# Measuring changes in neighbourhood exclusion and segregation in Australia's five largest cities

Based on AHURI Final Report No. 414: Spatial segregation and neighbourhood change



#### What this research is about

This research investigates changes in neighbourhoods in Australia's five largest capital cities (Sydney, Melbourne, Brisbane, Adelaide and Perth) over two census periods, showing changes in residential mobility by income groups and employment connectivity to the rest of the city and the wider regions, and how it correlates with social and economic deprivation. The study's indicators of neighbourhood change are based on long-term residential mobility of people between neighbourhoods, and short-term journey-to-work based mobility of people to and from neighbourhoods.

By tracking these indicators, the study shows which neighbourhoods are severely or moderately exclusionary or isolated from the rest of the city in their residential characteristics—that is, clustering of high-income or low-income earners over time—and which neighbourhoods are severely or moderately disconnected from the larger employment and labour markets of the city

#### The context of this research

There has long been concern about housing affordability in Australian cities, as well as the processes by which lower-income renters are displaced or unable to enter specific housing markets. This can result in social disadvantages and stigma associated with concentrations of poverty as well as risks to labour markets when lower-income workers are unable to relocate or remain living near employment centres.

Highly segregated cities show a high degree of spatial sorting. This sorting could be via income and socio-economic status, ethnic or minority population groupings, or other demographic or cultural criteria. It is widely acknowledged that spatial segregation—whether ongoing, maintained or accelerating—is detrimental to social cohesion and community wellbeing. Any segregation has negative effects, whether this segregation occurs at the affluent end (i.e. the rich gathering in some areas) or at the disadvantaged end (the poor concentrated in other areas). Conversely, inclusive cities exhibit lower spatial segregation, which supports social cohesion and community wellbeing.

#### The key findings

This study finds that segregation in Australian cities is increasing over time, driven by income and economic class segregation, rather than, for example, other demographic criteria such as ethnic, linguistic or minority group characteristics, as is more common in US cities.

The segregation in Australian cities is driven by upper end households: high-income and very-high-income earners cluster into tight spatial groups. These neighbourhoods then become socially isolated and exclude moderate-income, low-income, and very-low-income earners who cannot afford to live in expensive housing markets. This is despite the economic ties that lower-income workers often have to these areas.

In Australian cities, the most affluent areas—the high-value residential neighbourhoods—are closest spatially to the areas where there are the highest number of jobs. This results in a labour market where the highest-income earners travel the least to access job opportunities, whereas lower-income and moderate-income earners are forced out to the peripheries of the cities and must therefore travel more to access these same opportunities.

Such residential exclusion and the employment connectivity and dis-connectivity profiles combine to create conditions that exacerbate spatial inequalities in cities. This is in addition to the inefficiencies brought about by the locational imbalance of jobs and housing caused by the higher-income areas gathering closest to the major employment centres and many lower-income or moderate-income areas being farther away from major job centres.

## Concern with measuring local entrenched inequality

Where systematic displacement has already occurred and exclusion is entrenched, the usual set of measurements that indicate gentrification—such as rents in relation to local incomes or rising homelessness—do not work because as there is no evidence of the poor, no displacement can be observed. However, on a metropolitan or regional scale, these exclusive housing markets entrench socio-spatial disadvantage and inequality. Therefore, measuring exclusion and progress towards inclusion is equally as important as measuring processes of gentrification and displacement.

#### Measuring neighbourhood change in Australian cities

The research graded Statistical Area Level 2 areas (SA2s) in each city on a porosity scale with three types: Exclusionary, Towards Exclusionary and Porous, based on people moving into or out of that area. SA2s represent 'a community that interacts together socially and economically', and roughly equate to 'suburbs'.

An Exclusionary area can be either a neighbourhood dominated by extremely affluent and advantaged households with no evidence of entry for moderate and low income households, or dominated by poor and disadvantaged households with no evidence of entry of moderate and high income households. An area would be classified as Porous if there are no barriers of movements in and out to people of any specific economic band driving spatial clustering in these areas.

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## Of the five cities studied, Sydney has greatest spatial inequality

Of the five cities in this study, Sydney shows significant and pronounced trends towards increasing spatial inequality and segregation. This is driven by the clustering of very-high-income households in the least-disadvantaged areas—that is correlated with the most advantaged areas—rather than by the clustering of very-low-income or low-income households.

Melbourne emerges as a much more equitable city than Sydney, with similar movements of gains and losses for all the income bands regardless of the level of neighbourhood disadvantage or income. Thus, compared to Sydney, Melbourne appears to be the more 'porous' city, although there is still some evidence of segregation occurring at the higher ends of the market, rather than at the lower ends.

The results clearly show that between 2011 and 2016, the spatial concentration of very-high-income households has shown increased segregation. Results are particularly stark for Sydney, where the spatial concentration for all households has increased—but the higher the income, the higher the trend towards segregation. Perth echoes Sydney, but weakly—showing increases of spatial concentration in moderate-income, high-income and very-high-income households. Brisbane and Adelaide are the most stable cities in this study, although the general trend towards segregation observed in Sydney, Melbourne and Perth is maintained.

## Classifying changes in neighbourhoods

By tracking internal migration data and aggregating by Socio-Economic Indices for Areas (SEIFA) scores (a combined measure of relative socio-economic advantage and disadvantage; education and occupation; and economic resources), every neighbourhood in each city was classified into one of four neighbourhood types:

- Escalator: People moving in come from SA2s with the same or lower SEIFA scores, and people moving out go to SA2s with higher SEIFA scores, and signify upward social mobility.
- Gentrifier: In-movers come from SA2s with higher SEIFA scores (i.e. more affluent areas), and out-movers go to SA2s with the same or lower SEIFA scores.
- Isolate: In-movers come from SA2s with the same or lower SEIFA scores, and out-movers go to SA2s with the same or lower SEIFA scores, and show established exclusion effects.
- Transit: In-movers come from SA2s with higher SEIFA scores, and out-movers go to SA2s with higher SEIFA scores, and show maintained but not deteriorating mobility.

The results show that the least-disadvantaged neighbourhoods—that is, those with higher SEIFA scores—drive segregation and isolation much more than disadvantaged neighbourhoods do. The findings provide evidence that established exclusion is a dominant spatial signature.

A clear pattern emerges across all five cities:

- the dominance of Isolate neighbourhoods in the neighbourhoods that are the least disadvantaged.
- the dominance of Transit neighbourhoods in the neighbourhoods that are more or most disadvantaged.

Sydney emerges as the city where the effects of segregation and exclusion appear to be the most pronounced. This shows that the problem of exclusion is not characterised by disadvantaged neighbourhoods being isolated, but by affluent neighbourhoods isolating from the rest of the city.

Melbourne shows a similar signature to Sydney, but also shows a higher number of Transit neighbourhoods in the lower SEIFA deciles. Brisbane, Perth and Adelaide echo similar signatures: there are hardly any neighbourhoods in the highest SEIFA deciles that are classified as Transit, Escalator or Gentrifier neighbourhoods.

### Lower income workers have to travel further to work

The proportion of workers going to work in principal employment centres is an indicator to measure employment connectivity, and is computed for each SA2 for all five cities. Journey to Work (JTW) data captures daily, high-frequency flows of people connecting their places of usual residence to their workplaces to provide an insight into the daily patterns of people's movement within each city.

Larger numbers of neighbourhoods with higher SEIFA scores—those that are the least disadvantaged—are more connected than neighbourhoods with lower SEIFA scores—those that are the most disadvantaged.

Sydney and Melbourne emerge as the worst performing cities. The three smaller cities, Brisbane, Perth and Adelaide, are much more equitable than Sydney or Melbourne, and are also much more porous and less exclusionary.

Overall, barriers to entry into more affluent areas are high for lower-income and moderate-income earners—and at the same time the neighbourhoods that are connected to the best employment opportunities remain exclusionary.

# What this research means for policy makers

Segregated cities arising naturally as a result of market forces are detrimental to social and economic wellbeing and stability, and should therefore become an explicit policy focus addressed at all levels of Australian government through infrastructure, housing assistance and planning responses, including:

- recognising that infrastructure and planning interventions may exacerbate existing housing market pressures, as they reinforce processes of gentrification, displacement and exclusion of lowerincome earners—including key workers and those with long-term connections to the location.
- recognising the need for state and local governments to monitor housing markets for displacement, exclusion and porosity at the neighbourhood scale.
- recognising that strategic infrastructure investment decisions intended to improve transport accessibility should be supported by policies that preserve and increase affordable housing opportunities to prevent displacement of lower-income residents.
- recognising that strategic funding and planning interventions are also needed to increase the supply of affordable rental housing in accessible, jobs-rich areas in order to reduce socio-spatial segregation and exclusion.

Policies that encourage a healthy spatial mix of housing and tenure types should be encouraged for each neighbourhood or local government area, but especially in affluent neighbourhoods, which typically are in close proximity to the richest employment and social opportunities. The policy focus should be on encouraging a mix of housing types and tenure in these areas, so that the barriers to entry for lower-income and moderate-income earners are lowered and policy can actively intervene against maintained or rising spatial segregation.

Another focus area is those neighbourhoods that are not closely connected to employment and social amenities, with a combination of provision of affordable housing options, as well as increased transport accessibility.

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#### Methodology

This research draws on internal migration data to measure residential mobility and Journey-to-work data from the 2011 and 2016 ABS censuses for the five largest Australian capital cities: Sydney, Melbourne, Brisbane, Adelaide and Perth.

#### To cite the AHURI research, please refer to:

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