-criteria> )

FIGURE 3 AFFORDABLE HOUSING IN CITY OF MELBOURNE



Source: SGS Economics and Planning, Vic Government websites

## 2.2 Method

SGS has estimated the 'current' (2016) and projected (2036) requirement for social and affordable housing need in metropolitan Melbourne and in the City of Melbourne using its Housing Assistance Demand (HAD) Model. The Inner Metro Partnership (IMP) Area (LGAs of Melbourne, Yarra, and Port Phillip) and the Inner Melbourne Action Plan (IMAP) area plus Moonee Valley (LGAs of Melbourne, Port Phillip, Stonnington, Yarra, Maribyrnong, and Moonee Valley) are also examined. The original version of the HAD Model was commissioned by the State Government to assist in the strategic planning of a range of housing services including investment in social housing.

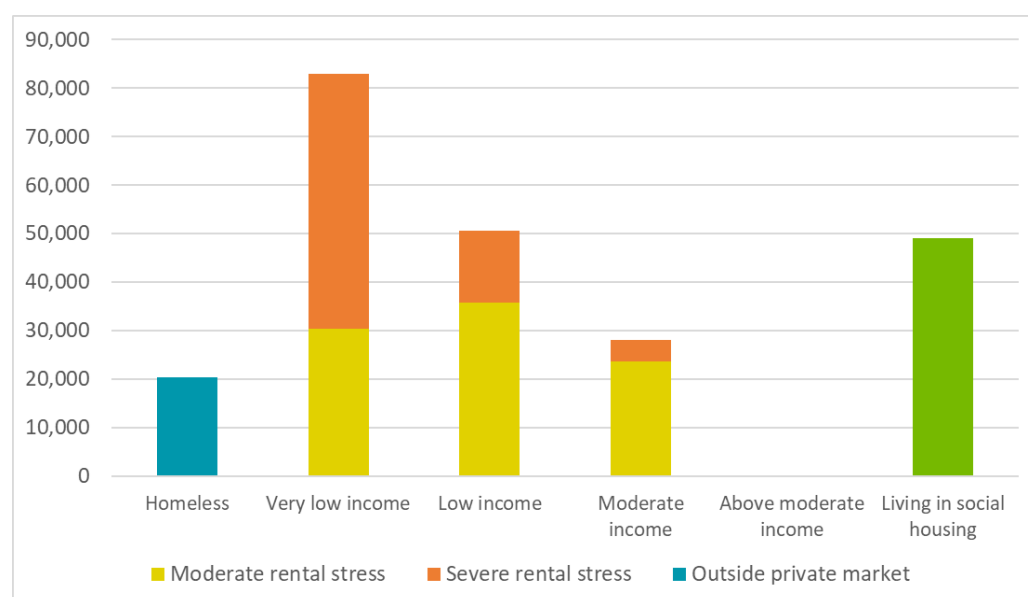
The Model is described in Appendix 1.

## 2.3 Current demand for social and affordable housing

### Metropolitan Melbourne

SGS estimates that in 2016, the demand for social and affordable housing across metropolitan Melbourne exceeded 231,000 households. As shown in Figure 4, this demand includes individuals who are homeless (20,500), households who currently reside in social housing (49,000), and households with moderate incomes (or lower) who are experiencing rental stress (162,000).

FIGURE 4: METROPOLITAN MELBOURNE DEMAND (HOUSEHOLDS) FOR SOCIAL AND AFFORDABLE HOUSING, 2016



Source: SGS Economics and Planning, 2019

Figure 5 presents a more detailed segmentation of these results, showing that demand for social and affordable housing represents 13 per cent of all households. Households in the private rental market earning very low incomes are worst affected, with 22 per cent requiring assistance and over 60 per cent experiencing severe rental stress.

FIGURE 5: METROPOLITAN MELBOURNE HOUSING MARKET SEGMENTATION, 2016

	Other households (a)	Moderate rental stress (b)	Severe rental stress (c)	Outside private market (d)	Total households (a + b + c + d)	Quantum of Demand (b + c + d)	Demand share of total households
Homeless	NA	NA	NA	20,429	20,429	20,429	100%
Living in social housing	NA	NA	NA	48,978	48,978	48,978	100%
Very low income households	300,997	30,359	52,672	NA	384,027	83,031	22%
Low income households	279,465	35,822	14,837	NA	330,124	50,659	15%
Moderate income households	320,328	23,577	4,564	NA	348,470	28,141	8%
Above moderate income households	641,333	NA	NA	NA	641,333	0	0%
<b>All households</b>	<b>1,542,123</b>	<b>89,758</b>	<b>72,073</b>	<b>69,407</b>	<b>1,773,361</b>	<b>231,238</b>	<b>13%</b>

Source: SGS Economics & Planning, based on ABS Census 2016 and VIF 2016

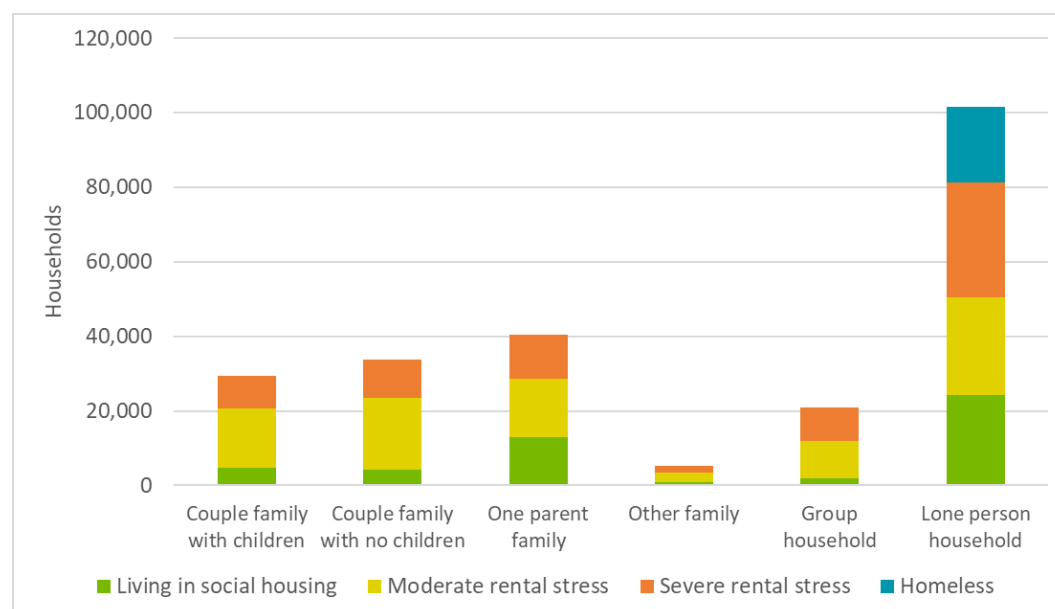
Note: Other households includes both rental households who are not in rental stress and non-rental households, and does not contribute to demand for social and affordable housing

For all the categories of demand considered above, Figure 6 shows that lone person households form the largest component of demand, followed by one parent families. This is particularly true of those suffering severe rental stress. Along with the results shown in Figure



5, this indicates that the largest share of demand is comprised of the most vulnerable households – that is, those who have very low incomes, have lower income generation potential (being single income households at most), and have dependents (i.e. lone parent families).

FIGURE 6: DEMAND (HOUSEHOLDS) FOR SOCIAL AND AFFORDABLE HOUSING (2016) BY HOUSEHOLD TYPE



Note: 'Other family' refers to related individuals who are not parents/children (e.g. siblings, grandparents, uncles/aunts)

Source: SGS Economics and Planning

The figures below present the spatial distribution of existing demand for social and affordable housing across metropolitan Melbourne, disaggregated by the categories considered in Figure 5.

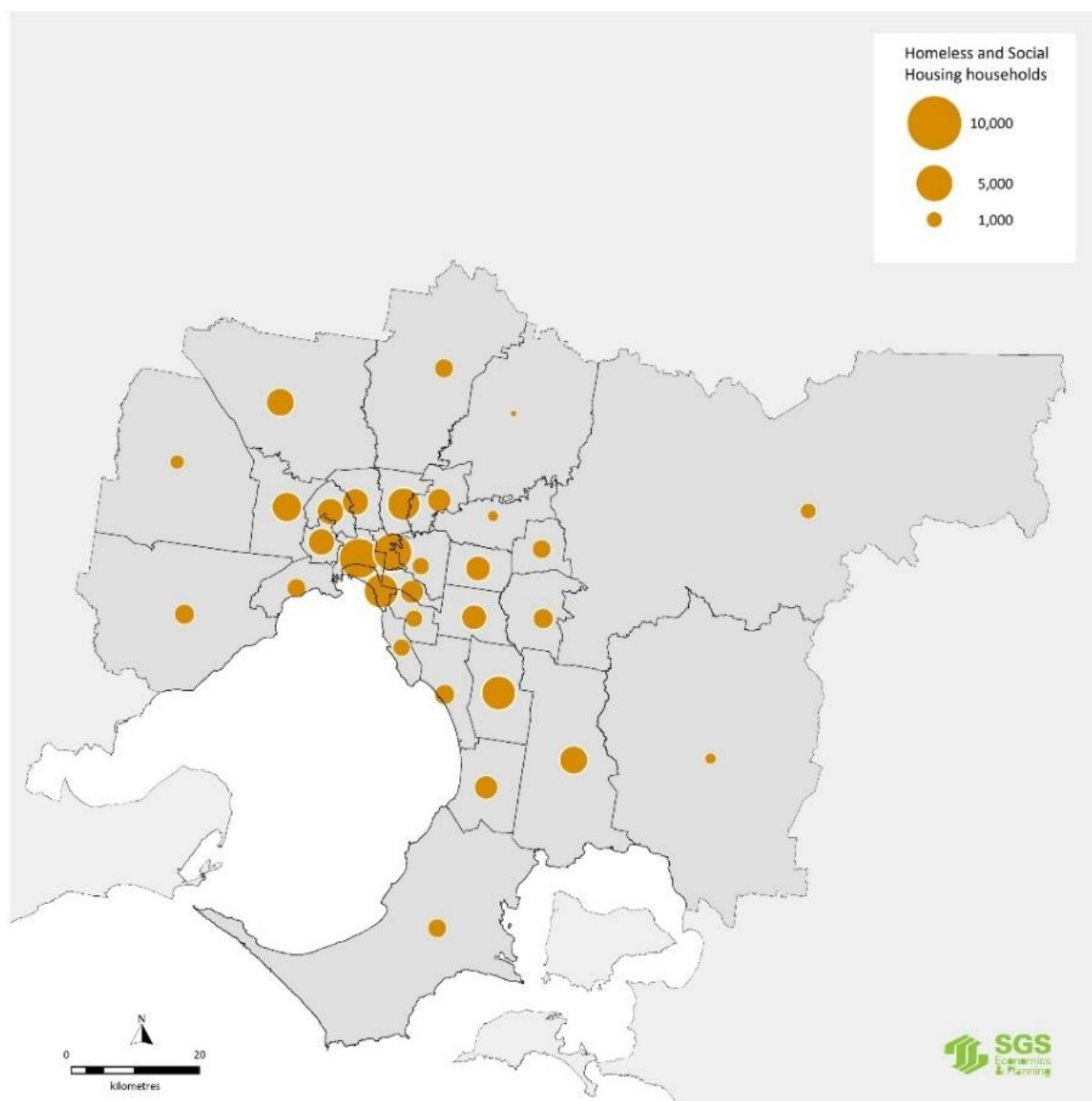
Homeless persons and those living in social housing (Figure 7) are most common in inner Melbourne (LGAs of Melbourne, Yarra, and Port Phillip) and the outer south east (LGAs of Greater Dandenong and Casey). However, it is important to note that, compared to other cohorts, the locations of these groups are not as strongly determined by individual choice. Rather, factors such as the location of existing social housing stock or homelessness services play a significant role.

Figure 8, Figure 9, and Figure 10 present the spatial distribution of demand for rental households in the very low, low, and moderate income groups respectively. In each map, the size of the bubble represents the quantum of demand, while the shade of the region shows the share of households (within each income group) which require social and affordable housing.

Unsurprisingly, the quantum and share of demand for all income groups is greatest in central Melbourne, and the City of Melbourne in particular. This is best illustrated by Figure 10, which shows that almost 40 per cent of households on moderate incomes experience rental stress within the City of Melbourne. This reflects two driving factors; rents which are beyond the affordable threshold for households on moderate incomes or less, and the decision of many these households to bear rental stress to live in these areas.

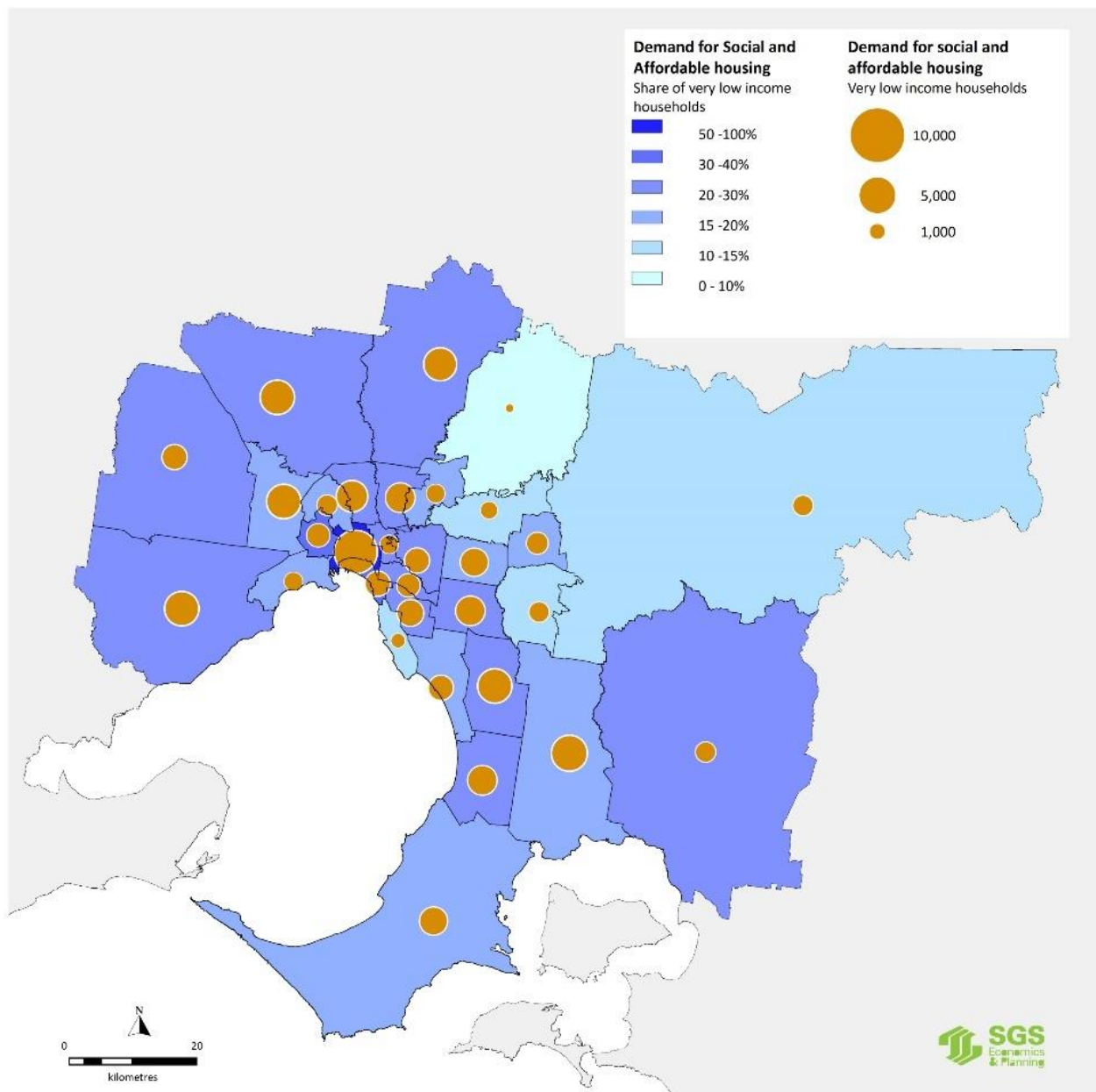
While very low income households have the highest rate of demand within the City of Melbourne (over 50 per cent), this does not improve significantly in outer municipalities, with over 20 percent of very low income households requiring social and affordable housing in both the middle ring and growth areas of Melbourne.

FIGURE 7: HOUSEHOLDS LIVING IN SOCIAL HOUSING AND HOMELESS HOUSEHOLDS (INDIVIDUALS) BY LGA (2016)



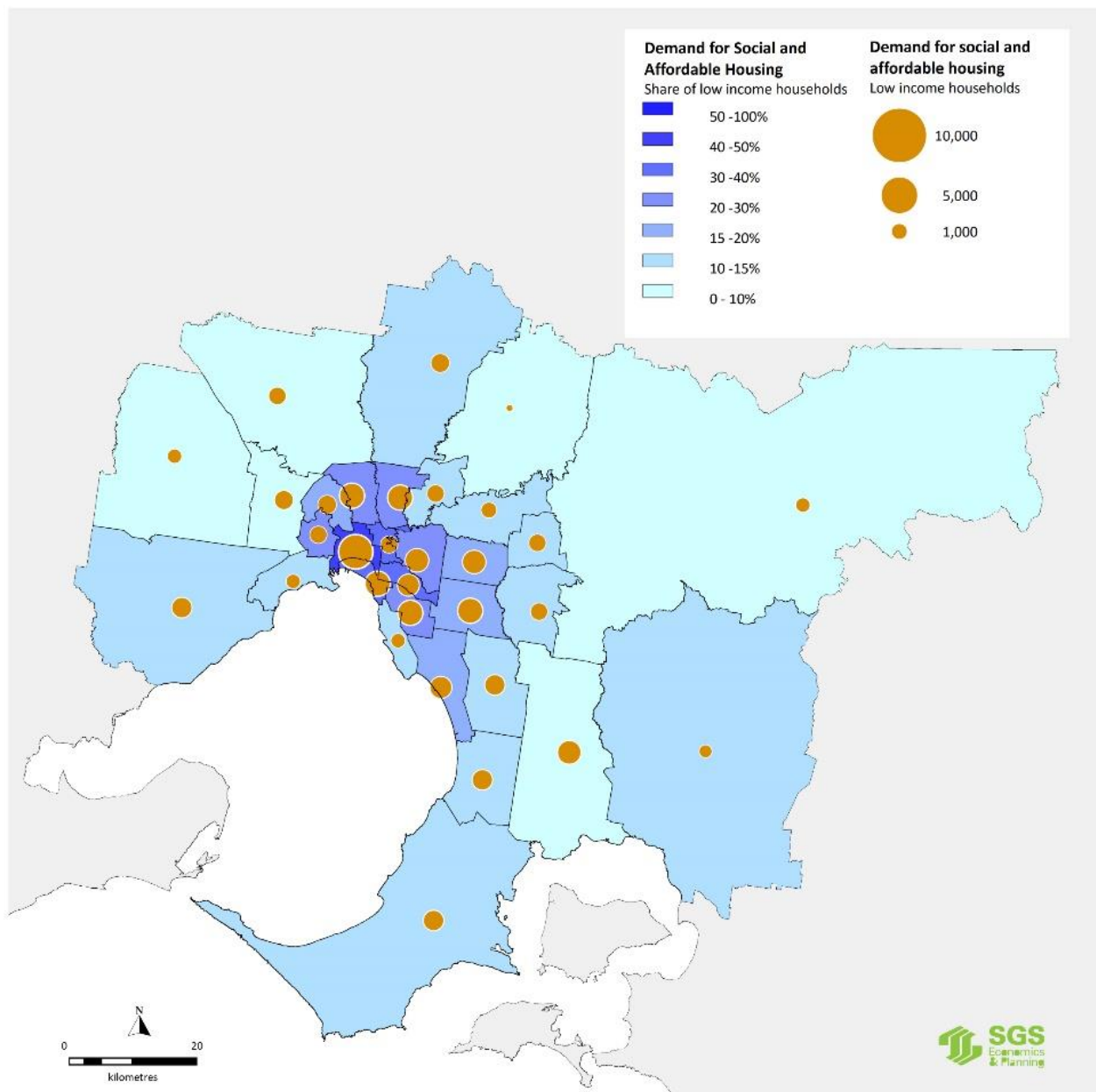
Source: SGS Economics and Planning, based on ABS Census 2016 and VIF 2016

FIGURE 8: VERY LOW INCOME RENTAL HOUSEHOLDS - DEMAND BY LGA (2016)



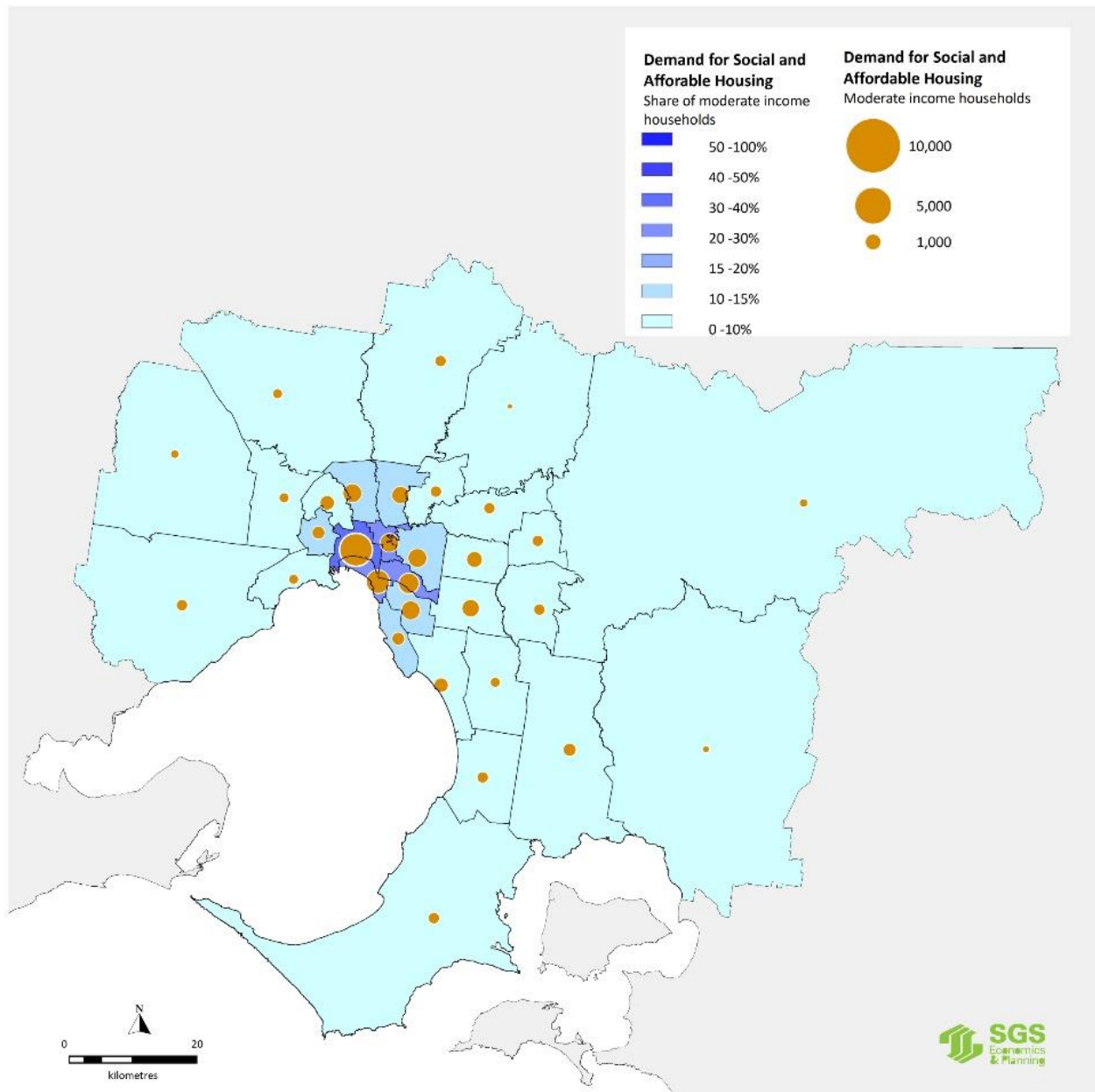
Source: SGS Economics and Planning, based on ABS Census 2016 and VIF 2016

FIGURE 9: LOW INCOME RENTAL HOUSEHOLDS - DEMAND BY LGA (2016)



Source: SGS Economics and Planning, based on ABS Census 2016 and VIF 2016

FIGURE 10: MODERATE INCOME RENTAL HOUSEHOLDS - DEMAND BY LGA (2016)



Source: SGS Economics and Planning, based on ABS Census 2016 and VIF 2016

## City of Melbourne

The demand for social and affordable housing within the City of Melbourne, by income group and household type are shown in Figure 11 and Figure 12. Over 20,000 households or 30 per cent of all households are in need<sup>1</sup> of housing assistance, which is high when compared to the metropolitan average of 13 per cent. This is particularly striking when considering the income profile of the municipality, with 46 per cent of households earning above moderate incomes, compared to the metropolitan share of 36 per cent.

Figure 13 to Figure 16 present the same analysis for the Inner Metro Partnership (IMP) region and Inner Melbourne Action Plan (IMAP) region plus Monee Valley. Existing need within these areas is less acute (although still greater than the metropolitan average), with 24 per cent and 20 per cent of households in need of housing assistance within the IMP and IMAP regions respectively.

FIGURE 11: CITY OF MELBOURNE HOUSING MARKET SEGMENTATION BY INCOME GROUP, 2016

	Other households	Moderate rental stress	Severe rental stress	Outside private market	Total households	Quantum of Demand	Demand share of total households
Homeless	NA	NA	NA	1,725	<b>1,725</b>	1,725	100%
Living in social housing	NA	NA	NA	3,970	<b>3,970</b>	3,970	100%
Very low income households	6,049	772	5,706	NA	<b>12,526</b>	6,477	52%
Low income households	4,318	1,998	2,217	NA	<b>8,533</b>	4,215	49%
Moderate income households	6,570	2,985	897	NA	<b>10,452</b>	3,882	37%
Above moderate income households	31,392	NA	NA	NA	<b>31,392</b>	0	0%
<b>All households</b>	<b>48,328</b>	<b>5,755</b>	<b>8,820</b>	<b>5,695</b>	<b>68,598</b>	<b>20,269</b>	<b>30%</b>

Source: SGS Economics and Planning, based on ABS Census 2016 and VIF 2016

Note: Other households includes both rental households who are not in rental stress and non-rental households, and does not contribute to demand for social and affordable housing

FIGURE 12: CITY OF MELBOURNE HOUSING MARKET SEGMENTATION BY HOUSEHOLD TYPE, 2016

	Other households	Moderate rental stress	Severe rental stress	Outside private market	Total households	Quantum of Demand	Demand share of total households
Couple family with children	5,818	377	279	377	<b>6,852</b>	1,033	15%
Couple family with no children	14,574	1,322	1,151	276	<b>17,323</b>	2,749	16%
One parent family	2,092	246	337	882	<b>3,556</b>	1,464	41%
Other family	1,921	400	555	99	<b>2,975</b>	1,054	35%
Group household	6,268	1,366	2,458	209	<b>10,301</b>	4,033	39%
Lone person household	17,655	2,044	4,039	3,853	<b>27,590</b>	9,935	36%
<b>All households</b>	<b>48,328</b>	<b>5,755</b>	<b>8,820</b>	<b>5,695</b>	<b>68,598</b>	<b>20,269</b>	<b>30%</b>

Source: SGS Economics and Planning, based on ABS Census 2016 and VIF 2016

<sup>1</sup> Note that this includes 1,725 homeless persons and 3,970 households already living in social housing



Note: Other households includes both rental households who are not in rental stress and non-rental households, and does not contribute to demand for social and affordable housing

FIGURE 13: INNER METRO PARTNERSHIP (IMP) REGION HOUSING MARKET SEGMENTATION BY INCOME GROUP, 2016

	Other households	Moderate rental stress	Severe rental stress	Outside private market	Total households	Quantum of Demand	Demand share of total households
Homeless	NA	NA	NA	3,690	<b>3,690</b>	3,690	100%
Living in social housing	NA	NA	NA	11,540	<b>11,540</b>	11,540	100%
Very low income	15,093	1,754	8,616	NA	<b>25,464</b>	10,371	41%
Low income	11,374	4,100	3,790	NA	<b>19,264</b>	7,890	41%
Moderate income	17,022	5,837	1,667	NA	<b>24,526</b>	7,504	31%
Above moderate income	84,085	NA	NA	NA	<b>84,085</b>	0	0%
<b>All households</b>	<b>127,575</b>	<b>11,691</b>	<b>14,073</b>	<b>15,230</b>	<b>168,569</b>	<b>40,994</b>	<b>24%</b>
CoM share of IMP Region	38%	49%	63%	37%	41%	49%	

Source: Source: SGS Economics and Planning, based on ABS Census 2016 and VIF 2016

Note: Other households includes both rental households who are not in rental stress and non-rental households, and does not contribute to demand for social and affordable housing

FIGURE 14: INNER MELBOURNE ACTION PLAN (IMAP) PLUS MOONEE VALLEY HOUSING MARKET SEGMENTATION BY INCOME GROUP, 2016

	Other households	Moderate rental stress	Severe rental stress	Outside private market	Total households	Quantum of Demand	Demand share of total households
Homeless	NA	NA	NA	5,201	<b>5,201</b>	5,201	100%
Living in social housing	NA	NA	NA	17,570	<b>17,570</b>	17,570	100%
Very low income	33,404	3,617	12,663	NA	<b>49,683</b>	16,280	33%
Low income	26,446	7,225	5,306	NA	<b>38,978</b>	12,532	32%
Moderate income	36,253	8,558	2,203	NA	<b>47,014</b>	10,761	23%
Above moderate income	146,081	NA	NA	NA	<b>146,081</b>	0	0%
<b>All households</b>	<b>242,185</b>	<b>19,400</b>	<b>20,172</b>	<b>22,771</b>	<b>304,528</b>	<b>62,343</b>	<b>20%</b>
CoM share of IMAP (plus Moonee Valley)	20%	30%	44%	25%	23%	33%	

Source: Source: SGS Economics and Planning, based on ABS Census 2016 and VIF 2016

Note: Other households includes both rental households who are not in rental stress and non-rental households, and does not contribute to demand for social and affordable housing

FIGURE 15 INNER METRO PARTNERSHIP (IMP) REGION HOUSING MARKET SEGMENTATION BY HOUSEHOLD TYPE, 2016

	Other households	Moderate rental stress	Severe rental stress	Outside private market	Quantum of Demand	Demand share of total households
Couple family with children	19,807	742	575	1,064	<b>2,381</b>	11%
Couple family with no children	38,134	2,596	1,939	843	<b>5,378</b>	12%
One parent family	6,233	651	700	2,760	<b>4,111</b>	40%
Other family	3,261	599	702	263	<b>1,564</b>	32%
Group household	15,623	2,551	3,547	436	<b>6,534</b>	29%
Lone person household	44,517	4,551	6,610	9,865	<b>21,026</b>	32%
<b>All households</b>	<b>127,575</b>	<b>11,691</b>	<b>14,073</b>	<b>15,230</b>	<b>40,994</b>	<b>24%</b>
CoM share of IMP Region	38%	49%	63%	81%	<b>49%</b>	0%

Source: SGS Economics and Planning, based on ABS Census 2016 and VIF 2016

Note: Other households includes both rental households who are not in rental stress and non-rental households, and does not contribute to demand for social and affordable housing

FIGURE 16 INNER MELBOURNE ACTION PLAN (IMAP) PLUS MOONEE VALLEY HOUSING MARKET SEGMENTATION BY HOUSEHOLD TYPE, 2016

	Other households	Moderate rental stress	Severe rental stress	Outside private market	Quantum of Demand	Demand share of total households
Couple family with children	53,630	1,532	1,039	1,623	<b>4,194</b>	7%
Couple family with no children	68,796	4,374	2,912	1,296	<b>8,582</b>	11%
One parent family	15,074	1,412	1,274	4,178	<b>6,864</b>	31%
Other family	5,358	868	877	404	<b>2,148</b>	29%
Group household	23,676	3,809	4,506	641	<b>8,956</b>	27%
Lone person household	75,650	7,406	9,564	14,629	<b>31,599</b>	29%
<b>All households</b>	<b>242,185</b>	<b>19,400</b>	<b>20,172</b>	<b>22,771</b>	<b>62,343</b>	<b>20%</b>
CoM share of IMP Region	20%	30%	44%	56%	<b>33%</b>	0%

Source: SGS Economics and Planning, based on ABS Census 2016 and VIF 2016

Note: Other households includes both rental households who are not in rental stress and non-rental households, and does not contribute to demand for social and affordable housing

These results are a robust estimate of the number of households within the categories which constitute demand for affordable housing. However, this likely includes households who meet the definition of being in rental stress but do not need to forego life's necessities such as food, health care and education, and therefore do not necessarily contribute to demand for affordable housing. Examples of households that might fall into this category could include:

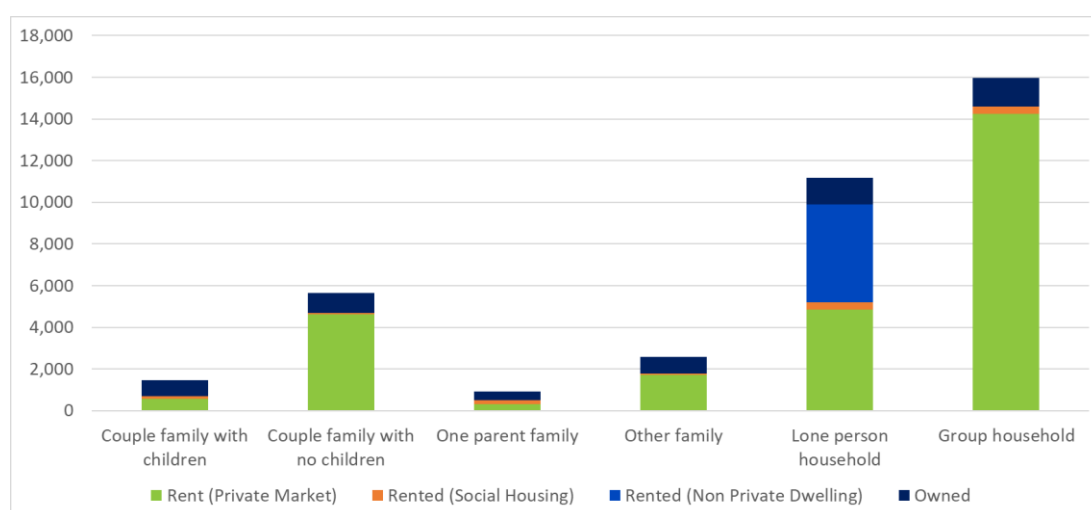
- Students with relatively low incomes but few other expenses or those who can draw on savings or family support for the limited time during which they complete their education
- Working holiday makers (e.g. those who choose to pay high housing costs for the benefits it provides, and often in the short term), and
- Households that are only temporarily in rental stress.

Determining which of these households genuinely contribute to demand for social and affordable housing is difficult as more detailed information about incomes, external assistance and expenditure are not available.

### Students households, housing stress and demand for housing assistance

A consequence of having several major universities and vocational education and training (VET) institutes in the City is that students form a large component of residents. In 2016, the 38,700<sup>2</sup> tertiary students living in the City constituted 32 per cent of the resident population. Eighty-nine per cent of students study full-time. Most tertiary students reside in rental properties as group households, while lone person households and couples with no children are the next most common household types (see Figure 17). A significant number of students (4,700 or 12 per cent) also reside in non-private dwellings. These are college residences, boarding houses, and hotels/motels.

FIGURE 17: COUNT OF TERTIARY STUDENTS BY HOUSEHOLD TYPE IN THE CITY OF MELBOURNE (2016)



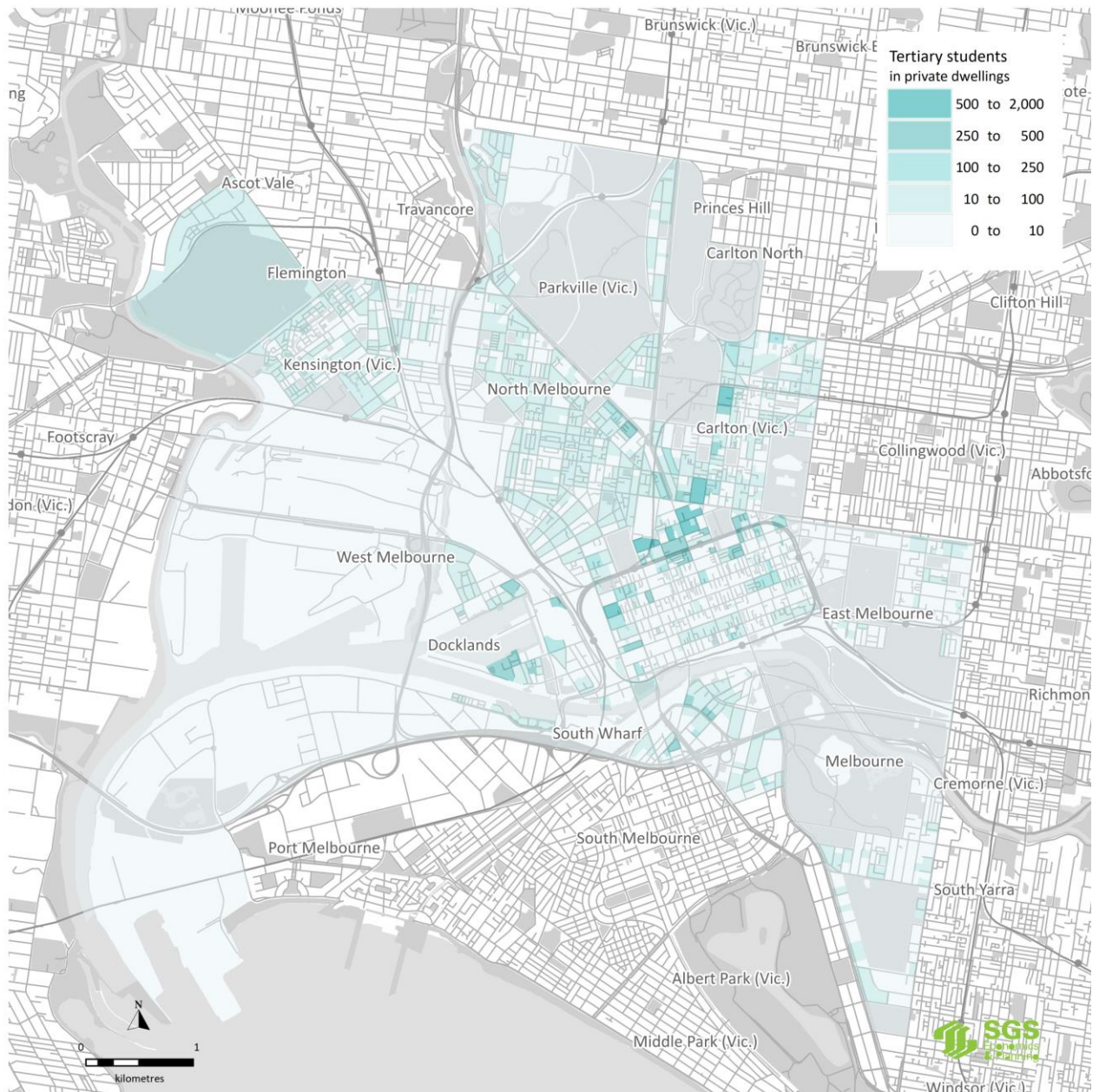
Source: SGS Economics and Planning, based on ABS Census 2016

While many households containing students experience rental stress (based on the comparison of rental costs to incomes) it is likely that not all need of housing assistance. The incomes of students may be supplemented by support from universities or family or from savings. Furthermore, it might be argued that some students choose temporary rental stress willingly while completing studies to advance their careers. Accurately determining which student households genuinely require affordable housing is difficult, due to the limitations of available data to measure these characteristics. Figure 18 displays the locations of students who live in private dwellings<sup>3</sup> in the City. This map suggests concentrations of students residing in the CBD, City North, Parkville, and Kensington.

<sup>2</sup> ABS Census 2016

<sup>3</sup> While not explicitly addressed in Census definitions, purpose-built student accommodation (PSBA) is most likely recorded as private accommodation

FIGURE 18: LOCATION OF TERTIARY STUDENTS LIVING IN PRIVATE DWELLINGS (2016)

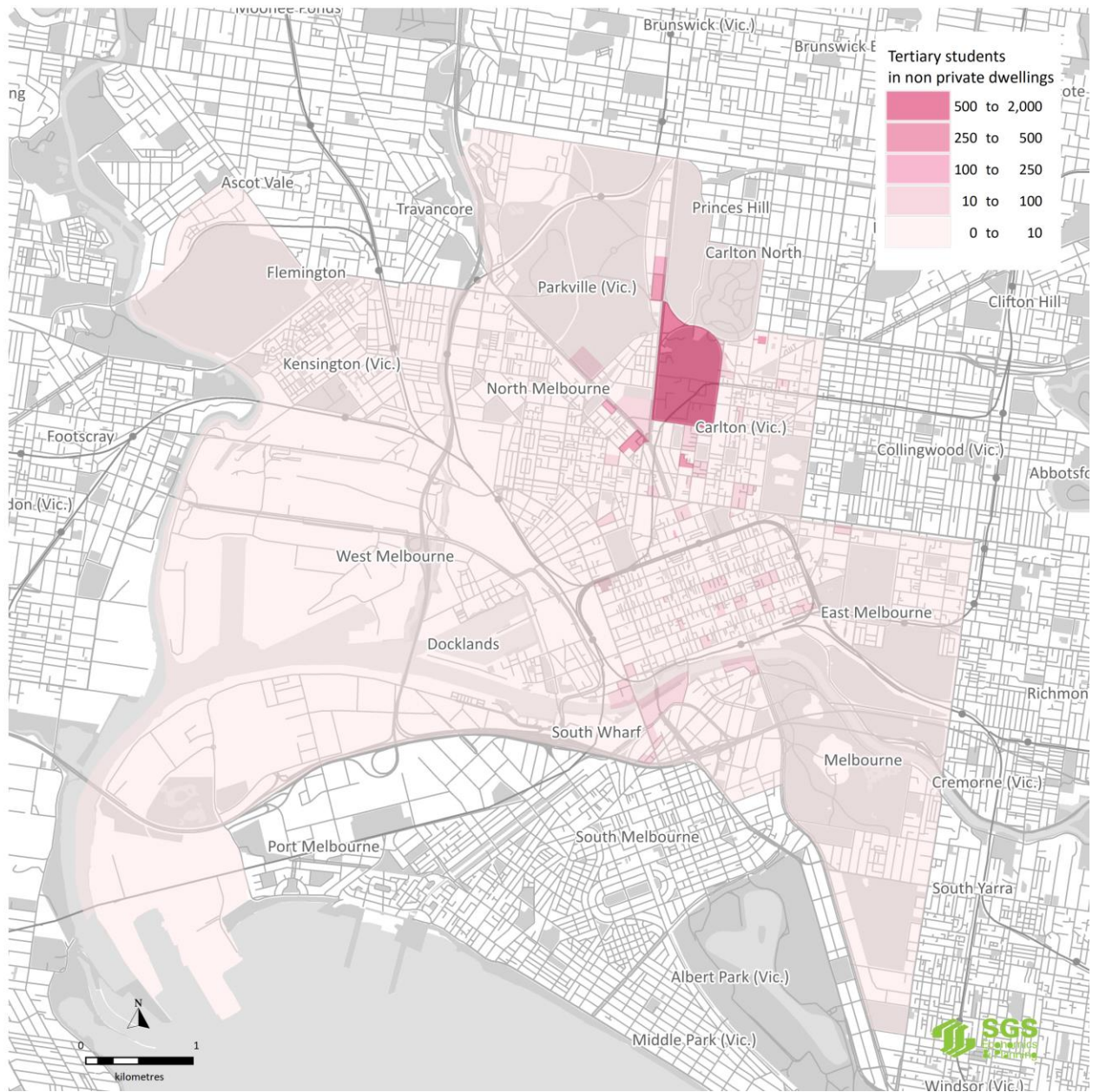


Source: ABS Census 2016

Figure 19 shows students living in non-private dwellings, with the greatest concentration in Parkville which includes the University of Melbourne residential colleges. Students in these non-private dwellings are not included in the estimation of households in rental stress



FIGURE 19: LOCATION OF TERTIARY STUDENTS LIVING IN NON-PRIVATE DWELLINGS (2016)



### Demand for social and affordable housing net of student households

The counts of student households in rental stress by household type are shown in Figure 20. It is estimated that over 11,000<sup>4</sup> households with students in the City of Melbourne are in rental stress. Consistent with Figure 17, which reports the living arrangements of the entire student population, lone person households and group households make up the largest share of tertiary student households in rental stress.

As discussed above, some of these households may not require affordable housing despite being in rental stress. However, this distinction is both difficult to define and to measure. Research conducted for the City of Sydney, which included student surveys and interviews with student advocacy groups, found evidence supporting the need for affordable housing for students. The findings highlight both the short and long term benefits (or disbenefits of a lack of affordable housing options), such as:

- Students being productive members of the community, who contribute to the local vibrancy and provide key services (e.g. hospitality, retail, childcare). A lack of affordable housing options reduces their ability to live and work in the City
- High rent means that students have to work more, leaving less time to study. This has negative impacts on their resilience, their mental health, and their ability to finish their studies or study enough – directly opposing why they're here
- Education is one of Australia's top three international exports. Ensuring a competitive housing offer is key to maintaining this

The final column of Figure 20 provides an adjusted measure of demand for social and affordable housing which assumes that, for student households, only those containing children require housing assistance<sup>5</sup>.

Based on this assumption, approximately 9,450 households of all types in the City of Melbourne need social and affordable housing.

Although the base demand estimate (column 1) is likely to overstate demand, the adjusted estimate, excluding the majority of student households, is highly conservative and could be interpreted as the absolute lower bound estimate of true demand.

While assessing the detailed housing assistance needs of students, and government's role in providing this assistance, is beyond the scope of this study, it can be stated that student demand is at most 11,000 dwellings. This means that the total existing demand for social and affordable housing in the City of Melbourne lies between 9,400 and 20,000 dwellings.

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<sup>4</sup> See Appendix 2 for further detail

<sup>5</sup> See Appendix 2 for further detail



FIGURE 20: HOUSEHOLDS IN RENTAL STRESS IN IN THE CITY OF MELBOURNE ADJUSTED FOR TERTIARY STUDENTS (2016)

	Demand for social and affordable housing	Tertiary student households in rental stress	Discount applied to adjust demand total	Adjusted demand for social and affordable housing
Couple family with children	1,033	228	0	1,033
Couple family with no children	2,749	1,778	1,778	971
One parent family	1,464	197	0	1,464
Other family	1,054	923	923	131
Group household	4,033	3,787	3,787	246
Lone person household	9,935	4,345	4,345	5,590
<b>All households</b>	<b>20,269</b>	<b>11,258</b>	<b>10,833</b>	<b>9,436</b>

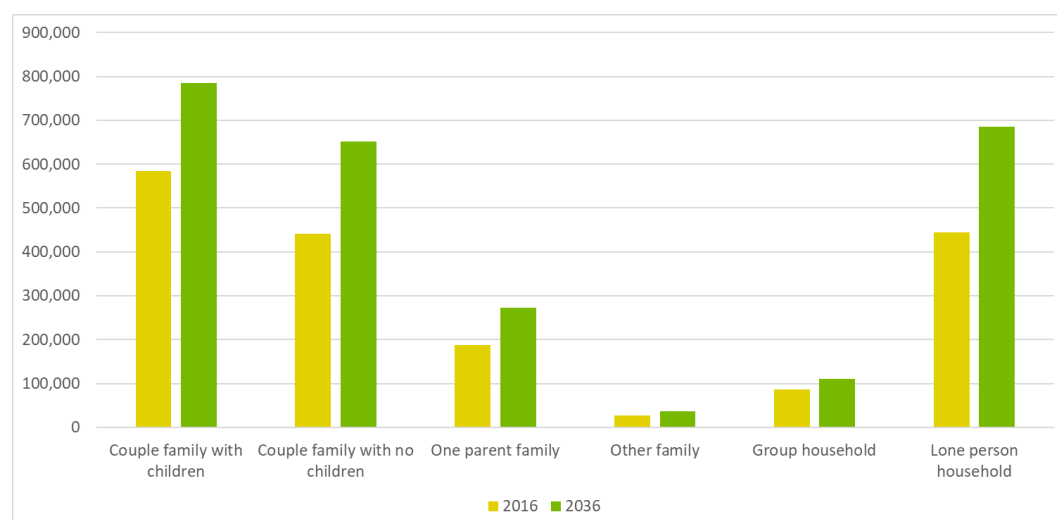
Source: SGS Economics and Planning, based on ABS Census 2016

## 2.4 Projected demand for social and affordable housing

### Metropolitan Melbourne

Metropolitan Melbourne is expected to grow by almost 770,000 households between 2016 and 2036. Driven by an ageing population, lone person households will contribute the largest share of this change, with a growth of over 240,000 households.

FIGURE 21: HOUSEHOLDS BY TYPE, 2016 - 2036



Source: SGS Economics & Planning, based on ABS Census 2016 and VIF 2016

FIGURE 22: FORECAST DEMAND (HOUSEHOLDS) FOR SOCIAL AND AFFORDABLE HOUSING, METROPOLITAN MELBOURNE, 2016 - 2036

	2016	2036	Change	AAGR
Couple family with children	29,274	39,282	10,008	1.5%
Couple family with no children	33,711	49,631	15,920	2.0%
One parent family	40,488	59,075	18,588	1.9%
Other family	5,266	7,026	1,760	1.5%
Group household	20,892	26,560	5,668	1.2%
Lone person household	101,608	156,467	54,859	2.2%
<b>Total</b>	<b>231,238</b>	<b>338,040</b>	<b>106,802</b>	<b>1.9%</b>
Very low income	152,438	223,573	71,135	1.9%
Low income	50,659	73,394	22,735	1.9%
Moderate income	28,141	41,073	12,932	1.9%
<b>Total</b>	<b>231,238</b>	<b>338,040</b>	<b>106,802</b>	<b>1.9%</b>

Source: SGS Economics and Planning, based on ABS Census 2016, VIF 2016, and City of Melbourne household forecasts

Assuming no changes to the existing market structure<sup>6</sup> (such as the distribution of incomes and rents and the efficiency of matching between rental properties with households), demand for social and affordable housing will grow by 107,000 over the 20-year period. By 2036, this will represent 13.3 per cent of all households. Figure 22 segments this demand twice, once by household type and once by income group. Under this baseline scenario, the greatest need will be expressed by lone person households and those on very low incomes.

A third segmentation of demand, which will influence the nature of social and affordable housing required, is the presence of household members with special needs due to a disability or mental health condition. These households are more likely to require greater access to health services, public transport, and may require specialist dwelling forms.

These special needs households satisfy the following criteria<sup>7</sup>:

- They have one or more household members who, due to disability or mental illness, are 'profoundly limited in core activities' (i.e. a person is unable to do, or always needs help with a core-activity task such as communication, mobility or self-care)
- Have a low income (defined as falling within the bottom 40<sup>th</sup> percentile of equivalised household income)
- Occupy a dwelling under a rental or rent-free tenure. This includes households currently in social housing but excludes those in life-tenure arrangements such as retirement villages (as these are similar to home ownership).

This does not represent all households with a member who has a disability, but rather the groups which will be most vulnerable to homelessness, and in need of housing support with special considerations.

Between 2016 and 2036 demand from this group will increase in line with population growth, from 19,000 to almost 28,000 households. Although lone person households form the largest component of this demand, a large share is also formed by one parent families.

<sup>6</sup> Further detail provided in Appendix 1

<sup>7</sup> These households are assumed to be a subset of the overall demand measured previously (i.e. 100 per cent overlap) and cannot be further segmented by income groups. This is due to the use of an external data source to measure disability and mental health conditions. Further detail provided in appendix

FIGURE 23: FORECAST DEMAND (HOUSEHOLDS) FOR SOCIAL AND AFFORDABLE HOUSING DUE TO DISABILITY OR MENTAL HEALTH CONDITION, METROPOLITAN MELBOURNE, 2016 - 2036

	2016	2036	Change	AAGR
Couple family with children	1,998	2,724	726	1.6%
Couple family with no children	411	649	238	2.3%
One parent family	7,587	10,762	3,175	1.8%
Group household	213	314	101	2.0%
Lone person household	8,876	13,349	4,473	2.1%
<b>Total</b>	<b>19,084</b>	<b>27,797</b>	<b>8,713</b>	<b>1.9%</b>

Source: SGS Economics and Planning, based on ABS Survey of Disability, Aged, and Carers (2015) and VIF 2016.

## Distribution scenarios

The forecast demand for 338,000 social and affordable housing could be accommodated across metropolitan Melbourne in a range of ways, based on factors such as maximising the opportunities available to tenants, cost minimisation to providers, or integration with private dwelling stock. This section considers four different approaches to distributing future demand. The first is to simply weight the distribution of social and affordable housing to align with the future population distribution; the second also uses a weighting method but carries out the distribution for each household type in turn; the third also uses a household type specific weighting method but excludes less accessible parts of the city from the distribution; and the fourth includes a separate distribution procedure for the identified 'Key Workers' within the overall group of households forecast to be in need of affordable housing.

Each of these distribution scenarios are explained in the following pages.

### Scenario 1 – Household (total) weighted distribution

Scenario 1 allocates future demand for social and affordable housing in alignment with the total number of households across the municipalities of Melbourne. This results in the City of Melbourne accommodating 6.2 per cent of metropolitan demand. This distribution will result in spatial integration between social and affordable housing and households in the private market and can be interpreted as a 'fair share' scenario.

### Scenario 2 – Household (by type) weighted distribution

Scenario 2 refines the method used in Scenario 1. Here, future demand for social and affordable housing generated by each household type is considered separately. The demand for each household type is distributed in alignment with the number of households of that type across the municipalities of Melbourne. This still represents a 'fair share' scenario but avoids the misalignment of household types<sup>8</sup> that occurs under scenario 1.

### Scenario 3 - Household weighted distribution in accessible locations

This scenario assumes that the future demand for social and affordable housing will be excluded from areas of Melbourne which have a poor<sup>9</sup> level of accessibility to jobs and services<sup>10</sup>. This is achieved using a measure known as effective job density, as shown below.

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<sup>8</sup> E.g. Casey has the greatest share of households in 2036, which are primarily family households. On the other hand, lone person households form the greatest share of demand for social and affordable housing across metropolitan Melbourne. Under Scenario 1, Casey would be allocated an inappropriately large amount of lone person household demand, which will not occur under Scenario 2

<sup>9</sup> Areas with an EJD in the lowest 25<sup>th</sup> percentile are excluded

<sup>10</sup> This is based on the current (2016) state, and not a modelled future scenario (e.g. including future infrastructure)

## WHAT IS EFFECTIVE JOB DENSITY?

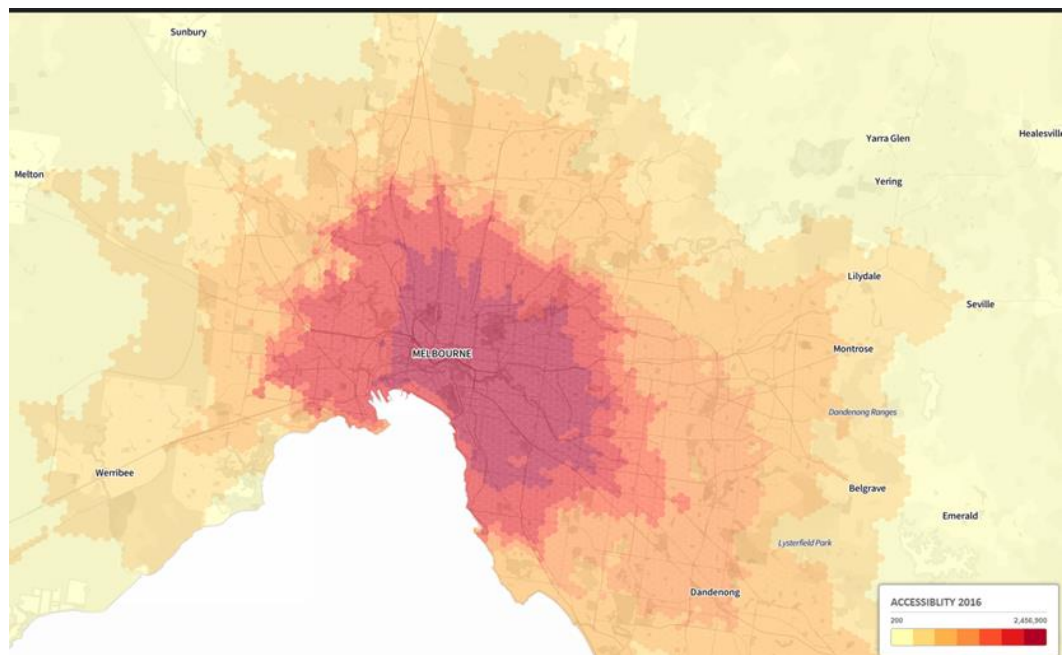
EJD indicates the accessibility to jobs in a given area based on the location of jobs, both in the area and how long it takes to get to other jobs across Melbourne. It is linked to the transport networks and infrastructure, a high EJD can be a result of having a large pool of employment nearby or being well connected to more distant employment.

$$\text{For a given spatial zone, } EJD_i = \sum_j \left[ \frac{PTMS_j * Emp_j}{PT_{i,j}} + \frac{PVMS_j * Emp_j}{PV_{i,j}} \right]$$

Where:

- $Emp_j$  = Employment in zone  $j$
- $EJD_i$  = Effective Job Density of zone  $i$
- $PTMS_j$  = per cent of trips to zone  $j$  which involve public transport
- $PVMS_j$  = per cent of trips to zone  $j$  which involve private vehicles (i.e. Car)
- $PT_{i,j}$  = Travel time from zone  $i$  to zone  $j$  by public transport
- $PV_{i,j}$  = Travel time from zone  $i$  to zone  $j$  by private vehicle

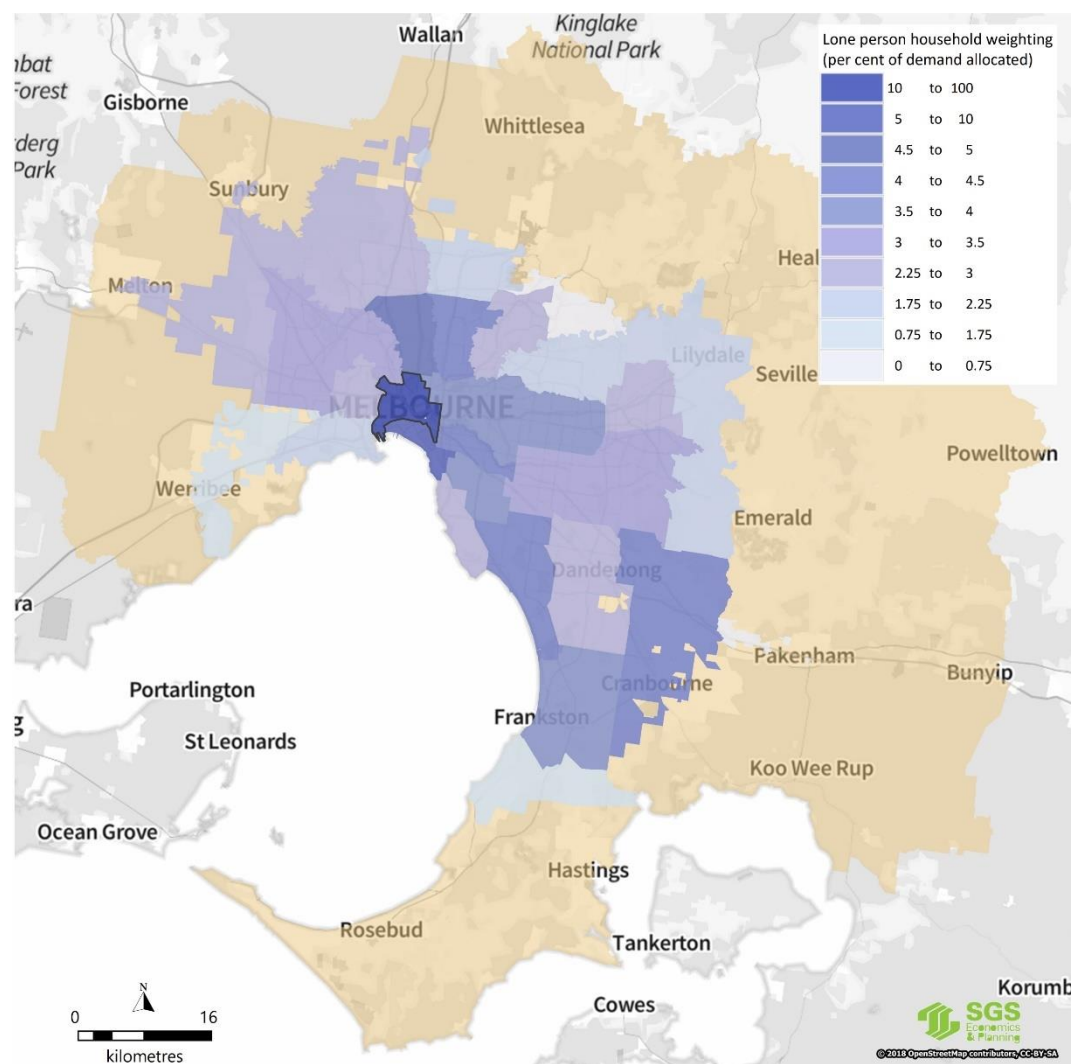
FIGURE 24: EFFECTIVE JOB DENSITY (2016)



Source: SGS Economics and Planning

Figure 24 illustrates accessibility across metropolitan Melbourne in 2016, showing that the central city and inner east perform best, while the western and northern growth areas have poorer access to jobs and services.

FIGURE 25: SCENARIO 3 - DISTRIBUTION OF DEMAND FOR LONE PERSON HOUSEHOLDS (2036)



Source: SGS Economics and Planning

In Scenario 3, the geographic scope for allocating demand is restricted by excluding areas which have an EJD in the lowest quartile. Next, demand for social and affordable housing is allocated based on the relative quantum of households (i.e. all households, regardless of whether they require affordable housing) within this area. Figure 25 presents this restricted geographic scope (i.e. the yellow shaded area has relatively low accessibility), and the weighting distribution for lone person households<sup>11</sup> within the area.

#### Scenario 4 – Key worker adjusted distribution

This scenario is designed to allocate demand for affordable housing in a manner which prioritises the needs of *Key Workers*. That is, it attempts to predict the demand for social and affordable housing spatially to align with the workplaces of *Key Workers*.

An integral component of this analysis is the definition of what constitutes *Key Workers*. While the term ‘key worker’ is widely used, it has no accepted definition, and its use can lead to confusion. It is often interpreted as referring to workers that provide essential services (e.g. police officers, fire services, nurses and teachers). However, unless early in their career, workers in these occupations are unlikely to fall within the very low, low or moderate household income bands, particularly where they reside with another income earner. Non-

<sup>11</sup> Each of the other 5 household types use their corresponding distributions

tertiary educated key workers – such as child carers, hospitality workers, cleaners, delivery drivers and chefs – are more likely to have lower incomes and experience housing stress.

It is therefore difficult to identify *Key Workers* based on observable characteristics (e.g. occupation). It could be argued that all workers are ‘key’ in some aspect, whether it be to the wellbeing of their firm, industry, or local economy/community where they are employed.

Therefore, the objective of this fourth scenario can be viewed as solving a two-step problem:

- Of the households in need of housing assistance, which include *Key Workers* and how can they be identified?
- In what locations across metropolitan Melbourne, is social and affordable housing required to cater for the needs of these *Key Worker* households?

While individuals across all three income groups (very low, low, and moderate) may be engaged in the workforce from time to time, it is likely that those in the ‘Moderate income’ category derive most of their earnings from employment, and are the individuals implied by the term *Key Worker*. Those in the lower income categories are more likely to depend on other sources of income (e.g. government assistance, pension, superannuation) and therefore are less likely to work full time. In Greater Melbourne (GCCSA), 68 per cent of individuals (aged over 20 and not studying) earning a moderate income were employed full time, compared to only 33 per cent for those earning a low income and just 4 per cent for those earning a very low income (ABS Census 2016). Therefore, in the following analysis it has been assumed that all moderate income households contain *Key Workers*.

For context, Appendix 3 provides additional analysis of the income characteristics of *Key Workers*, using a selected group of occupations. This illustrates the dispersed income distributions for occupations which are often referred to as *Key Worker*, with some (particularly essential services such as teachers/emergency services) primarily earning above moderate incomes. Note that the analysis is conducted for lone persons, as the income characteristics of other household types are difficult to determine (e.g. a moderate income couple family household may have one member earning an above moderate income while the other earns a very low income).

This scenario applies the same assumptions as Scenario 3 for those in-need households in the *Very Low* and *Low* income categories but adopts an employment-weighted distribution for in-need households in the *Moderate* income category. As a result, those locations which host a large shares of moderate income jobs have been assigned a higher share of the total social and affordable housing demand which stems from moderate income households. This allocation of demand from moderate income households has been derived via the following process:

- Establish the existing relationship between income groups and industry classifications (1-digit ANZSIC 2006), shown below in Figure 26
- Apply this distribution to SGS’s employment by industry forecasts, which will reflect changes to both the spatial and industry distribution of employment in Greater Melbourne. A continuing transition to a knowledge and service-sector dominated economy will result in two key outcomes for the City of Melbourne:
  - An increased concentration of employment, as agglomeration effects intensify, will result in the Melbourne LGA containing 19 per cent of employment in 2036, compared to 13 per cent in 2016
  - Income profiles of those who work in the City of Melbourne will change in response to the shift towards the knowledge intensive economy
- Use the resulting forecast of moderate income jobs to distribute metropolitan demand for social and affordable across LGAs.



FIGURE 26: INCOME DISTRIBUTION BY INDUSTRY (GREATER MELBOURNE)

	Very Low Income	Low Income	Moderate Income	Above Moderate Income
Agriculture, Forestry and Fishing	20%	26%	27%	26%
Mining	3%	5%	16%	76%
Manufacturing	9%	18%	33%	40%
Electricity, Gas, Water and Waste Services	3%	8%	26%	63%
Construction	9%	15%	29%	47%
Wholesale Trade	9%	16%	32%	43%
Retail Trade	36%	24%	23%	17%
Accommodation and Food Services	50%	22%	20%	8%
Transport, Postal and Warehousing	9%	17%	34%	40%
Information Media and Telecommunications	9%	9%	21%	60%
Financial and Insurance Services	4%	9%	24%	63%
Rental, Hiring and Real Estate Services	10%	16%	30%	44%
Professional, Scientific and Technical Services	8%	10%	22%	59%
Administrative and Support Services	22%	24%	28%	26%
Public Administration and Safety	5%	9%	25%	60%
Education and Training	17%	16%	23%	44%
Health Care and Social Assistance	15%	23%	29%	33%
Arts and Recreation Services	31%	18%	23%	28%
Other Services	23%	25%	30%	23%
<b>Total</b>	<b>17%</b>	<b>18%</b>	<b>26%</b>	<b>39%</b>

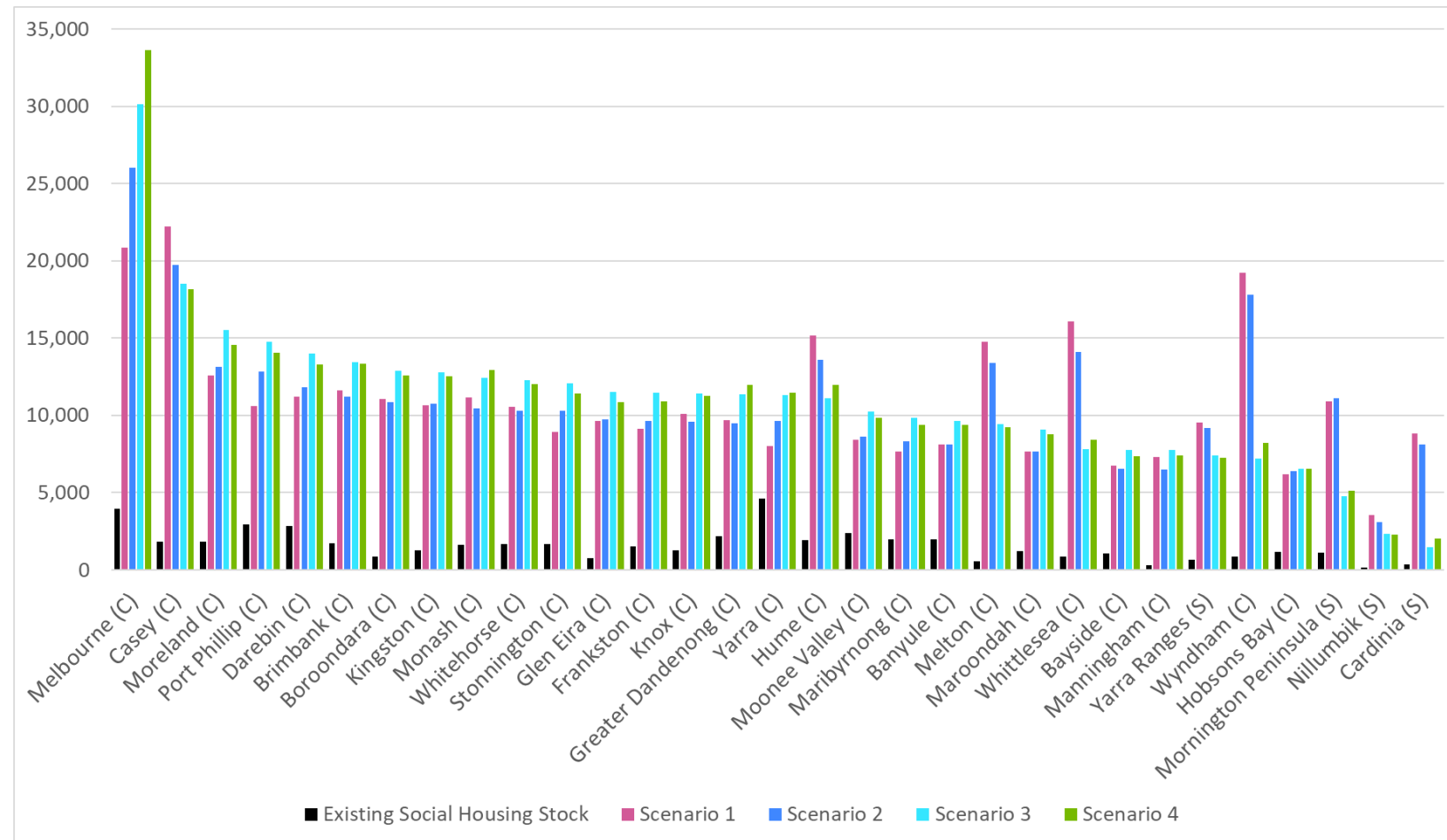
Source: ABS Census 2016

### City of Melbourne

The City of Melbourne is forecast<sup>12</sup> to accommodate an additional 193,000 people or 88,000 households between 2016 and 2036, resulting in a total of 341,000 people and 157,000 households in 2036. The results of applying the four scenario distribution methods are summarised in Figure 27. Of the four scenarios, Scenarios 3 and 4, which prioritise locations which have high accessibility and *Key Worker* employment respectively, show the most demand for social and affordable housing.

<sup>12</sup> Source: City of Melbourne forecasts

FIGURE 27: TOTAL DEMAND (HOUSEHOLDS) FOR SOCIAL AND AFFORDABLE HOUSING SCENARIOS BY LGA (2036)



Source: SGS Economics and Planning, based on ABS Census 2016, VIF2016, and City of Melbourne household forecasts

Figure 28 and Figure 29 disaggregate the demand<sup>13</sup> allocated to the City of Melbourne by household type. These indicate that:

- **Scenario 1** results in demand for 21,000 social and affordable housing dwellings within the City of Melbourne by 2036, or 13.3 per cent of the total dwelling stock in the City of Melbourne
- **Scenario 2** results in demand for 26,000 social and affordable housing dwellings within the City of Melbourne by 2036, or 16.6 per cent of the total dwelling stock in the City of Melbourne
- **Scenario 3** results in higher demand within the City of Melbourne, and lower demand within most Growth Area municipalities (see Figure 27). In this case, there will be demand for 30,000 social and affordable housing dwellings within the City of Melbourne by 2036, or 19.2 per cent of total dwelling stock in the City of Melbourne
- **Scenario 4** results in demand for almost 34,000 social and affordable housing dwellings within the City of Melbourne, or 21.5 per cent of total dwelling stock. This is the highest across the four scenarios
- Once existing stock has been accounted for, between 16,900 and 29,700 *additional* social and affordable housing dwellings will be required between 2016 and 2036 depending on which of the scenarios is applied.

Of this demand, over 50 per cent is for lone person households, which is a result of the relatively high share of this household type forecast within the municipality. Group households also form a large component, as a common housing choice for those who work in the CBD and surrounding precincts. While households with dependents form a relatively small share of demand, between 2,500 and 6,000 households, they will likely require a higher depth of subsidy due to their dwelling requirements and the expenses of dependents.

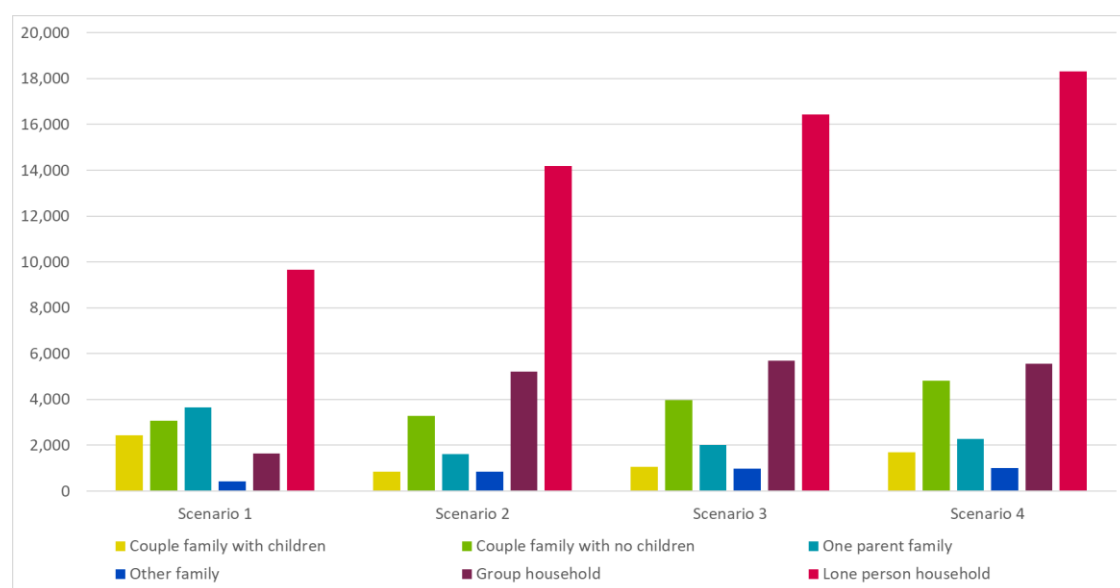
FIGURE 28: DEMAND (HOUSEHOLDS) FOR SOCIAL AND AFFORDABLE HOUSING BY HOUSEHOLD TYPE IN THE CITY OF MELBOURNE (2036)

	Scenario 1 (2036)	Scenario 2 (2036)	Scenario 3 (2036)	Scenario 4 (2036)
Couple family with children	2,423	850	1,053	1,681
Couple family with no children	3,061	3,288	3,972	4,814
One parent family	3,643	1,621	2,002	2,269
Other family	433	851	970	993
Group household	1,638	5,221	5,698	5,563
Lone person household	9,650	14,179	16,444	18,320
<b>Total</b>	<b>20,848</b>	<b>26,009</b>	<b>30,139</b>	<b>33,640</b>
Demand as per cent of total households in CoM	13.3%	16.6%	19.2%	21.5%
Existing Social Housing Stock	3,970	3,970	3,970	3,970

Source: SGS Economics and Planning, based on ABS Census 2016, VIF2016, and City of Melbourne household forecasts

<sup>13</sup> Note that the demand scenarios are derived from a metropolitan estimate which include student households. However, at a metropolitan scale, students do not comprise a large share of households in need of assistance. This means that the impact on the scenario estimates for the City of Melbourne is small (unlike the present-day analysis of the City of Melbourne presented in the prior section)

FIGURE 29: DEMAND (HOUSEHOLDS) FOR SOCIAL AND AFFORDABLE HOUSING IN THE CITY OF MELBOURNE (2036)



Source: SGS Economics and Planning, based on ABS Census 2016, VIF2016, and City of Melbourne household forecasts

Figure 30 segments the results by income groups. Very low income households comprise the largest component of demand across all scenarios for the City of Melbourne, IMP region and IMA region.

While low income households form the second largest component of demand in the City of Melbourne for scenarios 1 to 3, this is not the case under scenario 4. The municipality has the highest concentration of employment within metropolitan Melbourne, with this agglomeration expected to intensify in the future. The objective of scenario 4, which is to align demand for social and affordable housing with the workplaces of *Key Workers*, therefore results in the largest allocation being to the City of Melbourne.

An important observation to note is that the share of demand (relative to total households) is lower in all scenarios (13.3 per cent to 21.5 per cent) than the estimated share in 2016 (30 per cent). This reflects the fact that the distributional assumptions used for each scenario do not preserve existing patterns such as the high rate of social housing in City of Melbourne (relative to other municipalities) or the choice of some cohorts to bear rental stress. As discussed above, the measured number of households in rental stress may include groups such as students or working holidaymakers, some of whom will have high housing costs relative to incomes yet are not in housing stress and therefore do not contribute to demand for social and affordable housing<sup>14</sup>.

<sup>14</sup> Note that although the issue is present for the metropolitan forecast of demand, the impact on the City of Melbourne is less acute than that reported in section 2.3. This is because these households have been distributed across all LGAs

FIGURE 30: DEMAND (HOUSEHOLDS) FOR SOCIAL AND AFFORDABLE HOUSING BY INCOME GROUP IN THE CITY OF MELBOURNE, INNER METRO PARTNERSHIP REGION, AND INNER MELBOURNE ACTION PLAN (IMAP) REGION PLUS MOONEE VALLEY (2036)

		Scenario 1 (2036)	Scenario 2 (2036)	Scenario 3 (2036)	Scenario 4 (2036)
Very low income	IMP Region	26,089	30,608	35,591	35,591
	IMAP (plus Moonee Valley)	42,649	48,398	56,661	56,661
	City of Melbourne	13,789	16,158	18,787	18,787
Low income	IMP Region	8,565	11,020	12,734	12,734
	IMAP (plus Moonee Valley)	14,001	16,949	19,716	19,716
	City of Melbourne	4,527	6,054	6,993	6,993
Moderate income	IMP Region	4,793	6,859	7,870	10,820
	IMAP (plus Moonee Valley)	7,835	10,348	11,942	13,426
	City of Melbourne	2,533	3,798	4,360	7,860
<b>Total demand</b>	<b>IMP Region</b>	<b>39,447</b>	<b>48,487</b>	<b>56,194</b>	<b>59,145</b>
	<b>IMAP (plus Moonee Valley)</b>	<b>64,485</b>	<b>75,695</b>	<b>88,319</b>	<b>89,804</b>
	<b>City of Melbourne</b>	<b>20,848</b>	<b>26,009</b>	<b>30,139</b>	<b>33,640</b>
Demand share of total households	IMP Region	13.3%	16.4%	19.0%	20.0%
	IMAP Region	13.3%	15.6%	18.2%	18.5%
	City of Melbourne	13.3%	16.6%	19.2%	21.5%
Existing social housing stock	IMP Region	11,540	11,540	11,540	11,540
	IMAP (plus Moonee Valley)	17,570	17,570	17,570	17,570
	City of Melbourne	3,970	3,970	3,970	3,970

Source: SGS Economics and Planning, based on ABS Census 2016, VIF2016, and City of Melbourne household forecasts

## Age and disability

In addition to identifying the quantum of demand, the typology of affordable housing required will be an important consideration when planning future supply. Figure 31, which presents the forecast population by age for the City of Melbourne, highlights the effect of an ageing population, which sees the 65+ year old age group growing fastest within the municipality. This trend is reflected in the results above, which show high demand stemming from lone person households and couple families with no children.

FIGURE 31: POPULATION BY AGE IN THE CITY OF MELBOURNE

	2016	2036	Change	AAGR
0-19 years old	21,459	56,635	35,176	5.0%
20-40 years old	90,236	168,812	78,576	3.2%
40-65 years old	26,359	83,261	56,902	5.9%
65+ years old	9,986	32,014	22,028	6.0%
<b>Total Population</b>	<b>148,040</b>	<b>340,722</b>	<b>192,682</b>	<b>4.3%</b>

Source: City of Melbourne, 2018

For the City of Melbourne to provide for households with a disability at the same rate as the metropolitan average, in the order of 1,650 (scenario 1) to 2,000 (scenario 2) dwellings would be required by 2036<sup>15</sup>. Over 70 per cent of these will be lone person households. Note that the households considered in this section are those with profound disabilities, meaning that they likely have more specialised requirements than the accessibility standards preferred by affordable housing in general.

For those with limited mobility, the ability to perform common tasks such as carrying shopping into the home, cooking a meal, using the bathroom or accessing items from high shelves may be unnecessarily limited by the physical design of their home. The Liveable Housing Design guidelines were introduced in 2010 to address this issue and encourage those in the residential design and construction industry to make homes safer for people of all ages and capabilities, particularly the elderly and those with limited mobility. A summary of the design principles from the Liveable Housing Design guidelines is presented in the break out box below.

### THE LIVEABLE HOUSING DESIGN GUIDELINES

- 1) There is a safe, continuous, step-free pathway from the street entrance and/or parking area to a dwelling entrance that is level
- 2) There is at least one level entrance into the dwelling to enable home occupants to easily enter and exit the dwelling
- 3) Where the parking space is part of the dwelling access, it should allow a person to open their car doors fully and easily move around the vehicle
- 4) Internal doors and corridors facilitate comfortable and unimpeded movement between spaces
- 5) The entry level has a toilet to support easy access for home occupants and visitors
- 6) The bathroom and shower is designed for easy and independent access for all home occupants

<sup>15</sup> Derived using the metropolitan forecast of disability demand (Figure 23) and the assumptions that the ratio of disability demand to the quantum of total demand (by household type) is the same in the City of Melbourne.

- 7) The bathroom and toilet walls are built to enable grabrails to be safely and economically installed
- 8) The bathroom and toilet walls are built to enable grabrails to be safely and economically installed
- 9) Where installed, stairways are designed to reduce the likelihood of injury and enable future adaptation
- 10) The kitchen space is designed to support ease of movement between fixed benches and to support easy adaptation
- 11) The laundry space is designed to support ease of movement between fixed benches and to support easy adaptation
- 12) There is space on the entry level that can be used as a bedroom
- 13) Light switches and powerpoints are located at heights that are easy to reach for all home occupants
- 14) Home occupants can easily and independently open and close doors and safely use tap hardware
- 15) The family/living room features clear space to enable the home occupant to move in and around the room with ease
- 16) Window sills are installed at a height that enables home occupants to view the outdoor space from either a seated or standing position
- 17) Floor coverings are slip resistant to reduce the likelihood of slips, trips, and falls in the home.



## 2.5 Projected need by household type and housing service

As alluded to above, the measured current and projected need for affordable housing in the City of Melbourne encompasses the requirements of very low income households requiring homelessness services through to *Key Workers* who have secure employment but are unable to find affordable rental accommodation. In Figure 36 we discuss a continuum of housing services to meet the needs of this spectrum of households. The following table presents our findings of total affordable housing need in the City as at 2036, broken down by their likely housing service requirements.

FIGURE 32 OVERVIEW OF AFFORDABLE HOUSING NEED – CITY OF MELBOURNE 2036

Needs category		Crisis/Transitional Housing	Social Housing	Affordable Housing
Income bands (total pre-tax household income)		All income groups	<ul style="list-style-type: none"> <li>- Singles: \$0 - \$40,340</li> <li>- Single parents: \$0 - \$84,720</li> <li>- Couples with children and other family types: \$0 - \$84,720</li> <li>- Couples without children and group households: \$0 - 60,520</li> </ul>	<ul style="list-style-type: none"> <li>- Singles: \$40,340 - \$60,510</li> <li>- Single parents: \$84,720 - \$127,800</li> <li>- Couples with children and other family types: \$84,720 - \$127,800</li> <li>- Couples without children and group households: \$60,520 - 90,770</li> </ul>
Typical household types		<ul style="list-style-type: none"> <li>- Households experiencing an adverse shock or crisis</li> </ul>	<ul style="list-style-type: none"> <li>- Households at risk of homelessness</li> <li>- Households with intermittent engagement in the workforce or below moderate incomes</li> </ul>	<ul style="list-style-type: none"> <li>- 'Key Worker' households</li> <li>- 'Creatives' with intermittent and multiple portfolio work</li> <li>- Moderate income households who derive income through workforce engagement</li> </ul>
Projected <i>total</i> need (beds or dwelling units) in City of Melbourne in 2036 (including existing stock of social housing)	Scenario 1	1,423 (beds)	18,315 (dwellings)	2,533 (dwellings)
	Scenario 2	1,423 (beds)	22,211 (dwellings)	3,798 (dwellings)
	Scenario 3	1,423 (beds)	25,780 (dwellings)	4,360 (dwellings)
	Scenario 4	1,423 (beds)	25,780 (dwellings)	7,860 (dwellings)
Housing services required		<ul style="list-style-type: none"> <li>- Emergency shelters / crisis accommodation.</li> <li>- Transitional / supported housing</li> </ul>	<ul style="list-style-type: none"> <li>- Social housing (public housing and community housing)</li> </ul>	<ul style="list-style-type: none"> <li>- Affordable rental housing other than that included in social housing - could be operated by NFPs and private sector under special agreements</li> <li>- Affordable home ownership / shared home ownership</li> </ul>

Source: SGS Economics & Planning Pty Ltd

This alignment is based on the following key assumptions:

- **Crisis or Transitional Housing** comprises supported short-term accommodation programs. They will be required even in the absence of housing affordability issues, as one-off crises will occur, causing individuals/households to require assistance which acts as a steppingstone to more permanent tenure (e.g. social housing or

private rental). Therefore, this represents a net addition to the demand for social and affordable housing estimated in the sections above

- The analysis above forecasts demand for transitional housing at a Victorian level based on the current *expressed* demand for transitional housing (AIHW specialist homelessness services collection data, 2018), and the assumption that the rate of demand (with respect to total population) remains constant. The demand forecast for the City of Melbourne is then allocated based on the LGA's current share of clients who are (or at risk of) homeless
- **Social Housing** is a significantly subsidised form of assistance, which will typically seek to limit rental payments based on the income of tenants. Social housing is short and long-term rental housing that is owned and run by the government or not-for-profit agencies. It is made up of two types of housing, public housing and community housing
  - This analysis assumes that the 'very low' and 'low' income households who are forecast to require housing assistance will drive demand for social housing. Note that this is likely a conservative estimate, as some 'moderate' income households may also be unable to afford a slightly discounted market rent
- **Affordable Housing** requires the lowest level of subsidy, while still being more affordable than the market rental rate (e.g. 80 per cent of the market rate).
  - This analysis assumes that 'moderate' income households who are forecast to require housing assistance will drive demand for affordable housing

## 2.6 Synthesis

There is a current aggregate need for social and affordable housing in the City of Melbourne of at least 9,436 units. This figure largely excludes student households and can, therefore, be regarded as a lower bound estimate. An upper bound estimate which includes student households reaches 20,269 units. Current supply, as measured by the stock of social housing, is around 3,970 units. The City of Melbourne, therefore, has a deficiency in its social and affordable housing infrastructure of around 5,500 units. At a nominal acquisition cost of \$0.5 million per unit, this represents a \$2.75 billion infrastructure deficit.

As with any other form of infrastructure, the need for social and affordable in the City of Melbourne will increase with population growth. Future need will also be affected by property market trends and patterns of income growth. SGS estimates that if there is no addition to the City's social and affordable housing stock, the shortfall in these dwellings will grow to between 16,900 and 29,700 units by 2036 depending on the share of metropolitan growth in affordable housing need which is assigned to the Melbourne LGA. An approach prioritising provision for *Key Worker* households (i.e. scenario 4) indicates that within this overall pool of need for affordable housing in the City there will be a requirement for up to 7,860 *Key Worker* housing units (i.e. dwellings) by 2036.

# 3. WHY SHOULD COUNCIL GET INVOLVED?

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Social and affordable housing has traditionally been the policy province of the State and Commonwealth Governments. What might justify Council involvement in meeting at least part of the need measured in the previous Chapter? The policy rationale for the City of Melbourne's involvement is examined from several perspectives in this Chapter. This includes the value that can be created for the wider municipal community were the City to bring about a greater stock of social and affordable housing versus what might happen under a passive policy scenario. Also canvassed is the City of Melbourne's special obligation to create opportunities for the most marginalised in the community given that the City is the beneficiary of disproportionate taxpayer investment in infrastructure and services. This Chapter also notes the unique opportunity which the City has to improve the welfare of particular groups of at-risk households.

## 3.1 Scope

Set out below is a review of Australian and international literature relevant to two key questions raised explicitly or implicitly in Council's brief to SGS:

- Why should the City of Melbourne be interested in the provision of social and affordable housing? What value could such an ambition deliver to the municipality, and to metropolitan Melbourne and the state of Victoria more broadly?
- In recognition of the unique attributes of a Capital City Council, does the municipality have a special opportunity or obligation to engage with social and affordable housing? Is the argument for Council involvement in social and affordable housing stronger than that for other metropolitan municipalities?

## 3.2 Context

Before going to these substantive questions, it is useful to outline the changing role of the central city in the modern Australian metropolis and the implications for housing and social geography.

### The rise of the 21<sup>st</sup> Century City

In recent decades, cities across the world have undergone intensive processes of regeneration to assert themselves within the global marketplace and attract footloose capital and investment.<sup>16 17 18 19</sup> Such processes have been driven by localised policies encouraging repopulation of the urban core through the promotion of residential development and urban living. Frequently employed in combination with strategies to stimulate retail regeneration

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<sup>16</sup> Adams, R. (2008), 'From Industrial City to Eco-Urbanity: The Melbourne Case Study', *Planning News*, 34(1): 6-11.

<sup>17</sup> Bromley, R., Tallon, A. and Roberts, A. (2007), 'New Populations in the British City Centre: Evidence of social change from the census and household surveys', *Geoforum*, (38): 138-154.

<sup>18</sup> Dingle, T. and O'Hanlon, S. (2009), 'From Manufacturing Zone to Lifestyle Precinct: Economic restructuring and social change in inner Melbourne, 1971-2001', *Australian Economic History Review*, 49(1).

<sup>19</sup> Rérat, P. (2012), 'The New Demographic Growth of Cities: The case of reurbanisation in Switzerland', *Urban Studies*, 49(5): 1107-1125.

and historic conservation, these policies have been underpinned by broader social and economic changes. These changes include increasing exposure of national economies to international markets, the decline of manufacturing and concurrent growth in business services, increasing family fragmentation and diminishing household sizes, and rising concerns for sustainability in the face of urban sprawl.<sup>20 21</sup>

Melbourne, Australia's second largest city with a population of 4.5 million, has been an active participant in this transformative urban trend, seeking to distinguish itself as a '21<sup>st</sup> Century City'.<sup>22 23 24</sup> Spurred by the continuing construction of 'inappropriate international style developments, the invasion of the automobile, the destruction of heritage areas, and the decline of the central city', policies were adopted in the early 1990s at both state and local government levels with a vision to transform Melbourne's struggling Central Business District (CBD) into a thriving place to live and play after dark.<sup>25 26</sup>

These policies are considered to have been a resounding success, with the population of the City of Melbourne increasing from approximately 34,000 in 1991 to 179,307 in 2019, and the total number of dwellings rising from 14,000 in 1993 to 82,673 at present.<sup>27</sup> Supporting retail and hospitality industries have also recorded significant growth, with the number of bars, cafes and restaurants in the CBD increasing from 580 in 1998 to 3,025 in 2017.<sup>28 29</sup> These figures far surpass initial projections, and it is predicted that this trend of rapid growth is likely to continue with 340,722 residents and 156,665 households forecast for the year 2036.<sup>30</sup>

### Housing affordability and the geography of disadvantage

However, despite widespread acclaim, the continuing transformation of central Melbourne has not held positive consequences for all. The ongoing processes of gentrification have contributed to a significant housing affordability problem with a broad range of social and economic consequences.<sup>31 32</sup>

The location preferences of households are complex, linked to a broad array of factors including household wealth, the requirements of life-cycle stage, health and disability status, personal identity or desire to progress personal goals (for example career advancement).<sup>33 34</sup> However, the ability of a household to execute preferences based on these factors is highly dependent on the resources that they control. While those with considerable wealth

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<sup>20 20</sup> Bromley, R., Tallon, A. and Roberts, A. (2007), 'New Populations in the British City Centre: Evidence of social change from the census and household surveys', *Geoforum*, (38): 138-154.

<sup>21</sup> Bradbury, M., Peterson, M., and Liu, J. (2014), 'Long-term dynamics of household size and their environmental implications', *Population & Environment*, 36(1): 73-84.

<sup>22</sup> State Government of Victoria (1995), *Living Suburbs: A policy for Metropolitan Melbourne into the 21<sup>st</sup> century*, Melbourne: State Government of Victoria.

<sup>23</sup> Adams, R. (2008), 'From Industrial City to Eco-Urbanity: The Melbourne Case Study', *Planning News*, 34(1): 6-11.

<sup>24</sup> Engels, B. (2000), 'City Make-Overs: The place-marketing of Melbourne during the Kennett years, 1992-99', *Urban Policy and Research*, 18(4): 469-494.

<sup>25</sup> Adams, R. (2008), 'From Industrial City to Eco-Urbanity: The Melbourne Case Study', *Planning News*, 34(1): 3.

<sup>26</sup> State Government of Victoria (1995), *Living Suburbs: A policy for Metropolitan Melbourne into the 21<sup>st</sup> century*, Melbourne: State Government of Victoria.

<sup>27</sup> City of Melbourne (2018), Population forecasts;

[https://msd.unimelb.edu.au/\\_data/assets/pdf\\_file/0004/2720740/vertical-living-kids.pdf](https://msd.unimelb.edu.au/_data/assets/pdf_file/0004/2720740/vertical-living-kids.pdf) ;

<https://www.melbourne.vic.gov.au/SiteCollectionDocuments/future-living-discussion-paper.pdf>

<sup>28</sup> Adams, R. (2008), 'From Industrial City to Eco-Urbanity: The Melbourne Case Study', *Planning News*, 34(1): 3.

<sup>29</sup> City of Melbourne (2017), 'Accommodation and Food Services Statistics', Melbourne: City of Melbourne. Retrieved 14 January 2019 from: <http://melbourne.geografia.com.au/industries/anzsic/H>

<sup>30</sup> .id (2019), City of Melbourne: Population, households and dwellings. Accessed 14 January 2019 from:

<https://forecast.id.com.au/melbourne/population-households-dwellings>

<sup>31</sup> Randolph, B., & Holloway, D. (2004), 'The suburbanization of disadvantage in Sydney', *Opolis*, 1(1): 49-65

<sup>32</sup> Atkinson, R., Wulff, M., Reynolds, M., and Spinney, A. (2011), 'Gentrification and displacement: The household impacts of neighborhood change', Australian Housing and Urban Research Institute. Melbourne: AHURI.

<sup>33</sup> Cooper Marcus, C. (1995), *House as a Mirror of Self: Exploring the deeper meaning of home*, Berkeley: Conary Press.

<sup>34</sup> Karsten, L. (2007), 'Housing as a way of life: Towards an understanding of middle-class families' preference for an urban residential location', *Housing Studies*, 22(1): 83-98.

<sup>35</sup> Yuen, S. and Appold, B. (2007), 'Families in Flats, Revisited', *Urban Studies*, 44(3): 569-589.

<sup>36</sup> Baker, E., Bentley, R., Lester, L. and Beer, A. (2016), 'Housing affordability and residential mobility as drivers of locational inequality', *Journal of Applied Geography*, 72: 65-75.

and income may have the opportunity to choose a residential location that best meets their needs, low-income households inevitably have fewer choices, with the affordability of housing a key consideration.<sup>37</sup> Highly localised house price differentiation sees many low income households pushed down the affordability gradient, from the highly-priced inner city areas to comparatively affordable locations closer to the urban fringe. These locations are frequently defined by poor connectivity to services and employment, and poorer quality physical and social environments (as may be reflected by lower housing prices).

For those lower-income groups who choose to remain in the central city (for work, education, access to services or social connections - or all the above), the high cost of housing places a disproportionate burden on household finances. The experience of living in housing stress – whereby >30 per cent of household income is spent on rent - has substantial implications for individual and household wellbeing, as well as for broader community cohesion and productivity.

### Housing affordability and the City of Melbourne

In recognition of the growing issue of housing affordability in the central city, the resulting potential for negative social, economic and environmental outcomes, and the previous lack of appropriate action at the State and Commonwealth Government levels, the City of Melbourne is contemplating a proactive approach in addressing this issue within its municipal jurisdiction, as well as opportunities to advocate to state and local governments for action across the metropolitan area.

The City's lapsing housing policy – *Homes for People* – was adopted in 2014 with a vision for the central city to be a place where housing is affordable, well-designed and meets diverse needs. This policy sought to be holistic, understanding the important role housing plays in the health and wellbeing of residents and communities. In particular (and amongst other actions), the strategy suggested the inclusion of a proportion of dwellings as affordable housing on land owned by Council, and incentives for the provision of affordable housing through development bonuses (such as seen through Amendment C270 and at Fishermans Bend – see Section 4).

### 3.3 Creating city-wide value

Expanded availability of social and affordable housing brings benefits not only to the people who are provided with a secure home or removed from housing stress. It also creates value for the economic, social and cultural environment of the central city and wider community. Research into the impacts of increased social and affordable housing supply note the following key benefits:

- improved community cohesion and wellbeing
- improved competitiveness through more efficient local labour markets
- greater capacity for business and social innovation, and
- stronger city culture and branding.

### Community inclusion and diversity

#### Community inclusion

Wiesel *et al.* (2017) note the extent to which the contemporary planning discourse has consistently justified the uneven allocation of resources across metropolitan areas to enhance economic productivity.<sup>38</sup> In many cities, government investment in infrastructure has been targeted to regions with the highest economic growth potential, with these well-endowed

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<sup>37</sup> *Ibid.*

<sup>38</sup> Wiesel, I., Lui, F. and Buckle, C. (2017), 'Locational disadvantage and the spatial distribution of government expenditure on urban infrastructure and services in metropolitan Sydney (1988-2015)', *Journal of Geographical Research*, 56(3): 285-297.

areas (typically the CBD or central city) often correlated with high housing costs and poor affordability.<sup>39 40</sup>

Those who cannot secure affordable housing in these areas are required to find housing in an alternative location; frequently in parts of the city that are defined by significantly poorer access to employment, services, transport, lower amenity and higher levels of social 'dysfunction'.<sup>41 42</sup>

Such processes act to create areas of both concentrated advantage and disadvantage across the metropolitan region. Berry (2003) notes the way this process of locational disadvantage effectively traps or locks people in areas and contributes to cyclical processes of "decline and deprivation".<sup>43</sup>

There is a significant body of literature exploring the consequences of locational disadvantage and social segregation. The costs to individuals include poor psychological and wellbeing outcomes. Local communities suffer in terms of reduced social capital and cohesion, and increased rates of crime and violence. Meanwhile, the broader metropolitan and regional communities can see decreased productivity and rising fiscal costs to government<sup>44</sup>

People who are unable to find suitable affordable, appropriately located, housing and who remain in housing stress or insecure housing situations disproportionately suffer from a broad range of poor health, educational and social outcomes including<sup>45</sup>:

- poor self-esteem and sense of self-worth, stress and poor mental health
- higher rates of depression, substance abuse and risk of suicide
- experience of financial hardship and poverty
- diminished educational performance for young people
- reduced rates of secure and ongoing employment, and decreased participation in employment related assistance and job training programs
- living in poor quality, poorly designed, overcrowded and unsanitary housing conditions (featuring, for example, mould and noise exposure)
- social exclusion and isolation.

In exploring deep and persistent disadvantage in Australia, McLachlan, Gilfillan and Gordon of the Productivity Commission found that this condition imposes a range of costs on the people who experience it, those near to them and the broader community. They devised a model for estimating the totality of this cost as shown in the following diagram. Alleviating disadvantage by providing social and affordable housing, for example, can be expected to conversely generate value for the host society<sup>46</sup>.

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<sup>39</sup> *Ibid.*

<sup>40</sup> SGS Economics and Planning (2019), Rental Affordability Index, Melbourne: SGS Economics and Planning. Accessed 14 January from: <https://www.sgsep.com.au/publications/rental-affordability-index>

<sup>41</sup> Wiesel, I., Lui, F. and Buckle, C. (2017), 'Locational disadvantage and the spatial distribution of government expenditure on urban infrastructure and services in metropolitan Sydney (1988-2015)', *Journal of Geographical Research*.

<sup>42</sup> Berry, M. (2003) 'Why is it important to boost the supply of social housing in Australia', *Urban Policy and Research* 24(1), 413-435.

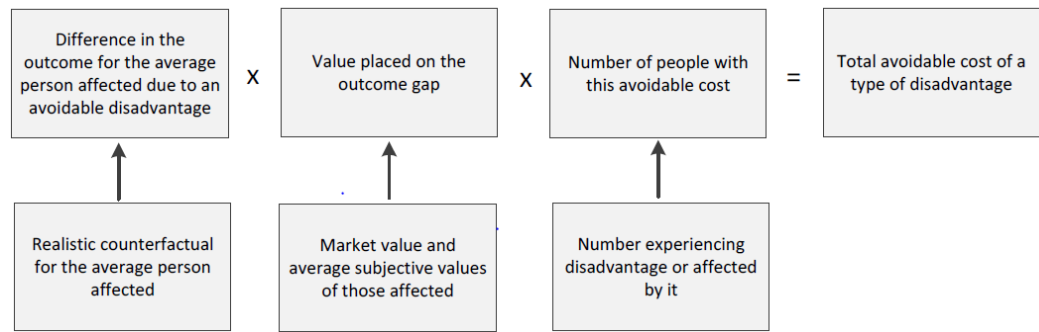
<sup>43</sup> *Ibid.*

<sup>44</sup> Berry, M. (2003) 'Why is it important to boost the supply of social housing in Australia', *Urban Policy and Research* 24(1), 413-435.

<sup>45</sup> Phibbs, P. and Young, P. (2005), Housing assistance and non-shelter outcomes. Retrieved from Australian Housing and Urban Research Institute: <https://www.ahuri.edu.au/research/final-reports/74>; Ravi, A., & Reinhardt, C. (2011). The social value of community housing in Australia Retrieved from Australia: Net Balance.

<sup>46</sup> McLachlan, R., Gilfillan, G. and Gordon, J. (2013) Deep and Persistent Disadvantage in Australia, Productivity Commission Staff Working Paper

FIGURE 33 PROCESS FOR CALCULATING THE COSTS OF DISADVANTAGE



Source: McLachlan, Gilfillan and Gordon (2013)

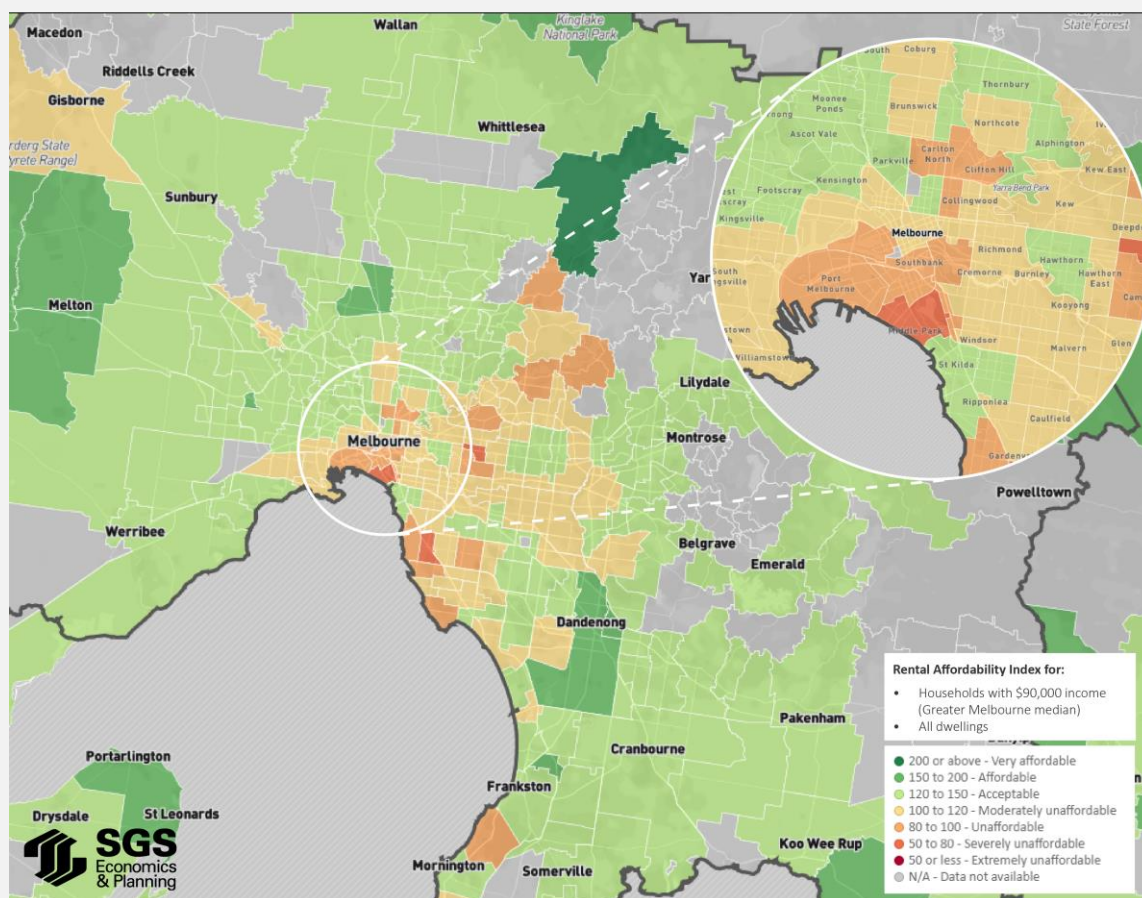


## THE RENTAL AFFORDABILITY GRADIENT AND LOCATIONAL DISADVANTAGE IN MELBOURNE

Several research projects have explored the spatial patterning of rental affordability and disadvantage in Melbourne. Hulse et al. (2012) note that historically the bulk of affordable rental accommodation (and rental accommodation generally) was in the inner city. However, gentrification has seen the inner and middle suburbs take on a new life, with associated impacts on property values and rents. SGS's analysis of rents in Melbourne show:

- Rents at any distance from the CBD are significantly higher now than a decade ago.
- The increase in rents over the decade have been greater in inner locations, and
- Outer urban rents relative to those in the inner city are more affordable in relative terms than they were a decade ago.

This is supported by SGS's recently released Rental Affordability Index which shows a concentration of unaffordable rental housing in the central city, and more affordable housing towards the city fringes.



Source: SGS Economics and Planning 2018

Through surveys, focus groups and interviews, Burke and Pinnegar (2007) explored the trade-offs that Australians within the private rental market make when choosing housing. They found that the greatest number of people compromise on price (i.e. accepting higher rents), while 24 per cent move to an area that they would not otherwise choose, to find affordable housing. They also found that 81 per cent of long-term renters move frequently – once every three years – and that 29 per cent move because they must not because they want to.

Other analysis by SGS shows that locations that have higher levels of rental affordability correlate with lower levels of access to employment, poor transport connectivity and significantly higher concentrations of disadvantage.

Noting similar patterns, Burke and Pinnegar (2007) opine that, with some exceptions, lower-income older renters are unlikely to be able to ever improve their circumstances and alleviate their affordability position.

## Community diversity

As discussed above, significant costs to the community arise from the segregation and concentration of communities of disadvantage across the city. In contrast to this, a long line of academic work has explored the potential benefits that arise from the creation of places that support diverse and inclusive communities.

Fainstein (2010) notes that diversity extends beyond simply the acceptance of differences in others, to the social composition of places, with Rolnik (2014) emphasising housing diversity (including diversity of tenure, type and price) as a crucial element in stimulating broader socio-demographic diversity.<sup>47 48</sup>

The merits of diversity in the city first came to popular consciousness through the writings of Jane Jacobs (1961), who argued that a mix of people of different cultures, social class, life-cycle stage, and immigration status are important for fostering interaction and trust between different people, as well as promoting economic opportunity. In the words of Jacobs (1961: 14):

*“places that are diverse offer fertile grounds for the plans of thousands of people”.*

In contrast, Jacobs says that:

*“no diversity offers little hope for growth, in the form of both personal and economic development”.*

These ideas have been taken up by many urbanists and expanded on in various ways. A recurrent central principle is that diversity maximises “exchange possibilities”, both economic and social, and brings significant benefits for people and places.<sup>49</sup>

Some authors have suggested that some forms of community diversity (predominantly racial or ethnic diversity) has a negative effect on social cohesion by reducing the collective sense of belonging and social solidarity.<sup>50</sup> Ariely (2014) notes that this is typically the consequence of differences in defining a concept as complex and multi-dimensional as ‘social capital’ or ‘social cohesion’. Nevertheless, belief in the positive outcomes of diversity in cities continues to prevail in academic writing and professional practice.

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<sup>47</sup> Fainstein, S. (2010), *The Just City*, Ithaca: Cornell University Press.

<sup>48</sup> Rolnik, R. (2014), ‘Place, Inhabitation, and Citizenship: The right to housing and the right to the city in the contemporary urban world’, *International Journal of Housing Policy*, 14(3): 293-300

<sup>49</sup> Hirt, S. (2012), *The urban wisdom of Jane Jacobs*, New York: Routledge.

<sup>50</sup> Ariely, G (2014), ‘Does diversity erode social cohesion? Conceptual and methodological issues’, *Political Studies*, 62(3).

## CREATING A MORE DIVERSE RENTAL PROFILE IN MONTREAL, CANADA

The City of Montreal adopted the 'Strategy for inclusion of affordable housing in new residential projects' in August 2005.

The primary goals of the strategy were to:

- provide a mix provide housing for a mix of different income brackets in all new large housing developments
- promote social mix as a condition of sustainable development
- avoid social segregation and break the cycle of poverty, and
- enable people to stay in their neighbourhood.

The policy sought to achieve these goals by facilitating the development of social housing, and also by stimulating the production of affordable housing for first time homeowners.

The Mayor of Montreal was a key supporter of the strategy, calling for an inclusive city as a way for providing a better quality of life for all Montrealers.

The strategy established guidelines that all new large residential development are to provide a minimum of 30 per cent of the new units as affordable housing – 15 per cent in social housing and 15 per cent in affordable rental or affordable ownership. The strategy targets developments of 200 and more units, with the particulars of the guidelines intended to respond to local conditions rather than creating a mandatory requirement.

Case study content adapted from Inclusionary Housing Canada (2019), Canadian: Case studies. Accessed 12 February 2019 from: <http://inclusionaryhousing.ca/2016/05/25/case-studies-canadian/>

## Driving competitiveness

### Labour market functioning

Concerns for the lack of social and affordable housing frequently stem from a social welfare or equity perspective, as highlighted in the discussion above. Somewhat less prevalent is consideration of the consequences of high housing costs for urban economic growth, particularly in the central city. This is despite a clear and widely investigated recognition by policymakers, researchers and industry professionals of the macro-economic impacts of housing.<sup>51 52</sup>

Policy discussion and academic research regarding the consequences of 'spatial mismatch' for the productivity of urban areas has attracted renewed attention in recent years.<sup>53 54</sup> Initially conceived by Kain (1968) in reference to the processes of the suburbanisation of employment occurring at the time, the spatial mismatch theory laments the increasing disjuncture between the location of jobs growth and concentrations of socially and economically

<sup>51</sup> Van den Nouwelant, R. Crommelin, L., Herath, S. and Randolph, B. (2016), 'Housing affordability, central city economic productivity and the lower income labour market', Melbourne: Australia Housing and Urban Research Institute (AHURI).

<sup>52</sup> SGS Economics and Planning (2012), 'Understanding the property and economic drivers of housing', Melbourne: SGS Economics and Planning.

<sup>53</sup> Spiller, M. (2013), 'Affordable housing: the productivity dimension', *The Quarterly Magazine*, Melbourne: SGS Economics and Planning.

<sup>54</sup> SGS Economics and Planning (2013), 'Understanding the property and economic drivers of housing', Melbourne: SGS Economics and Planning.

disadvantaged workers, and the associated impacts on economic prosperity and social wellbeing.<sup>55</sup>

#### INVESTIGATING THE IMPACT OF AFFORDABLE HOUSING ON PRODUCTIVITY

Several local and international studies have sought to explore the links between housing costs and the productivity of key industries. This includes research undertaken by the Australian Housing and Urban Research Institute (AHURI) investigating the impact of housing costs on businesses that are largely reliant on lower wage rate workers in central areas of Australia's major cities (Sydney, Perth, Melbourne, Brisbane, Darwin).<sup>56</sup>

This study found that low income, central city workers in Australia are spatially separated from their jobs to a much greater degree than metropolitan workers in general (found to be roughly double that of metro-wide median). Six industries were identified as likely to be affected by a shortage of low income central city workers based on a combination of the total number of low income workers, reliance on these workers and competition for these workers outside of the central city. These include hospitality, support services (travel and recruitment agency), professional services (legal and accounting), finance-insurance and government services. This research showed that while employers in these industries were aware of the issues, the burden was largely seen to be borne by employees with little consequence for businesses. It was felt that a number of mitigating factors, such as higher salaries, amenities and "buzz" of the central city, accessibility and the large supply of short-term workers (students and foreign workers), helped to thicken the supply of low-income workers in the city. While not quantified, the study identified a shortage of supply of low income workers to support the hospitality industry – particularly tourism and accommodation.

This finding is reinforced by Yates *et al.* (2006) who found that hospitality workers and sales assistants experienced the greatest levels of housing stress. These workers are more likely to be in lower skilled, casual and part time occupations that offer less opportunity for career progression.<sup>57</sup>

Research examples drawn from the UK have shown some evidence of recruitment issues and associated impacts on productivity due to local housing costs. Tym (2003) found evidence of recruitment difficulties in the public sector sometimes prompting actual or contemplated disinvestment in the region as a result.<sup>1</sup> Propper and van Reenen (2010) found that some areas of high housing costs had poorer performing hospitals as a result of difficulties in retaining quality medical staff, while Gordon and Monastiriotis (2007) found that the combination of high house prices in economically successful areas with a public sector pay structure which is unresponsive to this (or very unevenly so) leads to a qualitative 'crowding out' of public sector work such as that of teachers, leading to lower quality provision.

In the contemporary Australian context, a significant body of literature has documented a clear trend, whereby lower income households are increasingly being displaced (either relatively or absolutely) from inner city locations largely as a result of ongoing processes of gentrification, urban renewal and related housing cost increases.<sup>58</sup> This spatial mismatch has

<sup>55</sup> Kain, J.F. (1968), 'Housing segregation, negro employment, and metropolitan decentralization', *The Quarterly Journal of Economics*, vol. LXXXII, no. 2, pp.175–197.

<sup>56</sup> Van den Nouwelant, R. Crommelin, L., Herath, S. and Randolph, B. (2016), 'Housing affordability, central city economic productivity and the lower income labour market', Melbourne: Australia Housing and Urban Research Institute.

<sup>57</sup> Yates, J., Randolph, B. and Holloway, D. (2006), *Housing affordability, occupation and location in Australian cities and regions*, AHURI.

<sup>58</sup> Randolph, B. and Tice, A. (2014), 'Suburbanizing disadvantage in Australian cities: Sociospatial change in an era of neoliberalism', *Journal of Urban Affairs*, 36(1): 384–399.

been considered in the annual State of Australian Cities (SOAC) report for some years now, with the most recent report noting:

*“Australia’s cities are increasingly characterised by the significant spatial divide between areas of highly productive jobs and the areas of population-based services, reflected through the price premiums associated with houses that have better access to the city centre”.<sup>59</sup>*

This has been conceptualised as a concern for the economic productivity of cities due to a thinning of the local labour market of the central city area, whereby a decline in the total diversity of workforce pool (i.e. fewer low income workers) will result in poor labour matching. This, in turn, is seen to lead to labour market shortages, staff retention (and hence, retraining) problems and reductions in economic productivity and efficiency.<sup>60</sup> In the context of the central city, the SOAC report goes on to state that:

*“Ensuring that Australia’s most productive regions – the inner areas of cities – remain unconstrained, efficient and productive is critical. With such dense economic activity occurring within these relatively small areas, even minor inefficiencies can have a major impact on Australia’s national economy and remedying those inefficiencies can reap large economic benefits”.<sup>61</sup>*

While there is somewhat limited direct evidence to support the notion that employers in high cost areas cannot attract key workers because of housing affordability, there is evidence to support the claim that those who work in inner city areas and live there experience significantly greater housing affordability problems.<sup>62</sup>

In choosing to work in high-cost housing areas, such as the central cities, many of the studies discussed above have noted the extent to which low income and key workers make trade-offs between location, housing cost and transport accessibility. Some accept longer commutes for cheaper rent while others suffer housing stress to maintain continuity of work and access to other opportunities.

A significant body of literature also demonstrates the extent to which each of these conditions can contribute to lost labour productivity through adverse impacts on individual health and wellbeing, including increased stress and mental ill-health, capped career progression, reduced ability to upskill and diminished workforce participation.<sup>63 64</sup>

### City culture and branding

As mentioned in the introductory statements above, cities and regions in advanced economies face significant international competition for the attraction of footloose resources, jobs and capital.<sup>65</sup> Such processes have been driven by globalisation and the resultant loosening of trade barriers, more efficient and integrated global transportation and communication systems and the emergence of new competitive markets.<sup>66</sup> Indeed, these processes of business attraction have been described as essentially a zero sum game whereby

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<sup>59</sup> Department of Infrastructure and Regional Development (2015) State of Australian Cities 2014–2015: Progress in Australian regions, accessed 30 Sep 2015, [http://infrastructure.gov.au/infrastructure/pab/soac/files/2015\\_SoAC\\_full\\_report.pdf](http://infrastructure.gov.au/infrastructure/pab/soac/files/2015_SoAC_full_report.pdf), pp. 41.

<sup>60</sup> Van den Nouwelant, R., Commelin, L., Herath, S. and Randolph B. (2016), ‘Housing affordability, central city economic productivity and the lower income labour market’, Australia Housing and Urban Research Institute (AHURI).

<sup>61</sup> *Ibid.*, 64.

<sup>62</sup> Van den Nouwelant, R. Crommelin, L., Herath, S. and Randolph, B. (2016), ‘Housing affordability, central city economic productivity and the lower income labour market’, Melbourne: Australia Housing and Urban Research Institute.

<sup>63</sup> Ravi, A., & Reinhardt, C. (2011), ‘The social value of community housing in Australia’, Melbourne: Net Balance.

<sup>64</sup> Phibbs, P. and Young,, P. (2005), ‘Housing assistance and non-shelter outcomes’, Melbourne: Australian Housing and Urban Research Institute: <https://www.ahuri.edu.au/research/final-reports/74>

<sup>65</sup> Cleave, E., Arku, G., Sadler, R. and Gilliland, J. (2016), ‘The role of place branding in local and regional economic development: Bridging the gap between policy and practicality’, *Regional Studies, Regional Science*, 2(1), pp.207-228.

<sup>66</sup> *Ibid.*

places continually divert economic resources from competitors as businesses relocate to the place that offers them the best opportunity for success.<sup>67</sup>

In this climate of growing international visibility and competition, cities are seeking strategies to promote themselves as a location of choice for investors and knowledge workers. International research explores the factors that underly economic growth and performance within this context.<sup>68 69</sup> These factors include investment in public infrastructure, city size, depth of human capital, social capital, location and *reputation*.<sup>70 71</sup>

In the context of cities, reputation (frequently used interchangeably in the literature with place branding) is understood by Delgado-Garcia *et al.* (2016), as the “aggregation of a single stakeholder’s perceptions of the capacity of the city to meet demands and expectations of many city stakeholders”, noting that different stakeholders use different informational cues to generate their expectations about a place.

Berry (2003) notes how cities that maintain an external reputation for diversity, multi-culturalism and tolerance are highly competitive in attracting business investment, managerial staff and knowledge workers, as well as tourism. This concept is reflected in Florida’s (2002) discussion of the ‘creative class’, who are knowledge and creative workers that are drawn from a range of social minority groups (including gays and lesbians), and who tend to locate in cities that rate highly on the so-called ‘Bohemian and Diversity Indices’. Recent research by Hassen and Giovanardi (2018) supports this assertion, demonstrating how the city of Leicester has successfully redefined itself and its reputation in terms of diversity and inclusivity in order to reinvigorate its transitioning, post-manufacturing, economy.

Within this context of reputation building, the provision of housing to accommodate diverse communities is seen as crucially important. Berry (2003), notes that:

*“The reality – or even the public perception – of communities rent by polarising differences, visible poverty and homelessness, souring crime and an impoverished public realm raises strong barriers to the influx of investors...Housing markets, if unchecked, can play a major role in this dynamic” (emphasis added).*<sup>72</sup>

Emphasised consistently in the literature, however, is that any effort to promote a city’s reputation for diversity must be based on the genuine attributes of a place in order to be sustainable over the long term.<sup>73</sup> Cities that do not satisfy the expectations associated with their reputation will ultimately erode it.<sup>74</sup>

## Supporting innovation

Innovation (the creation of new things and new kinds of work) and clustering (geographic concentrations of interconnected companies and institutions) are essential for economic success and urban development.<sup>75 76</sup>

The notion of clustering has a long lineage in urban economic theory, with the location decisions and organising behaviours of firms tied closely to factors such as the availability of

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<sup>67</sup> *Ibid.*

<sup>68</sup> Wæraas, A. (2015), ‘Making a difference: Strategic positioning in municipal reputation building’, *Local Government Studies*, 41(2), pp.280–300.

<sup>69</sup> Aula, P., & Harmaakorpi, V. (2008), ‘An innovative milieu – A view on regional reputation building: Case study of the Lahti urban region’, *Regional Studies*, 42(4), pp.523–538.

<sup>70</sup> Delgado-Garcia, J., Quevedo-Puente, E. and Blaco-Mazagatos, V. (2017), ‘The impact of city reputation on city performance’, *Regional Studies*, 52(80), pp.1098–1110.

<sup>71</sup> *Ibid.*

<sup>72</sup> Berry, M. (2003) ‘Why is it important to boost the supply of social housing in Australia’, *Urban Policy and Research* 24(1), 413–435.

<sup>73</sup> Hassen, I. and Giovanardi, M. (2018), ‘The difference in ‘being diverse’: City branding and multiculturalism in the Leicester Model’, *Cities*, 80, pp.45–52

<sup>74</sup> *Ibid.*

<sup>75</sup> Jacobs, J. (1969). *The economy of cities*. New York: Random House.

<sup>76</sup> Jacobs, J. (1984). *Cities and the wealth of nations: Principles of economic life*. New York: Random House.



resources, including labour and office space, and other factors such as accessibility, local and national tax regimes and rent levels.<sup>77</sup>

More recently discussed and as brought to popularity by Florida (2002), the ability to access 'creative workers' has emerged as a significant factor in the locational decisions of firms.<sup>78</sup> These individuals are increasingly seen as critical in stimulating innovation, breaking 'path dependency' and motivating the creation of innovation clusters.

While the definition of creative workers continues to be contested, this group is said to include skilled workers in the design, knowledge intensive, information-rich industries of the 'new economy'.<sup>79</sup> Florida (2014) identifies the occupational categories belonging to the creative class as; entertainment and media; computer and mathematical sciences; management; law; architecture and engineering; medicine; finance; life, physical and social sciences; education and the super creative occupations including university professors, thought leaders, actors, dancers, musicians, novelists, artists and poets.<sup>80</sup>

It is evident from the occupational categories listed above that the creative class encompasses a diverse demographic. It is likely to include both the corporate elite as well as the up-and-coming entrepreneur or artist.

Berry (2003) notes that supporting such diversity in turn requires the provision of a range of housing opportunities, including a mix of housing types, tenures, sizes and prices. Berry warns that:

*"Successful regional economies cannot afford to turn their backs on young, creative workers at the beginning of their careers who are struggling to get a foothold in the local housing market".<sup>81</sup>*

Evidence from the Netherlands has demonstrated that failure to achieve affordable housing in creative clusters and cities can have negative consequences, where high housing prices and long waiting lists for affordable housing options has restricted the entry of young starters and creative talent into the local housing market.<sup>82 83</sup>

There is some debate, however, as to whether or not the creation of places attractive to the tastes of the creative classes ultimately results in processes of gentrification, growing unaffordability and intolerance of some social groups.<sup>84 85</sup>

### 3.4 Does a Capital City Council have a 'special obligation'?

Like other capital city councils, the City of Melbourne enjoys a privileged infrastructure endowment. Its special features include:

- being situated at the confluence of metropolitan and Victorian transport networks
- being the home of the state's key cultural and civic attractions and facilities including State Parliament, key sporting arenas (MCG, Rod Laver Arena, Etihad Stadium), the National Gallery of Victoria and Melbourne Performing Arts Centre

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<sup>77</sup> Musterd, S. Bontjem, M., Chapain, C. Kovacs, Z. and Murie, A. (2007), 'Accommodating creative knowledge. A literature review from a European perspective', Amsterdam: The University of Amsterdam.

<sup>78</sup> Florida, R. (2002), *The rise of the creative class*, New York, NY: Basic Books.

<sup>79</sup> *Ibid.*

<sup>80</sup> *Ibid.*

<sup>81</sup> Berry, M. (2003) 'Why is it important to boost the supply of social housing in Australia', *Urban Policy and Research* 24(1), 413-435.

<sup>82</sup> Musterd, S. Bontjem, M., Chapain, C. Kovacs, Z. and Murie, A. (2007), 'Accommodating creative knowledge. A literature review from a European perspective', Amsterdam: The University of Amsterdam.

<sup>83</sup> Musterd, S., M. Bontje and W. Ostendorf (2006), 'The changing role of old and new centres: The case of the Amsterdam region', *Urban Geography*, 27(4), pp.360-387.

<sup>84</sup> Atkinson, R. (2004), 'The evidence on the impact of gentrification: New lessons for the urban renaissance?', *European Journal of Housing Policy*, 4(1), pp.107-131.

<sup>85</sup> Atkinson, R. and Easthope, H. (2007), *The consequences of the creative class: The pursuit of creative strategies in Australia's cities*, State of Australian Cities paper.

- key health and educational institutions (University of Melbourne, RMIT, Victoria University, Royal Melbourne Hospital, Royal Women's Hospital, Royal Children's Hospital, Peter McCallum Cancer Centre)
- the Parkville National Employment and Innovation Cluster and the planned Fishermans Bend National Employment and Innovation Cluster
- hosting several areas designated as major urban renewal precincts, carrying on the major investments historically made by state governments in Southbank and Docklands.

This endowment, and the City of Melbourne's implied leadership role, may justify a level of Council involvement in social and affordable housing that extends beyond what might be expected of non-capital city councils.

### The City is accessible and service-rich; a responsibility to share

The City of Melbourne is the beneficiary of much greater infrastructure and service investment by the State and Federal Governments than any other municipality by virtue of its strategic location at the geographic, cultural and economic heart of metropolitan Melbourne. This disproportionate level of investment has meant that the City is highly accessible, provides a diverse array of employment opportunities, is endowed with well-maintained public open space and provides plentiful opportunity for residents to engage in the social and cultural life of the city.

Increasing the number of social and affordable dwellings in the municipality would allow a broader and deeper mix of the Victorian community to benefit from these many positive attributes of the City. Sharing a taxpayer-funded pool of public realm benefits that would otherwise be increasingly 'monopolised' by higher income groups or households with less constrained choices is important to perceived fairness and equity across the metropolitan area.

### High land values can absorb the cost of providing social and affordable housing

The heavy taxpayer investment in central city infrastructure and services is a key reason for the relatively high land values which prevail in the City of Melbourne.

This high publicly underwritten land value means that the central city can better support planning interventions to provide more social and affordable housing, regardless of whether these provisions are mandatory requirements or voluntary agreements.

As discussed in Chapter 5, higher land prices in the City mean that development is more likely to be able to absorb the additional cost of providing affordable housing without impacting development feasibility or market functioning at the aggregate level.

### The City has an existing reputation of policy leadership

As a capital city council, the City of Melbourne has a strong history and reputation in leading social, environmental and economic policy across the state, Australia and even internationally.

Many local governments look to the City for guidance in setting policy direction and content. In recent decades, specific policies that have been influential and widely replicated include:

- Postcode 3000
- urban forest strategy, and
- heritage conservation policies.

Housing affordability is a significant issue across Victoria, requiring action from many levels of government. As a council with a prominent position and reputation in the state, the City of Melbourne has a unique capacity to prompt other local governments to follow suit.

### Benefit multipliers for particular socio-economic groups

Aside from the imperative to provide fairer access to the endowment of the central city as described above, providing social and affordable housing in these parts of the metropolis can generate enhanced benefits for particular demographic groups, compared to housing them (affordably) in middle ring or outer suburbs. These groups include:

- low income older adults
- Indigenous Australians
- homeless, and
- long term unemployed people and people at risk of long term unemployment.

**Low income older adults** who rely on public transportation to reach necessary health services would benefit disproportionately from living in the City of Melbourne compared to a traditional single-family home or apartment in a car dependent suburb.

As people age and lose their vision and ability to drive, their need to live in places well serviced by transit or within walking distance of local amenities increases<sup>86</sup>. Besides rides from family and friends, public transport is likely to be their only reasonable transportation option to access necessary health services and infrastructure.

These benefits are further multiplied for pensioner households who are also long-term residents in City of Melbourne as they are more intensively affected by social changes around them (i.e. loss of friendships and community networks).

**Indigenous Australians** continue to be one of the most vulnerable groups in Australia<sup>87</sup>. Data from the ABS found:

- The average life expectancy for Indigenous Australians was approximately 10 years less than that of non-Indigenous Australians<sup>88</sup>
- More than half of the Indigenous population in Australia were not employed in 2012-2013<sup>89</sup>
- More than half of Indigenous Australians over the age of 15 had some form of disability in 2008<sup>90</sup>, and
- Indigenous Australians are 15 times more likely to be in prison compared to non-Indigenous adults<sup>91</sup>.

Many of these disadvantages stem from extreme levels of discrimination and trauma as a result of colonisation, including the associated violence and loss of culture and land, as well as subsequent policies such as the forced removal of their children. In many indigenous families and communities, this trauma continues to be passed from generation to generation with devastating effects<sup>92</sup>.

The City of Melbourne acknowledges elements of the disparity experienced by many Indigenous Australians in its Reconciliation Plan 2015-2018. This Plan seeks to celebrate Indigenous arts and culture and encourage the employment of Indigenous Australians in the municipality. Actions in the Plan include:

*“Seek to increase the number of Aboriginal and Torres Strait Islander people employed within the City of Melbourne municipality and beyond”*

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<sup>86</sup> Knopf-Amelung, S. (2013) Aging and Housing Instability: Homelessness Among Older and Elderly Adults

<sup>87</sup> <https://www.humanrights.gov.au/education/face-facts/face-facts-aboriginal-and-torres-strait-islander-peoples>

<sup>88</sup> 3302.0.55.003-Life Tables for Aboriginal and Torres Strait Islander Australians

<sup>89</sup> Department of Prime Minister and Cabinet, Australian Government, Closing the Gap, Prime Minister's Report 2014

<sup>90</sup> 4704.0-The Health and Welfare of Australia's Aboriginal and Torres Strait Islander Peoples (Disability and Social Inclusion), October 2010

<sup>91</sup> Australian Bureau of Statistics, 4512.0-Corrective Services, Australia, December quarter 2013 (March 2014).

<sup>92</sup> Australian Human Rights Commission (2018) Close the Gap: Indigenous Health Campaign

*“Celebrate and acknowledge Aboriginal and Torres Strait Island arts and culture”*  
*“Ensure Aboriginal and Torres Strait Islander peoples are represented in relevant Council funded events”*

The Plan has a vision to encourage *“participation of Aboriginal and Torres Strait Islander peoples in the social and economic advantages that Melbourne offers”*. Expanding affordable housing opportunities for this group in the City is an obvious way of advancing this Council policy objective.

Also noteworthy is the fact that the City of Melbourne occupies particularly significant land at the mouth of the Yarra River. Enabling more Indigenous people to resume direct contact with this land through residency would unlock unique cultural and social justice benefits not achievable elsewhere.

**Homelessness** encompasses a spectrum of severity that may last only a short time for more individuals, while others many experience many years of deprivation. Whether short or long term, homelessness is one of the most severe forms of disadvantage and social exclusion that a person can experience. Homelessness results in significant social and economic costs not just to individuals and their families, but also to communities and the nation as a whole<sup>93</sup>.

For these individuals, homelessness makes it difficult to engage in education and training and can leave people vulnerable to violence, victimization, long term unemployment and chronic ill-health. Some health problems are a consequence (and sometimes a cause) of homelessness, including poor nutrition, substance misuse, and poor mental health<sup>94</sup>. Those experiencing homelessness are often excluded from participating in social, recreational, cultural and economic opportunities in their community.

A study by AHURI found people who are homeless are less likely to be employed, more likely to be imprisoned, and impose a disproportionate demand on publicly funded medical facilities<sup>95</sup>.

The rich network of services available in the central city offers the opportunity for more effective responses to the challenge of homelessness.

Similarly, the multiple opportunities for education, training, part time work and mentoring in the central city means that long term unemployed people are likely to gain a disproportionate lift in their prospects for engagement in the workforce.

Improved access to work, education and leisure opportunities will provide a benefit ‘multiplier’ to those marginalised groups who suffer multiple forms of disadvantage, in addition to experiencing housing stress or insecurity and assist in breaking cycles of vulnerability.

### 3.5 Synthesis

The City of Melbourne has undergone transformative change since the 1990s transitioning from being largely a location for business and workers to a thriving hub of cultural, social and economic activity. This change, while positive, has held consequences for the affordability of housing across the municipality. Those who cannot afford the rising housing costs are forced to relocate to more affordable locations, increasingly causing a spatial patterning across metropolitan Melbourne according to wealth and socio-demographic status. For many who continue to live in the City (for a variety of reasons including, work, education, social

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<sup>93</sup> SGS (2017) Last Resort Housing

<sup>94</sup> Australian Human Rights Commission. Homelessness is a human rights issue [online article]. 2008. <https://www.humanrights.gov.au/our-work/rights-and-freedoms/publications/homelessness-human-rights-issue>

<sup>95</sup> Zaretsky K, Flatau P, Clear A, et al; Australian Housing and Urban Research Institute. The cost of homelessness and the net benefit of homeless programs: a national study. Findings from the Baseline Client Survey (AHURI Final Report No. 205). Melbourne: AHUR, 2013. <https://www.ahuri.edu.au/research/final-reports/205>

connections etc.), the rising cost of housing places increasing pressure on their health and wellbeing.

Addressing affordable housing in the City is likely to result in several key benefits to the wider community by:

- Mitigating existing and future issues related to key worker retention in the central city, thereby strengthening local business and overall economic efficiency.
- Achieving deeper and more genuine diversity through the provision of a greater range of housing types, tenures and prices. This is anticipated to attract creative talent (and business) and enhance Melbourne's global reputation as a cultural and creative hub.
- Providing enhanced opportunities for innovation by providing housing suitable for early career entrepreneurs and research workers within education and research agglomerations.
- Addressing social injustice and enhancing equity resulting from locational disadvantage and spatial socio-economic segregation.

There are also several specific benefits for particularly vulnerable groups whose experience and risk of homeless, insecure housing and housing stress can be reduced. These include:

- increase in savings for other important household needs (i.e. nutritious food and education)
- a stable environment (particularly for children) contributing to improved educational outcomes and life prospects
- access to more suitable jobs and critical community services
- improved mental and physical health, improved quality of life and independence (potentially freeing up family and friends to work), and
- creation of social and cultural capital that can only be formed in the central city because of its taxpayer-funded endowment.

## 4. COUNCIL'S ROLE & POLICY LEVERS

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Recognising the substantial unmet need for social and affordable housing in the City, and assuming that Council wants to play a part in addressing this problem, a number of policy questions arise. Council must decide where it will operate on the spectrum between 'hands off' advocacy through to direct investment of ratepayer assets in the creation of affordable and social housing in the municipality. The focus of Council's efforts – from addressing homelessness to creating opportunities for creative workers on moderate incomes – also needs to be resolved. Once these matters are agreed, Council will be able to apply a range of levers to advance its adopted objectives for social and affordable housing. These mechanisms come with varying relevance and strengths and weaknesses depending on Council's agreed policy focus.

### 4.1 Council's role in affordable and social housing

There are many forces and institutions driving housing affordability outcomes in the City of Melbourne which are beyond the direct purview or influence of Council. These relate to general economic conditions across the state and nation, monetary policy settings and the dynamics of the housing cycle.

Nevertheless, Council is an important agent in the production of housing within its jurisdiction. It can have a significant impact in this area in its own right and a bigger impact through partnership with other Councils, institutions and the private sector.

It is useful to consider the potential contribution of Council as to local housing affordability and affordable housing outcomes as falling into 'three tiers' (see Figure 34).

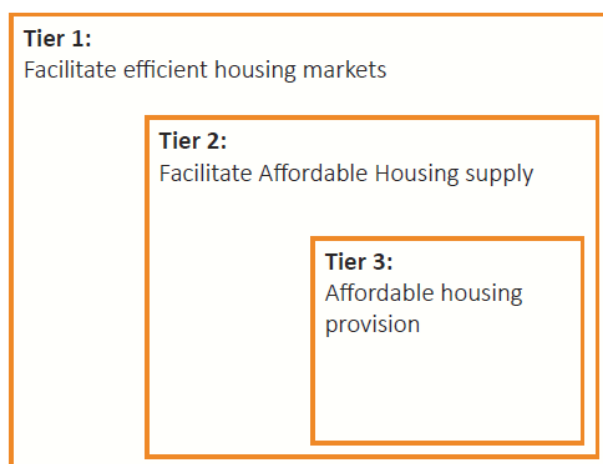
The first tier relates to running an efficient planning and development control system so that the supply side of the market can respond as smoothly as possible to local demand. Were the City of Melbourne to confine itself to this tier, it would be taking an entirely 'hands off' role in the provision of social and affordable housing in the City, seeing this as exclusively the province of State and Commonwealth Governments.

The second tier would see the Council going further in its policy efforts by facilitating local affordable housing supply. This could occur, for example, by brokering partnership deals between local providers and community-based groups. Council would also rigorously apply whatever regulatory powers it has to induce social and affordable housing provision by others, including applicants for permits under the Planning and Environment Act. Activity under this tier would see Council take a strong advocacy position in favour of social and affordable housing backed by a well-articulated policy and strategy.

Moving to the next tier, the Council itself becomes a direct agent of social and affordable housing supply, investing ratepayer funds and other assets to this end.

As illustrated in Figure 35, a continuum of at least 6 optional roles for Council can be identified based on the cumulative application of various tier based policy elements. Where Council positions itself on this continuum will depend on the City of Melbourne's appetite for risk and the priority it places on this particular social issue.

FIGURE 34: THREE-TIERED APPROACH FOR THE PROMOTION OF AFFORDABLE HOUSING



Source: SGS Economics and Planning Pty Ltd

FIGURE 35: CONTINUUM OF ROLES FOR COUNCILS IN AFFORDABLE HOUSING

			Basics only	Advocacy	Proactive use of planning provisions	Building infrastructure for local social housing provision	Direct investor - opportunistic	Long term investor
			1	2	3	4	5	6
Tier 1	Facilitating efficient housing markets	Land supply and availability						
		Planning policies and strategies						
		Development approvals processes						
		Infrastructure provision						
		Information dissemination						
Tier 2	Facilitating affordable and social housing supply	Policy and strategy						
		Community engagement and leadership						
		Housing partnerships						
		Development contributions for affordable housing						
Tier 3	Investing in social and affordable housing	Housing Trust						
		Ad hoc joint ventures						
		Equity investment in housing association						

Source: SGS Economics and Planning Pty Ltd

## 4.2 The housing assistance spectrum

In addition to determining where Council wants to situate itself on the role continuum discussed above, the CoM must resolve its priorities as to which groups of households in need



of social and affordable housing should be the focus of a municipal policy on these matters, as distinct from the policies of the State and Commonwealth Governments.

A further continuum can be identified relating to targeted household types and the depth of subsidy required to meet their housing needs. A version of this continuum is shown in Figure 36.

FIGURE 36: HOUSING CONTINUUM

The housing supply continuum							
Emergency shelters/ crisis accommodation	Transitional/ supported housing	Social housing (including public housing)	Affordable (community rental) housing	Affordable home ownership/ shared ownership	Private market affordable rental housing (including boarding houses and student accommodation, which may be government subsidised)	Private market rental housing	Home ownership
<b>Government subsidised housing (including housing provided by the government and the community sector)</b>			<b>Non-market housing (community housing sector)</b>		<b>Market housing</b>		

Source: id, adapted from AHURI

On the left of the continuum are the types of housing which require the deepest explicit or implicit subsidy from Government. These include crisis (emergency shelters and transitional housing) and social rental housing. These types of housing are made affordable for households with no income or very low levels of income experiencing severe disadvantage, homelessness, exposure to family violence, disability or health issues necessitating an urgent change in accommodation.

As noted in Chapter 2, social housing includes public housing owned and managed by the State Government and housing owned and/or managed by state-registered housing agencies<sup>96</sup>. Government-owned social housing typically accommodates households with the highest need for housing assistance. Rents are typically less than 25 per cent of the gross income of very low to low income households.<sup>97</sup>

Affordable rental housing (sometimes referred to as community rental housing) is delivered and managed primarily by housing agencies. It typically accommodates a slightly broader group of households than Government owned social housing, ranging from high needs to low through to moderate income earners.

While public housing and community housing both accommodate those who are facing housing stress, community housing organisations can also specialise in assisting specific groups, such as those with a disability, the elderly or women escaping domestic violence.

Affordable home ownership/shared ownership describes types of housing made affordable for low to moderate income earners through various forms of shared-equity. That is, the home buyer shares the capital cost of purchasing a home with an equity partner, such as a not-for-profit trust or a community housing provider.

The housing supply continuum also includes various categories of market housing. These include special needs private affordable rental housing directed at certain target markets such as boarding houses and student accommodation. This housing may be eligible for government subsidies.

Private market rental housing and home ownership can also satisfy the technical definition of affordable when rents or mortgage payments are less than 30 per cent of households' incomes. However, in the context of rising property prices and slow growth in wages and

<sup>96</sup> Housing Associations and Community Housing Providers

<sup>97</sup> Housing VIC (2019) <http://www.housing.vic.gov.au/public-housing>

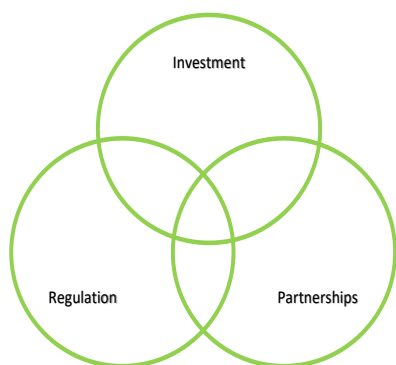
government income support, the share of market housing that meets this criterion is declining.

### 4.3 Policy levers and mechanisms

#### Overview

Depending on the role it wishes to play and the household types it wishes to assist, the City of Melbourne can apply a wide array of 'levers' to achieve affordable housing outcomes. These broadly fall into three overlapping categories (Figure 37).

FIGURE 37 COUNCIL INTERVENTIONS



Source: SGS Economics and Planning Pty Ltd

The 'regulation' group of interventions includes various mechanisms available to Council under the Planning and Environment Act. These cover both voluntary and quasi-mandatory arrangements whereby proponents provide affordable and social housing units or cash in lieu in return for the awarding of development rights. More generally, Council routinely applies its planning (regulatory) function in the maintenance of an efficient local housing market, by ensuring that there are no undue constraints on the generation of housing supply.

In the 'partnership and brokerage' group of interventions, the Council might work with private sector or community sector proponents to help them achieve affordable and social housing outcomes. Examples include brokerage of partnerships between corporate developers and registered community housing providers where the former are self-motivated to include affordable housing in their projects. Similarly, Council might help private sector advocates trial or demonstrate innovative projects which improve affordability, like build to rent housing or the provision of affordable rental on community trust land. Another important example is where Council works with the State Government to improve the housing yield from public housing assets.

The 'investment' group of interventions would see Council applying its own assets – whether this is cash, land or underwriting capacity – to directly generate an expansion of social and affordable housing in the City. By way of example, Council has, in the past, provided buildings for permanent or temporary use as homeless accommodation. Providing relief from rates and various Council charges (including infrastructure and open space contributions) is another form of effective ratepayer investment in pursuit of affordable and social housing objectives.

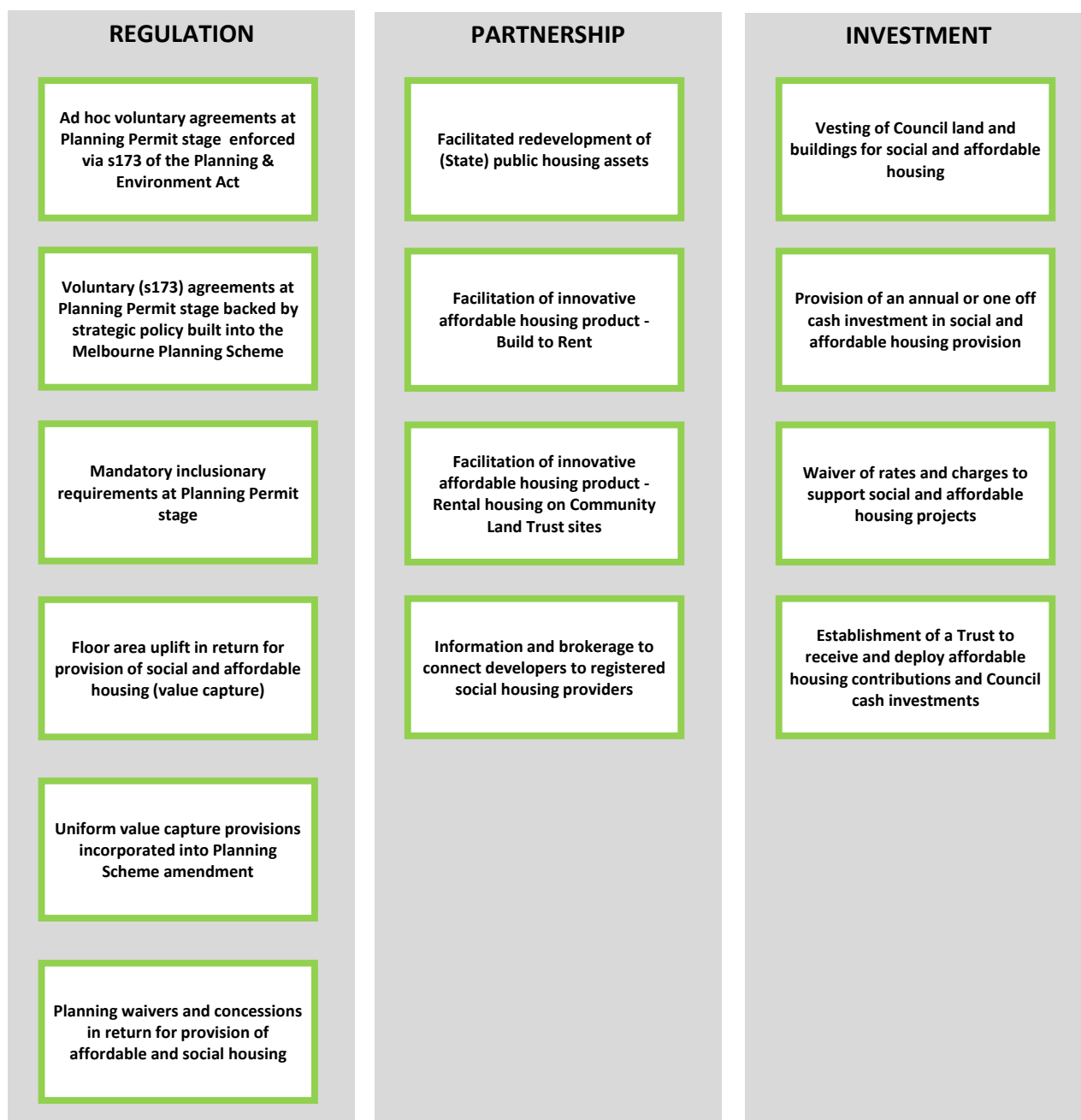
Mechanisms drawn from the three categories (see Figure 38) can be applied in tandem and in various combinations. For example, Council might facilitate private sector innovation in 'build to rent' by providing a rate rebate.

Some of the tools are more suitable at addressing particular categories of need across the housing supply continuum than others. This is highlighted in Figure 39. The actual yield of housing from any of these mechanisms within a given category in the housing supply continuum is partially dependent on the income group which Council (or partner agency)

targets. If moderate income groups are targeted – such as key workers - the implicit or explicit subsidy required to bridge their affordability gap will be smaller. This will mean that the application of the mechanism in question will generate more housing other things equal compared to targeting lower income groups.

In Figure 40 we elaborate on the mechanisms currently, or prospectively, practised by local governments across Victoria and Australia to improve social and affordable housing outcomes. Further detail and case studies for selected mechanisms are provided in the following pages.

FIGURE 38: LEVERS AND MECHANISMS TO ADVANCE SOCIAL AND AFFORDABLE HOUSING IN THE CITY OF MELBOURNE



Source: SGS Economics and Planning Pty Ltd

FIGURE 39

SUITABILITY OF THE TOOLS VERSUS CATEGORIES IN THE HOUSING SUPPLY CONTINUUM

		Housing supply continuum (after AHURI)							
		Emergency shelters / crisis accommodation	Transitional / supported housing	Social housing (public housing and community housing)	Affordable rental housing other than that included in social housing - could be operated by NFPs and private sector under special agreements	Affordable home ownership / shared home ownership	Private market affordable rental including boarding houses and student accommodation	Private market rental housing	Home ownership
Regulation	Ad hoc voluntary agreements at Planning Permit stage enforced via S173 of the Planning & Environment Act	Low	Low	High	High	Mod / High	Moderate	NA	NA
	Voluntary (s173) agreements at Planning Permit stage backed by strategic policy built into the Melbourne Planning Scheme	Low	Low	High	High	Mod / High	Moderate	NA	NA
	Mandatory inclusionary requirements at Planning Permit stage	Low	Low	High	High	Low	NA	NA	NA
	Floor area uplift in return for provision of social and affordable housing (value capture)	Moderate	Low	High	High	Low	NA	NA	NA
	Uniform value capture provisions incorporated into Planning Scheme amendment	Low	Low	High	High	Low	NA	NA	NA
	Planning waivers and concessions in return for provision of affordable and social housing	Moderate	Moderate	High	High	Moderate	Moderate	NA	NA
Partnership	Facilitated redevelopment of (State) public housing assets	Mod / High	Moderate	High	Moderate	Moderate	NA	NA	NA
	Facilitation of innovative affordable housing product - Build to Rent	NA	NA	NA	High	NA	High	NA	NA
	Facilitation of innovative affordable housing product - Rental housing on Community Land Trust sites	Mod / High	Mod / High	Mod / High	High	Mod / High	NA	NA	NA
	Information and brokerage to connect developers to registered social housing providers	NA	NA	Mod / High	High	NA	NA	NA	NA
Investment	Vesting of Council land and buildings for social and affordable housing	Mod / High	Mod / High	High	Mod / High	NA	NA	NA	NA
	Provision of an annual or one off cash investment in social and affordable housing provision	Mod / High	Mod / High	High	Mod / High	NA	NA	NA	NA
	Waiver of rates and charges to support social and affordable housing projects	Mod / High	Mod / High	High	Mod / High	NA	NA	NA	NA
	Establishment of a Trust to receive and deploy affordable housing contributions and Council cash investments	Mod / High	Mod / High	High	Mod / High	NA	NA	NA	NA

Source: SGS Economics and Planning Pty Ltd

FIGURE 40 AFFORDABLE HOUSING LEVERS AND MECHANISMS - OVERVIEW OF APPLICABILITY AND EFFICACY -

	Examples	Benefits	Drawbacks	Scale of impact	Type of households assisted	Implementation	
Regulation	Ad hoc voluntary agreements at Planning Permit stage enforced via S173 of the Planning & Environment Act	> Readily available under current legislation. > Development sector is building a better understanding of Council requirements	> Very labour intensive; customised, case by case agreements required > Can only be enforced if the proponent agrees. Requirements unlikely to survive if challenged at VCAT > Does not provide clear expectations or level playing field for developers. > CoM is not always the Responsible Authority	> Likely to produce only small volumes of social and affordable housing. > This flow will be even lower if Council targets the high needs / very low income end of the housing continuum.	Potentially relevant to the full housing continuum	Can be implemented immediately in CoM. Council is already negotiating affordable housing contributions on an ad hoc basis, but officers do not have the benefit of clear authorising policy from Council	
Regulation	Voluntary (s173) agreements at Planning Permit stage backed by strategic policy built into the Melbourne Planning Scheme	Approved Fishermans Bend 6 per cent affordable housing target	> Provides a stronger case to 'insist' on developer agreement. Planning permit conditions likely to be more robust at VCAT > Requirements of developers can be 'codified' and telegraphed in the strategic policy (Fishermans Bend provides an example). Because proponents can estimate their	> Ultimately, can only be enforced if the proponent agrees	> Untested, but could generate a moderate flow of affordable housing, depending on Council's preferred focus on the housing continuum	Potentially relevant to the full housing continuum	Implementation can commence immediately with the preparation of a Scheme amendment, using the model established by Fishermans Bend. Final adoption of the amendment could take between 12 months and two years.

		Examples	Benefits	Drawbacks	Scale of impact	Type of households assisted	Implementation
			affordable housing exposure in advance, there transaction costs can be reduced. > If the policy is incorporated in the Planning Scheme, it could be applied regardless of whether the CoM is the Responsible Authority.				
Regulation	Mandatory inclusionary requirements at Planning Permit stage	Not available in Victoria (NSW example - Ultimo Pyrmont Affordable Housing Scheme)	> Immune from appeal at VCAT > Requirements of developers would be codified and discoverable in advance of site purchase by developers, thereby reducing transaction costs.	> Not available in the current Victoria Planning Provisions (VPP)	> Were this mechanism to be available, the housing yield could be moderate to high, depending on Council's preferred focus on the housing continuum	Potentially relevant to the full housing continuum	Not available within the current VPP. Would require discrete State Government action to introduce an Affordable Housing Overlay or a Particular Provision for incorporation of affordable housing in all relevant development with a cash in lieu option (as per open space requirements)

		Examples	Benefits	Drawbacks	Scale of impact	Type of households assisted	Implementation
Regulation	Floor area uplift in return for provision of social and affordable housing (value capture)	Am 270 Melbourne Planning Scheme and Fishermans Bend Social Housing for Floor Area Uplift Scheme	<ul style="list-style-type: none"> <li>&gt; Principle of public benefit in return for floor area uplift now well established in Victorian planning practice. It is already embedded in the Melbourne Planning Scheme via Am C270.</li> <li>&gt; There is the potential to extend the model to other growth areas in the City and include a more ambitious value capture regime.</li> <li>&gt; Can apply regardless of whether CoM is the Responsibility Authority</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Some critics of Am C270 claim it is 'complex'. (The equivalent Fishermans Bend scheme is simpler but less flexible)</li> <li>&gt; Depending on how the public benefit obligation is specified, there could be little incentive for developers to opt for provision of affordable housing. At present, under AmC270 most developers opt to include office floorspace as this is an admissible public benefit in that Scheme.</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Low given current calibration of the public benefit to floor area uplift ratio.</li> <li>&gt; AmC270 is yet to deliver any social housing after 2 years of operation.</li> </ul>	Potentially relevant to the full housing continuum	Can be implemented immediately using established models. These can be recalibrated to improve social and affordable housing yield
Regulation	Uniform value capture provisions incorporated into Planning Scheme amendment	Am C088 Hobsons Bay Planning Scheme (though this process led to very low value capture rate – 5 per cent of dwellings to be offered to affordable housing providers at 25 per cent discount)	<ul style="list-style-type: none"> <li>&gt; It should be possible to require a substantial contribution for public benefit, including affordable housing, when land is being up-zoned. &gt; There are several examples across Melbourne where this has been attempted.</li> </ul>	<ul style="list-style-type: none"> <li>&gt; There is still strong resistance to value sharing because land traders factor in a speculated value uplift into their transactions.</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Potentially high for any given site.</li> </ul>	Potentially relevant to the full housing continuum	> Arden Macaulay could produce significant social and affordable housing under this mechanism, but there are many other public sector calls on this prospective value uplift.



		Examples	Benefits	Drawbacks	Scale of impact	Type of households assisted	Implementation
Regulation	Planning waivers and concessions in return for provision of affordable and social housing	> Waivers of parking requirements where there is discretion under the Planning Scheme	> Has a long history of practice across Victoria / Australia	> Conceptually flawed in that some public benefits are sacrificed to achieve another (social and affordable housing)	Likely to be small and erratic	Potentially relevant to the full housing continuum	> Can be implemented immediately, via adoption of suitable Council guidelines around what discretionary requirements may be waived or relaxed.
Partnership	Facilitated redevelopment of (State) public housing assets		> There are some significant Director of Housing holdings in the City which may be able to sustain higher housing yield	> State Government projects to redevelop public housing estates in partnership with the private sector have proven controversial	> Could be high for individual sites but moderate to low across the City as a whole	> Very low income households	> Would require a partnership MoU with State Government
Partnership	Facilitation of innovative affordable housing product - Build to Rent		> There is latent private sector interest in build to rent	> The level of subsidy required to induce Build to Rent is unclear	> Could be substantial, especially if institutional investment in Build to Rent is mobilised via tax breaks and other subsidies	> Moderate income households	> In principle, there is no impediment to immediate implementation. > Council could improve the viability of Build to Rent by advocating for new definitions and zonings for this use, thereby implicitly reducing land values
Partnership	Facilitation of innovative affordable housing product - Rental housing on Community Land Trust sites		> CoM could apply lessons from many examples of this approach in other jurisdictions	> Labour intensive; each project would likely require a customised agreement	> Likely to be very low	Potentially relevant to the full housing continuum	> In principle, there is no impediment to immediate implementation.

	Examples	Benefits	Drawbacks	Scale of impact	Type of households assisted	Implementation	
Partnership	Information and brokerage to connect developers to registered social housing providers	> This is a low risk / low cost option for Council	> By itself, this mechanism could be seen as tokenistic	> Likely to be very low	> Low income households	> In principle, there is no impediment to immediate implementation.	
Investment	Vesting of Council land and buildings for social and affordable housing	> Tangible evidence of Council commitment to boosting social and affordable housing	> Likely to be administratively costly, requiring considerable investment in project management	> By itself, likely to be low	Potentially relevant to the full housing continuum	> As demonstrated by City of Port Phillip and others, Council could proceed now.	
Investment	Provision of an annual or one off cash investment in social and affordable housing provision	City of Port Phillip 'In our Backyard' policy	> Opportunity to leverage Council cash flows via housing agency borrowings > Administratively less onerous than land dedications	> Council would need to gauge ratepayer appetite for such a scheme	> By itself, likely to be low	Probably very low income households and homeless	> As demonstrated by City of Port Phillip and others, Council could proceed now.
Investment	Waiver of rates and charges to support social and affordable housing projects	> Administratively simple > More likely to win popular support	> Hidden subsidy - less accountable	> By itself, likely to be low	Probably very low income households and homeless	> In principle, there is no impediment to immediate implementation.	
Investment	Establishment of a Trust to receive and deploy affordable housing contributions and Council cash investments	> Tangible evidence of Council commitment to boosting social and affordable housing	> Could be seen to be duplicating other instruments already available for funds pooling (e.g. the trusts set up by other relevant agencies)	> The Trust itself would not generate housing	Potentially relevant to the full housing continuum	> In principle, there is no impediment to immediate implementation.	

## Regulatory levers

### Ad hoc voluntary agreements - S173 of the Planning & Environment Act

Under Section 173, the Planning and Environment Act provides a general purpose tool whereby proponents can enter into binding agreements with the permit issuing authority about any (lawful) matter. These agreements typically 'run with the land', so that subsequent purchasers of the property in question carry the same legal obligation to comply with the agreement.

As noted, S 173 is a general purpose tool – it is not specifically designed to advance social and affordable housing objectives, though it can be used for this purpose.

Agreements made under S 173 must be just that, *genuine* agreements. A permit issuing authority cannot coerce a proponent into committing to certain actions or development contributions, including for social and affordable housing. There is a long history of failed attempts by Councils to enforce 'one sided' agreements when proponents have challenged these conditions at VCAT. Having said this, some proponents may be motivated to enter into agreements to undertake works or provide contributions they otherwise would be disinclined to undertake or provide simply to de-risk their projects and save time.

Voluntary S 173 agreements have been used on numerous occasions to enforce various forms of affordable and social housing conditions where the parties have, indeed, found common ground. These conditions can range from the transfer of dwellings to a registered housing agency at zero cost or a discounted price through to a time limited reservation of a certain number of dwellings at a discounted rent.

In judging the appropriateness or otherwise of proposed S173 agreements, VCAT addresses itself to the lawfulness and planning merits of what the approval authority is proposing. Until recently one of the common points of contention in these matters was the question of whether it is fair or reasonable for planning approvals to venture into the territory of social and affordable housing as, arguably, these fall exclusively into the policy domain of State and Commonwealth Government redistributive programs.

A counter argument has been that 'sustainability' under planning legislation and regulations is defined broadly to include social as well as ecological and built form matters. In this context, it is appropriate for planning authorities to require proponents to modify their projects in the interests of improved social sustainability, including through contributions to the local social and affordable housing stock.

Amendments to the Planning and Environment Act, undertaken in 2017 and coming into force on June 1 2018, have resolved this area of contention, at least to a degree. The Act now has a specific objective "to facilitate the provision of affordable housing in Victoria". The same amendments introduced a definition of 'affordable housing', as discussed in 2.1 of this report.

These amendments mean that the City of Melbourne can seek to enter into ad hoc agreements for various forms of social and affordable housing contributions with greater confidence.

### Voluntary agreements backed by strategic policy in the Melbourne Planning Scheme

Notwithstanding the advance offered by the 2017 amendments to the Planning and Environment Act, Councils do not have 'carte blanche' to prosecute affordable and social housing conditions in their development approvals. Recent VCAT proceedings underline the requirement for Councils to have a sound 'strategic basis' for any affordable and social housing requirements they might seek to agree with proponents.

For example, the proponents of a 31 level / 382 apartment development 826 Whitehorse Road, Box Hill successfully appealed against the Council's proposed S173 agreement for '10 dwellings as social or affordable homes to be used by a housing authority'.

In handing down its decision, VCAT (2019) noted *"The Whitehorse Planning Scheme has general state and local policy to support and encourage affordable housing. .... These are broad aspirational policies of the planning scheme, not specific policy or provisions directed to this site. They do not provide a nexus to directing a specific number of dwellings being transferred or secured for affordable housing in order to achieve an acceptable outcome, or net community benefit."*

VCAT further noted that more specific provisions existed in other planning schemes, and they had much clearer parameters about when a benefit was needed.

The revised planning rules adopted by the State Government for Fishermans Bend in October 2018 provide an example of these 'specific provisions' to back voluntary agreements.

The Fishermans Bend Framework (2018) sets out the Victorian Government's confirmed approach to statutory planning controls in this redevelopment area. The Framework includes two distinct initiatives in relation to social and affordable housing; a 6 per cent affordable housing target and a floor area uplift scheme for the provision of additional social housing. We return to the floor area uplift scheme later in this section.

The 6 per cent target obliges proponents to apply their 'best endeavours' to incorporate affordable housing – as defined in the Planning and Environment Act – within the maximum building envelope set by the Framework's Dwelling Density Ratio (DDR) for the site in question. As noted in the Framework...

*Fishermans Bend is an opportunity to increase the supply of a diverse range of, affordable housing, including social housing. The aim is for at least six per cent of housing across Fishermans Bend to be affordable. This includes a range of affordable housing models, typologies, and occupancies, from short-term crisis accommodation through to long-term secure housing for people with special needs, the aged and key workers employed in essential services.*

Importantly, the 6 per cent target is not mandatory. Proponents cannot be forced into affordable housing agreements under S173. Moreover, there is no obligation on proponents to pursue particular types of affordable housing were they of a mind to enter into such agreements. For example, they could legitimately focus on those forms of affordable housing which are least costly to them or to those parties selling development sites.

Nevertheless, the 6 per cent target is an important advance insofar as there is a strong onus of proof on proponents as to why they cannot comply, and this onus can be expected to be strongly pursued in review forums like VCAT.

The basis of the 6 per cent target is unclear; many parties to the proceedings leading up to the adoption of the Framework argued for targets between 10 per cent and 20 per cent. In any case, the 6 per cent has statutory backing in this particular part of Melbourne.

Potentially, the City of Melbourne could develop and adopt an equivalent target for application across other parts of the municipality, including major redevelopment areas. The VPA's vision for Arden Macaulay already includes 6 per cent affordable housing target.

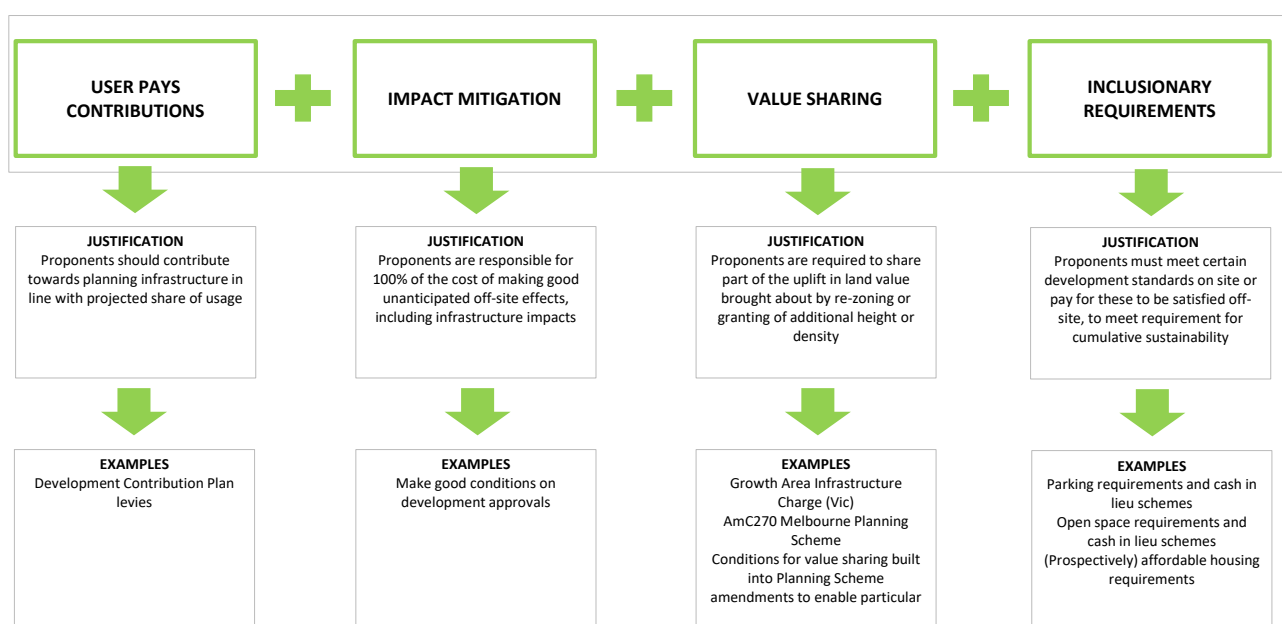
SGS's analysis reported in Section 5 suggests that a target of up to 10 per cent could be adopted without distorting the local housing market.

The research included in this report can be used as the basis for strategic policy to back a consistent voluntary contributions scheme across the municipality.

## Mandatory inclusionary requirements at Planning Permit stage

Conceptually, any development contribution requirement, whether in the affordable housing area or elsewhere, will fall into one of four mutually exclusive and additive categories – user pays charges, impact mitigation payments, value sharing requirements and inclusionary provisions. An overview of these categories, including the relevant principles for cost apportionment, is provided in Figure 41.

FIGURE 41 TYPES OF DEVELOPMENT CONTRIBUTION



Source: SGS Economics and Planning

Inclusionary provisions are premised on minimum acceptable standards of development with the proponent sometimes having the option to fulfil the required performance standard off-site through a cash or in-kind contribution. Cash-in-lieu schemes have been operated for the fulfilment of car parking requirements for decades and are now formalised in the Victorian Planning Provisions (VPP). Cash payments in lieu of provision of 5 per cent (or more) of land for public open space upon approval of subdivision is another example of the 'inclusionary standards' premise for requiring cash or in-kind contributions from a development proponent.

As indicated in the diagram, the premise of inclusionary requirements for development contributions is quite different to the other rationales for requiring cash or in-kind contributions (user pays, impact mitigation and value sharing) and could reasonably be applied in addition to all three of these other measures.

There is a strong in principle case for mandatory inclusionary requirements for social and affordable housing contributions. As mentioned, social and affordable housing is a 'must have' environmental attribute of urban development to ensure sustainability in much the same way as open space provision is. This broad interpretation of the essential attributes of a sustainable place is sanctioned by the expansive definition of 'environment' applied in modern town planning practice. 'Environment' is now taken to include the social as well as the natural and built form aspects of development.

Despite the strength of this argument, and the use of mandatory inclusionary zoning for social and affordable housing in other Australian jurisdictions (see text box below), the Victorian Government has, thus far, stopped short of enabling such provisions in the state's planning

system. Rather, the Victorian Government has preferred to limit itself to voluntary agreements (albeit with stronger targets) and modest forms of value sharing as discussed below.

At this stage, were Council to favour the application of mandatory inclusionary requirements, its only option is to advocate for the adoption of an appropriate tool in the Victoria Planning Provisions. In this context, it should be noted that through the IMAP forum, the inner city municipalities have already developed a 'ready to implement' draft VPP Overlay to give effect to mandatory inclusionary zoning, following the Ultimo Pymont model.

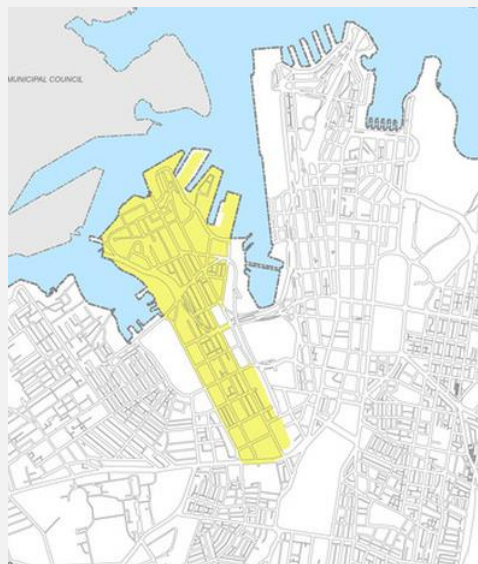
## MANDATORY INCLUSIONARY ZONING IN SYDNEY'S ULTIMO PYRMONT

The longest running mandatory Inclusionary Zoning scheme in Australia applies in Sydney's Ultimo Pyrmont urban redevelopment precinct. This former industrial/port district in the inner city was the subject of a State and Commonwealth '*Building Better Cities*' initiative in the early 90s, under which a targeted amount of affordable housing would be maintained in the neighbourhood as it transformed into an otherwise exclusive area for well remunerated 'knowledge workers'. A special purpose, not for dividend company – City West Housing Ltd – was created by the State Government to own, operate and, where necessary, build the targeted affordable housing. The requisite housing was to be procured via a one off *Better Cities* capital grant from the Commonwealth, an agreed proportion of the value of State Government land sales in the precinct and the proceeds, both cash and in kind, from the Inclusionary Zoning (IZ) scheme applying in the area.

In its latest version, the City West IZ scheme requires developers to provide affordable housing at a rate of 0.8 per cent of the total floor area to be used for residential purposes and 1.1 per cent of the total floor area that is not intended to be used for residential purposes. In 2009/10, the cash in lieu rates were \$30.97/m<sup>2</sup> for residential development and \$44.49/m<sup>2</sup> for non-residential development. City West Housing Ltd reported IZ cash contributions from developers of some \$54 million in the 2016/17 financial year (including contributions from an additional nearby urban renewal precinct known as 'Green Square').

The target set on the launch of the City West Affordable Housing Scheme in 1994 was that some 600 dwellings would be acquired in Ultimo Pyrmont over 30 years as permanently affordable rental stock for very low, low and moderate income households. This target has already been well surpassed.

### CITY WEST AFFORDABLE HOUSING (ULTIMO PYRMONT)





## Floor area uplift at planning permit stage

There are two formally adopted floor area uplift schemes in metropolitan Melbourne, applying in the Central City and Fishermans Bend<sup>98</sup>. The Central City scheme – introduced via Am C270 to the Melbourne Planning Scheme – offers proponents the option of providing social housing in return for additional development rights, while the award of additional density in Fishermans Bend Scheme is exclusively tied to the transfer of social housing.

Both floor area uplift schemes are a form of value sharing under the typology shown in Figure 41. Proponents can exceed a nominal dwelling density ratio or number of storeys provided they meet design rules and deliver a commensurate public benefit. As we explain in Section 5.1, the value of the development site is increased when additional development density or height is permitted. The provision of social and affordable housing is a means by which the proponent may share this uplift in land value with the wider community.

Value sharing requirements have their own separate justification from user pays, impact mitigation and inclusionary development contributions.

Regulation of land use and development through planning schemes in Victoria represents a form of restriction on market access necessitated by the objective of economic efficiency. The Victorian Government deliberately and systematically rations access to ‘development rights’ via planning regulations. Governments apply this rationing because it is expected to generate a net community benefit (that is, an efficiency or welfare gain) compared to allowing urban development to proceed on a ‘laissez faire’ basis.

The value of regulated development rights is capitalised into the price of land. For example, other things equal, a piece of land which is enabled for use as a major shopping centre will be more valuable than land without this privileged access to retail centre development rights. Similarly, land enabled for a multi-storey apartment building will be worth more than otherwise equivalent land designated for a single household dwelling, and so on. And land zoned for mixed use residential will be more valuable than land designated for industrial uses.

As occurs with other regulated markets, for example, commercial fisheries, mineral exploitation, broadcasting bandwidth and so on, it is appropriate to charge a licence fee for access to these regulated development rights<sup>99</sup>. Provision of social and affordable housing in payment for additional development rights can, therefore, be construed as the payment of a licence fee.

Key features of AmC270 and Fishermans Bend schemes are discussed in the following pages.

## Melbourne Planning Scheme Amendment C270

### *What are the height, FAR and FAU limits?*

- FAR = 18:1
- FAU = no upper limit
- Heights:
  - In the General Development Areas (GDA) there are no overall building heights. However, Commonwealth aviation controls (above 226-228m AHD) and additional overshadowing of public open spaces are considerations.

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<sup>98</sup> A further scheme is mooted for West Melbourne (AmC309)

<sup>99</sup> See Spiller, M., Spencer, A. and Fensham, P. (2017) Value capture through development licence fees, Occasional Paper published by SGS Economics & Planning Pty Ltd, February 2017

### ***What was the justification for setting the FAR?***

The aim of the FAR control and the justification for adopting 18:1 benchmark for the General Development Areas is outlined in the following extracts from Central City Built Form Synthesis Final Report:

- “The proposed allowable Floor Area Ratio on sites within the general development areas is 18:1. This aims to achieve two purposes:
  - Setting realistic and clear expectations about what a potential reasonable yield of a typical development site could be; and
  - Establishing a threshold density which triggers a value-sharing contribution towards community infrastructure.”<sup>100</sup>
- “Setting an allowable Floor Area Ratio is not an exact science that will determine the ‘perfect’ ratio. Rather, it is about setting a reasonable threshold, where the FAR is considered commensurate with a scale of development that can be accommodated on a typical site without causing the negative built form and amenity impacts that have been apparent with many recent developments.”<sup>101</sup>
- “This threshold has been set through an iterative process of architectural testing for two case study precincts in the Hoddle Grid and Southbank. The built form testing led to the establishment of a range of Floor Area Ratios that were able to meet the defined built form objectives. The built form testing in the Hoddle Grid indicated an average feasible plot ratio of 18.3:1 in the Hoddle Grid and 18.0:1 in Southbank”<sup>102</sup>
- “An allowable FAR of 18:1 would place Melbourne at the highest end of allowable densities globally, somewhat above cities such as Sydney, New York and Chicago. The combination of an allowable FAR control with a planning framework that incentivises the delivery of public benefit through permitting increased development yield, is accepted practice in Australia and internationally with demonstrable benefits.”<sup>103</sup>

The Panel report on Amendment C270 noted that the 18:1 FAR was high but in the absence of an alternative proposal it was adopted:

### ***How are contributions under the FAU scheme calculated?***

A guidelines document “*How to calculate Floor Area Uplifts and Public Benefits*” provides direction on the method of calculating the FAU contribution, the public benefits categories and methods for valuing each type of benefit.

The FAU contribution is calibrated to the residual land value (RLV) increase associated with the floor space that is above the 18:1 threshold. The calculation method set out in the guideline first estimates the Gross Realisation Value (GRV) of the additional floor space then calculates the RLV as 10 per cent of the GRV. The guideline includes a map and schedule of rates and provides the GRV/RLV rates by precinct and land use (see Figure 42 and Figure 43).

These rates are subject to annual review to ensure that they align with current land and property values. In this sense, the FAU scheme is not a set-and-forget arrangement but one where there is a genuine attempt to calibrate the value of public benefits to the value created via the planning decision.

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<sup>100</sup> Central City Built Form Synthesis Final Report 2016, page 92.

<sup>101</sup> *Ibid*, page 93.

<sup>102</sup> *Ibid*, page 93.

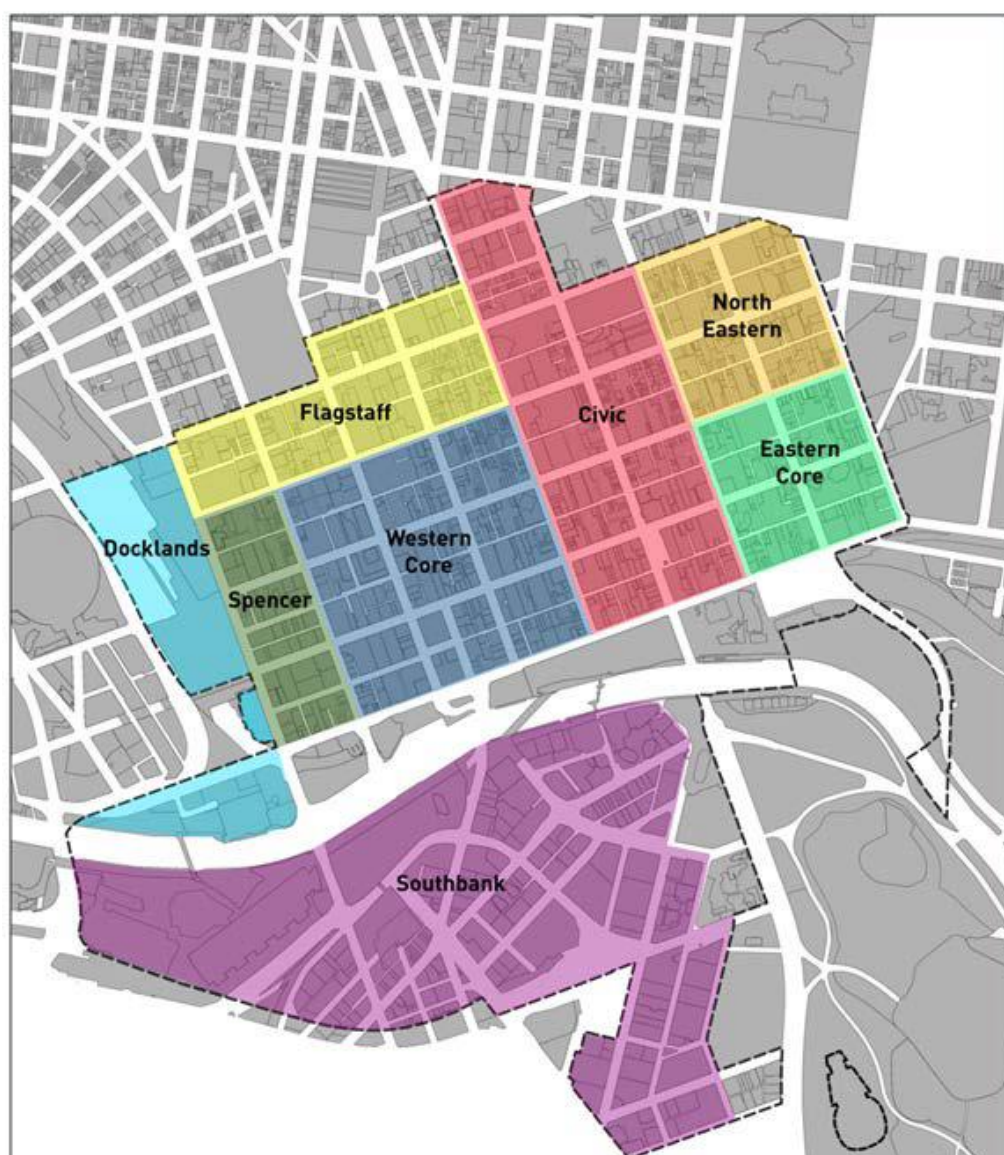
<sup>103</sup> *Ibid*, page 93.

FIGURE 42: GROSS REALISATION VALUES PER SQUARE METRE (1 JANUARY 2016)

USE	PRECINCT (see Fig.1)							
	Eastern Core	North Eastern	Civic	Flagstaff	Western Core	Spencer	Southbank	Docklands
Retail	\$17,000	\$14,000	\$16,000	\$15,000	\$17,000	\$14,000	\$12,000	\$14,000
Hospitality	\$9,000	\$8,000	\$8,000	\$7,000	\$7,500	\$6,500	\$6,500	\$6,500
Commercial	\$9,000	\$6,000	\$7,000	\$5,500	\$7,000	\$5,000	\$5,000	\$5,000
Residential	\$9,000	\$8,000	\$8,000	\$7,000	\$7,500	\$6,500	\$6,500	\$6,500

Source: Melbourne C270 How to calculate Floor Area Uplifts and Public Benefits November 2016, page 2

FIGURE 43: AMENDMENT C270 GRV PRECINCTS MAP (TO BE READ WITH TABLE ABOVE)



Source: Melbourne C270 How to calculate Floor Area Uplifts and Public Benefits November 2016, page 2.

### What types of contributions are permitted?<sup>104</sup>

Five explicit categories of public benefit area described:

- publicly accessible open areas on site (additional to any public open space contribution under Clause 53.01 of the Planning Scheme)
- publicly accessible enclosed areas within the proposed building
- affordable housing within the proposed building
- competitive design process for design of the proposed building, and
- strategically justified uses including office on site or within the proposed building.

The guidelines note that proposals for other types of public benefit will be considered if they are agreed to be of comparable relevance and value.

FIGURE 44: EXAMPLE CALCULATION FROM C270 GUIDELINE DOCUMENT

Step	Calculation	Example
1. Base Gross Floor Area (ie floor area available based on a floor area ratio of 18:1)	Site Area x 18	If site area is 2,000m <sup>2</sup> Base Gross Floor Area is: 2000 x 18 = 36,000m <sup>2</sup>
2. Proposed Development Gross Floor Area	Floor Area calculated in accordance with Schedule 1, 2 or 3 of the Capital City Zone, as applicable	Say, Proposed Development Gross Floor Area is 48,000m <sup>2</sup>
3. Floor Area Uplift (FAU) sought in square metres	Proposed Gross Floor Area (from Step 2) minus Base Gross Floor Area (from Step 1)	Then FAU is: 48,000 – 36,000 = 12,000m <sup>2</sup>
4. Base data for valuing FAU	GRV/m <sup>2</sup> associated with applicable Use of FAU in applicable Precinct as derived from Table 1 and Fig.1	Say, use of upper (additional) floors is residential in Flagstaff precinct Then Table 1 indicates: GRV/m <sup>2</sup> = \$7,000/m <sup>2</sup>
5. Value of each square metre of FAU	10% of applicable GRV/m <sup>2</sup> (from Step 4)	Then FAU value is: \$7,000/m <sup>2</sup> x 10% = \$700/m <sup>2</sup>
6. Total value of FAU	FAU sought (from Step 3) x value of each square metre of FAU (from Step 5)	12,000m <sup>2</sup> x \$700/m <sup>2</sup> = \$8.4M
7. Value of Public Benefit to be provided	Equal to (or greater than) the total value of FAU (from Step 6)	At least \$8.4M
8. Agreed Public Benefit to be provided	Total value of each component as specified in Table 2.  There may be a mix of Benefits from different categories and a combination of components from each category (eg. land and works)  Administrative and holding costs may also be agreed	Four social housing units of 100m <sup>2</sup> GFA each is valued at a GRV of \$7,000 / m <sup>2</sup> in Flagstaff = 4 x 100m <sup>2</sup> x \$7000/m <sup>2</sup> = \$2.8M PLUS: 200m <sup>2</sup> of land transferred to Council valued at \$20,000/m <sup>2</sup> = 200m <sup>2</sup> x \$20,000 = \$4.0M PLUS: Agreed civil works on the 200m <sup>2</sup> of land to provide a plaza valued at \$2,500/m <sup>2</sup> = 200m <sup>2</sup> x \$2500/m <sup>2</sup> = \$0.5M PLUS: Administrative costs at 15% = \$7.3M x 0.15 = \$1.1M TOTAL VALUE OF PUBLIC BENEFITS = \$2.8M + 4.0M + 0.5M + 1.1M = \$8.4M

Source: Melbourne C270 How to calculate Floor Area Uplifts and Public Benefits November 2016

### Limitations

The FAU and public benefit scheme in the central city has been in operation for a relatively short period of time, yet it is somewhat unlikely, in its current form at least, to provide affordable housing as a community benefit. The reasons for this are twofold. Firstly, the 18:1 threshold before the FAU requirements take effect is a very high benchmark. A significant number of new developments will fail to exceed this density and therefore will not be

<sup>104</sup> Melbourne C270 How to calculate Floor Area Uplifts and Public Benefits November 2016

required to make any public benefit contributions. Secondly, should a proposal exceed the 18:1 limit, the proponent is likely to prefer to provide commercial floor space as a community benefit, rather than any other benefit categories listed. It would be illogical for a developer to provide affordable housing at zero consideration when there is an alternative, revenue generating option available. This 'loophole' is likely to undermine the operation of the policy in terms of securing genuine community benefits in the foreseeable future.

## Fishermans Bend Amendment GC81

### *What are the height, FAR and FAU limits?*

The Fishermans Bend Review Panel devoted significant time and effort to reconciling growth forecasts, density controls, planning for land use mix, community benefit (FAU) mechanisms and affordable housing requirements.

The Review Panel's report ultimately recommended that FARs be abandoned in favour of dwelling density controls. The multiple and varied reasons for this recommendation are outlined in Chapter 7 of the Review Panel's report but might be summarised by the Review Panel's suggestion that: *"The FAR is trying to do too many things at once and as such is likely to fail at doing any of them well."*<sup>105</sup>

The Fishermans Bend Urban Design Strategy suggested an *average* FAR of 3.4:1 was needed to support the population target by 2050 for the Fishermans Bend precinct.<sup>106</sup> The draft Amendment for Fishermans Bend included FAR controls that ranged from 2.1 to 7.4 and included a policy on the minimum requirement for commercial floor space (see Figure 45).

FIGURE 45: FISHERMAN'S BEND FLOOR AREA RATIOS

	Capital City Zone			Local policy
	Maximum dwelling FAR	Maximum commercial FAR	Maximum total FAR	Minimum commercial FAR
Lorimer (all core)	3.7:1	1.7:1	5.4:1	1.7:1
Montague core	4.7:1	1.6:1	6.3:1	1.6:1
Montague non-core			3.6:1	–
Sandridge core	3.7:1	3.7:1	7.4:1	3.7:1
Sandridge non-core			3.3:1	–
Wirraway core	2.2:1	1.9:1	4.1:1	1.9:1
Wirraway non-core			2.1:1	–

An FAU mechanism was also proposed with three categories of community benefit: affordable housing, additional open space and community infrastructure. The FAU scheme was intended to create an incentive for the provision of affordable housing by allowing proponents to build eight additional private dwellings at a 'price' of one affordable housing dwelling built and transferred to an appropriate managing authority at no cost (Figure 46).

<sup>105</sup> Fishermans Bend Planning Review Panel, Report No. 1 – Volume 1, 19 July 2018

<sup>106</sup> Fishermans Bend Urban Design Strategy, page 75

FIGURE 46: PUBLIC BENEFIT RATIOS

Public benefit category	Public benefit ratio
Affordable housing	Eight additional dwellings to each affordable housing unit, providing the affordable housing unit mix replicates (size etc) the dwelling mix constructed and delivered for the market by the developer.
Additional public open space	One additional dwelling to the equivalent value of the additional public open space.  The value will be subject to the approval of the Valuer General and subject to approval by the Victorian Government Monitor.
Delivery of community infrastructure	One additional dwelling to the equivalent value of the community infrastructure.  The value will be subject to the approval of the Valuer General and subject to approval by the Victorian Government Land Monitor.

Source: How to Calculate Floor Area Uplifts and Public Benefits in Fishermans Bend

### *Dwelling density control recommendations*

In place of FARs, the Review Panel's recommended a range of dwelling densities be applied, expressed as dwellings per hectare. Their final recommendations are set out in the second row of the table below.

These densities were derived from the Review Panel's assessment of appropriate densities for each Precinct (discussed in Chapter 2.4 of their report). They estimate that the proposed densities would increase the lower end population range for Fishermans Bend at 2050 from 80,000 to 98,000. They go on to suggest that this leaves scope for the social housing uplift mechanism (see below) to operate within the difference between those population estimates and the upper bounds estimate of 120,000.

FIGURE 47: RECOMMENDED DWELLING DENSITIES FOR FISHERMANS BEND

	Wirraway		Sandridge		Montague		Lorimer
	Core	Non-core	Core	Non-core	Core	Non-core	Core
FAR equivalent dwellings per hectare adjusted for 75 per cent build out	185	174	414	205	400	263	339
Review Panel proposed density	370	348	414	225	440	290	339

Source: Fishermans Bend Planning Review Panel, Report No. 1 – Volume 1, 19 July 2018, page 72.

### *Floor area uplift scheme for social housing ('social housing uplift')*

The initial proposal for three categories of public benefits was narrowed to a single benefit category of social housing (as distinct from the broader definition of 'affordable housing' which is also used in the Fishermans Bend planning controls). The Review Panel favoured the narrow focus for the uplift mechanism as it was more likely to generate the desired and required social housing.

The scheme is based on a public benefit ratio approach where the requirement for public benefit (social housing) is calculated via a 'gifting' ratio. In this case, the ratio is 8:1, which means for every 8 additional dwellings permitted as FAU, the proponent is required to provide 1 social housing dwelling.

Assuming that 100 per cent of the land value uplift from the FAU is 'converted' to a public benefit (social housing), the 8:1 ratio implies that land value for 8 market dwellings is equivalent to the total value of one affordable housing dwelling.



Although this approach differs from Amendment C270 which uses dollar values to translate land value uplift value to community benefits, the ratio approach is similar in terms of underlying land economics. The equivalent ratio in the Amendment C270 area would be 10:1.

Interestingly, the Review Panel did not believe that it was presented with sufficient evidence to justify the 8:1 ratio. Its report states: *"The Review Panel does not consider it appropriate to endorse the proposed 8:1 ratio on the evidence before it. However, it represents a starting point."*<sup>107</sup>

The Panel did not appear to be concerned that the dwelling ratio approach might allow for 'gaming' on the part of developers who might, for example, seek permission for 8 additional 3 bedroom dwellings while gifting a single one bedroom social housing dwelling to meet the 8:1 obligation. Although this is an extreme example it does highlight how the dwelling ratio approach might lead to some perverse outcomes.

In other jurisdictions, it is commonplace for social or affordable housing obligations to be expressed as a proportion of the additional floor space or as a proportion of the number of bedrooms<sup>108</sup>. Either of these approaches would reduce the incentive for developers to manipulate the type and size of the proposed FAU dwellings in their favour. These alternatives might also result in more equitable obligations between sites.

### **Value capture provisions incorporated into rezonings**

In the cases of the Central City and Fishermans Bend, value capture is being pursued in the context of land which is already zoned for higher order uses.

Value capture strategies to support social and affordable housing provision can, and have been applied, in situations where land is being 'upzoned' from, say, industrial to residential or mixed use. Recent examples include the rezoning of industrial land in Altona North and the former Amcor site at Alphington.

Amendment C88 to the Hobsons Bay Planning Scheme (approved October 2018) rezones industrial land to enable development of a new medium density suburb in Altona North. It will facilitate the redevelopment of an area under multiple land holdings known as 'Precinct 15'. This amendment included a requirement for a minimum of 5 per cent of all dwellings to be made available to housing agencies at a 25 per cent discount on market price. This targets 150 of the proposed 3,000 dwellings in Precinct 15.

Given that in other value capture schemes (such as Fishermans Bend and Melbourne Central City), social housing units are intended to be transferred at zero cost, the 5 per cent affordable housing 'requirement' in Altona North is, in fact, closer to 1.25 per cent. Recognising that the underlying land value uplift enabled by the rezoning was estimated by EY to be some \$360 million, and assuming that each social housing unit has an acquisition cost of around \$500,000, the rate of value capture in Altona North is a very low 5.2 per cent.

During the panel hearing for Am C88, several key issues were raised:

- whether there is state policy support for affordable housing
- what is a reasonable amount of affordable housing for the precinct
- how a requirement for affordable housing should be implemented.

Hobsons Bay City Council had argued for a mandatory 10 per cent affordable housing, consistent with its adopted Affordable Housing Policy Statement 2016.

The Panel found that this was the first time Council had pursued an affordable housing requirement that specifically required the provision of 10 per cent social and affordable housing. The Panel suggested that if the Council's local policy was part of the planning

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<sup>107</sup> Fishermans Bend Planning Review Panel, Report No. 1 – Volume 1, 19 July 2018, page 98.

<sup>108</sup> The bedroom approach is used in London – see Affordable Housing and Viability Supplementary Planning Guidance.



scheme and had been reviewed by DELWP or a Panel, then it may have been more willing to support the 10 per cent requirement.

The Panel also found that in the absence of a state-wide framework for the provision of affordable housing it was difficult to support an approach that was generally 'not consistent with others tested, including the mandatory gifting of housing.

The Alphington Amcor site rezoning also included a nominal 5 per cent affordable housing contribution. However, most of the units in question will only be made available to registered housing agencies on a 10 year lease.

These two examples demonstrate that the absence of definitive guidance from the State Government about how to measure and share value uplift from rezonings has severely compromised the affordable and social housing yield from such planning scheme amendments, even though the underlying public policy case for value capture is strong and widely accepted.

The City of Melbourne has limited opportunities for value capture from discrete rezonings, though these principles are clearly very relevant to the future of Arden Macaulay.

### **Planning waivers and concessions**

Councils occasionally seek to assist social and affordable housing provision by offering proponents incorporating such accommodation various cost or time saving benefits. These can include:

- Waiving car parking requirements
- Rebates on any development contributions which may be applicable, and
- Access to the priority or fast track development assessment process.

These levers are no doubt welcome on the part of proponents, but they do raise some thorny issues. Waiving of planning standards which would otherwise be applicable implies that the quality of a development or its environmental performance on other grounds can be compromised to achieve the benefit of affordable housing.

Similarly, critics might argue that Councils should provide timely development assessment processes to all development proponents in the interests of creating an efficient housing market overall.

### **Partnership levers**

#### **Facilitated redevelopment of social housing assets**

In partnership with existing Housing Associations in City of Melbourne, Council can identify existing property assets that can be effectively and viably leveraged to realise an increased affordable housing yield through appropriate redevelopment, including the opportunity to tap any Victorian and Commonwealth Government partnership funding.

Similarly, Council can identify and facilitate opportunities to pilot new delivery models and increase the yield, diversity and/or quality of housing in existing public housing estates.

#### **Facilitation of innovative affordable housing product - Build to Rent**

Build to Rent (BTR) is attracting significant popular commentary as a potential 'market led' response to affordable housing needs. The sector is still in its infancy in Australia, and its relevance to low and moderate income groups (as defined for the purposes of the Planning and Environment Act) is ill-defined. The City of Melbourne could play a pro-active role in shaping BTR practice, pending removal of some of the key barriers which are controlled (principally) by the Commonwealth Government.

BTR is a development and business model whereby investors build apartments to hold indefinitely rather than retail to multiple owner-occupiers or minor investors.

Industry groups such as the Property Council see the BTR sector as a solution to growth in a market downturn and a welcome first step in creating a sector that will deliver high quality rental homes and stable long term yields for investors.<sup>109</sup>

## CURRENT AUSTRALIAN BUILD TO RENT PROJECTS

<b>Gold Coast, QLD</b>	<ul style="list-style-type: none"> <li>Grocon has partnered with UBS AM to deliver over 1,200+ apartments under a BTR model by converting the former Commonwealth games village.</li> </ul>
<b>Sydney, NSW</b>	<ul style="list-style-type: none"> <li>Mirvac and UBS have launched the syndicated club fund of \$390m called Liv by Mirvac to deliver BTR projects, the first of which is in Sydney Olympic Park.</li> </ul>
<b>Melbourne, VIC</b>	<ul style="list-style-type: none"> <li>Grocon development on City Road Southbank with 410 apartments over 61 levels to be delivered as a BTR model.</li> <li>Salta Properties has launched two BTR developments in Docklands and Richmond, Victoria.</li> <li>Make Ventures and Assemble launched an innovative long term rent-to-buy model in Kensington, Vic. The development had 3,000 application for 73 apartments, evidencing the market demand for this type of product.</li> </ul>
<b>Perth, WA</b>	<ul style="list-style-type: none"> <li>Element 27 in Subiaco is expected to lease to its first tenants in April-19. The development includes 93 apartments.</li> </ul>

Developers of BTR properties tend to be larger, specialised, property management companies, such as Australian developer Mirvac, backed by institutional investors, such as the Clean Energy Finance Corp.<sup>110</sup> Other Australian examples of BTR projects are shown in the text box.

There is no direct nexus between BTR and housing affordability per se. That is, BTR can be configured to achieve affordability outcomes but these are not implicit in the model itself.

Occupants of BTR in the UK and USA generally have above the median income<sup>111</sup>. In contrast to affordable housing, mainstream BTR buildings have high quality public space, excellent environmental performance and a focus on on-site amenities where residents are offered concierge services, pool facilities and communal rooftops.

Although not as common, there have been examples where BTR projects have provided affordable housing, particularly for key workers. Legal and General developed 440 homes on former Ferry Lane Industrial Estate in London and offered a proportion of homes at a 20 per cent discount to accommodate local key workers.

Unlike Australia, BTR is a common form of housing in the US, especially in larger cities. According to CBRE, the overall success of BTR is largely made possible by preferential mortgage market arrangements in the US. This includes the Multifamily Tax Exemption and US government backed lending programs not available for other housing supply models.<sup>112</sup>

BTR is growing rapidly in the UK. According to the British Property Foundation, policy support from local and national governments has contributed to the overall success of BTR in the UK.

<sup>109</sup> [www.propertycouncil.com.au/Web/Content/News/National/2018/Build-to-rent\\_builds\\_momentum.aspx](http://www.propertycouncil.com.au/Web/Content/News/National/2018/Build-to-rent_builds_momentum.aspx).

<sup>110</sup> <https://www.afr.com/real-estate/mirvac-launches-buildtorent-with-first-investor-clean-energy-finance-corp-20180731-h13d9y>

<sup>111</sup> <https://www.londonfirst.co.uk/sites/default/files/documents/2018-04/Build-to-Rent.pdf>

<sup>112</sup> CBRE (2017) US Multifamily Housing: A Primer for Offshore Investors.

For example, the Government Housing White Paper<sup>113</sup> released in 2017 allowed for changing planning rules so councils could proactively plan for more build to rent homes where there is a need, making it easier for BTR developers to offer affordable private rent in place of other types of affordable home. Furthermore, the draft New London Plan sets out a different approach to assessing the viability of BTR developments opening up a fast track route and bypassing costly negotiations through the planning system.<sup>114</sup>

## GOVERNMENT BTR INCENTIVES IN THE U.S.

Multifamily Tax Exemption	The MFTE program provides a tax exemption to developers and owners of new multi-family buildings who set aside 20-25 percent of their units as income- and rent-restricted for low to moderate income households.
Freddie Mac and Fannie Mae	<p>Freddie Mac is short for the Federal Home Loan Mortgage Corporation and Fannie Mae is short for the Federal National Mortgage Association</p> <p>Fannie Mae and Freddie Mac were created by Congress. They perform an important role in the US housing finance system – to provide liquidity (ready access to funds on reasonable terms), stability and affordability to the mortgage market.</p> <p>Most importantly, the majority of the apartments that Fannie and Freddie finance are designed to be affordable to tenants on low and moderate incomes</p> <p>Fannie and Freddie do not lend directly to apartment investors. Instead, they shoulder financial risks on loans that are underwritten by commercial mortgage companies. In a process known as securitisation, the agencies buy the loans, package them up and sell them on to investors. If borrowers default, Fannie and Freddie potentially have to cover big chunks of the losses.</p> <p>For example. Fannie Mae has helped finance 465 Washington Street in New York. Of 107 units, 20 units were reserved for low-income households. The remainder were let at market rates.</p>

In contrast to the US and UK, significant barriers must be overcome for BTR to establish itself in Victoria.

Under current tax arrangements, BTR schemes operated through a Managed Investment Trusts (MIT) are taxed at 30 per cent of profits which seriously dampens the attractiveness and competitiveness of this asset class.

BTR developers are not entitled to claim back the GST costs of construction, resulting in a 10 per cent premium on the overall cost of the project compared to a typical build to sell a project.

The owners of BTR projects also face land tax bills levied annually on increasing land values. It is interesting to note, however, that low cost accommodation and boarding houses are exempt from land tax.

Many of the barriers facing BTR in Victoria sit with the Commonwealth Government.

Although fundamental tax regime changes are unlikely, various current and prospective Commonwealth Government programs could work in favour of BTR.

It is worth highlighting the January 2019 announcement of the first funds released through the Affordable Housing Bond Aggregator (AHBA) managed by the National Housing Finance Investment Corporation (NHFIC) for low cost affordable housing. The purpose of this is to

<sup>113</sup> Department for Communities and Local Government (2017). "Fixing Our Broken Housing Market."

<sup>114</sup> [www.london.gov.uk/sites/default/files/new\\_london\\_plan\\_december\\_2017.pdf](http://www.london.gov.uk/sites/default/files/new_london_plan_december_2017.pdf)

raise money at lower rates from the wholesale bond market for not-for-profit community housing providers. BTR projects could potentially tap this source of debt finance.

Also noteworthy is that the federal Opposition has foreshadowed the introduction of subsidy program along the lines of the erstwhile National Rental Affordability Scheme. These income streams could also shore up the viability of BTR, especially where low and moderate income tenants are involved.

Council has limited power and influence to boost actual BTR construction, other than through a direct investment role (see below).

### **Facilitation of innovative affordable housing product - Community Land Trust**

As summarised by Crabtree et al (2012), Community Land Trusts (CLTs)...

*“are a form of common land ownership where land is usually held by a private non-profit organisation and leased on a long term basis to members of the community or other organisations. Buildings and services on that land are then held as owned or leased properties by residents, businesses and/or other community housing providers”<sup>115</sup>.*

CLTs are typically referenced as a means of expanding a home ownership-like product to moderate and lower income groups. Buyers, in effect, take a shared equity position in their dwelling, being the built asset component.

However, CLTs can also be established to provide long term land tenure for providers of affordable rental housing. These providers can similarly enjoy a major cost benefit in not having to secure land at full market rates.

A careful audit of community owned land in the City of Melbourne, comprising properties controlled by faith groups, service clubs and philanthropic bodies could well reveal a considerable stock of sites. If packaged and managed so as to tap into established funding sources (including NHFIC financing, subsidies under the State Government’s Homes for Victorians policy and a prospective revitalised NRAS), this portfolio of land could be deployed to generate significant affordable housing opportunities in partnership with the registered housing agencies.

Council could play a role in supporting the land audit process and brokering partnerships between CLT investors and housing agencies.

### **Information and brokerage**

A low cost and low risk policy lever for Council would be to ensure that all stakeholders are well informed about affordable housing needs and opportunities in the City. This could involve:

- regular publication of research on key affordable housing indicators
- hosting inter-sectoral ‘venture fairs’ introducing developers, philanthropists, government policy experts and housing agencies, and
- sponsoring the discovery and dissemination of best practice principles for delivery of affordable housing, for example, through fact finding missions interstate or the assembly of interstate experts to provide advice locally.

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<sup>115</sup> Crabtree, L., Phibbs, P., Milligan, V. and Blunden, H. (2012) Principles and practices of an affordable housing Community Land Trust model, AHURI

## Investment levers

### Vesting of Council assets

This intervention would see Council making a long-term commitment to investing ratepayer equity in the provision of local social and affordable housing, recognising that this is important local infrastructure.

The exemplar Council in this area is Port Phillip, which has a 30-year history of involvement in the provision of social housing. The City owned and managed social housing stock from 1985 to 2006, much of which was rooming house accommodation. The City of Port Phillip Municipal Strategic Statement lists 'supporting a diversity of people across all six of its neighbourhood planning areas' as a key community goal. In meeting this goal, Council chose to become actively involved in the provision of housing to protect disadvantaged residents from rental inflation in an otherwise rapidly gentrifying municipality.

The Port Phillip Housing Association (PPHA) was established in 1985 to manage the City's housing stock. In 2006 the City of Port Phillip and the PPHA established the Port Phillip Housing Trust (PPHT). PPHA acts as the Trustee and the City of Port Phillip serves as governor of the Trust. The PPHA sought and received official registration with the State Government to continue to access joint venture funding from the DHHS. The City of Port Phillip transferred the titles of 12 of its 17 social housing projects to the PPHT in 2006. In part, these reforms reflected Council's desire to divest itself of the role of housing developer.

The City has supported the PPHA (as trustee of the PPHT) with an ongoing capital injection of around \$400,000 subsidy per year, plus access to surplus Council properties for social housing projects. More recently, the City has canvassed the possibility of spreading its annual investment to a broader range of local providers, including niche organisations geared to the needs of particular demographic groups or districts.

Were Council to desire a direct role in social and affordable housing provision, there are a range of proven models from elsewhere in Melbourne that it could follow.

### Annual or one-off cash investment

Following the Port Phillip model and that of the Social Housing Growth Fund established by the State Government, Council could look to provide cash assistance to suitable social and affordable housing projects.

Through the Social Housing Growth Fund, the State Government proposes to build up a \$1 billion endowment fund, the annual returns on which (targeted to be \$70 million) would be awarded to various proponents with innovative and/or effective schemes to generate sustainable affordable housing. Such support is competitively awarded.

### Waiver of rates and charges

Waiving of Council rates and charges that would otherwise apply on social and affordable housing providers is also a form of direct financial support for these outcomes. However, they are less transparent and accountable.

### Housing Trust

A number of Councils, including Port Phillip, Moreland and Hobsons Bay, have established, or plan to establish Housing Trusts to support their social and affordable housing policies.

These Trusts are not policy instruments in themselves. Rather they are a means of consolidating and deploying funding and asset streams from disparate sources. These could include cash in lieu of development contributions and philanthropic donations.

The additional costs and loss of economies of scale with the proliferation of local Housing Trusts is an issue. The City of Melbourne could consider purchasing Trusts services from another Council.

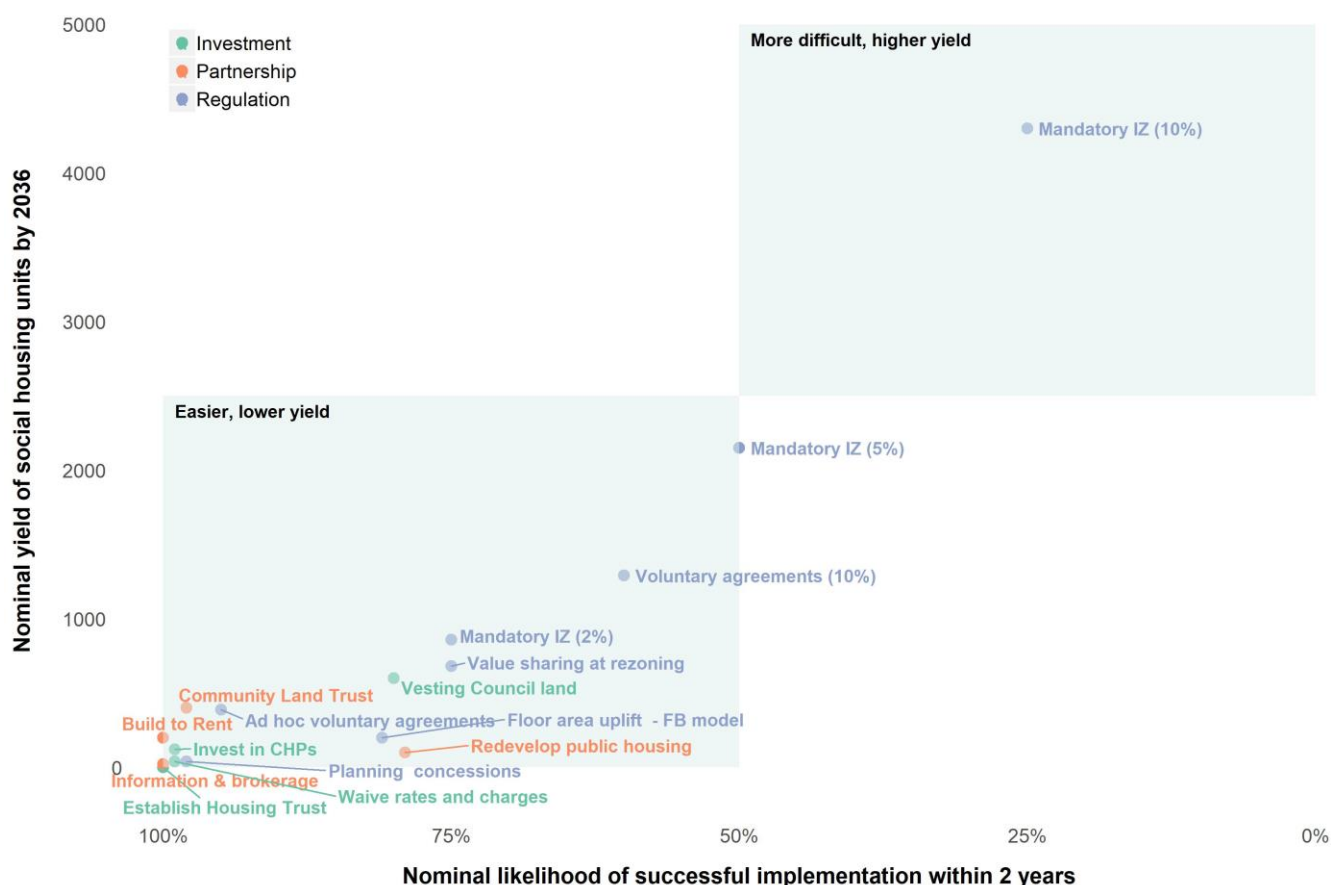
## 4.4 Implementation and impact

As we have shown, some of the listed mechanisms are relatively readily applied in the City because Council has the authority to move in its own right. Others are dependent on State Government providing the required authorising environment. For example, there is no current mechanism in the Victoria Planning Provisions for the enforcement of *mandatory* inclusion of affordable housing in new developments in the City, although a number of policy statements suggest that the State Government may consider enabling reforms in this area.

As well as their capacity for successful implementation within a reasonable period (say 2 years), the mechanisms can also be differentiated in terms of the quantum of affordable housing they are likely to generate over, say, the period to 2036. Figure 48 below shows SGS's assessment of housing yield versus ease of implementation for each of the mechanisms.

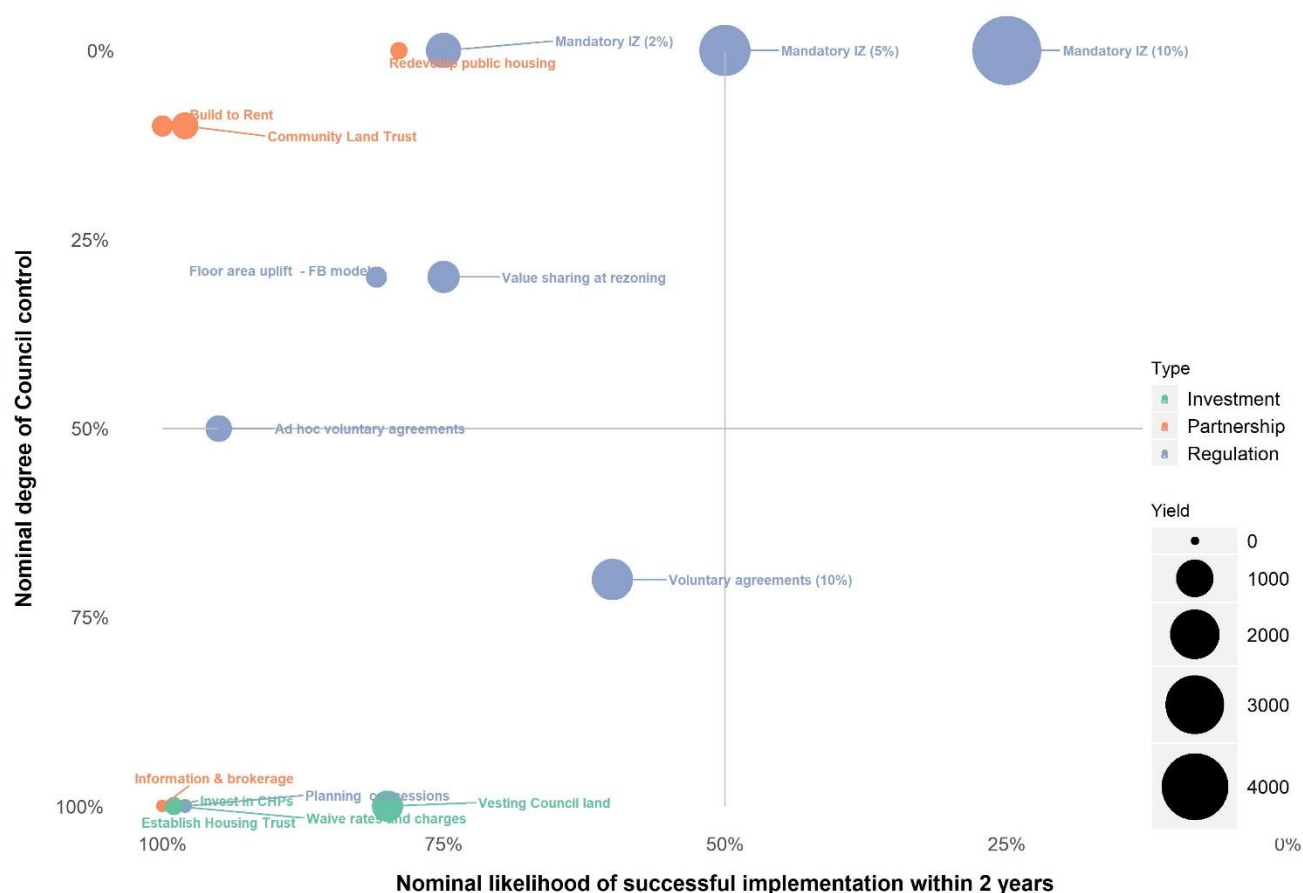
It is evident that many of the levers that can be readily applied will have a moderate to low impact on the level of need in the City. Council needs to be mindful of the effort/return ratio as it contemplates strategic responses to the affordable housing challenge in Melbourne. This is underlined by Figure 49 which indicates that those levers where Council 'can go it alone' without further external authorisation, including vesting of Council land, waiving of rates and charges and provision of planning concessions, are not likely to generate significant flows of affordable housing.

FIGURE 48 HOUSING YIELD VERSUS PROBABILITY OF SUCCESSFUL IMPLEMENTATION



Source: SGS Economics and Planning

FIGURE 49 HOUSING YIELD, LEVEL OF COUNCIL INFLUENCE AND SCALE OF IMPACT



Source: SGS Economics and Planning

## 4.5 Synthesis

Were Council to be motivated to address the considerable and rapidly growing shortage of social and affordable housing in the City, it would need to resolve these policy questions:

- **What role** to play from hands off advocacy through to direct investment in social housing?
- **Who to target** with this policy effort, from those in or at risk of homelessness through to 'key' and creative workers?
- **How to deliver** the adopted social and affordable housing aspirations via regulatory, partnership and investment levers?

The array of policy levers open to Council is extensive, but no single mechanism can be expected to make a major dent in the level of need by itself. While the State Government has clarified that the planning system can and should have a role in affordable housing provision, it is yet to endorse mechanisms such as mandatory Inclusionary Zoning and development licensing arrangements that could mobilise a significant flow of social and affordable housing in Melbourne.

# 5. ECONOMIC CASE FOR INTERVENTION

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Any intervention that Council might make to mitigate the social and affordable housing shortfall in the City will not be cost free. These interventions might dampen development activity and generate other unwanted effects. This Chapter of the report assesses the market impacts of Council action, assuming that Council could, and would, enforce development contributions for social and affordable housing. The Chapter also investigates whether any costs generated by these interventions are outweighed by positive impacts leading to a net community benefit.

## 5.1 Property market impacts of inclusionary requirements

### Framing in the context of notional mandatory contributions

The purpose of this analysis is to investigate the potential effect of notional mandatory affordable housing requirements on land values and the quantum of redevelopment activity in the City of Melbourne.

We recognise that, as things stand, there is no provision for mandatory inclusionary requirements in the Victorian planning system. However, we have framed this analysis on the assumption that such a tool is available and that Council would choose to apply it. From an 'adverse market impact' point of view, this establishes a worst case scenario.

### Research question and data sources

This analysis relies on an assessment of the residual land values (RLV) that would result from the development of those sites likely to be available for new housing in the next 20 years.

Data provided by the City of Melbourne on available sites and their respective capacities has been used as a key input in this assessment.

The key question this analysis seeks to address is whether the imposition of social and affordable housing requirements, through the planning system, would dampen the residual land values to the point where development sites will be withheld from the development process.

For the sake of this analysis it has been assumed that planning-related affordable housing obligations will be satisfied via the transfer of newly constructed dwellings to registered housing agencies at zero consideration.

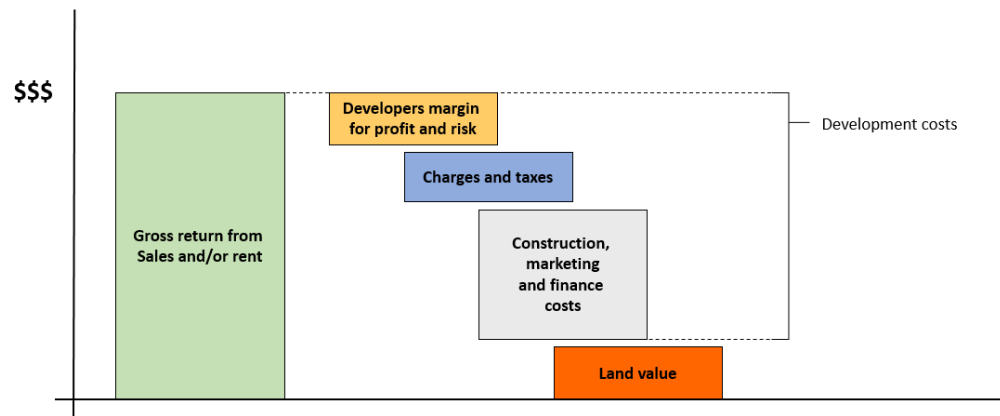
### Residual land value and development feasibility

Development feasibility is typically assessed by comparing the RLV to the existing use value (or, where appropriate next highest value for a site). The RLV can be thought of as the maximum amount a rational developer would pay for a development site. RLV is estimated by deducting all development costs, including profit and risk, from anticipated revenues. The amount left over from the equation – the 'residual' – is capitalised into the value of the land. This is shown conceptually in Figure 50.



A development is feasible if the RLV is sufficient to entice the current landowner to sell their site for redevelopment. What is deemed ‘sufficient’ will vary from site to site and landowner to landowner. It is a function of a range of factors including the income generated by the existing use, options for alternative future uses, general market conditions and individual landowner circumstances and motivations.

FIGURE 50 RESIDUAL LAND VALUE APPROACH TO VALUING LAND



Source: SGS Economics and Planning

### Impact of affordable housing on property markets

Commentary on the economic impact of additional development costs (development contributions, open space requirements, affordable housing, etc.) typically assumes that these costs can be, and will be, passed forward, meaning that they are added to the price faced by end buyers, whether they be owner-occupiers or investors. However, this perspective overlooks the fact that developers of new housing cannot simply increase the price of new housing to cover higher input costs. Developers are ‘price takers’ rather than ‘price makers’: the price of new dwellings (or any other marketed floorspace) is determined by the operation of broader housing markets that include both existing dwellings and new dwellings in other locations.

The most likely impact of additional development costs, where they are known in advance, is that they will be passed back to the owners of potential development sites. Because land for development is valued on a residual basis (see discussion above), additional development costs reduce the RLV and therefore the amount a rational developer will be willing to pay for a development site.

Passing additional development costs backwards, reducing the RLV, will impact development feasibility. The key question when assessing the impact of affordable housing requirement on property development is to determine whether the RLV, after the requirements are considered as a development cost, is sufficient enticement for the incumbent landowner to sell their land to a prospective developer.

### Approach

SGS’s analysis of these issues involved the following steps:

1. Creating a generic RLV model, populated with preliminary cost and revenue assumptions (sourced by SGS and reviewed by m3property).
2. Incorporating available land and density data from Council’s ‘development capacity project’ into the RLV model.
3. Mapped and spreadsheet analysis of potential development sites to determine the number and location of residential development projects that are theoretically viable.
4. Assessing the impact of affordable housing requirements on development project viability.

5. Determine what share of viable projects might be abandoned or deferred because of reduced residual land values versus the capitalised value of current rent streams.

## Data and assumptions

### Study area

The study area includes all of the City of Melbourne. However, the areas designated Port Melbourne and West Melbourne (Industrial) have been excluded given these precincts are unlikely to be redeveloped in the next 20 years.

### City of Melbourne housing capacity data

To identify sites available for housing in the future our modelling has drawn on residential capacity data provided by the City of Melbourne. This data set identifies sites likely to be available for future redevelopment and provides an estimate of the gross floor space that might be developed.

This capacity modelling does not purport to identify where or when development will occur. It simply identifies potential opportunities for residential development across the City.

### Available land

The housing capacity dataset provided by Council included a total of 13,847 sites with a total area of 26,987,301 square metres. Of these sites, 1,337 (around 10 per cent) were deemed available for development. The total area of available sites is approximately 460 hectares.

The following lot characteristics were used in Council's capacity model to determine sites that are unlikely to accommodate residential development in the future:

- lots less than 200 sqm in area
- all lots subject to heritage overlays (with the exception of HO1, HO2 and HO3)
- sites where the existing floor space is greater than 75 per cent of estimate of potential floor space
- lots zoned C1Z, C2Z or Special Use
- sites with more than 5 owners
- sites with irregular geometry
- parks (based on both GIS layers and zoning data), and
- sites with development activity (in the City's Development Activity Monitor) which are currently being developed, are approved for development or have planning permit applications currently under consideration.

### Potential density of future residential development

The capacity or density of redevelopment was provided in the City's housing capacity dataset. This was estimated using a range of criteria, in order of preferred application:

- for urban renewal area the average floor area ratio for that precinct (these values may not be site by site)
- parametric modelling of the DDO using City Engine (DD10 in particular)
- for remaining areas capacity was estimated as the 75 per cent percentile of built densities for each zone/neighbourhood combination, and
- any GRZ1 zoned sites were capped at a maximum of 2 dwellings.

The capacity data also included estimates of dwelling sizes and the proportion of gross floor space that would be residential (i.e. excluding common areas, parking, non-residential floor space). This data was derived from a sample of current residential buildings in each precinct.

FIGURE 51: DWELLING SIZE ASSUMPTIONS FROM CITY OF MELBOURNE CAPACITY DATA

Precinct	Average dwelling size (sqm)
Melbourne CBD	56.05
Southbank	57.00
Docklands	63.00
North Melbourne	59.50
Carlton	59.60
Parkville	66.10
East Melbourne	105.00
West Melbourne (Residential)	54.10
Kensington	98.00
South Yarra/Melbourne (Remainder)	73.65

Source: City of Melbourne residential capacity data, 2018.

### Existing floor space

Existing floor space has been used in SGS's modelling to estimate demolition costs and existing sites values.

Existing floor space was derived from Census of Land Use and Employment (CLUE) data provided by the City of Melbourne. This data includes separate 'space use' categories for each site (i.e. "bps\_base\_id"). The space use categories were filtered to determine those that are likely to generate revenues for the purpose of existing site values.

### Estimates of site-specific existing use values based on net annual value

Existing site values have been estimated using CLUE data on existing floor space and space use categories, estimated rental return per square metre of floor space and yield assumptions. These are shown in Figure 52 below. These figures were reviewed by m3property.

### Revenue assumptions for new residential development

Revenues assumptions in the model are based on square metre rates for the net saleable floor space as set out in Figure 53 below.

These values are preliminary estimates only that have been derived from the Gross Realisation Values published in the guidelines for estimating the monetary value of community benefits contributions published with Amendment C270 to the Melbourne Planning Scheme. These values are reproduced below at Figure 42 on page 79.

We have assumed the rates in this guideline are per square metre of *gross* floor area and have thus converted them to rates per square metres of *net saleable* floor area using the gross to net floor space efficiency rate (75 per cent for all hypothetical development projects). A 5 per cent discount was then applied to bring the result in-line with current market values. m3property reviewed these rates before their application in SGS's modelling.

FIGURE 52: ASSUMPTIONS FOR ESTIMATING EXISTING USE VALUES

Floor space use	Net rent per sqm gross floor space (estimate)	Yield (estimate)	Implied gross realisation value/sqm gross floor space
Commercial Accommodation	\$250	5.0%	\$5,000
Institutional Accommodation	\$250	5.0%	\$5,000
House/Townhouse	\$240	3.5%	\$6,857
Residential Apartment	\$290	4.5%	\$6,444
Student Accommodation	\$720	9.0%	\$8,000
Office	\$400	5.5%	\$7,273
Retail - Shop	\$500	5.0%	\$10,000
Retail - Showroom	\$300	6.5%	\$4,615
Manufacturing	\$150	5.0%	\$3,000
Hospital/Clinic	\$600	5.5%	\$10,909
Storage	\$125	5.0%	\$2,500
Workshop/Studio	\$150	5.0%	\$3,000
Educational/Research	\$400	5.0%	\$8,000
Unoccupied - Unused	\$250	5.0%	\$5,000
Transport/Storage - Uncovered	\$275	4.0%	\$6,875
Performances, Conferences, Ceremonies	\$250	5.0%	\$5,000
Wholesale	\$125	5.0%	\$2,500
Entertainment/Recreation - Indoor	\$250	5.0%	\$5,000
Community Use	\$250	5.0%	\$5,000
Public Display Area	\$250	5.0%	\$5,000

Source: SGS Economics and Planning

FIGURE 53: REVENUE PER SQUARE METRE NET SALEBLE AREA

Precinct	GRV/sqm NSA
Melbourne CBD	\$9,250
Southbank	\$8,650
Docklands	\$8,650
North Melbourne	\$9,000
Carlton	\$9,000
Parkville	\$8,000
East Melbourne	\$11,000
West Melbourne (Residential)	\$8,750
Kensington	\$7,500
South Yarra/Melbourne (Remainder)	\$8,500

Source: SGS Economics and Planning

## Feasibility assessment

As outlined, the fundamental test applied in the modelling to determine whether a hypothetical development is feasible was to compare the RLV of that development to the existing use value of the site plus the margin that is required to motivate the landowner to sell. Put simply, a hypothetical development is feasible when:

$$RLV \geq EUV +$$

For the current modelling, the margin represented by the '+' is 20 per cent of the existing site value.

Where affordable housing requirements are introduced into the feasibility equation, the required proportion of dwellings are deducted from the estimated revenue while the cost of constructing them is included. There are consequential adjustments to GST and marketing costs. The net effect of these changes is a reduction in the RLV. A hypothetical development, with an affordable housing requirement, is deemed feasible when:

$$RLV \text{ (with AH)} \geq EUV +$$

The following sub-sections discuss the preliminary results of applying these tests to those sites deemed available in the City's housing capacity data.

### Capacity for housing on available sites

Based on the City's housing capacity criteria as described above, and the density assumptions provided with this dataset, there is capacity for an estimated 176,000 new dwellings in the municipality. Note that only a proportion of these would be commercially feasible on today's costs and revenues (see below).

Most of this gross capacity is in four precincts: Docklands (32,000); the CBD (34,000); North Melbourne – which include Arden and Macaulay (47,000) and Southbank (30,000).

FIGURE 54: AVAILABLE SITES AND ESTIMATED DWELLING CAPACITY

Precinct	Sites	per cent of sites	Dwellings	per cent of dwelling capacity
Carlton	81	6%	9,256	5%
Docklands	39	3%	32,217	18%
East Melbourne	71	5%	1,004	1%
Kensington	215	16%	6,233	4%
Melbourne (CBD)	184	14%	34,233	19%
North Melbourne	363	27%	46,779	27%
Parkville	151	11%	8,875	5%
South Yarra	46	3%	648	0%
Southbank	46	3%	30,146	17%
West Melbourne (Residential)	138	10%	6,109	3%
Melbourne (Remainder)	3	0%	439	0%
<b>Total</b>	<b>1,337</b>	<b>100 per cent</b>	<b>175,940</b>	<b>100 per cent</b>

Source: City of Melbourne residential capacity data, 2018. Note: dwelling counts differ from CoM figures due to the global application of 75 per cent efficiency rate (gross to net floor space).

## Feasibility of residential development on available sites

As explained, feasibility of development has been determined for each available site by comparing the RLV to the existing use value plus 20 per cent.

Of the 1,337 sites and 176,000 dwellings in the capacity dataset, preliminary modelling suggests that redevelopment of 494 sites would be commercially feasible. These sites would host 116,500 dwellings (see Figure 55 and Figure 56). This accounts for 37 per cent and 66 per cent of the total sites and total dwellings in the housing capacity dataset respectively.

Feasible sites are most common North Melbourne, the CBD, Kensington, South Yarra and West Melbourne. In terms of total dwelling numbers on feasible sites, North Melbourne has 43,000 and Southbank and Docklands have around 20,000 each.

The location of feasible sites is shown in Figure 58.

FIGURE 55: FEASIBLE SITES – BASE CASE (NO AFFORDABLE HOUSING REQUIREMENT)

Precinct	All sites	per cent of all sites	Feasible site	per cent of feasible sites
Carlton	81	6%	26	5%
Docklands	39	3%	22	4%
East Melbourne	71	5%	19	4%
Kensington	215	16%	43	9%
Melbourne (CBD)	184	14%	68	14%
North Melbourne	363	27%	194	39%
Parkville	151	11%	5	1%
South Yarra	46	3%	43	9%
Southbank	46	3%	31	6%
West Melbourne (Residential)	138	10%	42	9%
Melbourne (Remainder)	3	0%	1	0%
<b>Total</b>	<b>1,337</b>	<b>100%</b>	<b>494</b>	<b>100%</b>

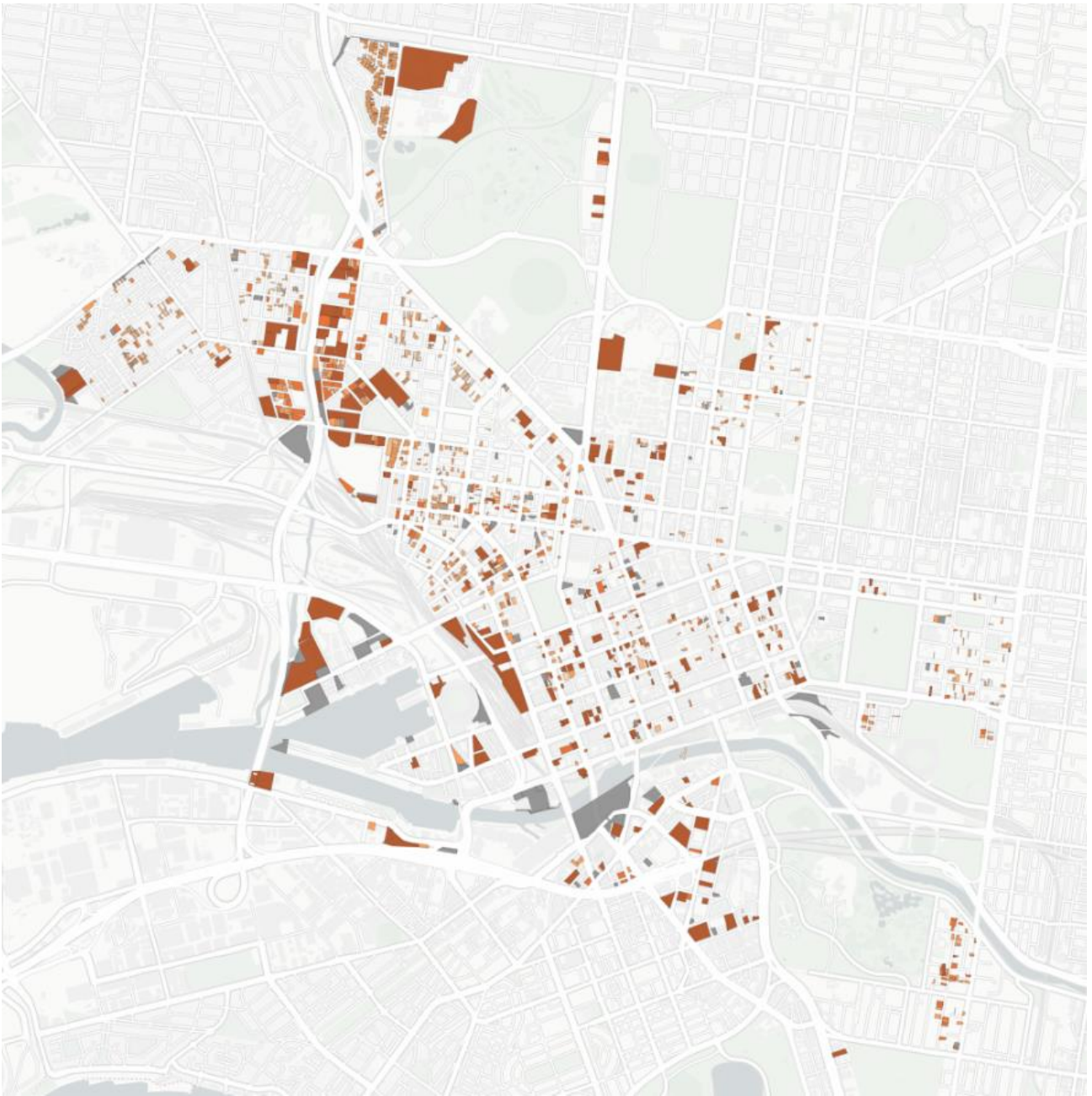
Source: SGS Economics and Planning

FIGURE 56: FEASIBLE DWELLINGS – BASE CASE (NO AFFORDABLE HOUSING REQUIREMENT)

Precinct	All dwellings	per cent of all dwellings	Feasible dwellings	per cent of feasible dwellings
Carlton	9,256	5%	5,936	5%
Docklands	32,217	18%	20,290	17%
East Melbourne	1,004	1%	554	0%
Kensington	6,233	4%	4,367	4%
Melbourne (CBD)	34,233	19%	12,138	10%
North Melbourne	46,779	27%	43,840	38%
Parkville	8,875	5%	7,238	6%
South Yarra	648	0%	618	1%
Southbank	30,146	17%	17,847	15%
West Melbourne (Residential)	6,109	3%	3,406	3%
Melbourne (Remainder)	439	0%	246	0%
<b>Total</b>	<b>175,940</b>	<b>100%</b>	<b>116,481</b>	<b>100%</b>

Source: SGS Economics and Planning

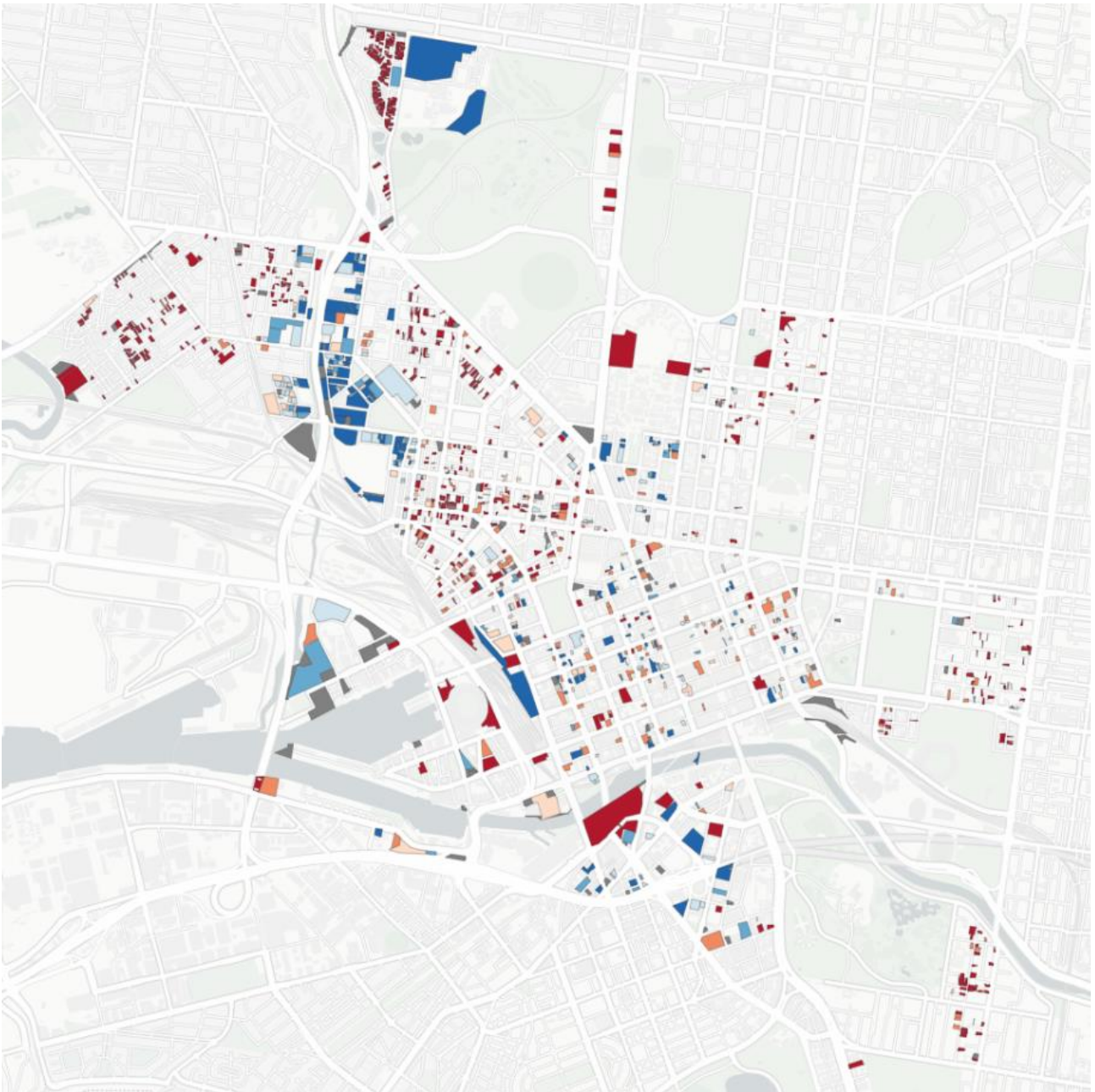
FIGURE 57: EXISTING USE VALUE OF AVAILABLE SITES (ESTIMATE – DARKER = HIGHER)



Source: SGS Economics and Planning



FIGURE 58: RELATIVE FEASIBILITY OF AVAILABLE SITES (BLUE = FEASIBLE; RED = NOT FEASIBLE)



Source: SGS Economics and Planning



## Impact of affordable housing requirements

The impact of affordable housing requirements is measured by discounting revenues in the hypothetical developments but maintaining the same cost assumptions. The effect is to reduce the RLV. Comparing the new residual land value to the existing use value plus (EUV+) for each site generates a reduced number of feasible sites.

The tables below show the impacts of 5 per cent and 10 per cent affordable housing requirements on the number of feasible sites and the total potential dwellings on those sites. A five percent affordable housing requirement reduces the number of feasible sites from 494 to 451 – a 9% reduction. This in turn reduces the number of feasible dwellings from 116,500 to 109,600 – a 6% reduction.

FIGURE 59: FEASIBLE SITES – 5 PER CENT AFFORDABLE HOUSING REQUIREMENT

Precinct	Count of feasible sites (base case)	Proportion of all feasible sites (base case)	Count of feasible sites (5 per cent AH)	Proportion of all feasible sites (5 per cent AH)
Carlton	26	5%	24	5%
Docklands	22	4%	20	4%
East Melbourne	19	4%	15	3%
Kensington	43	9%	35	8%
Melbourne (CBD)	68	14%	63	14%
North Melbourne	194	39%	186	41%
Parkville	5	1%	4	1%
South Yarra	43	9%	41	9%
Southbank	31	6%	30	7%
West Melbourne (Residential)	42	9%	32	7%
Melbourne (Remainder)	1	0%	1	0%
<b>Total</b>	<b>494</b>	<b>100%</b>	<b>451</b>	<b>100%</b>

Source: SGS Economics and Planning

FIGURE 60: FEASIBLE DWELLINGS – 5 PER CENT AFFORDABLE HOUSING REQUIREMENT

Precinct	Count of feasible dwellings (base case)	Proportion of all feasible dwellings sites (base case)	Count of feasible dwellings (5 per cent AH)	Proportion of all feasible dwellings (5 per cent AH)
Carlton	5,936	5%	5,427	5%
Docklands	20,290	17%	18,583	17%
East Melbourne	554	0%	492	0%
Kensington	4,367	4%	3,056	3%
Melbourne (CBD)	12,138	10%	11,576	11%
North Melbourne	43,840	38%	42,982	39%
Parkville	7,238	6%	6,939	6%
South Yarra	618	1%	604	1%
Southbank	17,847	15%	17,583	16%
West Melbourne (Residential)	3,406	3%	2,148	2%
Melbourne (Remainder)	246	0%	246	0%
<b>Total</b>	<b>116,481</b>	<b>100%</b>	<b>109,636</b>	<b>100%</b>

Source: SGS Economics and Planning

A ten percent affordable housing requirement reduces the number of feasible sites from 494 to 404 – an 18% reduction. This in turn reduces the number of feasible dwellings from 116,500 to 103,400 – a 16% reduction.

FIGURE 61: FEASIBLE SITE – 10 PER CENT AFFORDABLE HOUSING REQUIREMENT

Precinct	Count of feasible sites (base case)	Proportion of all feasible sites (base case)	Count of feasible sites (10 per cent AH)	Proportion of all feasible sites (10 per cent AH)
Carlton	26	5%	24	6%
Docklands	22	4%	19	5%
East Melbourne	19	4%	14	3%
Kensington	43	9%	25	6%
Melbourne (CBD)	68	14%	51	13%
North Melbourne	194	39%	172	43%
Parkville	5	1%	4	1%
South Yarra	43	9%	34	8%
Southbank	31	6%	29	7%
West Melbourne (Residential)	42	9%	31	8%
Melbourne (Remainder)	1	0%	1	0%
<b>Total</b>	<b>494</b>	<b>100%</b>	<b>404</b>	<b>100%</b>

Source: SGS Economics and Planning

FIGURE 62: FEASIBLE DWELLINGS – 10 PER CENT AFFORDABLE HOUSING REQUIREMENT

Precinct	Count of feasible dwellings (base case)	Proportion of all feasible dwellings sites (base case)	Count of feasible dwellings (10 per cent AH)	Proportion of all feasible dwellings (10 per cent AH)
Carlton	5,936	5%	5,427	5%
Docklands	20,290	17%	17,048	16%
East Melbourne	554	0%	462	0%
Kensington	4,367	4%	2,632	3%
Melbourne (CBD)	12,138	10%	10,364	10%
North Melbourne	43,840	38%	42,158	41%
Parkville	7,238	6%	6,939	7%
South Yarra	618	1%	504	0%
Southbank	17,847	15%	15,483	15%
West Melbourne (Residential)	3,406	3%	2,118	2%
Melbourne (Remainder)	246	0%	246	0%
<b>Total</b>	<b>116,481</b>	<b>100%</b>	<b>103,381</b>	<b>100%</b>

Source: SGS Economics and Planning

### Sensitivity testing

For illustrative purposes only, the tables below demonstrate the impact of progressively increasing the affordable housing requirements on development feasibility. A one percent affordable housing requirement reduces the number of feasible sites by 7 (1% of feasible sites) whereas a 20 per cent requirement reduce this number by 265 (54% of feasible sites) This corresponding reductions in feasible dwellings are 221 (<1%) and 41,360 (54%).

FIGURE 63: IMPACT OF VARIOUS AFFORDABLE HOUSING REQUIREMENTS – FEASIBLE SITES

Affordable housing per cent	Feasible sites (no affordable housing requirements)	Feasible sites with affordable housing requirement	Reduction in feasible sites due to AH requirement (%)	Reduction in feasible sites due to AH requirement (count)
1.0 per cent	494	487	1%	7
2.0 per cent	494	483	2%	11
3.0 per cent	494	473	4%	21
4.0 per cent	494	457	7%	37
5.0 per cent	494	451	9%	43
6.0 per cent	494	443	10%	51
7.0 per cent	494	438	11%	56
8.0 per cent	494	425	14%	69
9.0 per cent	494	412	17%	82
10.0 per cent	494	404	18%	90
12.0 per cent	494	379	23%	115
14.0 per cent	494	347	30%	147
16.0 per cent	494	309	37%	185
18.0 per cent	494	272	45%	222
20.0 per cent	494	229	54%	265

Source: SGS Economics and Planning

FIGURE 64: IMPACT OF VARIOUS AFFORDABLE HOUSING REQUIREMENTS – FEASIBLE DWELLINGS

Affordable housing per cent	Feasible dwellings (no AH)	Feasible dwellings with AH requirement	Reduction in feasible dwellings due to AH requirement (%)	Reduction in feasible dwellings due to AH requirement (count)
1.0 per cent	116,481	116,260	0%	221
2.0 per cent	116,481	114,579	2%	1,902
3.0 per cent	116,481	113,971	2%	2,510
4.0 per cent	116,481	110,407	5%	6,073
5.0 per cent	116,481	109,636	6%	6,844
6.0 per cent	116,481	107,121	8%	9,360
7.0 per cent	116,481	105,449	9%	11,032
8.0 per cent	116,481	104,590	10%	11,891
9.0 per cent	116,481	103,828	11%	12,653
10.0 per cent	116,481	103,381	11%	13,100
12.0 per cent	116,481	100,984	13%	15,497
14.0 per cent	116,481	91,677	21%	24,804
16.0 per cent	116,481	83,804	28%	32,676
18.0 per cent	116,481	81,139	30%	35,342
20.0 per cent	116,481	75,121	36%	41,360

Source: SGS Economics and Planning

## Discussion

### Preliminary modelling results

The analysis demonstrates some key dynamics in the property market with respect to future housing supply. These can be summarised as follows:

- Of the total land area in the City, only a fraction will be available for new residential development in the next 20 years.
- Regardless, there is likely to be significant *theoretical* capacity for housing growth owing to several larger redevelopment areas, and the relatively high densities that might be achieved in the City in general.
- Only a proportion of sites identified as being available for housing will be feasible to redevelop. Of 1,377 sites identified as being available for redevelopment, 494 were identified as being feasible (see Figure 55).
- The introduction of affordable housing requirements will reduce revenues will reduce the number of sites that are feasible (see Figure 61 and Figure 62).
- Higher affordable housing requirements will have a greater impact on feasibility and more widespread property market impacts (see Figure 63).

### Market impact

There is a projected requirement for approximately 88,000 additional dwellings in the City of Melbourne to accommodate population growth between 2016 and 2036. Current planning approvals, which may or may not be acted upon, provide for around 60,000 dwellings. SGS's high level modelling shows that a mandated requirement for 10 per cent affordable housing (delivered via gifting) across all new development in the City would still leave a stock of commercially feasible development opportunities with capacity for 103,000 dwellings. This suggests that the introduction of mandated inclusionary requirements up to 10 per cent would not distort the City of Melbourne housing market; housing supply would have ready scope to adjust to demand over the next 20 years. However, the mix of development sites could change compared to a scenario where mandated inclusionary requirements were not applied. That is, some landowners would be adversely impacted, but the overall housing market would still deliver the required supply.

### Limitations and cautions

The high level modelling we have described necessarily brings a number of limitations. Of note, the decision rules built into the City of Melbourne development capacity model are open to critique and/or adjustments. To recap the criteria:

- All land zoned C1Z was excluded.
- Sites with more than five owners were excluded. In the case of commercial strata buildings some of these sites could still be considered available for development.
- All sites with development activity (in the City's Development Activity Monitor) were excluded (i.e. sites being development, sites approved for development and sites with planning permit application currently under consideration). This impact of affordable housing requirements on these sites has not been tested.
- Some sites with substantial existing developments were included even though in some instances the result is counter-intuitive. For example, two notable and substantial buildings in 1 Spring Street and 222 Exhibition Street fall into the developable pool under the decision rules in the City's capacity model. This occurs because the current level of development is under the threshold for exclusion (existing development being greater than 75 per cent of potential floor space calculated at a floor area ratio of 18:1).

Notwithstanding the last of these points, SGS's view is that, overall, the decision rules in the City of Melbourne capacity model make for a conservative estimate of the potential future supply of housing in the municipality.

Certain limitations in SGS's feasibility modelling approach also need to be noted.

Feasibility was determined by comparing an 'existing use values' to RLVs. Due to data constraints, these existing use values were estimated by calculating the capitalised value of the net annual rents. These rent estimates are not site specific.

SGS's feasibility model also assumes that the mandatory affordable housing transfers will be valued in the developer's feasibility study at full market price rather than construction cost. In practice, developers would have a lower GST exposure and selling costs on gifted affordable housing units would be negligible. As a result, SGS's estimate of the reduction in RLV as a result of a mandatory inclusionary requirement is likely to be higher than what would be found in a real-world feasibility study<sup>116</sup>.

There is scope for further work to refine the findings of SGS's modelling. That said, the general direction of the limitations in the modelling is to over-estimate any adverse impact on the withdrawal of development sites from mandatory inclusionary requirements. Our broad conclusion that the introduction of such requirements would not unduly distort the market holds as a sound hypothesis for policy development in this area.

## 5.2 Cost benefit analysis of mandatory affordable housing requirements

Major regulatory initiatives in Victoria must be demonstrated to generate a net community benefit. That is, the value of welfare gains by beneficiaries moving from a normal business scenario to the new regulatory regime must be shown to be greater than the value of any welfare losses from this shift, when expressed in present value terms.

If the regulatory reform delivers a net community benefit in these terms, it is deemed to result in a more economically efficient allocation of Victoria's collective resources than under the business as usual scenario.

### Cost benefit analysis methodology

There is an established discipline and method for conducting CBAs in Victoria. This is common to all Australian jurisdictions.

In short, a CBA must address the full spectrum of environmental, social and business impacts of the regulatory proposal at hand. Positive and negative effects are quantified and monetised (expressed in dollar terms) as far as possible and then compared. This leads to a conclusion as to whether the proposal is likely to make the community better off, in net terms, compared with persevering with business as usual conditions.

The principal steps in the generic cost benefit analysis method (see Figure 65) include:

1. Differentiating between the outcomes under a 'business as usual' or 'base case' scenario and those arising with the regulatory initiative in question (the 'with project' scenario).
2. Identifying the economic, social and environmental costs and benefits that might arise in moving from the 'base case' to 'with project' scenario.
3. Quantifying and monetising these costs and benefits, where possible, over a suitable project evaluation period (in this case 20 years).

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<sup>116</sup> It is also assumed that affordable dwellings will be provided at zero cost to a housing association. However, this is not a material assumption, as a range of affordable housing requirements were tested. For example, a 5 per cent requirement provided at no cost will be equivalent to a 10 per cent requirement provided to a housing association at 50 per cent of the market rate

4. Generating measures of net community impact using discounted cash flow techniques over the 20-year duration of the regulation; this requires an expression of future costs and benefits in present value terms using a discount rate that is reflective of the opportunity costs of resources diverted to the implementation of the reforms.
5. Testing the sensitivity of these measures to changes in the underlying assumptions utilised.
6. Supplementing the quantitative analysis with a description of costs and benefits that cannot be readily quantified and monetised.

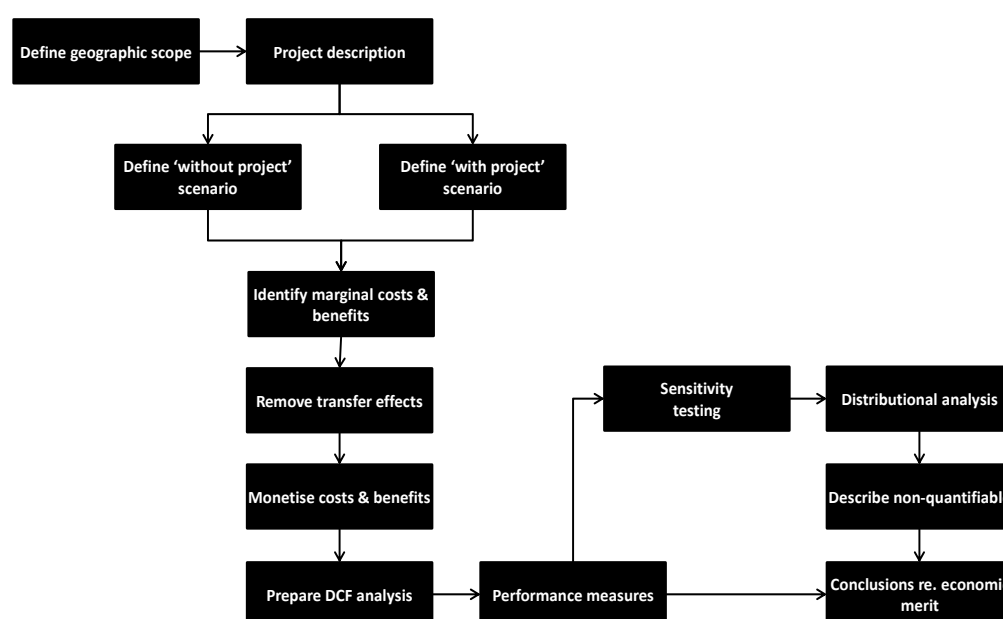
It is important to note that *all* impacts of the proposed regulations versus the base case *must* be considered, whether or not they are ‘traded’ effects or ‘externalities’.

As the name implies, traded effects have a price in the market. Externalities, on the other hand, are unpriced costs and benefits sustained by third parties in any market transaction. The cost benefit analysis must account for these impacts even though they are not directly mediated (bought and sold) in the market. The monetised value of these external effects needs to be imputed using a variety of techniques as advised by DTF in its *Cost Benefit Analysis Tool Kit*.

Another vital characteristic of CBA in the context of increasing the supply of social and affordable housing is that the community benefit delivered by this regulatory initiative is judged by reference to the ‘*Kaldor-Hicks*’ rule. This states that the initiative in question is worth undertaking if the gain in welfare by the beneficiaries is greater than the loss in welfare for those adversely affected. In other words, the regulatory initiative would be warranted if the beneficiaries could, if required, compensate those adversely affected and still be better off; hence the term ‘*net*’ community benefit.

The ‘*Kaldor Hicks*’ rule differs from the ‘*Pareto*’ test which is sometimes used in town planning practice. The Pareto test is that an initiative is *only* warranted if there are *no* losers in the process. The Pareto test is not sanctioned in regulatory impact assessment because it places an unworkable onus of proof on the economic merits of regulatory change.

FIGURE 65 COST BENEFIT ANALYSIS METHOD



Source: SGS Economics and Planning

## Common errors and misapplications in cost benefit analysis

There are some common pitfalls in assessment of *net community benefit* in matters of planning regulation. One is to confuse ‘economic impact’ with ‘economic benefit’. The former deals with the commercial flow-on effects of an initiative or program (sales made, people employed, suppliers contracted and so on), while the latter relates to an improvement in community welfare.

Another pitfall is to construe construction and operational jobs as a ‘benefit’ of a proposal whereas they are typically factored into cost benefit analyses as a cost. This is because the labour in question has an opportunity cost – it could be deployed elsewhere to produce benefits for the community were it not for the project at hand. Employment is usually only counted as a benefit when the project creates jobs for people who would otherwise be permanently unemployed or underemployed.

A third common misapplication of economic thinking to the *net community benefit* test in urban planning issues is to implicitly or explicitly confine the analysis to the local district or host region of the development in question. Again, in line with usual advice offered by jurisdictional Treasuries, the frame for assessing *net community benefit* should be set at the state jurisdiction level. To do otherwise runs the risk of patently illogical findings; that is, a *net community benefit* may be found for the local area, but this might be more than offset by transfers or external costs for neighbouring communities or the host metropolitan area or state.

## Distinguishing financial and cost benefit analysis

*Financial analysis* is sometimes confused or conflated with CBA. Financial analysis is undertaken from the narrow perspective of an investor, or buyer, or seller in the market and only tracks market transacted costs and benefits. It also considers tax liabilities. In contrast, CBA is undertaken from a Victoria wide perspective and, as noted, considers all impacts on welfare, whether priced or unpriced. Moreover, because CBA is concerned with net effects, tax impacts are typically set aside as they are simply transfers within the wider community.

## Base case, project case, costs and benefits

The purpose of the CBA outlined in this section is to test whether a notional policy of mandatory affordable housing requirements in the City of Melbourne would represent an efficient regulatory reform. That is, to test the net community benefit of moving from the base case to the project case.

## CBA framework

Typically, applying a CBA methodology to evaluate the merit of an initiative requires knowledge of the implementation and operational details of the project. In the case of the provision of social and affordable housing, these details include identifying who will be the targeted recipients of the affordable housing and what mechanism will be used to deliver this supply. Given that the exact nature of the project is not yet defined at this level of detail, two key methodological choices have been adopted in this discussion paper.

Lacking knowledge of the groups which will be targeted by the program, an appropriate methodology for a preliminary CBA is to evaluate a BCR on a ‘per household’ basis, which will represent the merit of providing affordable housing to a representative household. The costs and benefits used will, therefore, be defined based on a set of assumptions which specify the composition of this representative household.

Under the assumptions adopted for the project case (detailed in the following section), the specific mechanisms used to deliver the supply of social and affordable housing are inconsequential to the estimation of costs which will be used to evaluate the BCR. This is due to the operation of transfer effects, the details of which are discussed in further detail below.

## Defining the base case and project case

The **base case** assumes the current status quo where a significant number of households in the City are unable to access affordable housing, and as a result, suffer a range of negative consequences from rental stress to homelessness. In the base case the current number of social and affordable housing dwellings remains static, while the total number of dwellings in the City increases by 88,000 dwellings between 2016 and 2036.

The **project case** assumes that the introduction of regulation would result in an increase in the supply of social and affordable housing stock in the City of Melbourne. It is assumed that the program will achieve the following outcomes:

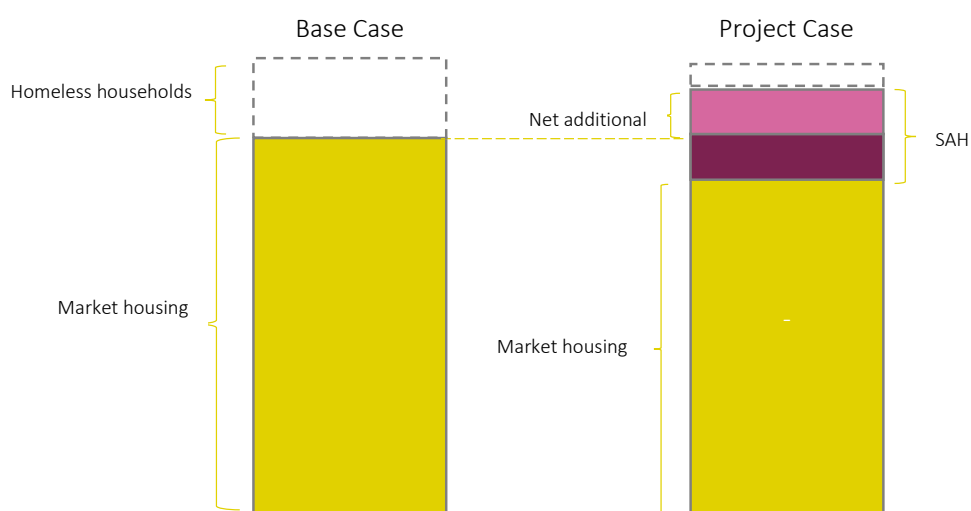
- provide affordable housing for homeless persons, and
- provide affordable housing for those who would otherwise experience housing stress.

It has been assumed that the regulations will have two distinct impacts on the supply of housing stock over the 20-year period in question:

1. A share of the private dwellings provided in the base case will be provided as social and affordable housing dwellings in the project case (represented by the dark purple shaded area in the figure below). This replacement effect assumes that there would be no increase in demand as a result of the regulation, and therefore no change to total dwelling supply.
2. Where homeless persons are provided with secure housing this would constitute a net increase in housing supply relative to the base case (represented by the pink shaded area in the figure below). These households would not have been accommodated under the base case.

Therefore, it is assumed the introduction of mechanisms to increase the supply of affordable housing stock will result in an overall net increase in occupied dwellings.

FIGURE 66: BASE CASE AND PROJECT CASE HOUSING SUPPLY OUTCOMES COMPARED



Source: SGS Economics and Planning

Finally, the project case assumes that the benefits of social and affordable housing stem from the alleviation of housing stress or homelessness rather than any changes in households' locations. That is, the broad locational characteristics of a household affected by the project (e.g. accessibility) will be similar across the base and project cases. This assumption precludes the need to explicitly define where each household would move from if an affordable dwelling was made available in the City of Melbourne and can be interpreted as assuming that the households affected are those that would have chosen to reside within the City of Melbourne under the base case.



## Marginal costs

This section lists the potential additional costs associated with the introduction of social and affordable housing regulations, that is, moving from the base case to the project case. Some of these costs relate only to the realisation of the net additional dwellings (as defined in the project case), while others are relevant only to dwellings that would have been otherwise provided by the market but will now be used for social or affordable housing. These are summarised in the table below and then described in more detail.

FIGURE 67: SUMMARY OF COSTS

Net additional dwellings	All other dwellings
Base construction costs	
Maintenance and operating costs	
Reduction in residual land value	Reduction in residual land value
Increased construction costs from additional design requirements	Increased construction costs from additional design requirements
Adverse debt raising effects	Adverse debt raising effects

Source: SGS Economics and Planning

### Construction costs

The expenses relating to the initial establishment of the net additional dwellings (as defined in the project case) include:

- land acquisition
- planning and feasibility studies
- architectural and engineering design
- construction, including materials, equipment and labour
- construction financing
- insurance, and
- equipment and finishing.

### Maintenance and operating costs

Ongoing expenses will be incurred for maintenance and operating costs throughout the useful life of the net additional dwellings, once constructed. Broad categories of these costs include:

- insurance
- property management
- utilities
- repairs and maintained, and
- administrations.

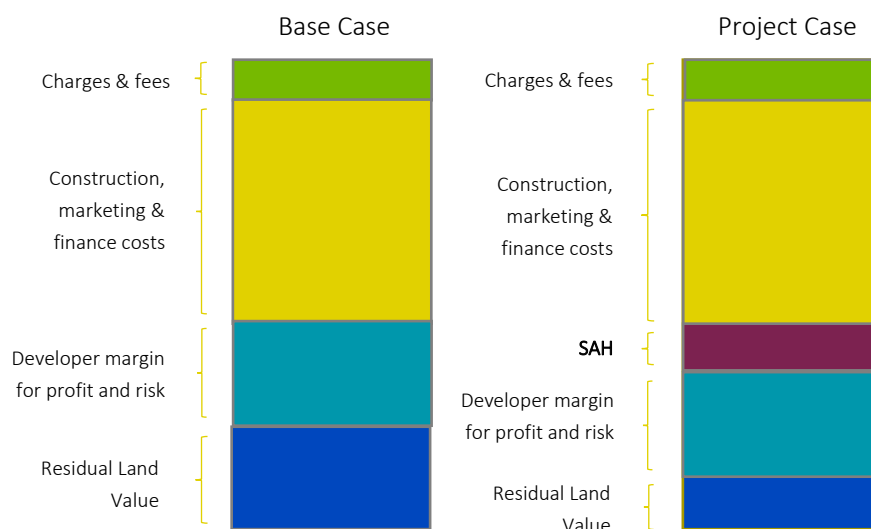
### Reduction in residual land value (RLV)

As described in detail above, the maximum price which a developer is willing to pay for land is equal to the Gross Development Value (GDV) of the development (i.e. revenue received if the development was sold at market value), minus the cost of construction and fees, as well as a desired profit margin for a project. This can be expressed simply according to the following equation:  $RLV = GDV - (Construction + Fees + Profit)$

In the project case, there is an additional requirement that impacts the developers' costs, which is to provide social or affordable housing at zero consideration.

Providing these dwellings comes at a financial cost to the developer and, all things being equal, will result in a reduction in the RLV.

FIGURE 68: REDUCTION IN RLV



Note: SAH = social and affordable housing

Source: SGS Economics and Planning

### Increased construction costs from additional design requirements

Social and affordable housing should accommodate the universal needs of residents to enable ongoing independence throughout various stages of life or tenure. Dwellings should respond effectively to these needs without requirement for costly and energy intensive alternations.

A range of features may be incorporated into the design of social and affordable housing units to achieve this, and include:

- adaptable floor plans
- incorporate a high level of physical access provision for people with a physical impairment, whether it be the primary resident or visitor
- enhanced provision for people with sensory, intellectual or cognitive impairment
- slightly wider doorways or passage ways
- robust surfacing treatments, and
- easy to use fixtures such as taps and door handles.

*The Housing Design Guidelines*, developed by the Department of Health and Human Services (DHHS), provides guidance on specific design requirements for low rise public housing. *The Liveable Housing Design Guidelines Standard or AS 4299 Adaptable Housing Class C* provide guidance for high rise social housing developments.

As this form of universal dwelling design is not standard for all residential developments, developers will likely incur an additional cost in the design and construction of this type of housing. The National Disability Insurance Scheme (NDIS) identifies a cost of \$25,190 per dwelling to incorporate a high level of access provision in new housing stock. This is equivalent to the 'Liveability Housing Australia (Platinum)' level and has been used to quantify the additional design costs.

### Property market impacts

As we have detailed in Section 5.1 possible consequence of the reduction of RLV could be that some potential housing projects are rendered unfeasible. Should this be the case, the flow of new housing might be negatively impacted as developers would be unable to afford to purchase enough land to satisfy housing demand.

## Adverse debt raising effects

Requirements to include affordable housing in new development may reduce overall property and land values, impacting the ability of owners to raise finance against these assets (i.e. through higher interest rates or reduced borrowing amounts). The impact of this cost will be mitigated if the requirements for affordable housing are increased progressively rather than in a single step-change.

## Marginal benefits

This section lists the potential benefits associated with the introduction of social and affordable housing regulations. As with the costs detailed above, some of the defined benefits relate only to the realisation of the net additional dwellings (as defined in the project case), while others are relevant only to dwellings that would have been otherwise provided by the market but will now be used for social or affordable housing. These are summarised below.

FIGURE 69 BENEFITS SUMMARY

Net additional dwellings	All other dwellings
Health cost savings	Health cost savings
Reduced domestic violence	Reduced domestic violence
Reduced costs of crime	Reduced costs of crime
Enhanced human capital	Enhanced human capital
Worker retention	Worker retention
Educational benefits	Educational benefits
Improved community pride and social justice	Improved community pride and social justice
Retained cultural value	Retained cultural value
Enhanced social capital	Enhanced social capital
Gain in housing services	Increased consumer surplus

Avoided property price and tourism impacts

Source: SGS Economics and Planning

## Health cost savings

Homeless individuals and people experiencing housing stress consume far more health services than people who have stable and affordable housing. There are many reasons for this, with the impacts of housing felt in both direct and indirect ways by individuals. The World Health Organisation has identified four specific attributes of housing which contribute to the wellbeing of residents. These include the:

- meaning of 'home' as a protective, safe and intimate refuge where one develops a sense of identity and attachment
- physical structure and its conditions, mould growth, quality, design, and noise exposure
- immediate housing environment, including the quality and amenity of the environment immediately surrounding
- community and the shared sense of trust and collective efficacy.<sup>117</sup>

The benefits of secure, affordable and quality housing have been extensively researched and documented. These benefits include reduced stress and improved mental health outcomes,

<sup>117</sup> Bonnefoy, X. (2007). Inadequate housing and health: an overview. *Int. J. Environment and Pollution*, Vol. 30, Nos. 3/4, , 411–429.

enhanced ontological security, reduced number of hospital presentations and length of stay, and a shift from crisis medical attention to preventative care.<sup>118</sup>

Substandard or no accommodation can leave a person more susceptible to illness and less able to appropriately manage chronic conditions and can predispose residents to accidents and injury (with children and the elderly particularly affected). The financial strain caused from chronic (ongoing) housing stress can contribute to a variety of physical and mental issues, including increased likelihood of substance abuse, and can limit an individual's ability to access health and community services.<sup>119</sup>

The benefits of housing are most pronounced for those who are removed from homelessness or in insecure housing. This is evidenced by recent housing projects such as The Michael program which provided housing and wrap-around services to homeless men, significantly altering the type and quantity of health services required by participants.<sup>120</sup>

### Reduced domestic violence

The 2016 Royal Commission into Family Violence found that family and domestic violence is a significant issue in Victoria, with the recorded rate of family violence incidence increasing by 83 per cent between 2009 and 2014.

The causes of family violence are complex and varied, however, financial hardship is a well-evidenced and frequently cited contributing factor. Research by Benson and Fox (2004) found that couples experiencing financial strain had an average rate of domestic violence of 9.5 per cent compared with 2.7 per cent for couples who reported low levels of strain.<sup>121</sup> High housing costs place a significant economic burden on families and can fuel the occurrence of domestic violence. This is supported by the findings of the Commission, who noted 'financial, housing and gambling issues' as prevalent amongst male perpetrators.

Poor housing affordability also contributes to the issue of domestic violence by limiting the ability of victims to find safe and secure shelter when wishing to remove themselves from a violent household. For many victims, the lack of appropriate housing often resulted in the victim returning to the abusive household or becoming homeless. In its findings, the Commission found that family violence was a key factor contributing to homelessness, with just under 40 per cent of family violence victims seeking support from Specialist Homelessness Services.<sup>122</sup>

Domestic violence costs the Victorian community through increased need for crisis care, health services, specialist homelessness services, justice system and child-protection costs, and the pain and suffering of victims.<sup>123</sup>

### Reduced costs of crime

Providing affordable housing can help to reduce the incidence of crime and engagement with the justice system.

Homeless people and people experiencing housing stress are more likely to be both the victims and perpetrators of crime than the general community. This is because:

- Living in a public space means that homeless individuals are more susceptible to committing public order offences.

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<sup>118</sup> Raynor, K, Palm, M, O'Neil, M and Whitzman, C. (2018), 'Investigating the costs and benefits of the Melbourne Apartments Project', Transforming Housing, The University of Melbourne

<sup>119</sup> Phibbs, P. and Young, P. (2005), Housing assistance and non-shelter outcomes. Retrieved from Australian Housing and Urban Research Institute: <https://www.ahuri.edu.au/research/final-reports/74>

<sup>120</sup> Mission Australia (2010), The Michael Project: New perspectives and possibilities for homeless men, Australia: Mission Australia.

<sup>121</sup> Benson, M.L., & Fox, G.L. (2004), 'When violence hits home: How economics and neighbourhood play a role', Washington, DC: U.S. Department of Justice, National Institute of Justice.

<sup>122</sup> Australian Government (2016), Royal Commission into family violence: Report and recommendations, Melbourne: Victorian Government Printer.

<sup>123</sup> AIHW (2018), 'Family, domestic and sexual violence in Australia 2018', Canberra: Australian Institute of Health and Welfare.

- People without stable accommodation, or suffering significant financial pressure, may have little choice but to engage in ‘survival offending’.
- Substance abuse as a coping mechanism may lead to offending behaviour to fund habits.
- The lack of safe and stable housing for some individuals may mean that they are less able to secure belongings.

Research by MacKenzie (2016) shows that homeless young people are six times more likely to be apprehended as an offender while also having a higher incidence of reporting robbery and theft.

Social and affordable housing can help alleviate many of these causes by providing stable and secure accommodation, and reducing the financial strain caused by rental stress.

### **Enhanced human capital**

The Melbourne Sustainable Society Institute notes that the experience of homeless and housing stress can limit the ability of people to make productive contributions to society in terms of work, social relationships, volunteering and community activities.

The provision of affordable housing and relief of experience of housing stress can help to free time and financial resources to be input into other endeavours, including reconnecting with the job market and education, or taking a more active role in the community, thereby improving future employment prospects.<sup>124</sup>

Human capital benefits are likely to be particularly pronounced in the City of Melbourne, where there is a high concentration of opportunities to engage in productive activities.

### **Worker retention**

As discussed in the supporting background paper, there is growing concern for poor housing affordability contributing to a thinning of the labour pool in the central city. In some instances – both internationally and in Australia – lack of diversity in the workforce pool is resulting in poor labour matching and increasing costs relating to labour market shortages, staff retention (and hence retraining) and reductions in economic productivity.

It is expected that implementing social and affordable housing targets in the City of Melbourne will result in increased housing for key service workers (including both essential and personal service workers). To the extent that this initiative allows these workers to find secure housing in a neighbourhood closer to work, local services and businesses will enjoy reduced recruitment and retention costs for key staff.

### **Educational benefits**

Poor housing affordability can affect the educational outcomes of school-aged children in several ways.

Children living in households in housing stress are more likely to change school more often due to greater susceptibility to fluctuations in rent, or difficulty in maintaining chronically high rental payments, resulting in the family relocating. Research has shown that children who change schools more frequently are more likely to have below average grade scores, are more likely to drop out and have higher rates of absenteeism than children who have not.<sup>125</sup>

<sup>124</sup> Raynor, K, Palm, M, O’Neil, M and Whitzman, C. (2018), ‘Investigating the costs and benefits of the Melbourne Apartments Project’, Transforming Housing, The University of Melbourne

<sup>125</sup> Mueller, E. and Tighe, J.R. (2007), Making the case for affordable housing: Connecting housing with health and education outcomes, Journal of Planning Literature, 21(4)

Likewise, other consequences of poor housing affordability, such as overcrowding and lower housing quality also result in decreased academic performance due to increased noise, poor health and lack of quiet space to do homework.<sup>126</sup>

### **Improved community pride and social justice**

The lack of stable shelter and the vulnerability, discrimination, insecurity and lack of personal and professional development faced by individuals who do not have adequate and affordable accommodation represents an injustice.

By facilitating the provision of social and affordable housing to address the injustices that housing insecurity creates, society receives a social justice benefit. This benefit is unquantifiable but can be thought of as the gain the community receives knowing that they are a participant in a fair and just society.

### **Retained cultural value**

As addressed in the supporting background paper, cities and regions in advanced economies are seeking to distinguish themselves within an increasingly competitive global economy to attract footloose capital and investment. Incubating and promoting diversity is seen as a positive attribute in creating a point of differentiation. Diversity is also seen as important in business and tourism attraction.

It is anticipated that the implementation of targets will assist in delivering an increase in alternative housing forms and tenures, which will in turn allow for a greater diversity of people and households to reside in the municipality (people of different socio-economic status, abilities, ages and household composition).

### **Enhanced social capital**

A significant body of international literature identifies a clear link between stable communities and the growth of social capital.<sup>127</sup> Social interaction is seen to provide residents living in a community with knowledge about their fellow residents, which in turn assists in allowing for exchanges to take place, building trust, and creating social networks and a common set of rules.

Enhanced social capital has been shown to contribute to a range of positive economic and social outcomes including high levels of growth of gross domestic product, more efficiently functioning labour market, higher educational attainment, lower levels of crime, better health, increased social contributions (volunteering) and more effective institutions of government.

Affordable housing reduces the likelihood of tenant turnover, increasing the potential for the development of a stronger sense of community - or social capital.

### **Gain in housing services**

As described in the base case above, it has been assumed that increasing the requirement for social and affordable housing in the City will ultimately result in a net increase in the total dwelling stock. This overall increase in total dwellings is the result of providing accommodation for people and households who were previously homeless or in insecure housing situations and is valuable for its ability to provide shelter, security of tenure, security of person and privacy.

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<sup>126</sup> Mueller, E. and Tighe, J.R. (2007), Making the case for affordable housing: Connecting housing with health and education outcomes, *Journal of Planning Literature*, 21(4)

<sup>127</sup> Williams, J. (2005) 'Designing Neighbourhoods for Social Interactions: The case for cohousing', *Journal of Urban Design*, 10(2), 195-227.

### Increased consumer surplus

Consumer surplus is an economic measure of consumer benefit, which is calculated as the difference between the benefits consumers receive from a good or service and the price they actually spend to obtain it. In this case, the good is housing, which has a benefit equivalent to the market rental rate. Households who receive tenancy at below-market rates have an increase in consumer surplus which is equal to the difference between the rent they pay and the market rate. This benefit applies to the households who, under the base case, would have consumed an identical product (i.e. housing) but paid a level of rent which placed them in rental stress.

### Avoided property price and tourism impacts

Research by the Sustainable Society Institute (2017) noted that the City of Melbourne has recently expressed concerns about the impact of homelessness on shopping areas such as Elizabeth Street and Flinders Street, having received hundreds of calls rejecting the visibility of Melbourne's homelessness.

Other evidence suggests that homelessness bears a cost to the community through deflated development and property prices, and in impacting the tourism sector.<sup>128</sup>

Providing affordable housing, particularly forms of housing targeting the homeless, is expected to result in a net gain by reducing the visibility of homelessness. The Melbourne Sustainable Society Institute (2017) quote evidence from the recent Gold Coast Project for Homeless Youth (GCPPHY), in which substantial donations were received from local businesses to shelter homeless youths. The amount donated is evidence of a willingness-to-pay for the reduced visibility of homeless youth.

### Transfer effects

The term 'transfer effects' refers to cases in which resources are transferred from one party to another without any economic value being created or consumed.

As noted, any transfer effects should be removed in CBAs as they represent costs and benefits that are redistributed within the community (i.e. the costs to one party are entirely offset by benefits to other parties) and do not generate any change in net community benefit.

Two of the marginal impacts considered in the sections above can be removed from the CBA as they constitute transfer effects. These are the costs and benefits that accrue from an affordable dwelling that is provided to a household who would otherwise have experienced rental stress.

### Households relieved of rental stress (not net additional stock)

For households who receive an affordable dwelling, and are relieved of rental stress, a marginal cost is the reduction in RLV, which is borne by the landowner. This cost is offset by benefits that flow to other parties. In this case, the Housing Associations receive rental income, albeit at below market rates, and the tenants of these dwellings (who are renting them at below market rates) receive a consumer surplus.

Another way of conceptualising this transfer mechanism is to see that there is no change in the use of resources caused by the intervention. Under both the base and project scenarios, the same dwelling is produced and is assumed to house the same occupant. The sole difference is the share of the value of the dwelling between parties (i.e. landowner and occupant). An example, which assumes delivery via the planning system is illustrated below.

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<sup>128</sup> Melbourne Sustainable Society Institute (2017), Issue Paper Series: The case for investing in last resort housing, University of Melbourne: Melbourne.

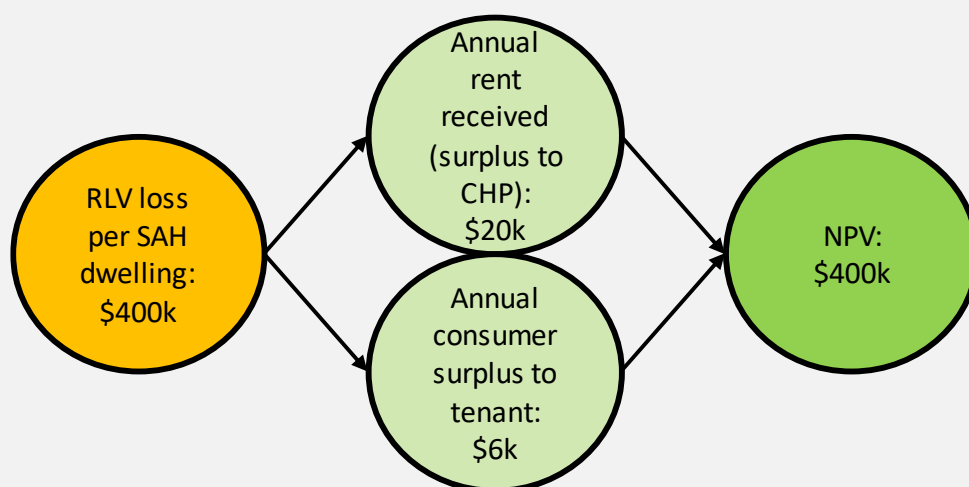
### Net additional dwellings (homeless households)

In the case of net additional dwellings provided to homeless households, the marginal cost of a reduction in RLV, is borne by the landowner. The benefit of these new dwellings is the value of housing services received by the occupants (who would have been homeless under the base case). This is **not a transfer effect**.

### TRANSFER EFFECTS FOR NON-HOMELESS HOUSEHOLDS

Consider a development in which social and affordable housing (SAH) is provided to households who would otherwise suffer rental stress. This results in a loss in RLV per SAH dwelling, which is borne by the landowner. The mechanism by which the transfer operates is illustrated in the following example:

- the landowner bears a RLV loss per SAH dwelling of \$400,000
- this is equivalent to the present value of rental income that could be generated by the dwelling (\$26,000 per year an infinite period, discounted at 7 per cent). To see this, consider the case without SAH provision requirements – in which case the developer sells the dwelling at a market rate of \$400,000 to a buyer who leases it at \$26,000 per annum (\$500 per week)
- the SAH dwelling is gifted to a Registered Housing Association. The Housing Association leases it to a low income household at 75 per cent of market rent, which is approximately \$20,000 per annum
- the tenant household therefore gains a consumer surplus of \$6,000 per annum
- the net present value to the Housing Association and tenant is therefore \$400,000, which offsets the loss to the landowner.



### Quantification of costs and benefits

#### Overview

After accounting for transfer effects, the remaining benefits and costs have been quantified on a per dwelling, per annum basis. As identified in Figure 67 and Figure 69 above, some benefits relate only to the provision of housing for homeless people, while others are only relevant to dwellings that would have been otherwise provided by the market but will now be used for social or affordable housing.

Figure 70 and Figure 71, below provide a summary of all costs and benefits and their treatment under the CBA for both:



- Net additional dwellings (housing for the homeless)
- All other SAH dwellings

FIGURE 70: COSTS AND BENEFITS FOR NET ADDITIONAL SAH DWELLINGS

Cost category	Monetised	Un-monetised	Transfer
Reduction in RLV			✓
Construction costs			✓
Maintenance and operating costs	✓		
Increased construction costs from additional design requirements	✓		
Adverse debt raising affects		✓	
Benefit categories	Monetised	Un-monetised	Transfer
Gain in housing services			✓
Utility gain			✓
Health cost savings	✓		
Reduced domestic violence	✓		
Enhanced human capital	✓		
Worker retention	✓		
Educational benefits	✓		
Avoided property price and tourism impacts		✓	
Improved community pride and social justice		✓	
Retained cultural value		✓	
Enhanced social capital	✓		

Source: SGS Economics and Planning

FIGURE 71 COSTS AND BENEFITS FOR ALL OTHER SAH DWELLINGS

Cost category	Monetised	Un-monetised	Transfer
Reduction in RLV			✓
Increased construction costs from additional design requirements	✓		
Adverse debt raising affects		✓	
Benefit categories	Monetised	Un-monetised	Transfer
Utility gain			✓
Health cost savings	✓		
Reduced domestic violence	✓		
Enhanced human capital	✓		
Worker retention	✓		
Educational benefits	✓		
Improved community pride and social justice		✓	
Retained cultural value		✓	
Enhanced social capital	✓		

Source: SGS Economics and Planning

Furthermore, not all benefit streams apply equally (or in some cases, at all) to all types of households. The provision of affordable housing for some households will deliver a substantial benefit under a range of categories as compared to other household types.

Benefits to the following seven household categories have been quantified to show this:

- homeless household
- Indigenous household
- lone parent with children
- high-service use household (pensioner or person with a disability)
- single person household (part-time worker/ un-or underemployed)
- creative worker
- typical household (i.e. a household who would otherwise only suffer rental stress)

It is assumed that each of these households is currently experiencing some form of housing stress or housing insecurity due to poor affordability.

FIGURE 72: SUMMARY OF MONETISED BENEFITS (PER HOUSEHOLD PER ANNUM)

Group	Health cost savings	Reduce domestic violence	Reduced crime costs	Enhanced human capital	Key worker retention	Educational benefits	Gain in housing services*
Typical household	\$2,253	\$935	NA	\$3,169	\$6,323	\$4,719	Transfer
Homeless	\$8,590	\$6,334	\$6,379	\$437	NA	NA	\$589,000
Indigenous household	\$2,253	\$3,181	NA	\$3,169	\$6,323	\$4,719	Transfer
Lone parent (employed full time) with child in housing stress	\$2,253	\$935	NA	\$3,169	\$6,323	\$5,808	Transfer
High service-use household (pensioner or person with a disability)	\$1,479	\$1,871	NA	NA	NA	NA	Transfer
Single person household (part-time worker/ un-or underemployed)	\$2,253	\$935	NA	\$3,169	\$6,323	NA	Transfer
Creative worker	\$2,253	\$935	NA	\$3,169	NA	NA	Transfer

\*Note: Gain in housing services is given in net present value terms, not annual benefit

Source: Source: SGS Economics and Planning

FIGURE 73: SUMMARY OF MONETISED COSTS (PER HOUSEHOLD)

Cost Category	Relevant group	Cost
Maintenance and operational	All	\$2,253 per annum
Additional design expenses	All	\$25,190 at year 0
RLV loss	Homeless only	\$589,000 at year 0

Source: Source: SGS Economics and Planning

Excluding those categories that are transfer effects, the following tables summarise the quantification techniques applied to each of the costs and benefits, by relevant household type.

## Costs

FIGURE 74: COSTS QUANTIFICATION

Category	Quantification method	Adjustments/ Assumptions
Maintenance and operating costs	<ul style="list-style-type: none"> <li>Operating and maintenance costs estimated at 1 per cent of the average property value (\$488,000) per year.</li> </ul>	None
Reduction in residual land value	<ul style="list-style-type: none"> <li>Findings from the property market impact analysis indicate that, on average across the City of Melbourne, the loss in RLV is \$9,500 per square metre. Applying this to an average dwelling size of 62 square metres yields a loss in RLV of \$589,000 per dwelling.</li> </ul>	
Increased construction costs from additional design requirements	<ul style="list-style-type: none"> <li>National Disability Insurance Scheme (NDIS) identifies a cost of \$25,190 per dwelling to incorporate a high level of access provision in new housing stock. This is equivalent to the 'Liveability Housing Australia (Platinum)' level.<sup>129</sup></li> </ul>	None
Adverse debt raising affects	No data to support quantification	

Source: SGS Economics and Planning

<sup>129</sup> Australian Government (2017), NDIS Price Guide: Specialist disability accommodation, Canberra: Australian Government.

## Benefits

FIGURE 75: BENEFITS QUANTIFICATION

Category	Relevant households	Quantification method	Adjustments/ Assumptions
Health cost savings	<ul style="list-style-type: none"> <li>Homeless</li> </ul>	<ul style="list-style-type: none"> <li>MacKenzie (2016) found that homeless youth experience a range of health issues to a much greater extent than the general population or other disadvantaged young people who are unemployed but not homeless.</li> <li>The total cost to the Australian economy of health services associated with young people experiencing homelessness is on average \$8,505. This is \$6,744 per person per year more than for the long-term unemployed youth.</li> <li>The Melbourne Sustainable Society Institute (MSSI)(2017) adjusted this figure upward by 25 per cent to account for the generally lower health care costs of young people. This figure was then applied to the general population of homeless persons, at \$8,429 per person per year.</li> </ul>	<ul style="list-style-type: none"> <li>Adjusted for inflation: year 2018</li> <li>Adjusted to average homeless household size: 1</li> </ul>
	<ul style="list-style-type: none"> <li>Indigenous</li> <li>Lone parent with children</li> <li>Single person household (part-time worker/ un-or underemployed)</li> <li>Creative worker</li> <li>Average household</li> </ul>	<ul style="list-style-type: none"> <li>Work commissioned by the Community Housing Federation of Australian and undertaken by Net Balance (2010) found a reduction in the average annual spend on health services after low-income households entered community housing of \$1,872 per household per year.</li> </ul>	<ul style="list-style-type: none"> <li>Adjusted for inflation: year 2018</li> </ul>
	<ul style="list-style-type: none"> <li>High-service use household (pensioner or person with a disability)</li> </ul>	<ul style="list-style-type: none"> <li>Work commissioned by the Community Housing Federation of Australian and undertaken by Net Balance (2010) found a reduction in the average annual spend on health services of high-service use households after entering community housing of \$640 per year per resident.</li> </ul>	<ul style="list-style-type: none"> <li>Adjusted for inflation: year 2018</li> <li>Adjusted to average household size for the City of Melbourne: 1.92</li> </ul>

Reduced domestic violence	<ul style="list-style-type: none"> <li>Homeless</li> </ul>	<ul style="list-style-type: none"> <li>An evolution of the, 'Family Violence Housing Blitz', by the Victorian Government in 2018 found that the program had delivered \$62,220 in benefits to the community through: reduced costs of crisis care, reduced health system costs, reduced specialist homelessness and moving costs, benefit from work for re-entry, reduced justice system costs, reduced child-protection related costs, reduced pain and suffering.<sup>130</sup></li> <li>Benefit is received per client assisted.</li> </ul>	<ul style="list-style-type: none"> <li>To avoid duplication with other benefit categories, health system cost savings and work force re-entry were removed from total (\$15,000).</li> <li>Adjusted for inflation: year 2018</li> <li>Adjusted prevalence of DV/ violence: 13 per cent<sup>131</sup></li> </ul>
	<ul style="list-style-type: none"> <li>Indigenous</li> </ul>	<ul style="list-style-type: none"> <li>An evolution of the, 'Family Violence Housing Blitz', by the Victorian Government in 2018 found that the program had delivered \$62,220 in benefits to the community through: reduced costs of crisis care, reduced health system costs, reduced specialist homelessness and moving costs, Benefit from work for re-entry, Reduced justice system costs, reduced child-protection related costs, reduced pain and suffering.<sup>132</sup></li> <li>Benefit is received per client assisted.</li> </ul>	<ul style="list-style-type: none"> <li>To avoid duplication with other benefit categories, health system cost savings and work force re-entry were removed from total (\$15,000).</li> <li>Adjusted for inflation: year 2018</li> <li>Adjusted prevalence of DV/ violence: 3.4 per cent<sup>133</sup></li> </ul>
	<ul style="list-style-type: none"> <li>Lone parent with children</li> <li>Single person household (part-time worker/ un-or underemployed)</li> <li>High service-use household (pensioner or person with a disability)</li> <li>Creative worker</li> <li>Average household</li> </ul>	<ul style="list-style-type: none"> <li>An evolution of the, 'Family Violence Housing Blitz', by the Victorian Government in 2018 found that the program had delivered \$62,220 in benefits to the community through: reduced costs of crisis care, reduced health system costs, reduced specialist homelessness and moving costs, Benefit from work for re-entry, Reduced justice system costs, reduced child-protection related costs, reduced pain and suffering.</li> <li>Benefit is received per client assisted.</li> </ul>	<ul style="list-style-type: none"> <li>To avoid duplication with other benefit categories, health system cost savings and work force re-entry were removed from total.</li> <li>Adjusted for inflation: year 2018</li> <li>Adjusted prevalence of DV/ violence: 1 per cent<sup>134</sup></li> </ul>

<sup>130</sup> Department of Health and Human Services (2018), Family violence housing blitz: Package evaluation.

<sup>131</sup> Australian Institute of Criminology (2018), 'Homeless people: Their risk of victimisation', Canberra: Australian Institute of Health and Welfare.

<sup>132</sup> Ibid.

<sup>133</sup> AIHW (2018), 'Family, domestic and sexual violence in Australia 2018', Canberra: Australian Institute of Health and Welfare.

<sup>134</sup> AIHW (2018), 'Family, domestic and sexual violence in Australia 2018', Canberra: Australian Institute of Health and Welfare.

Reduced crime costs	<ul style="list-style-type: none"> <li>▪ Homeless</li> <li>▪ No data found to support quantification of other households</li> </ul>	<ul style="list-style-type: none"> <li>▪ MacKenzie (2016) found that homeless youth experience a rate of exposure to the justice system to a much greater extent than the general population or other disadvantaged young people who are unemployed but not homeless.</li> <li>▪ The total cost to the Australian economy of justice services associated with young people experiencing homelessness is on average \$8,242 per person per year more than for the long-term unemployed youth.</li> <li>▪ The Melbourne Sustainable Society Institute (MSSI)(2017) adjusted this figure downward by 25 per cent to account for the higher use of justice services by younger people in general so that the figure may be applied to the general homeless population.</li> <li>▪ Overall, the MSSI (2017) found reduction in crime cost savings of \$6,182 per person per year.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Adjusted for inflation: year 2018</li> <li>▪ Adjusted to average homeless household size: 1</li> </ul>
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Enhanced human capital	<ul style="list-style-type: none"> <li>Homeless</li> </ul>	<ul style="list-style-type: none"> <li>The annual salary was taken as the upper bound wage of a resident within Victoria in the first quintile of incomes as sourced from the Australian Bureau of Statistics.</li> <li>The individual is assumed to be housed for two years without gaining employment and then to be in employment for an additional 30 years.</li> <li>The benefit is the individual's future lifetime earnings stream discounted to a present value in the year the individual is housed.</li> <li>The benefit is estimated at \$4,236 per bed per annum</li> </ul>	<ul style="list-style-type: none"> <li>Adjusted for inflation: year 2018</li> <li>Adjusted to average homeless household size: 1</li> <li>To estimate the labour force participation benefit associated with the provision of secure housing for the homeless, the MSSI (2017) assumed that 10 per cent of all tenants will access employment after they have been provided accommodation. This assumption is guided by the previous experience of SGS Economics and Planning, with community housing programs that indicated that between 8-10 per cent of tenants accessed employment after gaining housing.</li> </ul>
	<ul style="list-style-type: none"> <li>Lone parent with children</li> <li>Single person household (part-time worker/ un-or underemployed)</li> <li>High service-use household (pensioner or person with a disability)</li> <li>Creative worker</li> <li>Average household</li> </ul>	<ul style="list-style-type: none"> <li>Ravi and Reinhardt (2010) found there to be an increase in employment rates and earning potential amongst low-income persons who were housed through a community housing program at the value of \$17,784 per person per year.</li> <li>Average weekly earnings of a part-time worker with a Year 12 or equivalent degree is \$342 (adjusted for inflation) - income data from ABS 2005 adjusted for inflation to 2010 values.</li> </ul>	<ul style="list-style-type: none"> <li>Adjusted for inflation: year 2018</li> <li>Adjusted to average homeless household size: 1.92</li> <li>Weighted to the proportion of people in housing stress actively looking for work: 9 per cent<sup>135</sup></li> </ul>
Worker retention	<ul style="list-style-type: none"> <li>Indigenous</li> <li>Lone parent with children</li> <li>Single person household (part-time worker/ un-or underemployed)</li> <li>Creative worker</li> <li>Average household</li> </ul>	<ul style="list-style-type: none"> <li>The value of worker retention was calculated by SGS Economics and Planning by assuming that each tenancy turnover results in training and recruitment expenses for an employer.</li> <li>The reduction in tenancy turnover as a result of finding secure housing was assumed as the difference between the average tenancy turnover for households in rental stress as compared with the average turnover for the general population. The difference was found to be 4.4 times over a 20-year period.</li> <li>For calculation purposes, SGS assumed that recruitment and training costs amount to 25 per cent of annual salary of \$60,000. This is in line with the recruitment bounty typically charged by employment agencies.</li> </ul>	<ul style="list-style-type: none"> <li>Recruitment costs were capitalised to determine per annum benefit.</li> </ul>

Educational benefit	<ul style="list-style-type: none"> <li>Indigenous</li> </ul>	<ul style="list-style-type: none"> <li>Measured by Ravi and Reinhardt (2010) as the additional earning potential for Year 12 graduates as compared to those earning at Year 10 certificate or below.</li> <li>Valued at \$3,016 per child per year</li> </ul>	<ul style="list-style-type: none"> <li>Adjusted by the average number children per lone parent family: 1.8</li> </ul>
	<ul style="list-style-type: none"> <li>Lone parent with dependent children</li> </ul>	<ul style="list-style-type: none"> <li>Measured by Ravi and Reinhardt (2010) as the additional earning potential for Year 12 graduates as compared to those earning at Year 10 certificate or below.</li> <li>Valued at \$3,016 per child per year</li> </ul>	<ul style="list-style-type: none"> <li>Adjusted by the average number children per lone parent family: 1.3</li> </ul>
Gain in housing services	<ul style="list-style-type: none"> <li>Homeless</li> </ul>	<ul style="list-style-type: none"> <li>The NPV of the gain in housing services to the tenant household is assumed to be equivalent to the loss in RLV to the landowner (i.e. \$589,000), which itself is a proxy for the full market value of the additional dwelling.</li> </ul>	
Avoided property price and tourism impacts	No data to support quantification		
Improved community pride and social justice		No data to support quantification	
Retained cultural value	No data to support quantification		
Enhanced social capital		No data to support quantification	

Source: SGS Economics and Planning

<sup>135</sup> Ravi, A. and Reinhardt, C. (2011), The social value of community housing in Australia, Net Balance



## Economic impact by key socio-demographic groups

Figure 76 shows the total value of all relevant benefits for each of the households, including a weighted average. The weights represent a hypothetical scenario in which:

- Homeless households are weighted according to their share of the overall demand in 2016.
- Most recipients (60 per cent) are typical households who would otherwise suffer rental stress.
- A notional weighting of 5 per cent is assumed for all other groups except single person households, who are prioritised (12 per cent) due to the high demand for lone person households identified in Primary Project 1.

FIGURE 76: ECONOMIC IMPACT BY SOCIO-DEMOGRAPHIC GROUP

Group	Total benefit	Weighting
Typical household	\$17,400	60%
Single person household (part-time worker/ un-or underemployed)	\$21,740	12%
Homeless	\$19,645	8%
Indigenous household	\$18,489	5%
Lone parent (employed full time) with child in housing stress	\$3,350	5%
High service-use household (pensioner or person with a disability)	\$12,681	5%
Creative worker	\$6,358	5%
<b>Weighted average benefit per household per year</b>	<b>\$16,093</b>	<b>100%</b>

Source: SGS Economics and Planning

## Findings

Along with the quantification methods described in the prior section, the CBA has been performed using the following parameter:

- **Time horizon:** 20 years
- **Discount rate:** Commercial discount rate of 7 per cent real<sup>136</sup>
- **Timing of benefits:** All benefits realised at the time of affordable housing provision
- **Timing of costs:** Construction costs in year zero and maintenance costs thereafter
- **Terminal values:** Each of the benefit streams is assumed to terminate in year 20, even though most are likely to continue indefinitely. The assumption of zero terminal values makes for a conservatively low assessment of net community benefit

The assumptions described above indicate that providing an affordable rental dwelling to a representative household will result in a **benefit cost ratio (BCR) of 3.01**, which represents a net positive economic and community outcome for Victoria.

<sup>136</sup> Victorian Department of Treasury and Finance: Economic Evaluation for Business Cases Technical guidelines (August 2013)

Figure 77 ranks the benefits by their magnitudes (after applying the weighting of socio-demographic groups). This shows that the largest benefits stem from key worker retention and educational benefits. A conservative scenario, under which these benefits are excluded entirely, results in a **benefit cost ratio (BCR) of 1.74**, which still represents a net positive economic and community outcome for Victoria.

FIGURE 77: RANKING OF BENEFITS

Rank	Benefit Category	Weighted average benefit (by socio-demographic group)
1	Key worker retention	\$5,185
2	Educational benefits	\$3,358
3	Enhanced human capital	\$2,792
4	Health cost savings	\$2,721
5	Reduce domestic violence	\$1,526
6	Reduced crime costs	\$510
<b>Total</b>		<b>\$16,093</b>

Source: SGS Economics and Planning

### 5.3 Synthesis

Assuming that Council had a means of enforcing affordable housing contributions via the planning system, and that it chose to apply such a tool, it would significantly impact the local property market. The level of impact would depend on the scale of the mandatory requirement. A proportion of sites that would otherwise be available for development could be withdrawn.

Our analysis shows that a mandatory requirement of up to 10 per cent could be supported without choking off housing supply adequate to meet projected aggregate requirements in the City of Melbourne.

Our analysis also shows that while some landowners will suffer a loss of value in their property, mandatory requirements would deliver a strong net benefit for the whole community. In this sense, this intervention is economically warranted.

## 6. POLICY TARGETS FOR CITY OF MELBOURNE

This chapter considers what social and affordable housing provision target the City of Melbourne might adopt for its policy efforts, assuming Council is interested in this action. Two approaches to setting this target are examined. One relies on pure estimates of unmet need after considering the provision strategies of other levels of government. Recognising the likely enormity of this unmet need and the inevitably constrained role of the Council, the second, more pragmatic, approach sets a target by reviewing precedents from other municipalities across Australia. Further, the types of actions Council would need to undertake to move social and affordable housing supply in the City towards the nominated target are identified.

### 6.1 Needs-based target: the residual target method

A 'logical' or uncompromising approach to establishing an affordable housing target for the City of Melbourne's policy efforts would focus on net measured need, that is, residual need after accounting for new supply generated by other parties, most notably, the State and Commonwealth Governments.

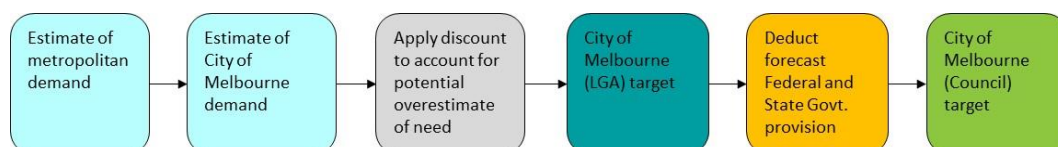
As we have discussed, addressing the shortfall of social and affordable housing is the responsibility of all levels of government. Both State and Commonwealth Governments have contributed directly to the supply of social and affordable housing in the past. They are well placed to make further investments, as they do in other essential urban infrastructure, by virtue of their superior revenue raising powers and ability to take on debt.

#### Residual target method

Establishing a target for social and affordable housing using the residual target method involves the following steps:

1. Estimate demand for social and affordable housing across Metropolitan Melbourne
2. Estimate demand for social and affordable housing in the City of Melbourne.
3. Apply a discount to this demand figure to account for households that may not need housing assistance (e.g. students, working holidaymakers, etc.).
4. Establish a target for the City of Melbourne *local government area*.
5. Determine the likely contributions of state and federal housing programs
6. Calculate a residual target for the City of Melbourne (*the Council*) by deducting the figure at step 5 from the target at step 4.

FIGURE 78: STEPS TO SETTING A NEED BASED SOCIAL AND AFFORDABLE HOUSING TARGET



## Estimate of demand

The total demand for social and affordable housing for both Metropolitan Melbourne and the City of Melbourne were discussed in Section 2.

Four different approaches to calculating demand in the City of Melbourne to 2036 produced estimates of 20,848, 26,009, 30,139, and 33,640 households/dwellings. These figures would represent 13 per cent, 17 per cent, 19 per cent, and 22 per cent respectively of all housing in the City in 2036.

For the subsequent steps in estimating a needs-based target SGS adopted the second highest figure. This was derived from an allocation method that assumes the future distribution of social and affordable housing should be concentrated in more accessible locations.

## Discount for potential overestimate of need

Housing stress is a situation where households find their housing costs are so high that they must forego life's necessities such as food, health care and education. It is conceivable some households are paying more than 30 per cent of their income on rent and yet are relatively satisfied with respect to all other necessities. Individuals that might fall into this category could include some students (e.g. those with relatively low incomes but few other expenses), some working holidaymakers (e.g. who might choose to pay high housing costs and for a short term, by drawing down on savings) and households that are temporarily in rental stress or temporarily overcrowded. However, as discussed in section 2.3, accurately determining which of these households genuinely require affordable housing is difficult, due to the unobservable nature of these traits.

To ensure the needs-based target for the City of Melbourne is not excessive, a discount might be applied to the estimated demand figures to account for a nominal proportion of households that meet the technical definition of housing stress but do not require a social and affordable housing supply response.

There is no readily available data to assist in estimating the number of households identified as being in housing stress but not actually in need of housing assistance. For the sake of establishing the demand-based target, we have applied a discount of 10 per cent to the total demand figure.

## City of Melbourne (LGA) target

The aggregate affordable housing requirement for the Melbourne local government area is the estimated demand discounted by 10 per cent. This amounts to **27,125** dwellings by 2036 (based on scenario 3).

## Contribution of federal and state programs

Various federal and state government programs and funding streams are available for social housing provision. In recent years, funding under the base load 'National Affordable Housing Agreement' between the Commonwealth and State Governments has provided barely enough resources to replace social housing which is at the end of its useful life. Consequently, social housing supply has stagnated over the past two intercensal periods, both in absolute and proportional terms.

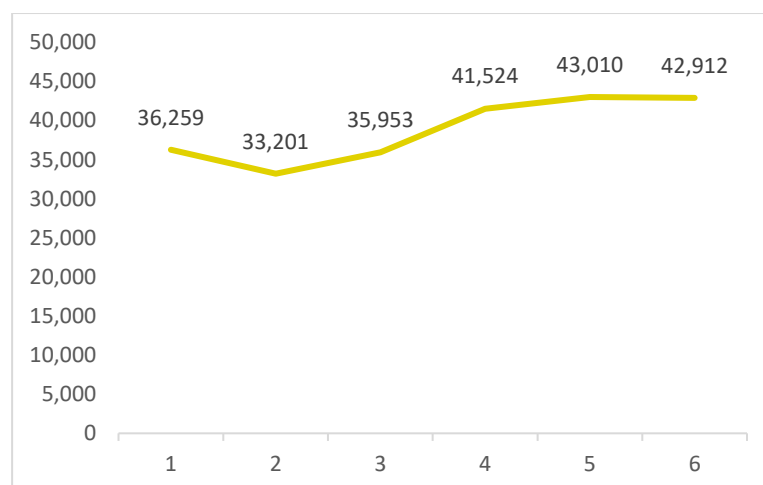
In 2017, the State Government moved to redress this decline through its 'Homes for Victorians' policy package. The principal initiative in this package was the formation of the Social Housing Growth Fund. This can be expected to generate a significant flow of new housing, some of which could be provided in the City of Melbourne.

As noted, the Growth Fund will use the interest on a \$1 billion investment to provide social housing throughout the state. The fund might yield \$70 million per annum assuming a 7 per cent return. The City of Melbourne will account for 9 per cent of projected population

growth in Victoria to 2036.<sup>137</sup> If the City attracted a proportional share of the funding enabled by the Social Housing Growth Fund this would provide around 250 dwellings over a 20-year period.<sup>138</sup>

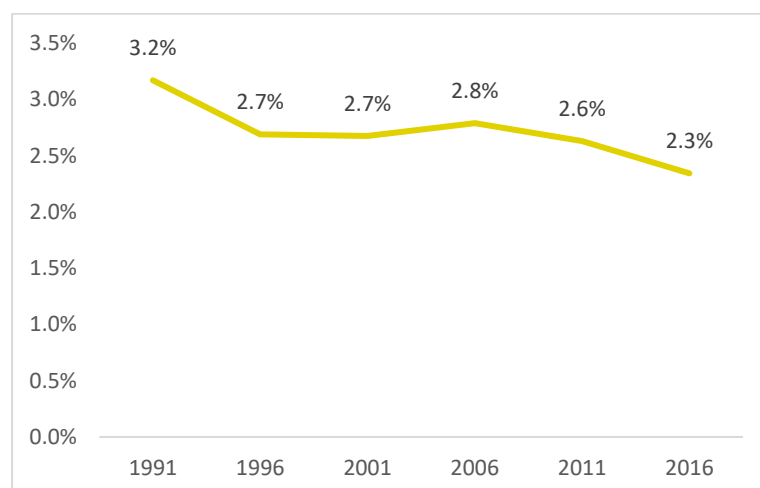
In addition to the Growth Fund, the State Government's Public Housing Renewal Program is likely to deliver net additional social and affordable dwellings as well as the renewal of existing social housing stock. It follows that the slated renewal of the North Melbourne estate has the potential to contribute to new supply. However, specific data on net additional social and affordable housing dwellings are not currently available.

FIGURE 79: OCCUPIED SOCIAL HOUSING – METROPOLITAN MELBOURNE 1991 - 2016



Source: ABS Census data, SGS calculations

FIGURE 80: SOCIAL HOUSING AS PER CENT OF TOTAL OCCUPIED HOUSING STOCK – METROPOLITAN MELBOURNE 1991 - 2016



Source: ABS Census data, SGS calculations

The federal opposition has signalled its intention to be more proactive on affordable housing if elected. This may result in a more significant Commonwealth role in future, although the size of this contribution is not known.

<sup>137</sup> Based on Council forecasts for the City of Melbourne and VIF (2016).

<sup>138</sup> \$70 million per year/\$500,000 average procurement price = 140 dwellings per year x 9 per cent = 12.6 dwellings per year x 20 years = 250.

In summary, the contribution of other levels of government to the supply of social and affordable housing in the City of Melbourne is likely to be relatively modest. There are however some signs that this contribution will increase in future when compared to the recent trends.

### City of Melbourne (Council) residual social and affordable housing target

The residual target for Council is calculated by taking the difference between the Melbourne (LGA) target and the contribution of other government policies and programs. Existing social housing dwellings are also netted off the LGA target. This calculation is shown in the table below.

The result is a target of **22,954** social and affordable housing dwellings by 2036.

FIGURE 81. DEMAND-BASED SOCIAL AND AFFORDABLE HOUSING TARGET CALCULATION (2036)

	Estimate of demand	Discount rate to account for potential overestimate	Target for City of Melbourne (LGA)	Existing social housing dwellings	State and federal forecast supply	Residual target for Council
Demand based on Scenario 3	30,139	90%	27,125	3,970	250	<b>22,954</b>

Source: SGS Economics and Planning, 2019.

This figure presents an ambitious target given the total forecast housing growth for the City is 88,065 additional dwellings to 2036. To meet the demand-based target, one in every four new dwellings provided would need to be social or affordable housing. This is an unprecedented rate in the Australian context and high even by international standards.

The residual needs-based method would generate a more achievable target for Council if other levels of government made a more substantial contribution to the LGA provision.

## 6.2 Precedent-based target

An alternative approach to setting a policy target for Council is to extrapolate from existing precedents.

Targets for the provision of social and affordable housing can be found in broader aspirational policies, specific planning policies and site-specific planning negotiations and decisions. The tables below outline examples of each type of target. The examples focus on Australian precedents.

The lowest rate identified, 0.4 per cent, is the rate of permanent provision at the Alphington (Amcor) renewal site. This outcome was negotiated by the City of Yarra and the developer in 2016. The highest rate is 20 per cent which has been identified for the Fitzroy Gasworks site. This is a state government owned site for which there are, as yet, no specific development proposals.

While the rates vary, they are mostly consistent and in the order of 5 per cent to 10 per cent of dwellings in a particular residential building.

At Ultimo Pyrmont, Australia oldest 'inclusionary housing' scheme, an affordable housing contribution rate of 1.1 per cent is applied to new development. However, the targeted provision for public and affordable housing in the 'overarching' policy was 8-10 per cent. In this instance, it is likely that the shortfall between the inclusionary rate and the target was to be funded by both the State and Commonwealth Governments.

For the most part, the targets and rates apply to the proportion of housing that is affordable rental dwellings made available through state housing agencies and/or not-for-profit housing

providers. South Australia is something of an exception. Its affordable housing policy has a focus on affordable dwellings for purchase.

FIGURE 82: AFFORDABLE HOUSING TARGETS IN POLICIES AND STRATEGIES

Policy	Rate target	Notes
Ultimo Pyrmont, Sydney	8-10% of housing will be affordable or public rental housing; comprised on 600 affordable housing dwellings and 100 public housing dwellings	See Department of Planning (2010) Revised City West Affordable Housing Program; Scheme commenced in 1995.
In Our Back Yard, City of Port Phillip	7% (920 dwellings of project growth of 13,620 between 2015 and 2025)	(SGS needs based target presented in IOBY policy review, 2018, was 13%)
Sustainable Sydney 2030, City of Sydney	By 2030 7.5% of all housing in the City will be affordable housing delivered by not-for-profit or other providers.	
A Metropolis of Three Cities, Greater Sydney Commission, 2018	5-10% affordable rental housing in nominated precincts, subject to viability	
Altona North precinct, Hobsons Bay	10%	"Precinct 15" - SGS advice to Council based on need and cognisant on feasibility impacts. (AmC88)

Source: SGS Economics and Planning, 2019.

FIGURE 83: AFFORDABLE HOUSING REQUIREMENTS IN ADOPTED AND DRAFT POLICIES

Policy	Rate of provision	Notes
City West Affordable Housing Program, Ultimo Pyrmont, Sydney	0.8% of the total floor area residential uses; 1.1% of the total floor area for non-residential uses Cash rates: \$30.97 and \$44.49 per square metre of residential and non-residential floor area respectively.	Lower rate for residential based on 30% discount to incentive residential development; Scheme commenced in 1995.
Green Square Affordable Housing Program, Sydney	330 dwellings	Unclear what the base number of dwellings supplied will be or the timeframe for provision. Pre-dates Sydney 2030 policy target of 7.5%.
Affordable Housing Overlay, South Australia	15% Applies to 'significant developments' within a designated affordable housing zone. Includes government land, major developments and private developments that are bound by the development plan policy for affordable housing.	AH: offered for sale at or below the appropriate price; offered for sale to eligible buyers priced at \$354,000 or less; affordable rental properties can contribute to the 15% of affordable dwellings if rented out at an affordable price.
Homes for Londoners: Affordable housing and viability supplementary planning guidance, Greater London Authority (2017)	Effective rate of social housing provision is 10.5 per cent (35% x 30%).	Default arrangement for developers to avoid the need to submit to case-by-case requirements negotiated via open book feasibility assessment is 35 per cent; split between 'social housing' (30%) and 'intermediate

Policy	Rate of provision	Notes
		housing' (70%).
Altona North, Hobsons Bay	5%	Rate recommended in AmC88 Panel report.
Fishermans Bend	6%	Rate in base floor space; not mandatory; proposed to work in tandem with FAU scheme which requires additional AH at a rate of 8:1 private to social dwellings
West Melbourne	6%	Draft policy (2018)

Source: SGS Economics & Planning, 2019.

FIGURE 84: AFFORDABLE HOUSING REQUIREMENTS IN SPECIFIC DEVELOPMENTS

Development	Rate of provision	Notes
Yarra Bend, Alphington (Glenwill/AMCOR site)	150 of 2500 dwellings (6%) for 10 years; 10 of 2500 dwellings (0.4%) permanently	HA (CHL) to lease 150 dwelling from the developer at a fixed rent for 10 years to be subleased at below 75% market rent. The HA will retain titles to 10 dwellings in perpetuity.
Flinders Bank development (CBD)	20 of 700 (approx. 3%)	Ministerial approval in September, 2018 negotiated the inclusion of 20 dwellings to be leased at 50 per cent of market rent for the life of the building.
Nightingale Village, Brunswick	14 of 210 dwellings or 7%	Section 173 Agreement requires developer to provide unencumbered ownership of no less than 14 dwellings (or 7% of the total dwellings) to be transferred to a Registered Housing Agency
Fitzroy Gasworks site, North Fitzroy	20 per cent (see notes)	Development Victoria website suggest site will contain 1,100 apartments, 20% of which will be social/shared equity/affordable housing.
Riverlee site, Epping, Victoria		Negotiated agreement between Council and developer (Riverlee).

Source: SGS Economics and Planning, 2019.

### Setting a precedent-based social and affordable housing target

The rates and targets described above range from less than 1 per cent to 20 per cent of dwellings, with most figures in the order of 5 per cent to 10 per cent. These policies imply more modest requirements than the need-based target identified above. This reflects the somewhat limited scope for planning-based approaches to achieve social and affordable housing outcomes without subsidies from other levels of government.

Notwithstanding that Victoria has constrained regulatory tools to advance social and affordable housing compared to other Australian jurisdictions, planning approaches remain one of the main mechanisms Council has direct influence over (albeit that the support of State Government is essential). Implementing a successful inclusionary housing policy - via a value capture mechanism, inclusionary targets (as per Fishermans Bend) or a combination of these policies – is likely to have the greatest impact on the supply of social and affordable housing of any option that is available.



Assuming that Council is able to successfully implement a planning policy for social and affordable housing, a precedent-based target would be calculated by applying 'precedent rates' outlined above to the forecast dwelling growth, which is 88,065 dwellings between 2016 to 2036. Calculations for three rates – 5 per cent, 7.5 per cent and 10 per cent – are shown in the table below. The resulting targets are for 4,404, 6,605 and 8,806 dwellings respectively.

A fourth target is shown that is based on retaining the 2016 level of social housing provision as a proportion of the total dwelling stock to 2036. Approximately 5.8 per cent of all dwellings are social housing dwellings. Retaining this proportion would require a further 5,108 dwellings.

FIGURE 85: TARGETS USING PRECEDENT METHOD

	Supply 2016 to 2036 (all dwellings)	per cent of social and affordable housing	Council's Target (dwellings)
5.0 per cent of dwellings added between 2016 and 2036	88,065	5.0%	4,404
7.5 per cent of dwellings added between 2016 and 2036	88,065	7.5%	6,605
10 per cent of dwellings added between 2016 and 2036	88,065	10.0%	8,806
Maintain the 2016 proportion of social housing	88,065	5.8%	5,108

Source: SGS Economics and Planning

### Precedent-based and demand-based targets compared

The highest of precedent-based targets shown above falls short of the demand-based target by a significant margin. This suggests that if Council were to pursue even the most ambitious precedent-based target shown there would still be substantial unmet demand for housing assistance.

FIGURE 86: DEMAND-BASED AND PRECEDENT-BASED TARGETS COMPARED

Target for City of Melbourne (LGA)	Existing social housing dwellings	State and federal supply added between 2016 and 2036	Residual target for Council	5.0 per cent of dwellings added between 2016 and 2036	7.5 per cent of dwellings added between 2016 and 2036	10 per cent of dwellings added between 2016 and 2036	Maintain the 2016 proportion of social housing
27,125	3,970	250	22,954	4,404	6,605	8,806	5,108

Source: SGS Economics and Planning, 2019.

## 6.3 A target for the City of Melbourne

Council should adopt a realistic and achievable target for its contribution to the supply of social and affordable housing based on those policies and activities it has direct influence over.

Assuming Council wishes to maximise social and affordable housing outcomes, and that the property market impacts are acceptable, we would suggest Council adopt a target based on the higher end of the precedent rates; that is, **8,800** additional dwellings between 2016 and 2036. This is still well below the need-based target of 22,954 but would be a more realistic yet still ambitious target.

Provision of this target could take various forms across the housing spectrum, depending on Council's chosen priorities and available resources. For example, provision of social housing units would assist those most in need, while provision of affordable housing would require a lower subsidy. Figure 87 presents one possible disaggregation of targets, across both the housing spectrum and time. This is based on the relative levels of demand for social housing and affordable housing under scenario 3, and the timing of residential growth expected in the City of Melbourne.

While the target of 8,800 has been apportioned to 'social' and 'affordable' housing categories in line with their shares in overall measured need, Figure 87 applies the full estimated need for transitional housing beds in the City of Melbourne, based on expressed demand. This is the outworking of two considerations. Firstly, transitional housing can be characterised primarily as a support service rather than a housing (or shelter) program as such. There is no obvious way of scaling back estimated need to form a target suitable for the City of Melbourne's operations. Secondly, provision of transitional housing – which is typically provided by community based groups with varying levels of government and philanthropic support – can be seen to be more in the domain of local government, the sphere of government closest to community.

FIGURE 87: TARGETS FOR SOCIAL AND AFFODABLE HOUSING PROVISION ACROSS THE HOUSING SPECTRUM

	Target					2016 - 2036
	2016-2020	2020-2024	2024-2028	2028-2032	2032-2036	
Social Housing	-	1,914	1,890	1,853	1,870	7,527
Affordable Housing	-	324	320	313	316	1,273
<b>Total</b>	-	<b>2,238</b>	<b>2,210</b>	<b>2,167</b>	<b>2,186</b>	<b>8,800</b>
Transitional Housing	-	362	357	350	353	1,423

Source: SGS Economics and Planning, 2019.

By way of comparison, a target of 8,800 (excluding transitional housing) over 20 years can be contrasted with the City of Port Phillip's 20 year equivalent target of 1,840 dwellings. After allowing for differences in population numbers, Melbourne's target would be 3.75 times greater than that of City of Port Phillip. Bearing in mind the special role of a Capital City Council in social and affordable housing provision (see Section 3), this ratio may be appropriate.

## 6.4 What does Council need to do to meet the target?

### Achievable planning initiatives

Without pre-empting any future social and affordable housing strategy that Council might adopt, our review of supply levers available to the City of Melbourne under **current policy settings** controlled by the State and Commonwealth Governments (see Section 4.3) suggests that the most effective approach for Council would be to:

- Extend the Fishermans Bend affordable housing target approach to all relevant parts of the municipality and lift the ratio from 6 per cent to 10 per cent. While this is not mandatory inclusionary zoning, it is the next best option. It is intended that developers will have a strong onus of proof as to why they should not meet the nominated target.
- Extend the principle of the Fishermans Bend floor area uplift for social housing scheme to all relevant parts of the City. This would mean revamping AmC270 to require proponents exceeding a FAR of 18:1 to provide social housing as the sole off-setting public benefit.

### Implementation 'ramp up' period

Even though these two planning initiatives are ambitious, they have clear recent precedents in Melbourne and should be achievable. Nevertheless, it is important to recognise that if Council's main strategy to achieve the target is via planning policy mechanisms, there will be some delay in the policy taking effect and delivering dwellings.

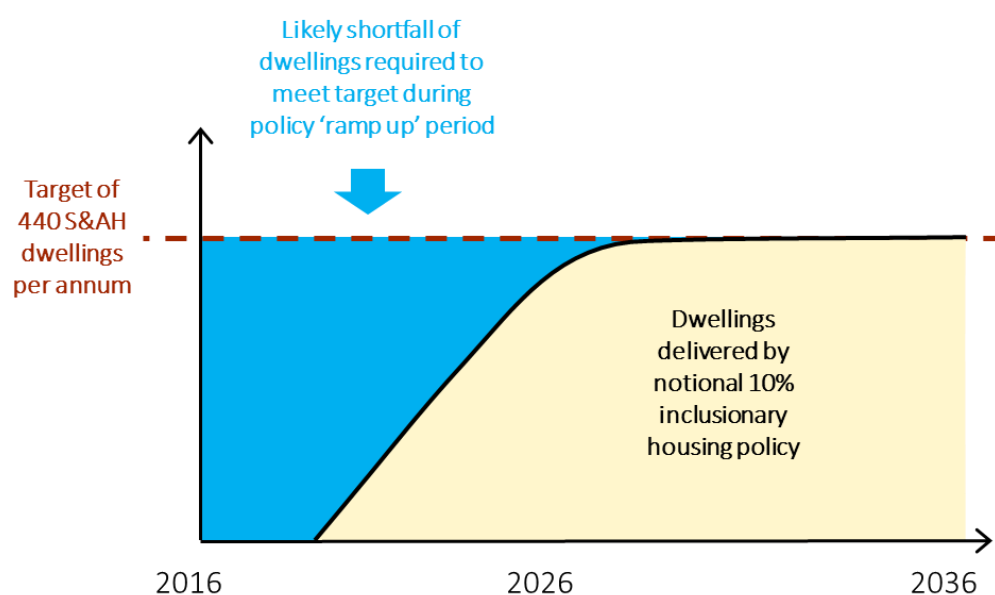
The policy would need to be developed and passed through the planning scheme amendment process which might take 12 to 24 months. Once in place, planning applications assessed under the policy would take some time to be approved and then be realised on the ground. This might take another 2 years. Existing planning approvals that are already in the development pipeline will also absorb a share of demand further reducing the impact of the policy in the next few years until these approvals are either taken up or allowed to lapse.

This policy ramp effect up is illustrated in the figure below.

If the primary tool for achieving the target is a non-mandatory inclusionary zoning mechanism that required 10 per cent of dwellings to be social and affordable, this would only produce the average annual target of 440 dwellings per annum after a period of several years. An estimation of the ramp-up effect on the supply of affordable housing dwellings is shown in Figure 89 below. This considers data extracted from the City of Melbourne's Development Activity Monitor (DAM, which indicates that there are:

- 13,726 dwellings identified as being completed in 2017 and 2018
- 16,415 dwellings identified as under construction
- 37,788 dwellings in approved permits
- 13,456 dwellings in active permits applications

FIGURE 88: IMPACT OF RAMP UP PERIOD OF PLANNING POLICY ON ACHIEVING TARGET



Source: SGS Economics and Planning

FIGURE 89: ESTIMATION OF IMPACT OF 'RAMP UP' EFFECT ON AFFORDABLE HOUSING SUPPLY

Source of new dwellings	2016 to 2021		2021 to 2026		2026 to 2031		2031 to 2036		Total
	Count	Share	Count	Share	Count	Share	Count	Share	
Already constructed	13,719	57 %	-	0 %	-	0 %	-	0 %	13,719
Under construction	10,230	43 %	6,185	29 %	-	0 %	-	0 %	16,415
Existing approvals/ applications under consideration	-	0 %	9,526	45 %	-	0 %	-	0 %	9,526
New applications (pre-affordable housing policy)	-	0 %	4,400	21 %	1,071	5 %	-	0 %	5,471
New applications (post-affordable housing policy)*	-	0 %	1,058	5 %	20,356	95 %	21,520	100 %	42,934
Total dwellings**	23,949	100 %	21,169	100 %	21,427	100 %	21,520	100 %	88,065
Affordable dwellings	-	0.0 %	106	0.5 %	2,036	9.5 %	2,152	10.0 %	4,294

Source: SGS Economics and Planning, 2019

\*Affordable housing provision rate of 10 per cent applied to new applications only.

\*\* City of Melbourne population forecasts.

The shortfall of dwellings in the earlier years might be acceptable as an inevitable consequence of the delayed effect of new policy. Alternatively, Council might endeavour to 'backfill' the shortfall via other mechanisms (e.g. the development of Council owned land and direct financial contributions to Housing Agencies -see Section 4.3).

## 6.5 Synthesis

The task of responding to the need for social and affordable housing in the City is significant. We have estimated the aggregate requirement for the City of Melbourne local government area in 2036 as 27,125 dwellings (based on scenario 3 and the discount). The combined efforts of Council and other spheres of government are required to address this challenge.

A supply target for Council's efforts, as part of any wider response, may be required.

This supply target can be set in one of two ways; (1) as a residual of what the other levels of government deliver versus measured need; and (2) extrapolation of precedents from other local government policies.

Given the scarcity of new supply known to be coming from State and Commonwealth Governments, the former approach would leave Council with a very high target of almost 23,000 additional social and affordable housing units by 2036.

The latter approach yields a range of targets the upper end of which is 8,800 additional units by 2036. This figure would seem to be both ambitious and realistic, given the leadership role and endowments of a capital city council.

Assuming an affordable housing provision rate of 10% and a policy ramp up period that sees this policy taking effect from 2021, we have estimated that Council could deliver in the order of 4,300 affordable dwellings via this inclusionary approach. The balance of the 8,800 additional units might be met via floor area uplift mechanisms, direct investment or through Registered Housing Associations leveraging gifted stock to acquire additional dwellings.

# APPENDIX 1: DEMAND FORECAST METHODOLOGY

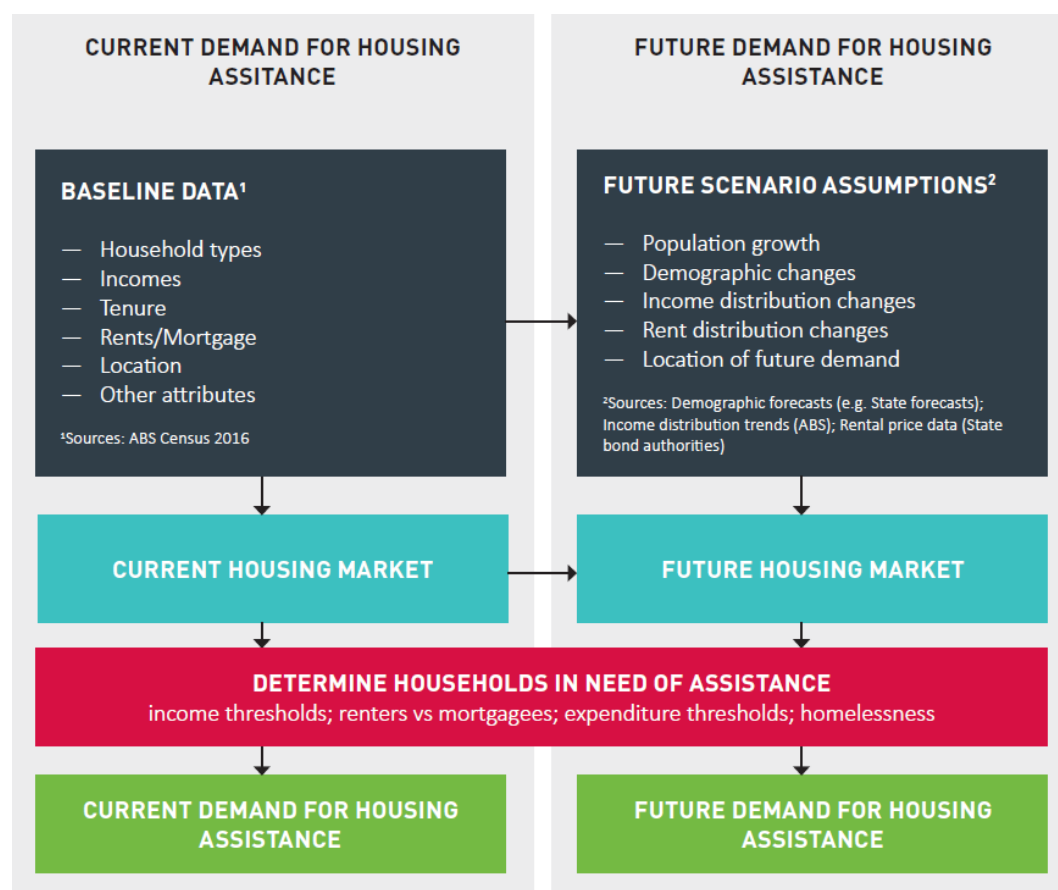
## Overview

The SGS Housing Assistance Demand Model measures the number of households who currently need affordable housing, segmented by demographic and spatial variables, and forecasts the evolution of this need subject to factors such as expected population growth, demographic shifts, changes in household incomes, and the evolution of rental rates.

The model uses the following key datasets:

- ABS Census 2016. A detailed list of ABS Census data appears in Figure 92
- 2016 ABS estimation of homelessness (cat 2049.0)
- Forecasts of household by type – Victoria in Future 2016 and City of Melbourne forecasts (2018)<sup>139</sup>

FIGURE 90: HOUSING ASSISTANCE DEMAND MODEL OVERVIEW



Source: SGS Economics and Planning

<sup>139</sup> Victoria in Future forecasts are available for metropolitan Melbourne. However, upon Council's request, forecasts for the Melbourne LGA have been aligned to the City of Melbourne's internal forecasts

## Methodology

The structure of the Housing Assistance Demand model follows three key steps:

- Preparing an initial market state, based on 2016 ABS Census data.
- Evolving the market state over time, based on user-defined assumptions (e.g. changes in household incomes and rents)
- Interrogating the count of households in need of affordable housing.

### Initial market state

An initial market state is prepared using 2016 ABS Census data, and household forecast data (VIF 2016 and City of Melbourne forecasts). The main data inputs are 2016 census data, which is used to prepare a detailed attribute-by-attribute market state distribution. Household forecast data provides control totals against which the market state is adjusted, ameliorating systematic errors in Census data (e.g. undercount). The attributes necessary to identify financial stress appear in Figure 91.

FIGURE 91: CENSUS ATTRIBUTES

Variable	Use
Weekly rent	Weekly rent is used to identify households spending a large proportion of their income on rent.
Weekly household income <sup>140</sup>	Weekly household income is used to identify households spending a large proportion of their income on rent.
Household type	Lone person, Group household, or several family sub-types. The appropriate housing response for households in need of SAH will vary based on household type.
Tenure type	Used to differentiate between home-owner households, rental households, social housing households, and households with no tenure types (includes homeless households).
LGA	Spatial component used to show distribution of SAH demand across VIC
Weekly equivalised income <sup>141</sup>	Equivalised income converts household income to a 'Lone-person household equivalent' income. This allows for the incomes of different household types to be compared, which is necessary in order to identify 'low income' households. Use of equivalised income in such a way is an OECD <sup>142</sup> standard.

Source: SGS Economics and Planning, 2018

Ideally, census data could be obtained to identify the number the households fitting any criteria with any given set characteristics. However, for reasons of privacy, ABS products will not provide accurate data where the number of persons fitting a category is small, returning a small random number instead. Because of the detailed breakdown, using ABS Census Table Builder to obtain a cross-tabulated table with all the variables listed above returns unreliable numbers.

Therefore, one must collect data more carefully and build a quintuple-attribute model, at an LGA level, in a more sophisticated manner than a simple query of ABS data. The data tables in Figure 92 were obtained from ABS Census Table Builder and used in the preparation of the market state.

<sup>140</sup> This represents pre-tax income, as reported in the Census

<sup>141</sup> Despite being included, this is an unused variable for the purpose of this analysis, as income thresholds are defined based on total household income and not income percentiles (the 40<sup>th</sup> income percentile is a common alternative)

<sup>142</sup> Organisation for Economic Cooperation and Development

FIGURE 92 CENSUS 2016 INPUT DATA TABLES

Single attribute tables	Double attribute tables
<ul style="list-style-type: none"> <li>▪ LGA by HCFMD Family Household Composition (Dwelling)</li> <li>▪ LGA by TENLLD Tenure and Landlord Type</li> <li>▪ LGA by RNTRD Rent (weekly) Ranges</li> <li>▪ LGA by HIND Total Household Income (weekly)</li> <li>▪ LGA by HIED Equivalised Total Household Income (weekly)</li> </ul>	<ul style="list-style-type: none"> <li>▪ LGA by HCFMD Family Household Composition (Dwelling) and HIED Equivalised Total Household Income (weekly)</li> <li>▪ LGA by HCFMD Family Household Composition (Dwelling) and RNTRD Rent (weekly) Ranges</li> <li>▪ LGA by HCFMD Family Household Composition (Dwelling) and RNTRD Rent (weekly) Ranges</li> <li>▪ LGA by HIND Total Household Income (weekly) and HCFMD Family Household Composition (Dwelling)</li> <li>▪ LGA by HIND Total Household Income (weekly) and HIED Equivalised Total Household Income (weekly)</li> <li>▪ LGA by HIND Total Household Income (weekly) and RNTRD Rent (weekly) Ranges</li> <li>▪ LGA by HIND Total Household Income (weekly) and TENLLD Tenure and Landlord Type</li> <li>▪ LGA by RNTRD Rent (weekly) Ranges and HIED Equivalised Total Household Income (weekly)</li> <li>▪ LGA by TENLLD Tenure and Landlord Type and HCFMD Family Household Composition (Dwelling)</li> <li>▪ LGA by TENLLD Tenure and Landlord Type and HIED Equivalised Total Household Income (weekly)</li> <li>▪ LGA by TENLLD Tenure and Landlord Type and RNTRD Rent (weekly) Ranges</li> </ul>

A model of the market state is prepared at a local government area level, using a process called iterative proportional fitting (statistics), or the RAS algorithm (economics). This process is described in the breakout box below.

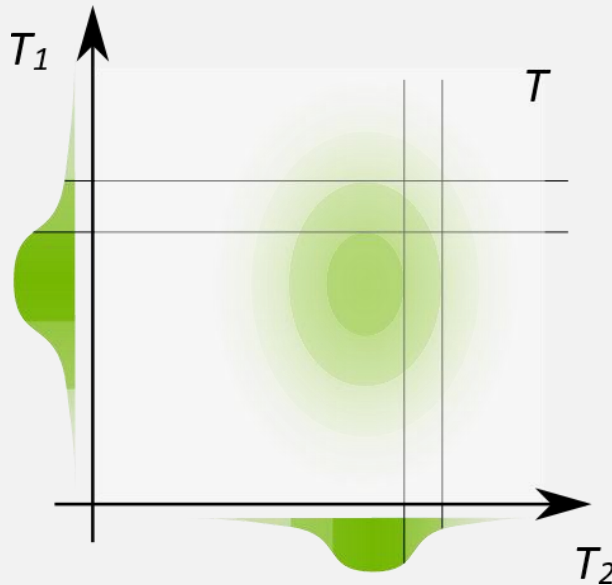
The goal is to use the 10 double-attribute and 5 single-attribute tables to prepare a seed for the 4-attribute target table. This is performed LGA by LGA. The process is as follows:

1. Scale all tables listed in Figure 92 so that each sums to 1.
2. As a preliminary step, for each double-attribute table, use the RAS algorithm to align it to the margins provided by the two corresponding single-attribute tables. This is a necessary to ensure consistency needed in the following steps.
3. Prepare a collection of 5-attribute tables by combining two double-attribute tables and one single-attribute table, without repeating factors. For instance
  - LGA by HCFMD Family Household Composition (Dwelling) and HIED Equivalised Total Household Income (weekly)
  - LGA by TENLLD Tenure and Landlord Type and RNTRD Rent (weekly) Ranges
  - LGA by HIND Total Household Income (weekly).
4. Take the average of all these tables, to produce one 5-attribute table that combines all the data input tables. This is the seed for the following step.
5. Use the table prepared in step 3 as the seed in a final use of the RAS algorithm. In this step, the 10 double-attribute tables adjusted in step 2 are the margins against which the seed is aligned.
6. The output of step 5 is a five-attribute data table that aligns with all tables in Figure 92.
7. As the census household types do not align with the VIF family types, the 5-attribute table output above is aggregated to align with the household types in that publication.
8. The five-attribute table is scaled (by household type) to align to the control totals of VIF 2016. This gives the data of the market state for a given LGA in 2016.

## THE RAS ALGORITHM

The RAS algorithm is a process for building an unknown  $n$ -dimensional table  $T$  of positive numbers, given known tables  $T_1, T_2, \dots$  which form margins of  $T$  (i.e., totals along various axes of  $T$ ). It is a generalization of the method of using “control totals” to align data. An illustration of the output of the RAS algorithm is presented in Figure 93.

FIGURE 93 OUTPUT OF THE RAS ALGORITHM



The process is simple in the case when  $T$  is a two-dimensional table (i.e., as in a spreadsheet) with rows and columns. Say,  $T_1$  are the row-totals of  $T$ , while  $T_2$  are the column totals of  $T$ .

1. Begin with an initial “seed” for  $T$ . For the sake of this example, assume  $T$  is a table of 1s.
2. Scale each row of  $T$  such that it matches the row total as per  $T_1$ .
3. Scale each column of  $T$  such that it matches the column total as per  $T_2$ .
4. Iterate through steps 1 and 2 repeatedly until  $T$  stabilizes sufficiently.

Under reasonable conditions for  $T$ , this process is guaranteed to stabilise.

However, while the resulting table for  $T$  will align with both  $T_1$  and  $T_2$ , difference in choice of seed can result in considerably different output for  $T$ , as seen in Figure 93

## Future market state

Time evolution of the market state is inspired by a Markov-like process: a household with certain attributes ( $a$ ) in year  $y$  may become a household of another type ( $a'$ ) in year  $y+1$ , occurring with a certain probability. Global parameters in the Model, determine those probabilities.

The implemented model differs from a true Markov process in two ways:

- It is deterministic – the large volume of households tracked means probabilistic effects are washed out in practice.

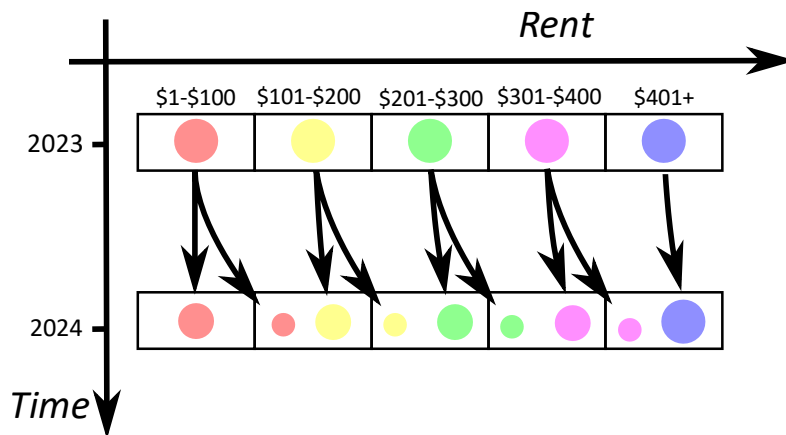


- To make the Model more intuitive, household rent increases over time in alignment with global assumptions, rather than in a distributional manner.

Additionally, new households are added to the existing market state in alignment with existing household projections. These new households are assigned to the market in proportions matching the existing market state.

Scenario-defined parameters specify how the state of the market steps forward in time. In each time step, households are re-allocated to other attribute sets based on their initial set of attributes. This process is portrayed in Figure 94. For this analysis, it is assumed that there will be **no future change in the relative distribution of rents and incomes** (i.e. transition process depicted in Figure 94 does not allow for changes in category)

FIGURE 94 ATTRIBUTE REALLOCATION



### Query of financial stress

Finally, for each year in the forecasting period, households with attributes that fit the criteria of a household in need of affordable housing are identified and counted.

To understand the definition of demand for social and affordable housing, consider first the base year of 2016. A household is considered if it falls within any of the following categories:

- Rental stress - The household equivalised income is below a certain threshold and the proportion of income spent on rent is above a certain threshold.
- Very low income households in rental stress (paying over 30 per cent of income on rent).
- Low income households in rental stress (paying over 30 per cent of income on rent)
- Moderate income households in rental stress (paying over 30 per cent of income on rent).
- Social housing - The household resides in social housing, indicating that they would be in financial stress were it not for this assistance. This implicitly assumes that these are very low income households.
- Homeless or no tenure - The household is homeless, indicating that they need of affordable housing despite not experiencing rental stress. This implicitly assumes that these are very low income households.

## WHO ARE VERY LOW, LOW AND MODERATE INCOME HOUSEHOLDS?

The annual household income ranges for all households across Metropolitan Melbourne are shown in the table below.

Household	Very Low Income	Low Income	Moderate Income
Couple family with children	Up to \$52,940	\$52,940 to \$84,720	\$84,720 to \$127,800
Couple family without children	Up to \$37,820	\$37,820 to \$60,520	\$60,520 to \$90,770
One-parent family	Up to \$52,940	\$52,940 to \$84,720	\$84,720 to \$127,800
Other family*	Up to \$52,940	\$52,940 to \$84,720	\$84,720 to \$127,800
Group household**	Up to \$37,820	\$37,820 to \$60,520	\$60,520 to \$90,770
Lone person	Up to \$25,220	\$25,220 to \$40,340	\$40,340 to \$60,510

Planning and Environment Act, Section 3AA(2)

\* Other family set equivalent to couple family with children

\*\* Group household set equivalent to couple family without children

To contextualise these income ranges, consider the annual income for the following occupations (only applicable to lone person households)

- **Moderate-income:** Music professionals (\$46,000), Registered nurses (\$60,000)
- **Low-income:** Commercial cleaners (\$33,000), Aged and disabled carers (\$39,000)
- **Very low-income:** Café workers (\$21,000)

The model identifies households that comprise demand based on their attributes (weekly rent, weekly household income, household type, and tenure type). The query of the above categories from the initial market state is as follows:

- Rental stress - Weekly rent and weekly household income are used to compute whether a household earns a moderate income or lower, and the proportion of income spent on rent<sup>143</sup>.
- Social housing – The tenure and landlord type of the household is defined as either ‘Rented: State or territory housing authority’ or ‘Rented: Housing co-operative, community or church group’.
- Homeless or no tenure – This group consists of households who are not counted in either of the previous categories but are nonetheless in financial stress. They are most commonly ‘homeless’ individuals who were residing in non-private dwellings (boarding houses or supported accommodation with no tenure). To account for this category, the Model incorporates an external estimate of these individuals (assumed to be lone person households) and adds them to the query of the two other categories. This external estimate draws on the ABS Homelessness Estimate (Cat. 2049.0).

In forecast years, the Model queries the number of households in rental stress based on the same attributes, which have evolved due to population growth and various user-defined assumptions. When considering the ‘social housing’ and homeless or no tenure’ categories, it is important to note that the Model does not forecast changes to the social housing supply or the incidence of homelessness. Rather, it ensures that the individuals in these categories are represented in the query of demand for affordable housing.

<sup>143</sup> Note that some households may not be counted as being in rental stress due to them receiving assistance (i.e. rental assistance). However, data limitations at the time of analysis did not permit this to be accounted for, as the proportion of households who both receive rental assistance and remain in rental stress can’t be determined

## APPENDIX 2: TERTIARY STUDENT HOUSEHOLDS IN RENTAL STRESS

The adjusted demand is presented in section 2.3 relies on analysis of ABS Census data. The key attributes used for analysis are:

- Counts of persons by place of enumeration, which enables housing characteristics (e.g. tenure, rent, household income) to be cross-tabulated with education characteristics.
- Counts of dwellings by place of enumeration, which is used to estimate average household sizes for each household type.

FIGURE 95: STUDENT DEMAND ASSUMPTIONS

	Average students per household	Affordable housing requirement	Rental stress (persons)	Rental stress (households)
Couple family with children	1.00	All households contribute to demand	228	228
Couple family with no children	1.33	No households contribute to demand	2,365	1,778
One parent family	1.00	All households contribute to demand	197	197
Other family	1.33	No households contribute to demand	1,227	923
Group household	2.61	No households contribute to demand	9,888	3,787
Lone person household	1.00	No households contribute to demand	4,345	4,345
<b>Total</b>			<b>18,250</b>	<b>11,258</b>

Source: SGS Economics and Planning

The quantity of interest is the number of households which contain students, meet the criteria of rental stress, but do not contribute to demand for affordable housing due to other factors. This is estimated using the following key steps and assumptions:

- For each household type, rental stress is defined as described in Appendix 1. This is used to determine the number of tertiary students who live in households which meet the definition of rental stress.
- Counts of students in rental stress are converted to a count of households by applying the assumptions presented in Figure 95.
- For couple families with children, the household size of 1 implies that these households in rental stress each contain only one tertiary student (i.e. either one of the partners or a single dependent).
- For couple families without children, the household size of 1.33 implies that 50 per cent of the students in rental stress live together, while the other 50 per cent live with a partner who is not a tertiary student
- For one parent families, the household size of 1 implies that there is only one student in each household (i.e. either the parent or one of the dependents).

- For other families (usually siblings in a single household), the household size of 1.33 implies that 50 per cent of these students live together (in groups of two), while the other 50 per cent live in a household which doesn't contain a tertiary student.
- Group households have an average size of 2.61 across the City of Melbourne. Using this implies that all tertiary students in rental stress have formed households with each other, and therefore leads to a conservative estimate of demand (i.e. in reality, some will live with non-students).
- All student households which include dependents contribute to demand.
- For other household types, student households do not contribute to demand.

## APPENDIX 3: KEY WORKERS

This appendix provides some additional contextual analysis of workers who may be considered *Key Workers*. As defined by Council in its internal studies, *Key Workers* include, but are not limited to, certain ranks or classifications of police officers (on *average* annual incomes up to \$91,000), fire and emergency workers (\$89,500), ambulance officers and paramedics (\$83,000), registered nurses (\$61,000), commercial cleaners (\$33,000), café workers (\$21,000), primary school teachers (\$66,000), secondary school teachers (\$76,500), child care workers (\$34,500), aged and disabled carers (\$39,000), social workers (\$63,500) and music professionals (\$48,500). All of these jobs generate salaries within the eligibility bounds set out in the Affordable Housing definition in the Planning and Environment Act, depending on their household structure. Figure 96 presents the personal income distribution for workers in these occupations within Greater Melbourne (GCCSA), excluding those who are studying. This shows a diverse range of income distributions across occupations (e.g. Café workers are more likely to have low or very low incomes, while most police earn an above moderate income). It is this variation which makes identifying workers who are 'key', and may warrant prioritised assistance, a complex problem. However, excluding the highest income category, over 50 per cent of workers in these occupations earn a moderate income.

Other workers in households within the Moderate income category may not hold jobs in the nominated occupations, but can nonetheless be treated as 'key', at least in the enterprises and organisations which retain them. Some 'Key Workers' as defined by Council may not have found their way into SGS's estimates of Moderate income households in sufficient stress to warrant affordable housing provision because their incomes are at the higher end within their professional bands and/or they have found accommodation at affordable but remote locations. We have assumed that, overall, this sub-group of Key Workers does not require an affordable housing supply response, even though those in affordable but remote locations may face a degree of productivity sapping difficulty in maintaining their jobs.

FIGURE 96: INCOME DISTRIBUTION OF SELECTED OCCUPATIONS (GREATER MELBOURNE)

	Very Low Income	Low Income	Moderate Income	Above Moderate Income
Music Professionals	23%	18%	25%	35%
Primary School Teachers	3%	6%	21%	70%
Secondary School Teachers	3%	5%	16%	77%
Registered Nurses	2%	10%	35%	53%
Social Workers	1%	6%	39%	53%
Ambulance Officers and Paramedics	0%	3%	17%	80%
Child Carers	17%	37%	39%	7%
Aged and Disabled Carers	20%	38%	32%	11%
Cafe Workers	38%	44%	12%	6%
Fire and Emergency Workers	0%	3%	16%	81%
Police	0%	1%	12%	87%
Commercial Cleaners	27%	42%	23%	8%
<b>Total</b>	<b>8%</b>	<b>16%</b>	<b>26%</b>	<b>49%</b>

Source: ABS Census 2016



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