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Commuting burden and housing affordability for low-income renters

From the AHURI Inquiry: Urban productivity and affordable rental housing supply

Authored by

Jago Dodson, RMIT University
Tiebei Li, RMIT University
Elizabeth Taylor, Monash University
Xavier Goldie, RMIT University

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Executive summary

Key points

- There is a need to better understand the contribution of urban spatial labour markets to urban productivity, particularly in relation to job access cost of commuting. Policy needs to improve its framing of urban productivity in relation to job access and, in turn, the contribution that urban labour markets make to urban productivity.

- On average, commuting burdens comprise 9.4 per cent of income for Q2 renters in Melbourne, and 8.6 per cent for Q2 renters in Sydney. The total number of Q2 renters who have commuting burdens greater than the average is no more than 12,000 for each city.

- Of the no more than 12,000 Q2 renters with an above-average commuting burden in each of Sydney or Melbourne, fewer than 5,000 commuters in each city travel to the top 10 employment destinations for this group. This dispersed spatial pattern of employment makes locationally targeted policy difficult to apply.

- There are comparatively few sites within 10 kilometres of the top 10 locations for Q2 renter employment where the current rental market conditions make new market-priced housing development feasible to the extent that it overcomes commuting burdens.

- There is extensive market underutilisation of residentially zoned land in Sydney and Melbourne. The planning system clearly intends that residential development should occur at much higher average dwelling yields per unit area of land than the market is supplying under present conditions. The reasons for this underutilisation deserve further investigation.

Key findings

Improving understanding of urban spatial labour market

This project argues that there is a need to better understand the contribution of urban spatial labour markets to urban productivity, particularly in relation to the cost of commuting. There is relatively limited international literature that seeks to understand urban labour markets from a theoretical perspective that is oriented to the productivity benefits of agglomeration. There is almost no work that has directly investigated such questions in the Australian context. Policy understandings of urban productivity are underdeveloped with little appreciation of issues beyond 'congestion' or 'access'. Given the increasing recognition of the importance of urban productivity in Australia's major urban areas, there is an urgent need to improve research and policy knowledge of this area. Policy needs to improve its framing of urban productivity and, in turn, the contribution that urban labour markets make to urban productivity. This includes going beyond simple framings of agglomeration theory around labour market depth, breadth and access, to a more nuanced understanding of the total cost of work access relative to economic value produced. State metropolitan planning policies and federal infrastructure and productivity policies require improved understanding of these questions.

High commuting burdens affect a minor proportion of Q2 renters

On average, commuting burdens comprise 9.4 per cent of income for Q2 renters in Melbourne, and 8.6 per cent of income for Q2 renters in Sydney. Based on our model, the total number of Q2 renters who have commuting burdens greater than these levels is no more than 12,000 for each city. These relatively small proportions and absolute numbers for above-average commuting cost Q2 renters suggest that the impacts of higher than average commuting burdens are likely to be modest. Policy that improves overall metropolitan accessibility in an affordable way would benefit all workers (and firms), including Q2 renters.

Dispersed workplace locations constrain customised accessibility policies for Q2 renters

Of the no more than 12,000 above-average commuting burden Q2 renters in each of Sydney or Melbourne, fewer than 5,000 commuters in each city in total travel to the top 10 employment destinations for this group. This dispersed spatial pattern of employment makes locationally targeted policy to address Q2 renter burdens difficult to apply. While it is possible to focus future affordable housing development around Q2 renter employment concentration locations, the targeting of such housing to this worker category may not benefit all Q2 renters. Policies that improve housing affordability for renters generally around Q2 employment nodes, particularly at the lower end of the market, are likely to be supportive of wider efforts to improve Q2 renter housing and commuting affordability. Similarly, policies to improve commuting access to dispersed employment, such as via better overall public transport network coordination may improve overall accessibility for Q2 renters, while also benefitting other worker cohorts.

Limited site options for affordable market housing meaning non-market support is needed

There are comparatively few sites within 10 kilometres of the top 10 locations for Q2 renter employment where the current rental market conditions make new market-priced housing development feasible to the extent that it overcomes commuting burdens. A larger number of sites, however, become feasible for development at 75 per cent of market rental pricing. If policy is to target Q2 renters through delivery of new stock proximate to Q2 renter employment concentrations, then delivery vehicles that are able to operate with some shielding from market cost pressures (such as community housing organisations) are likely to be required.

Extensive market underutilisation of zoned residential land

The analysis presented in this study suggests there is extensive market underutilisation of residentially zoned land in Sydney and Melbourne. The planning system clearly intends that residential development should occur at much higher average dwelling yields per unit area of land than the market is supplying under present conditions. This suggests that strategies involving relaxation of residential zoning regulations may not be as effective as policies to encourage intensification of current residential zones to dwelling densities that are closer to the 75th percentile. Intensification would also generally support improved work access for Q2 renters.

Policy development options

The study

This report is structured in three main parts: Chapter One, Chapter Two, and Chapter Three.

Chapter one

Chapter one sets the policy context for the research, discusses existing research and details the research methods through which the study was undertaken.

The review of the policy context in Chapter one shows that there is a growing appreciation among policy and advisory organisations at both state and federal levels that the productivity of Australia's major cities is an important contributor to overall economic growth and productivity. However, despite urban productivity becoming a recognised issue, the conceptualisation of productivity within policy is underdeveloped. Typically, versions of agglomeration theory are applied to urban productivity but with limited further elaboration. Often, Australian urban policy cleaves to concern with 'congestion' as a policy issue or to general statements about labour market accessibility. While these issues may affect urban productivity, both the conceptual and empirical mechanisms are not well understood.

The review of existing research shows that there has been considerable attention to theories and evidence of urban productivity in recent decades, principally around the advantages that firms enjoy in co-locating within urban agglomerations. These benefits include access to larger specialised labour markets, sharing of infrastructure and knowledge spillovers. However, the literature has not yet offered a sophisticated understanding of how commuting patterns contribute to urban productivity in terms of labour market matching at the individual worker level or at the aggregate for a given metropolitan region. The focus on second-income-quintile renter workers presented in the existing research is intended to advance the understanding of this question.

The final part of chapter one details the research methods used. Three main approaches are applied. First, the study undertakes analysis of journey to work patterns for Sydney and Melbourne for Q2 renter workers. This analysis is based on a specially requested ABS Census dataset and assesses the costs of commuting by public transport and private motor vehicle. Next, the study assesses the rental costs for Q2 renters relative to commuting costs using ABS Census data. An appraisal is then made of the major commuting destinations for Q2 renters in each of Sydney and Melbourne, identifying the top 10 destinations. Assessments are then made of land-use capacity for residential intensification within 10 kilometres of these top 10 destinations to reduce commuting burdens. Last, scenarios are applied to identify specific sites that could be redeveloped to deliver new affordable housing to Q2 renter workers.

Chapter two

Chapter two presents the results of the research study. The chapter begins with a review of existing knowledge of commuting burdens in Australian cities. This review demonstrates that while there has been occasional attention to commuting burdens within the literature, this attention has not focused on particular productivity issues or on the experience of particular subgroups such as Q2 renters.

Next, the chapter calculates commuting burdens for Q2 renters. This is achieved by determining the distance between their origin SA2 and workplace SA2 and applying weightings according to travel mode, including distance travelled, motor vehicle fuel efficiency and fixed cost factors. The method for calculation of public transport travel is detailed, including the assignment of route and fare costs. The analysis identifies a moderate inverse relationship between rent paid by Q2 workers and the costs of commuting. This appears to have the character of a bid-rent curve relationship. In general, a gain in rent of approximately AU$100 per week resulted in a reduction in commuting costs of approximately AU$3 per day (AU$15 per five-day week), which implies that rents for Q2 renters capitalise more than a commuting expenditure versus rent trade-off.

The chapter then identifies the main locations for affordable housing supply based on a combination of planning zoning and market conditions. This analysis was initially undertaken using rental data for Sydney and Melbourne based on the 2016 Census which revealed the distribution of rents across each city, as well as the distribution of Q2 renters. The research then creates and applies a scenario-based model to identify suitable sites for provision of affordable housing for Q2 renters based on mesh blocks where dwelling densities were less than the 75th and 90th percentile for residentially zoned land in each of Sydney and Melbourne. Potential suitable locations for affordable housing were identified based on a combination of proximity to Q2 renter employment destinations, dwelling densities less than the 75th percentile for residential zones and where market rents for current stock were no greater than for the existing locations of current Q2 renters working in those employment destinations. This analysis identified many, though often isolated, locations across Melbourne and Sydney that would be suitable for affordable housing development targeting Q2 renters.

The chapter also identified the main locations to which Q2 renters travel for work, using a sophisticated journey to work model of specialised ABS Census data tables. This analysis focused on the top 10 commuting destinations for Q2 renters. It demonstrated that Q2 renter commuting is spatially concentrated around a limited number of employment centres. In Sydney, this was principally the CBD and immediately adjacent inner-urban localities. In Melbourne, Q2 renter commuting destination patterns were more polycentric, with a number of middle suburban sites serving as major commuting foci, in addition to the Melbourne CBD.

Next, Chapter two investigated commuting patterns in two metropolitan-adjacent satellite cities: Wollongong adjacent to Sydney and Geelong adjacent to Melbourne. The analysis investigated self-containment rates for Wollongong and Geelong, and found that for Q2 renters there is a high degree of self-containment within each city and the largest work destination zone is the satellite city's CBD. The relatively modest rents expended by satellite city Q2 renters and the lesser distances traveled by the satellite city Q2 renters in accessing work (compared to metropolitan peers) implies that issues of rental affordability and commuting burden are not a priority for policy attention.

Chapter three

Chapter three of the report assesses the key questions the research answers. The chapter identifies a series of findings, including: improved understanding of the urban spatial labour market in Sydney and Melbourne; better knowledge of the proportion of Q2 renters with high commuting burdens; insight into the issues posed by dispersed Q2 renter commuting patterns; appreciation of the relatively limited sites for new employment-proximate Q2 renter affordable housing development; and the extensive market underutilisation of residentially zoned land.

The chapter includes a series of policy development options, including: policies to address employment distribution; transport networks to respond to dispersed commuting patterns, and; new vehicles for affordable housing delivery.