

Should Melbourne Build Out or Build Up?

The Economics of Housing Insight Series

The second instalment in our state-based insights series on the economics of housing in Australia examines the best locations in Melbourne for new housing development to address shortages.

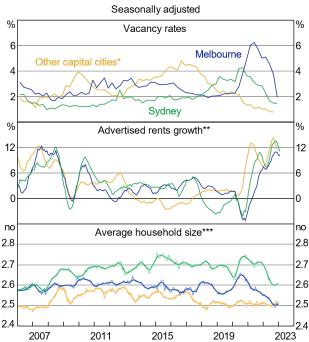
Melbourne has consistently been ranked amongst the world's 10 most liveable cities. Great coffee, an array of museums and galleries, world class sporting events, and areas of natural beauty all draw visitors to the city.

Perhaps because of this, Melbourne is growing rapidly. In the year before COVID-19, the city added more than 110,000 residents, with two-thirds coming from inwards migration.² Over the coming decade, Melbourne is predicted to overtake Sydney as Australia's most populous city for the first time in more than a hundred years.³

At the same time, per capita consumption of housing has increased post-COVID. During the pandemic, rents fell significantly in Melbourne as tourism and migration halted and many residents relocated to other parts of the country (as displayed in the middle section of the rental market conditions graph). Many young people living at home and in shared apartments took advantage of the cheaper housing by renting a place to live on their own.

By mid-2021, an estimated 12,000 group households in Melbourne had dissolved, and the number of dwellings occupied by a single occupant had grown by 35,000.⁵ Additionally, the increased rates of working from home have led many households to seek more space. The bottom part of the graph shows how the average household size in Melbourne dropped after COVID-19.

Rental Market Conditions



While relatively modest in relative terms, around 5%, this effect has likely had a bigger impact on housing demand than cumulative overseas migration to Melbourne since 2020 (net overseas migration between 2020 and 2023 has added about 4% to Melbourne's population).



The combined demand impacts have caused rental vacancies to drop and rents to soar, placing households already challenged by a cost-of-living crisis under even more financial pressure. According to the Australian Institute for Health and Welfare, close to 50% of low income households renting in Melbourne in 2020 were in rental stress.⁶ With sluggish wage growth, high CPI and the increases in rents since then, the problem has only worsened.

The Victorian Government is responding to the housing affordability challenges by unlocking land, developing precincts and streamlining development pathways. It aims to facilitate the construction of 800,000 new

homes over the next decade, with close to 400,000 of these in Melbourne.7 In recently proposed housing targets, the Government is asking councils across the city to plan for the delivery of nearly 2 million new homes by 2051 - a doubling of the existing stock.8

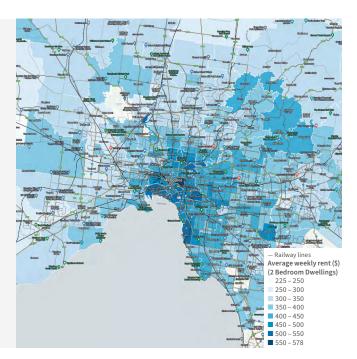
This raises the question of where we should permit more houses to be built? This article examines this question from an economic perspective, exploring the societal and economic costs and benefits of building more housing in different parts of Melbourne. It provides important initial insights into good, and not-so-good, locations for delivering additional housing.

Location, Location

As a starting point, let's explore where people want to live. Suburbs with access to good amenities, in close proximity to jobs and quality schools, and that have access to efficient transport systems, and other desirable features, tend to be in high demand. Disparities in rental prices across suburbs reflect the value residents place on living in a more attractive location.

The following map shows estimated median rents in for two-bedroom units. Unsurprisingly, the closer to the coast and employment centres, the higher the rent – with the premium for living in inner-city suburbs, compared to city fringe locations, reaching more than \$400 per week, equating to around \$20,000 per year.

But there are, of course, other factors to consider.



The Societal Costs of Additional Housing

Increasing the supply of housing causes societal costs. Some of these burdens fall on governments (i.e. taxpayers), who bear the cost of supporting public infrastructure. Local residents bear other costs, such as increased traffic, disruptions and overshadowing. Furthermore, everyone is affected by broader impacts, such as lost biodiversity and heightened carbon emissions.

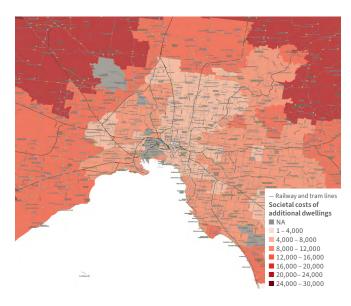
The costs of housing developments differ significantly across a city. They will vary substantially based on whether the housing is built on a site that is greenfield, brownfield, fringe, infill, transit oriented or in growth areas. Additionally, each development site will present unique challenges, such as overshadowing, flood risk and heritage protection. However, in general, these costs include:

- Public infrastructure costs on a per dwelling basis vary significantly based on location, with established areas benefitting from existing infrastructure and lower costs. According to work by Infrastructure Victoria, these costs could exceed \$200,000 per dwelling in some greenfield locations while they could be as low as \$12,000 in established areas.9
- While **congestion costs** are higher in built-up areas due to increased traffic, better public transport options lead to reduced car usage and shorter travel distances per trip. As a result, commuters living in established areas cause around \$3,000 per year in congestion costs on others, compared to more than \$15,000 per year in fringe locations.
- The **carbon costs** associated with development can be complex. Embodied carbon in construction materials and activities may favour simpler construction of

stand-alone dwellings common in growth areas, although this may be offset by the smaller dwelling sizes delivered in inner-city locations. Whereas, unit developments are more energy efficient, with fewer windows and external walls. Overall, there may not be significant differences by location.

 Loss of biodiversity is a primary concern in greenfield areas, particularly on the fringe. The cost of greenfield land loss can exceed \$20,000 per dwelling.

These costs can be converted into annual, per dwellingequivalent societal costs based on location – as shown on the following map. It is important to note that dwellings in fringe areas are typically larger than inner-city infill developments, so accommodate more residents. Therefore, a strategy to house a larger portion of the future population in infill locations may require the construction of more dwellings compared to a housing strategy focused on greenfield growth, assuming all other factors remain constant. This is reflected in the following analysis.



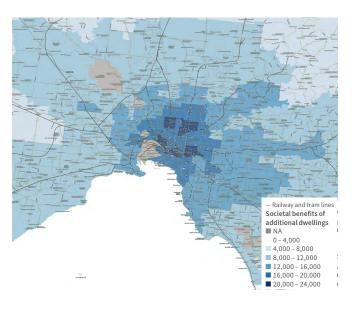
The societal costs associated with building additional dwellings are the lowest near the CBD and along major rail and tram routes but grow progressively higher further away, reaching more than \$24,000 per year per dwelling in growth areas. These factors must be considered when planning for Melbourne's future growth.

The Benefits of Additional Housing

Additional development can lead to societal costs, but it also brings societal benefits. Again, these vary by location.

- The most significant benefit arises from agglomeration economies, where denser economic activity leads to increased productivity. These economies are fundamental to the existence of cities, attracting firms to large talent pools, shared resources and infrastructure, and robust knowledge exchange, which further enhances productivity. Proximity between workers and employment centres fosters this cycle of productivity gains, valued at \$20,000 per dwelling annually near city centres but less than \$5,000 in fringe areas.
- Additionally, encouraging more active lifestyles can promote positive societal benefits. Residents of inner-urban areas typically walk and cycle more as part of their daily routine compared to those in outer areas, improving public health outcomes - valued at around \$3,000 per dwelling per year.

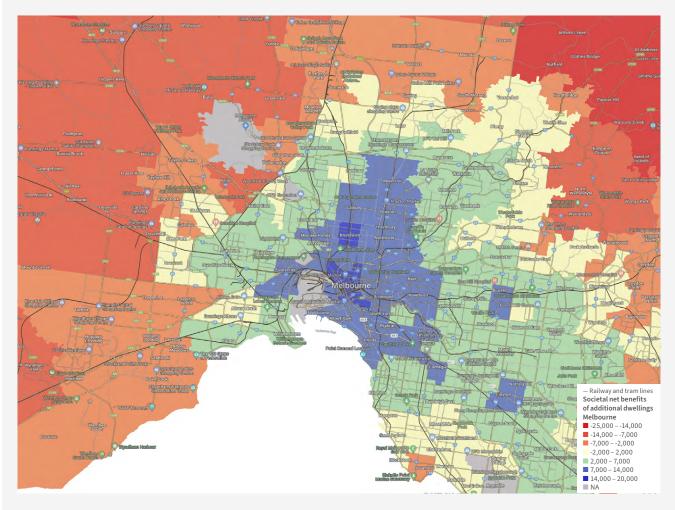
The following map shows these benefits, highlighting interesting geographical patterns.



The economic returns to higher-density development are far greater in and near employment centres and, similar to the societal costs, extend along major rail corridors, reducing to nearly zero at the urban fringe.

What Does It All Mean?

By integrating the societal costs and benefits shown in the previous two maps, we derive the following net benefits of additional density.



Based on the insights explored in this article, it is clear that the net societal benefits of increased residential density are positive in the city and adjoining suburbs. Further away they only remain positive along rail lines, and turn negative elsewhere and on the urban fringe. To effectively address housing shortages, we should restrict further costly urban sprawl and prioritise development in areas where existing infrastructure can be leveraged, supporting a productive economy.

What does this mean for the Victorian housing targets? We estimate that the 2 million or so dwellings to be delivered in Greater Melbourne by 2051 will generate around \$1.6 billion in net societal benefits, the vast majority occurring in the Melbourne LGA. If the targets were 20% higher in established areas and 20% lower in fringe locations, this figure would increase to more than \$4.6bn.

It is important to note that this analysis is a high-level, comparative overview of different locations to explore general spatial patterns. It does not suggest we should stop building in red areas or build in all blue areas. Rather, the maps highlight where planning policy settings should allow more residential density, assuming other factors remain constant.

In summary:

- Various attributes make different parts of Melbourne more attractive to residents, leading to higher rents and house prices. Allowing higher densities in these locations would enable more people to enjoy these amenities.
- Other societal costs and benefits of densification also align with this approach, indicating that additional density should be permitted near employment centres and areas with existing infrastructure that can be leveraged.

How FTI Consulting Can Help

The Victorian government is developing plans to address the expected population growth in Melbourne and the state over the coming decades. The Economic & Financial Consulting team at FTI Consulting understands that every location has unique challenges. We can help organisations navigate opportunities to avoid unintended outcomes by:



Communicating the net public value a proposed development delivers to the community -

encompassing both the general and site-specific impacts of a development, such as enabling more productive use of land, improved amenities, better pedestrian access, adaptive heritage reuse and precinct benefits.



Developing priorities for and assessing the value of outcomes – across precincts including health, biomedicine, education, innovation and cultural events.



Conducting comprehensive cost-benefit analysis, evaluation and assessment – of urban renewal projects, affordable housing, social housing and infrastructure projects, incorporating all aspects of societal costs and benefits at a site-specific level.

For more information on these issues and how we can support your business, please reach out to a member of the team.



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 $^{^1}Ellis, A.\ "\underline{Melbourne\ has\ fallen\ in\ the\ official\ ranking\ of\ the\ world's\ most\ liveable\ cities\ for\ 2024", Timeout\ (1\ July\ 2024)}$

² "Regional population 2018-19", Australian Bureau of Statistics (25 March 2020)

³ Wade, M., "Melbourne tops Sydney as Australia's biggest city – on a technicality", Sydney Morning Herald (17 April 2023)

 $^{^4\,}Agarwal,\,N.,\,Bishop,\,J.,\,\&\,Day,\,I.,\,"\underline{A\,New\,Measure\,of\,Average\,Household\,Size}",\,Reserve\,Bank\,of\,Australia\,(16\,March\,2023)$

 $^{^{\}scriptscriptstyle 5}$ FTI analysis of ABS Census data

⁶ "Housing Occupancy and Costs", Australian Bureau of Statistics (25 May 2022), accessed through "Australian Institute of Health and Welfare"

⁷ State of Victoria (Department of Premier and Cabinet), "Victoria's Housing Statement - The decade ahead, 2024-2034", Victorian Government (20 September 2023)

 $^{^{\}rm 8}$ Engage Victoria, "Statewide draft housing targets", Victorian Government (2024)

⁹ "Infrastructure Provision in Different Development Settings", Infrastructure Victoria (April 2019)