



Accessibility: its role and impact on labour and housing markets in New Zealand's main metropolitan centres

In an efficient labour market, workers move freely between their jobs and where they live. Research in the US suggests there's a 'spatial mismatch' between where people live and where they work. Is this true for New Zealand's urban areas, and can we improve accessibility?

In urban economies that function efficiently, workers, consumers and suppliers exchange labour, goods, services and ideas with minimum friction. This requires easy access between workers' homes and their workplaces, and for transport to be affordable. If there's a mismatch between where jobs are located and where people live, access to suitable travel can have a significant effect on people accessing employment.

In New Zealand we didn't know how big this problem is, or what could improve accessibility between affordable housing areas and employment areas. The researchers in this study conducted a literature review and New Zealand-based research to see if a spatial mismatch exists in the same way here that it does in other countries, particularly the US.

The research questions

The researchers asked:

- What is the spatial mismatch between affordable housing areas and the location of employment opportunities in New Zealand, and what tools can we use to investigate this issue?
- How does the transport system connect affordable housing areas and employment opportunity areas?
- What transport barriers do people living in affordable housing areas face when they need to travel to high employment areas?
- How might central and local government respond to such issues and what transport initiatives can be implemented and funded?

Literature review findings

In the literature review, the researchers found the following:

- In studies of where people live, job accessibility is usually a significant factor, but in most cases other factors such as household structure and neighbourhood effects are more significant. In the US, racial segregation is a major driver of spatial mismatch.

- Accessibility also affects property prices, but again, individual, household and location concerns tend to dominate.
- Accessibility affects labour market outcomes, work status and earnings, and diverse job opportunities and worker skills are important factors. Differences between geographical areas in commuting costs can also manifest in wage rates, not just in property prices.
- Spatial mismatch is affected by other factors such as industry, gender, skills and occupation.
- The main moderator of accessibility is the road network for private vehicles. However, public transport can also have a significant role, especially in low-priced housing areas.
- There wasn't a strong relationship between accessibility and employment rates, which might be expected if spatial mismatch were problematic.
- Commuting distance is negatively related to accessibility to job opportunities, and the strength of the relationship increases with worker skill. It seems that higher-skilled workers wish to, and can more easily afford to, live further from work.
- Changes in the level of employment seem to be more from general economic conditions than from job accessibility.
- Reducing transport costs to access an affordable housing area would likely improve the welfare of locals. However, there are second round effects to consider.
- One second-round effect is through higher house prices, which benefit existing property owners, but the combined lower transport costs and higher housing costs may end up being a disadvantage to renters.
- Overall, it seems that in New Zealand the labour market and transport network function fairly well to mitigate the worst effects of spatial mismatch. The housing market functions less well.

Study of New Zealand urban areas

In their study the researchers:

- calculated job accessibility for locations in four urban areas of Auckland, Napier-Hastings, Wellington and Dunedin, between 2005 and 2018
- examined the relationship of job accessibility with:
 - wages and rents, to infer how workers and firms value accessibility, and the trade-offs in choosing residential and business locations
 - the probability of employment for workers
 - the probability of how long a worker will be out of employment after they leave their job
 - the commute distance
- examined how each of these relationships differs for workers of different skill levels
- analysed selected relationships separately for areas that differ by rent levels and public transport use.

Study results

Here is what the researchers found:

- Accessibility is associated with higher rents and lower wages. Accessibility is a local amenity that residents are willing to pay for.
- Greater accessibility to job opportunities is associated with lower wages (net of commuting costs) and higher house prices. The effect varies in strength across gender and worker skill.

Although spatial mismatch may not be pervasive in New Zealand, particular population subgroups or some smaller subsets of geographical areas may mean greater work-home separation than is socially desirable.

Recommendations for further research

The researchers identified the following opportunities for further research:

- Repeat the census analysis after the next census (2023). This would likely give more precise estimates of the relationship between accessibility to job opportunities, and rents, wages and commuting.
- Do a longitudinal Integrated Data Infrastructure-based case study of an area that has seen a significant and discrete transport intervention, plus gather richer data on accessibility and commuting (value of time and direct outlays), employment, housing, education and other demographics. This would enable better attribution of changes in labour market status, commuting and residential location to specific transport interventions, which was difficult to detect in this study.

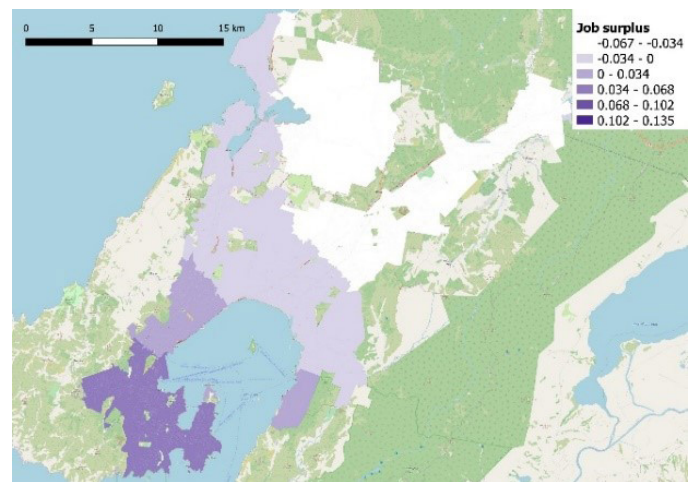
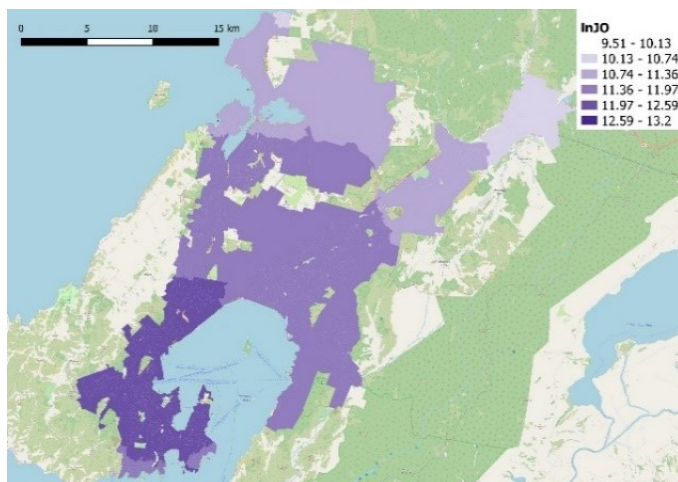
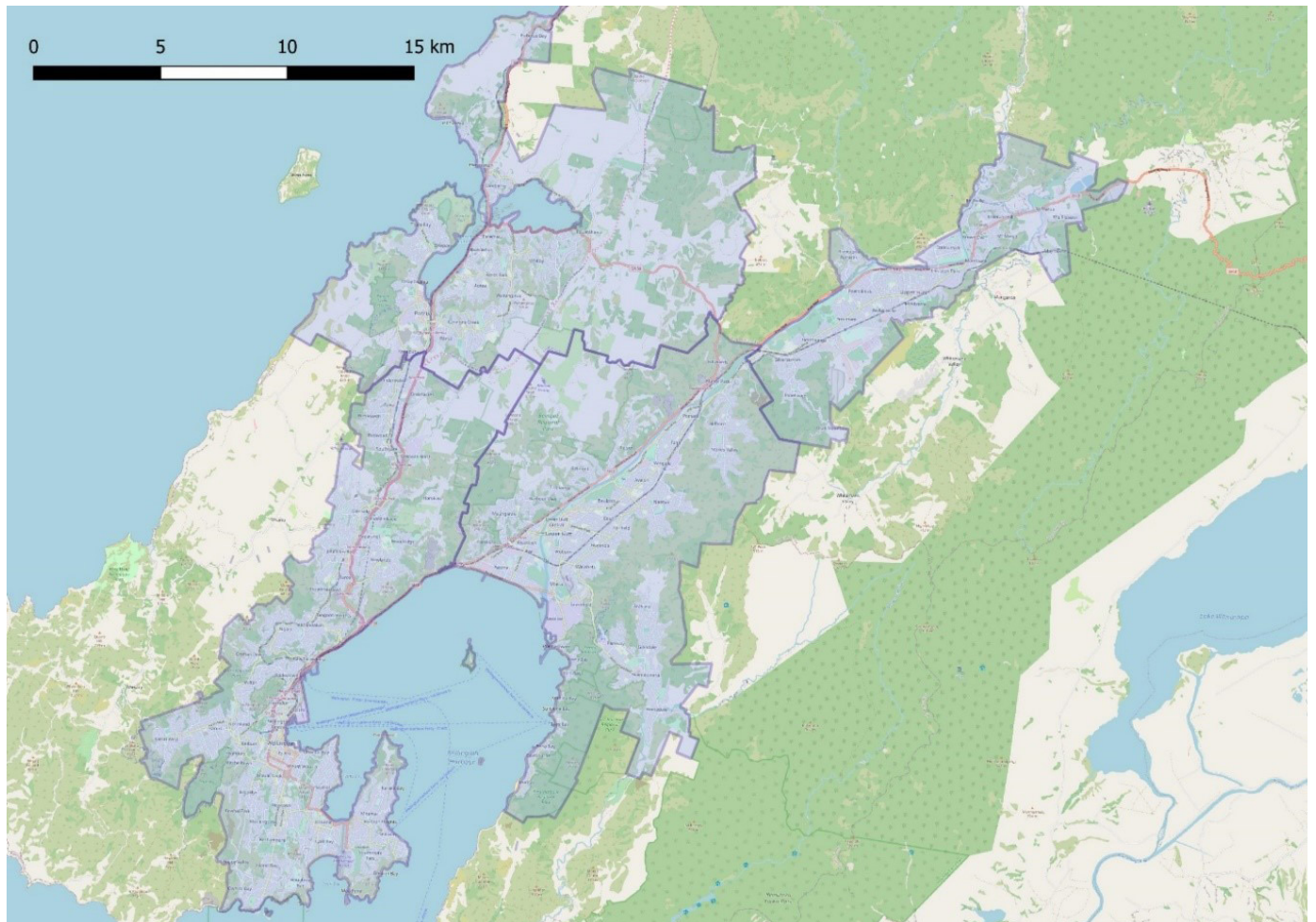


Figure 3.5 Wellington urban area (2018): boundaries, log of job opportunities and job surplus



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