

# AMENITIES AND THE **ATTRACTIVENESS** OF NEW ZEALAND CITIES

## AN EXECUTIVE SUMMARY OF MOTU WORKING PAPER 18-XX

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## SUMMARY HAIKU

People like to be  
dry and sunny, by the sea,  
but firms like cities.

## INTRODUCTION

This new study from Motu Economic and Public Policy Research for the Building Better Homes, Towns, and Cities National Science Challenge uses census rent and wage data to compile quality of life and quality of business measures for 130 towns and cities in New Zealand. These measures are derived from economic theory to reflect the value of local amenities of a place, as perceived by households and firms. It also analyses the relationship between each of these measures and various local natural and social attributes.

Households and firms prefer different amenities which means places with high quality of life often have low quality of business. For instance, households appear to prefer sunny, dry locations near water, while firms appear to prefer to locate in larger cities.

Our measures of “quality of life” and “quality of business” are defined to reflect the value households or firms place on the amenities of a place. We derive the value placed on these amenities by the wages and rents that individuals/firms are willing to accept to locate in a place.

So, for example, a place that has relatively high rents and low wages must be a nice place to live, otherwise people would not be willing to live there at those prices! And less attractive places require high wages and/or low rents, otherwise people wouldn't choose to live there either.

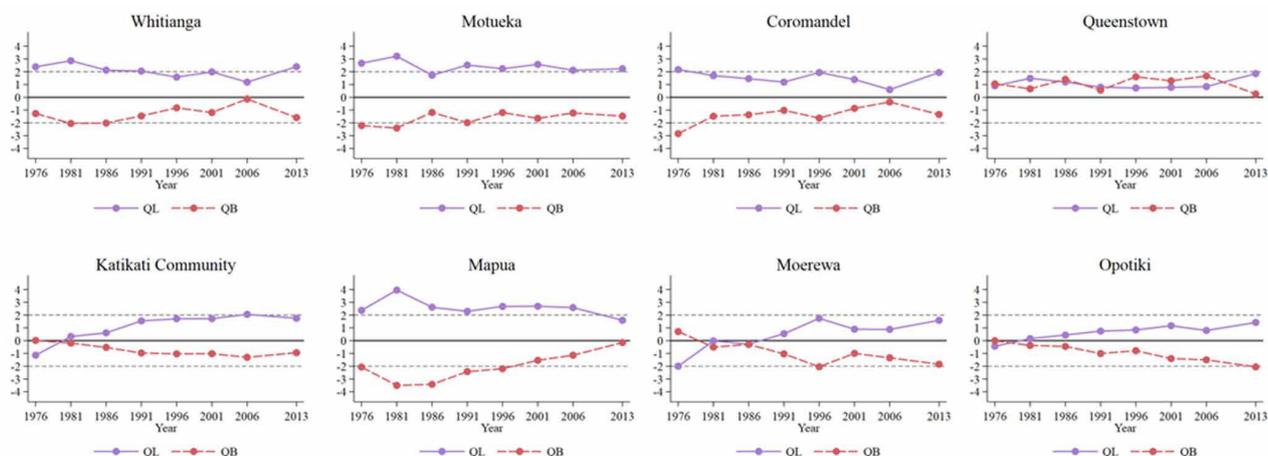
Firms that choose to locate in places that have high rents and high wages must regard those places as having offsetting productivity benefits otherwise they would choose to move elsewhere.

## METHODOLOGY

Our research extends from 1976 to 2013. We have both included and excluded New Zealand's big centres, Auckland, Wellington and Christchurch in our methodology.

In 2016<sup>1</sup>, we analysed a dataset of 56 New Zealand towns and cities from 1926 to 2006. What we found was that land-use capability, sunshine hours, human capital and proximity to Auckland were factors associated with long-run population increase. In this study, we studied a far greater number of settlements over a shorter time period and adopted a different analytical lens.

<sup>1</sup> Grimes, Arthur, Eyal Apatov, Larissa Lutchman, and Anna Robinson. 2016. “Eighty Years of Urban Development in New Zealand: Impacts of Economic and Natural Factors.” *New Zealand Economic Papers* 50 (June): 303–22. <https://doi.org/10.1080/00779954.2016.1193554>



**Figure 1:** Eight graphs of settlements with high QL: Whitianga, Motueka, Coromandel, Queenstown, Katikati Community, Mapua, Moerewa, Opotiki, Wanaka

## QUALITY OF LIFE

Our estimates show that quality of life tends to be higher in coastal and lakeside cities, and in places with less rain and more sun.

Since the mid-1990s, places with increasing shares of their workforce engaged in education and health have risen in perceived quality of life. For instance, for the period 1996-2013, an increase in one standard deviation in education is associated with a 0.27 standard deviation increase in quality of life. This could reflect the increasing importance of tertiary education, particularly university education, as a drawcard for settlements over time.

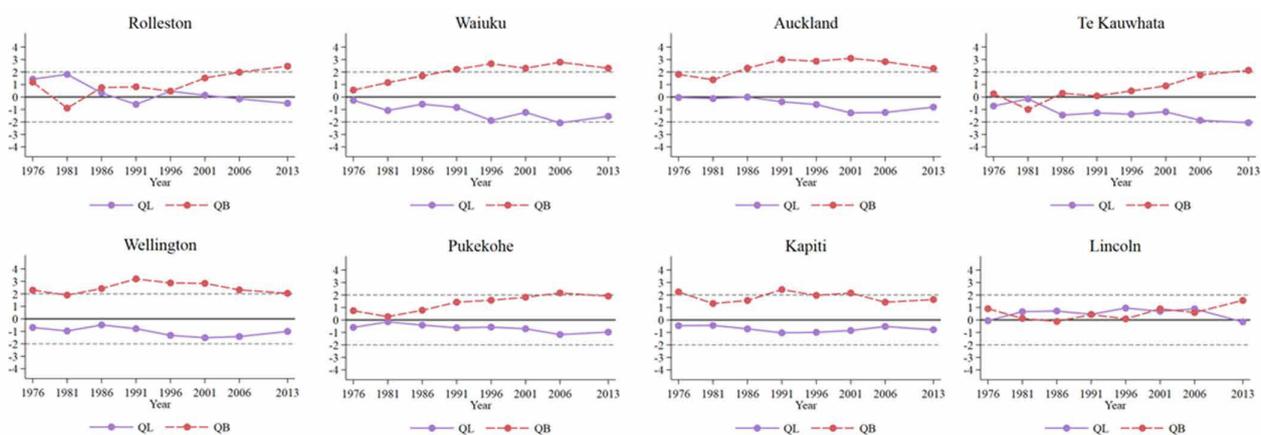
We find no evidence that increasing employment share in the accommodation, food, arts, and recreational services is associated with an increase in quality of life (at least outside the large cities). It seems that places that are nice to live in are generally rich in employment in these sectors. However, intensifying those industries in a given city does not necessarily improve quality of life.

We do, however, detect a positive and statistically significant relationship between quality of life and changes in the employment share in accommodation, food, arts, and recreational services when we include the major cities of Auckland, Wellington, and Christchurch over the more recent years (1996-2013).

There is no evidence of a positive effect of the share of employment in land and water transport or changes in the employment share in the air travel industry.



We find evidence that population growth within cities is negatively associated with quality of life. One possible explanation for this result is that the congestion and crowding that comes with growth are viewed negatively by consumers. This finding serves as a warning that investment in improving local consumption amenities may be partially offset by subsequent population increases. It is notable in our results, however (both with and without the larger cities) that this effect is smaller in the second than the first half of our sample. Perhaps New Zealand's cities are becoming more cosmopolitan and/or people are valuing these aspects more, so that cities are seen as increasingly attractive places to live. Another possibility is that urban infrastructure (including communications technology) has been effective in ameliorating congestion or that certain negative aspects of cities (such as crime rates or pollution) have reduced over time.



**Figure 2:** Eight graphs of settlements with high QB: Rolleston, Waiuku, Auckland, Te Kauwhata, Wellington, Pukekohe, Kapiti, Lincoln, Arrowtown, Hawera

## QUALITY OF BUSINESS

In 2013, all of the top 8 towns for firms (and hence work opportunities) were in or around the three big cities: Auckland (Auckland, Waiuku, Te Kauwhata, Pukekohe), Wellington (Wellington, Kapiti) and Christchurch (Rolleston, Lincoln).

Quality of business tends to be higher in larger settlements, and, and especially in cities with growing populations. Experiencing a 10 percent increase in population is associated with an increase in quality of business by a statistically significant 0.1 standard deviation.



## THE INTERACTION OF LIFE AND BUSINESS

In many cases, amenities that are positively associated with quality of life are negatively associated with quality of business, and vice versa.

It is possible that our quality of business measure is less well measured than is quality of life. One potential source of error for both our quality of life and quality of business measures is that census income data is an imperfect measure of wages. A second potential source of error relates to business rents. Our calculation for quality of business uses quality-adjusted residential rents rather than commercial rents. As many firms operate in the central business district within a city or in distinct industrially-zoned districts, this could mean that the rents firms pay are poorly measured. In addition, both our quality of business and quality of life variables are average measures for a location that do not distinguish between households or firms having differing tastes or production needs relative to the average. For these reasons, we place greater emphasis on our quality of life results relative to those for quality of business.

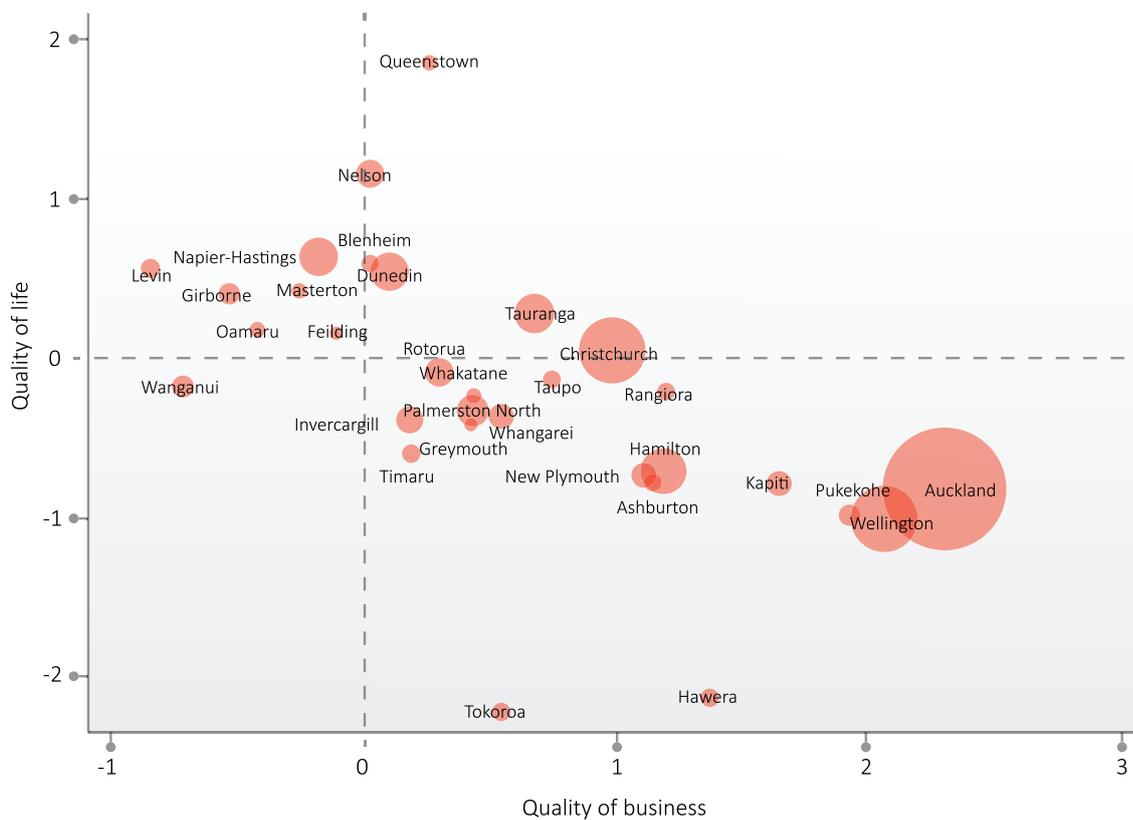


Figure 3: Quality of Life and Quality of Business (2013) – largest settlements only



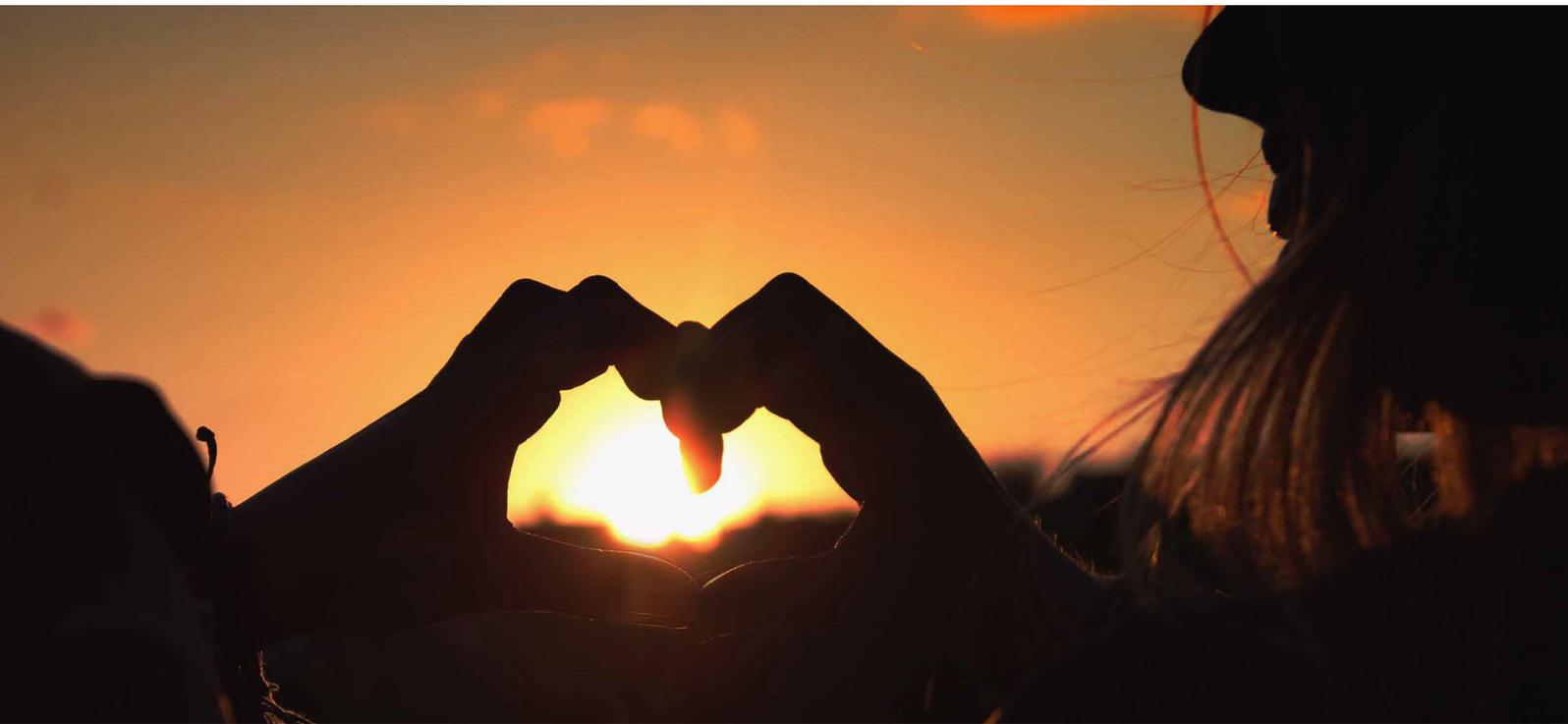
## CONCLUSION

Our research suggests that livelihood and liveability are often in opposition - ie. some towns are more liveable while others are towns in which we choose to live primarily because it's where we can earn our money and have a job. However, there are a few cities that are attractive to both workers and firms. These include Christchurch, Tauranga and Queenstown. Over the 37-year period we analyzed, our perception of quality of life and quality of business in these places has remained relatively stable.

However, as the measures do change over time in some settlements, it is possible for locations with poor performance to improve. There is scope for local policy makers to address the consumption and production amenities in their settlements and so seek to improve their local quality of life and/or quality of business.

Future work will study the link between quality of business and quality of life with people's location choices (and hence population size) using data on individuals within a location choice framework.

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**Building Better Homes, Towns and Cities (BBHTC)** is one of 11 National Science Challenges, funded by the Ministry of Business, Innovation and Enterprise (MBIE). BBHTC undertakes world-class research to shape New Zealand's built environment and strengthen communities. The Challenge develops findings that will empower public, planners and policymakers with reliable information and new tools for fresh thinking and better decisions and is discovering new pathways to address the long-standing housing challenges of our most disadvantaged.