HOUSING

Housing is an important determinant of health and wellbeing. There are three main elements to housing: affordability, availability, and quality. Affordable housing is usually defined as housing (rented or owned) that costs no more than 30 percent of a household's gross income [1]. Affordability and availability are closely linked. Where housing supply is low and demand for houses is high, market prices increase. People with limited income may find it more difficult to obtain suitable housing, and changes in relative levels of affordability can also affect the demand for different types of housing [2]. The quality of housing has a strong influence on health and wellbeing outcomes for individuals, whānau, and communities; housing influences social relationships within and beyond the household [3,4]. Good quality housing is warm and dry and provides sufficient space and amenities for the occupants. It also protects the occupants from noise, air pollution (such as second-hand tobacco smoke, emissions from open fires and un-flued gas heaters), and other environmental exposures (such as vibration from heavy transport movements).

Good quality housing can reduce the risk of poor physical and mental health, reduce the number of trips and falls, reduce the number of school days lost to illness, contribute to improved educational attainment, and reduce visits to the GP and other health and social care services [5-9]. Taking a broad view, the quality of housing includes not just the physical structure, but also features of the surrounding area such as access to education, employment, retail outlets, access to transport routes and interchanges, proximity to green spaces and other community amenities, and population density.

Key trends within housing

Supply-side pressures have eased and household incomes have trended upward in greater Christchurch over the past few years, resulting in generally more favourable housing affordability, compared with New Zealand overall. Household crowding is also notably lower in Canterbury compared with New Zealand overall. Survey data indicate that most people in greater Christchurch are satisfied or very satisfied with the quality of their housing, particularly in the Selwyn and Waimakariri districts, slightly less so in Christchurch City (but with a significant improvement between 2017 and 2019).

Key equity issues within housing

Despite the general pattern of improvement in the availability of quality affordable housing in greater Christchurch, there are clear inequalities in exposure to poor quality housing. People with limited financial resources, people of Māori and Pacific ethnicity, people with a long-term health condition or disability, and those living in rental houses are at increased risk of exposure to poor quality housing. Affordability is sensitive to welfare and policy settings and other changes that can place people's income under pressure.

What this means for wellbeing

Housing is a key determinant of health and wellbeing. Improvements in the supply of good-quality, affordable housing in greater Christchurch continue. Some indicators have largely returned to the pre-earthquake picture while others continue to make progress.

Indicators in this domain

- **Housing affordability**
- **Housing-related spending**
- **Rental property supply**

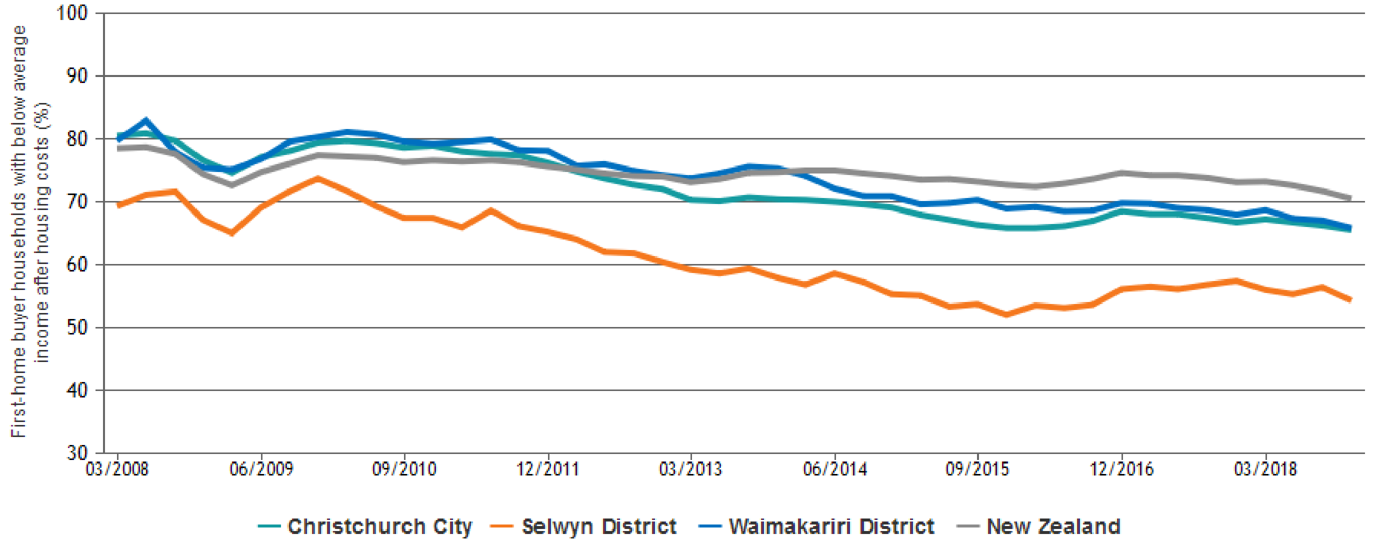
- **Household crowding**
- **Housing quality**

HOUSING AFFORDABILITY

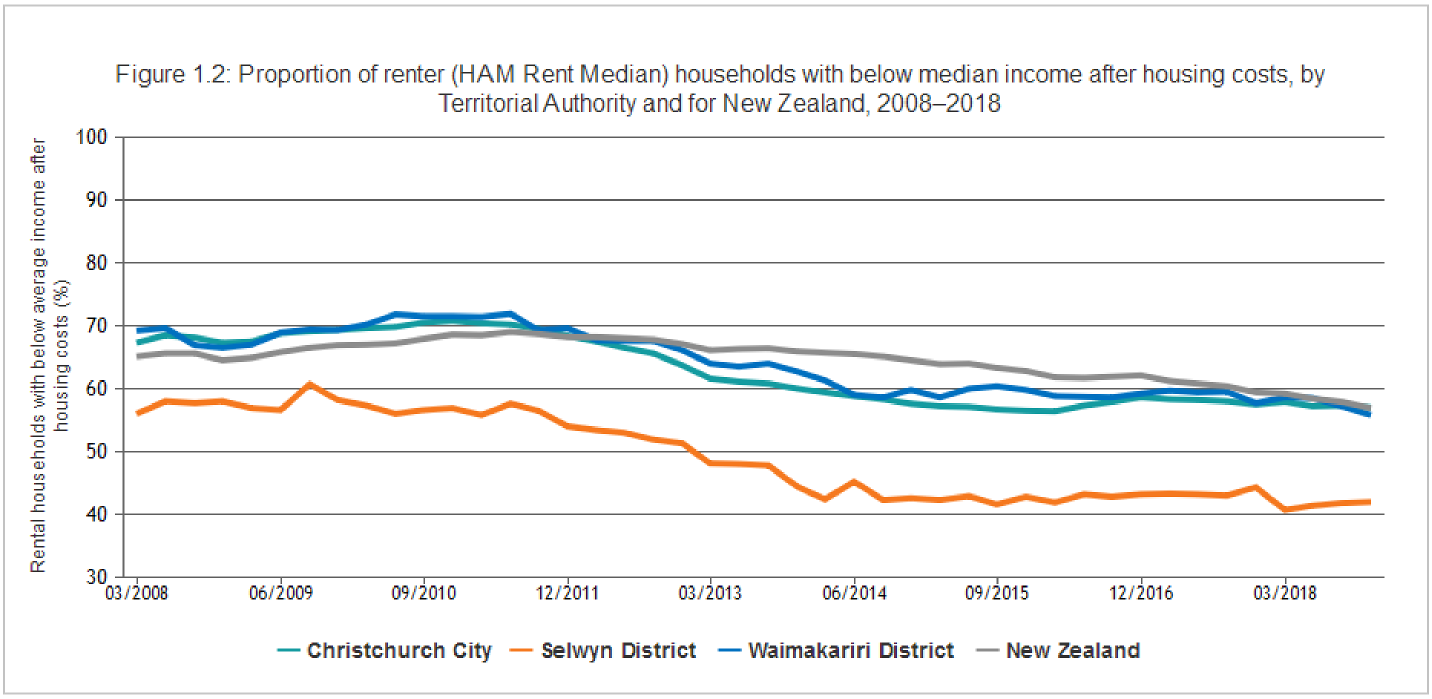
The Housing Affordability Measure (HAM) provides a picture of how much New Zealanders spend on housing, and tracks whether housing is becoming more or less affordable over time for renters and potential first home buyers (based on income data, rent/mortgage payments, rates and insurance; adjusted for household size). The HAM Buy Median indicator addresses whether a household that is currently renting can feasibly afford to own a home (i.e., hypothetically, if they bought a lower quartile-valued dwelling in their Territorial Authority). The HAM Rent Median indicator addresses whether a household that rents can feasibly afford to live in their current accommodation [10]. The HAM does not set a level at which housing is or is not affordable. Determining affordability depends on each household's circumstances and expectations of what qualifies as a socially accepted standard of living [10] (i.e. rating what goods and services are necessary is subjective).

This indicator presents the proportion of households with below the median New Zealand household income after deducting housing costs. This measure is presented separately for potential first homeowners (HAM Buy Median), and for renters (HAM Rent Median), for each Territorial Authority in greater Christchurch and for New Zealand, from 2008 to 2018, inclusive. Higher numbers on the HAM measure indicate less affordable housing (these data report version 1.4 of HAM). Note that the full back series of data is updated whenever HAM is re-released.

Figure 1.1: Proportion of potential first home buyer (HAM Buy Median) households with below median income after housing costs, by Territorial Authority and for New Zealand, 2008-2018



The figure shows that the proportion of potential first home buyer households in Christchurch City with below the median income after housing costs decreased by just over one percentage point from 66.7 percent in December 2017 to 65.5 percent in December 2018. This finding indicates that housing (ownership) became marginally more affordable over this period. The proportion in December 2018 was slightly higher in Waimakariri District (65.8%) and substantially lower in Selwyn District (54.3%). At a national level, the proportion of potential first home buyer households with below the median income after housing costs also decreased between December 2017 and December 2018; 73.1 percent and 70.5 percent, respectively. Overall, the HAM Buy Median indicates that home ownership affordability for potential first home buyer households in greater Christchurch has improved from early 2017 to the current time point (December 2018).



The figure shows that the proportion of renter households in Christchurch City with below the median income after housing costs remained relatively stable between December 2017 (57.5%) and December 2018 (57.0%). The proportion in December 2018 was slightly smaller in Waimakariri District (55.8%) and substantially smaller in Selwyn District (42.0%), which indicates comparatively affordable renting in Selwyn District. For New Zealand overall, the proportion of renter households with below the median income after housing costs declined between December 2017 (59.4%) and December 2018 (56.9%). This decline continues the general pattern of increasing affordability for renters for New Zealand overall, apparent since mid-2011.

Overall, affordability for renter households in Christchurch City and Waimakariri District has improved, with the HAM Rent Median converging towards that for New Zealand overall between March 2016 and December 2018. HAM Rent Median in Selwyn District has remained consistently lower than in Christchurch City and Waimakariri District throughout the time series presented. Taken together, the data for HAM Buy Median and HAM Rent Median illustrate that housing costs take a smaller proportion of household income for renters than for first home buyers.

Data Sources

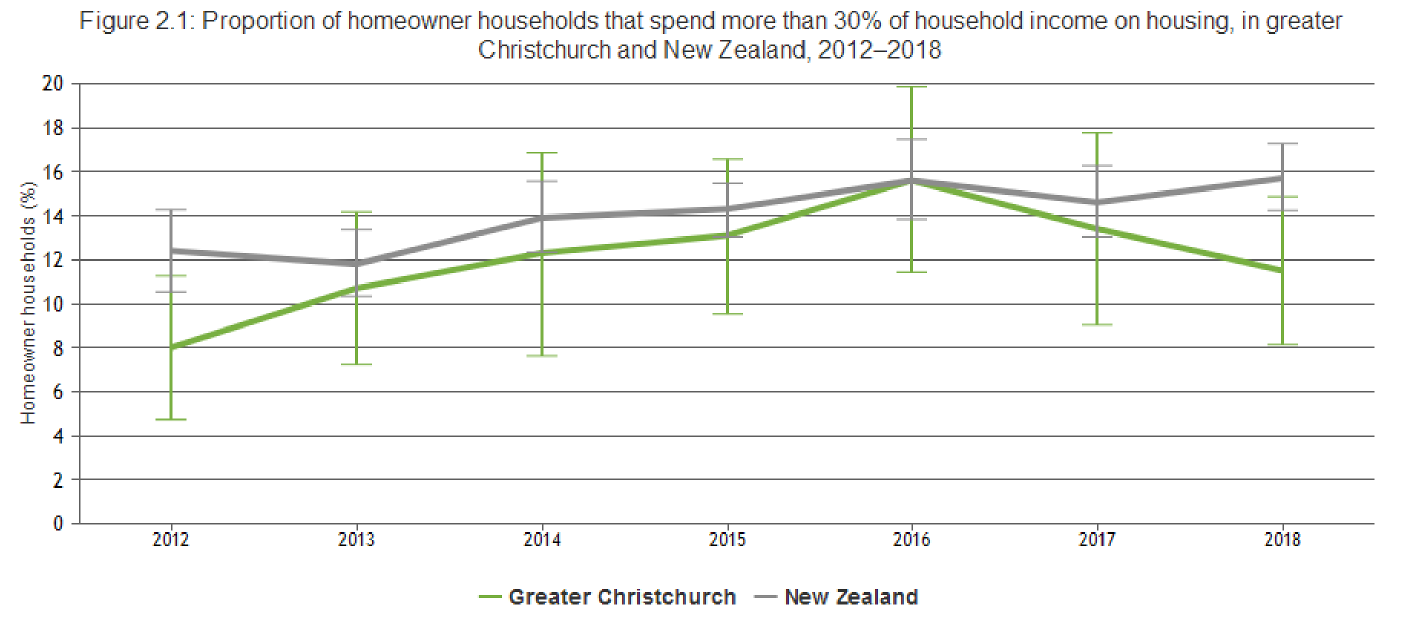
Source: Ministry of Housing and Urban Development.
Survey/data set: Data set (HAM version 1.4) created for research purposes from the Integrated Data Infrastructure (IDI), managed by Statistics New Zealand. Access publicly available data from the Ministry of Housing and Urban Development website www.hud.govt.nz/news-and-resources/statistics-and-research/housing-affordability-measure-ham.
Source data frequency: Quarterly.

Metadata for this indicator is available at https://www.canterburywellbeing.org.nz/index-data

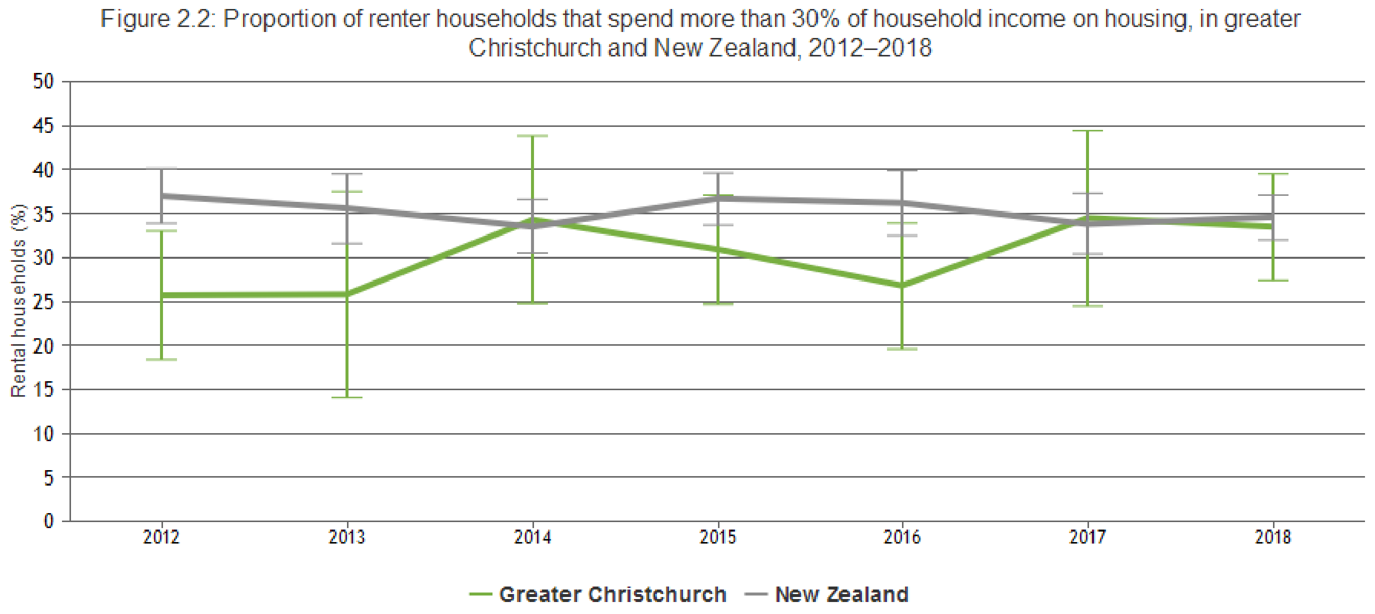
HOUSING-RELATED SPENDING

Housing affordability is largely influenced by income, supply, and demand, and is sensitive to any changes that can place people's income under pressure. The 'spending on housing' indicator provides a picture of whether housing is becoming more or less affordable over time for renters and home owners (based on income data, rent/mortgage payments, rates and insurance; adjusted for household size). The spending on housing indicator considers whether a household is spending more or less than 30 percent of its income on housing costs. The 30 percent threshold does not imply that spending 30 percent of household income is or is not affordable. Determining affordability depends on each household's circumstances and expectations of what qualifies as an acceptable standard of living [10].

This indicator presents the proportion of households that spend more than 30 percent of household income on housing, for renters and for homeowners, for greater Christchurch and New Zealand. Higher proportions indicate less affordable housing.



The figure shows that the proportion of all homeowner households in greater Christchurch that spent over 30 percent of their income on housing costs decreased from 13.4 percent in 2017 to 11.5 percent in 2018 (however, this drop is not statistically significant). By this measure, for the period 2012 to 2018, home ownership appears to have been more affordable in greater Christchurch compared with New Zealand overall, although the differences shown are not statistically significant at any time-point.



The figure shows that the proportion of renter households in greater Christchurch spending over 30 percent of their income on housing costs was stable between 2017 and 2018 (34.5 percent in 2017, 33.5 percent in 2018; difference not statistically significant). By this measure, for the period 2012 to 2016, spending on housing has generally been lower for greater Christchurch renters compared with renters in New Zealand overall. In 2017 and 2018, spending on housing for renters in greater Christchurch was similar to New Zealand overall. No differences shown are statistically significant, with the exception of a significantly lower proportion for greater Christchurch in 2012.

Data Sources

Source: Statistics New Zealand.
Survey/data set: Household Economic Survey to June 2018. Custom data request for greater Christchurch region.
Source data frequency: Annually.

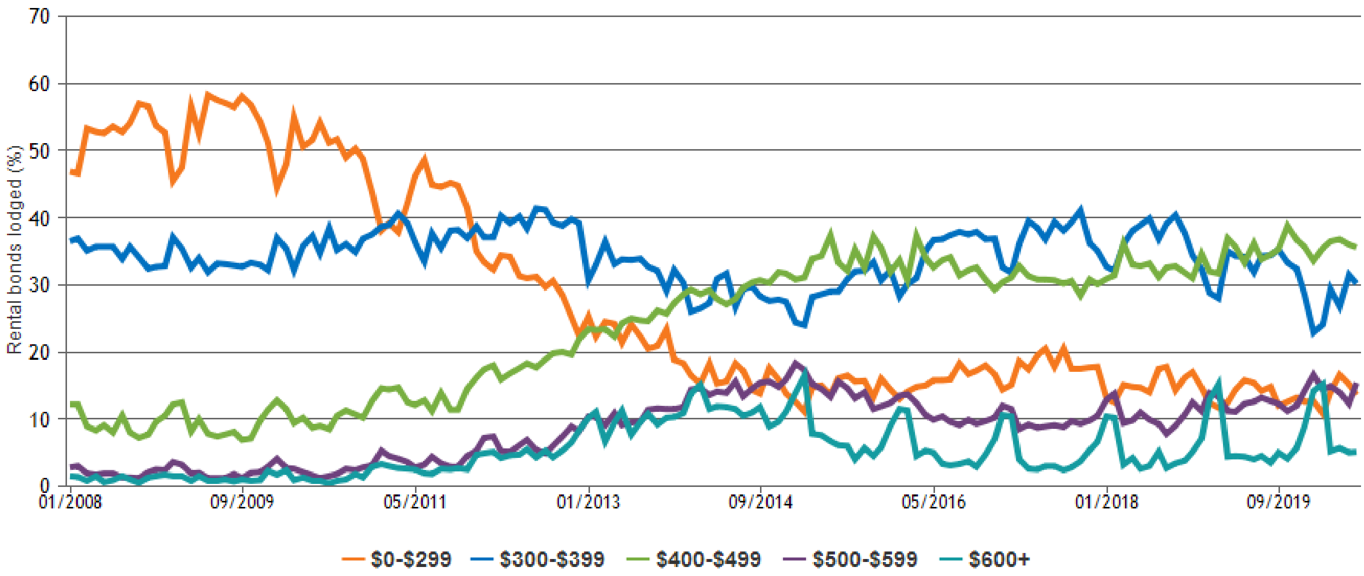
Metadata for this indicator is available at https://www.canterburywellbeing.org.nz/index-data

RENTAL PROPERTY SUPPLY

The tenancy bond dataset held by the Ministry of Business Innovation and Employment (MBIE) includes rental properties from private sector landlords, individuals in state housing, and rentals owned by local governments and government entities. It is estimated that bonds are lodged for around 85 percent of all tenancies (excluding tenancies with a fixed term of less than six months, and individuals that have a family member as a landlord)[11]. MBIE provides monthly updates on bond lodgements and current market price for rental properties.

This indicator presents the proportion of private sector rental bonds lodged monthly, by weekly rent level, in greater Christchurch, from 2008 to 2020. Note that almost all bonds from state housing, and rentals owned by government entities were less than $300 over the timeframe shown.

Figure 3.1: Proportion of private rental bonds lodged monthly by weekly rent level, in greater Christchurch, 2008–2020



The figure shows that the availability of low-cost private sector rental properties ($0–$299 weekly rent) within greater Christchurch has declined markedly over the last 10 years. The supply of low-cost rentals plateaued around 2015, and low-cost rentals have since accounted for approximately 15% of the rental market. The supply of mid-level rentals ($300-$399 and $400–$499 weekly rent) has also stabilised since 2015, and each of these price bands has made up approximately one-third of the market, over the 2015 to 2020 period ($300-$399, 33.7%; $400–$499, 33.3% mean 2015-2020). The proportion of high-cost properties amongst private sector properties available for rent has been low and relatively stable over the last 10 years (≈10%, $500-$599 and ≈6%, $600+ mean 2010 to 2020).

Data Sources

Source: Ministry of Business Innovation and Employment.
Survey/data set: Data set created for research purposes from MBIE's tenancy bond database. Access publicly available data from the Ministry of Business Innovation and Employment website www.mbie.govt.nz/building-and-energy/tenancy-and-housing/rental-bond-data/
Source data frequency: Monthly.

Metadata for this indicator is available at https://www.canterburywellbeing.org.nz/index-data

HOUSEHOLD CROWDING

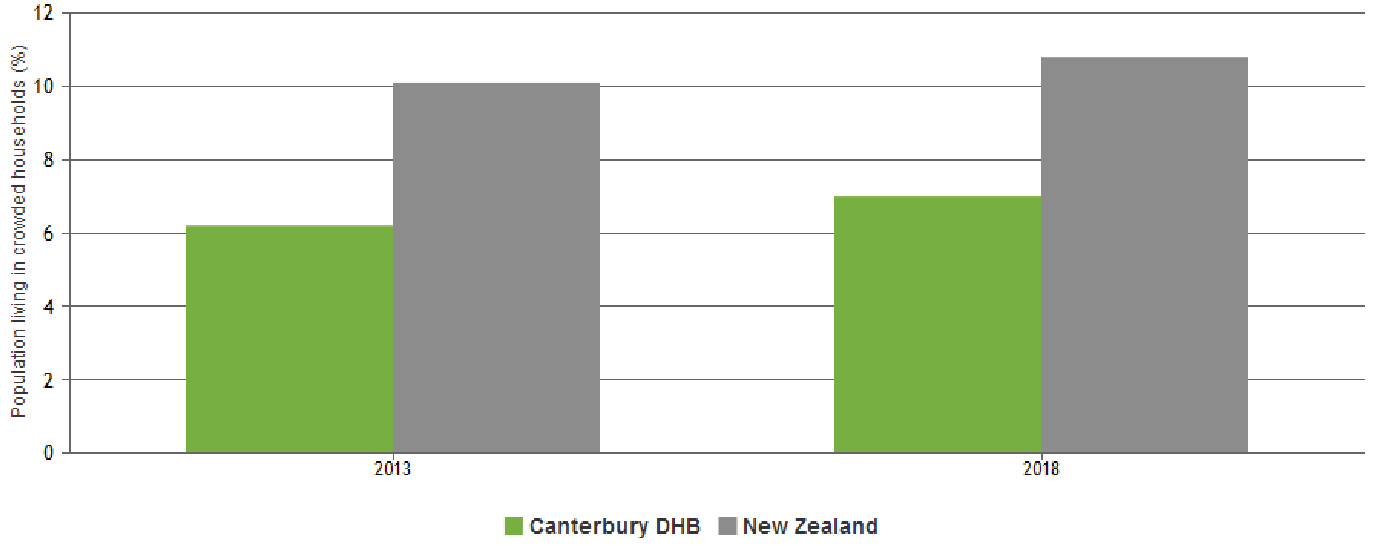
Household crowding increases the risk of infectious diseases spreading (such as bronchiolitis, pneumonia, gastroenteritis, and meningococcal disease), particularly among children [12]. Household crowding also increases the likelihood of adverse psychological responses to living in high-density conditions, such as stress and feelings of lack of privacy [13,14].

Household crowding is measured with census data, by applying the Canadian National Occupancy Standard (based on a formula that includes the number of bedrooms, and the number of occupants and their gender, age, and relationships). Crowding is defined as needing one or more bedrooms; severe household crowding is defined as needing two or more bedrooms.

The complexity of the relationship between household crowding and negative health and wellbeing outcomes makes it difficult to separate the effects of crowding from other factors. Related factors include the physical condition and type of housing, socioeconomic factors, and risk behaviours such as smoking [14]. Despite these complexities, household crowding remains a useful overall indicator of people's exposure to poor housing conditions.

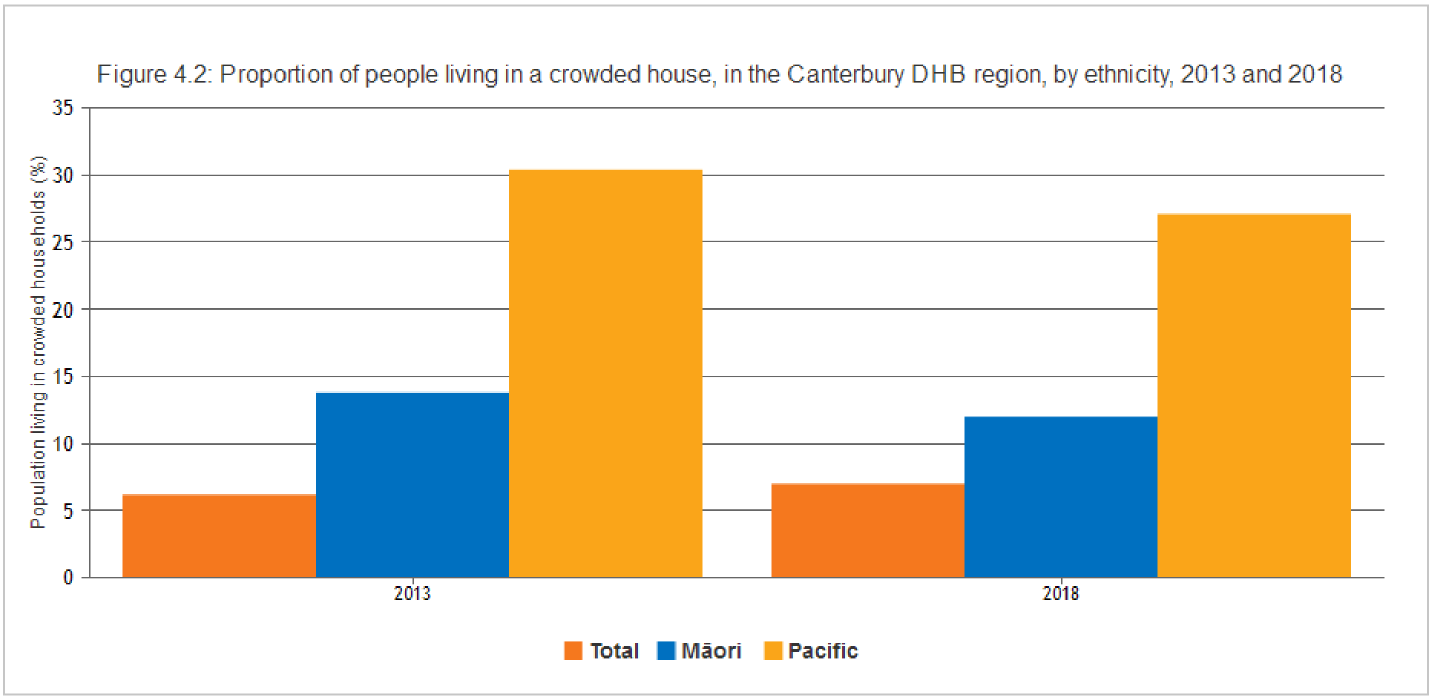
This indicator presents the proportion of the population living in a crowded household (needing one or more bedrooms based on the Canadian National Occupancy Standard) for the Canterbury District Health Board region, in 2013 and 2018.

Figure 4.1: Proportion of people living in a crowded house, in the Canterbury DHB region and New Zealand, 2013 and 2018



The figure shows the proportion of those exposed to household crowding for the Canterbury DHB region compared with New Zealand as a whole. In 2013, 6.2 percent of the Canterbury DHB population and 10.1 percent of the New Zealand population overall, lived in crowded households, increasing to 7 percent and 10.8 percent, respectively, in 2018. The relative difference remains unchanged.

Breakdown by ethnicity



The figure shows that the distribution of exposure to household crowding in the Canterbury DHB region is uneven, with higher levels for Pacific peoples and Māori, relative to the total population. Proportions living in homes defined as crowded in 2013 and 2018 were 30.4 and 27.1 percent for Pacific peoples, 13.8 and 12.0 percent for Māori, and 6.2 and 7.0 percent for the total population, respectively.

Data Sources

Source: Statistics New Zealand.
Survey/data set: Census of Population and Dwellings. Custom request for Canterbury DHB region.
Source data frequency: Census conducted every 5 years.

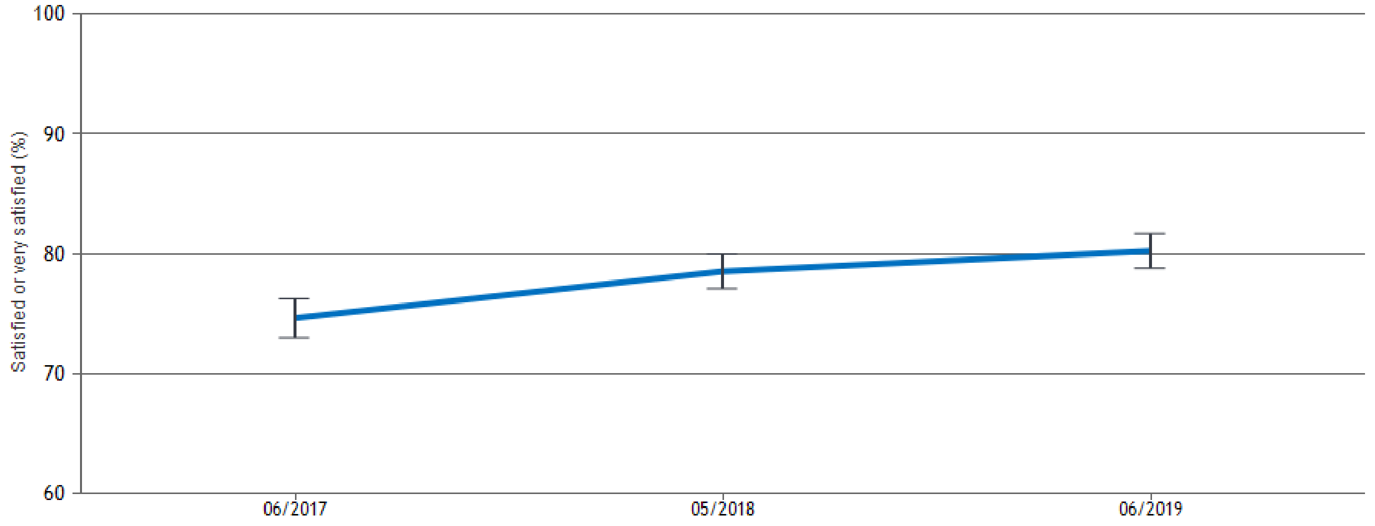
Metadata for this indicator is available at https://www.canterburywellbeing.org.nz/index-data

HOUSING QUALITY

Good quality housing is warm and dry and provides sufficient space and amenities for the occupants. A question included in the Canterbury Wellbeing Survey asks respondents to rate their satisfaction with the overall quality of the home in which they live (in terms of warmth, insulation, heating, moisture levels, and weather tightness).

This indicator presents the proportion of those 18 years and over indicating that they were either satisfied or very satisfied with the overall physical quality of the home in which they lived, as reported in the Canterbury Wellbeing Survey from 2017 to 2019.

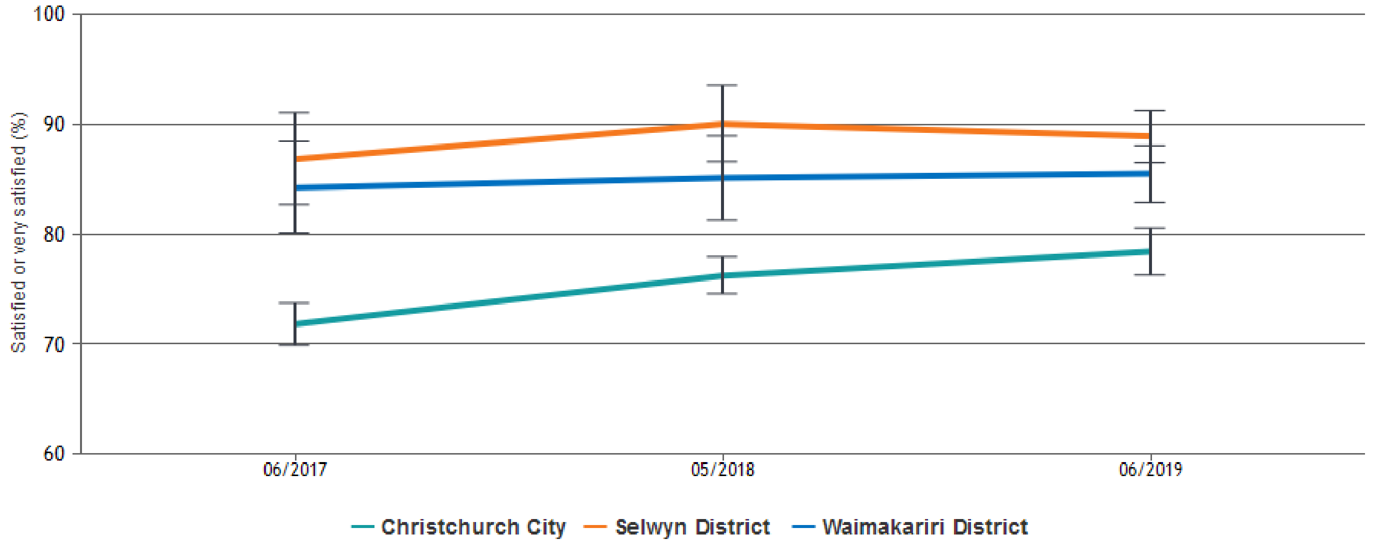
Figure 5.1: Proportion of those aged 18 years and over satisfied or very satisfied with physical quality of home, in greater Christchurch, 2017-2019



The figure shows that in June 2019, 80.2 percent of survey respondents indicated that they were either satisfied or very satisfied with the overall quality of the home in which they lived. This represents a statistically significant increase from June 2017 (74.6 percent), although the difference from 2018 to 2019 was not statistically significant (78.5 percent in 2018).

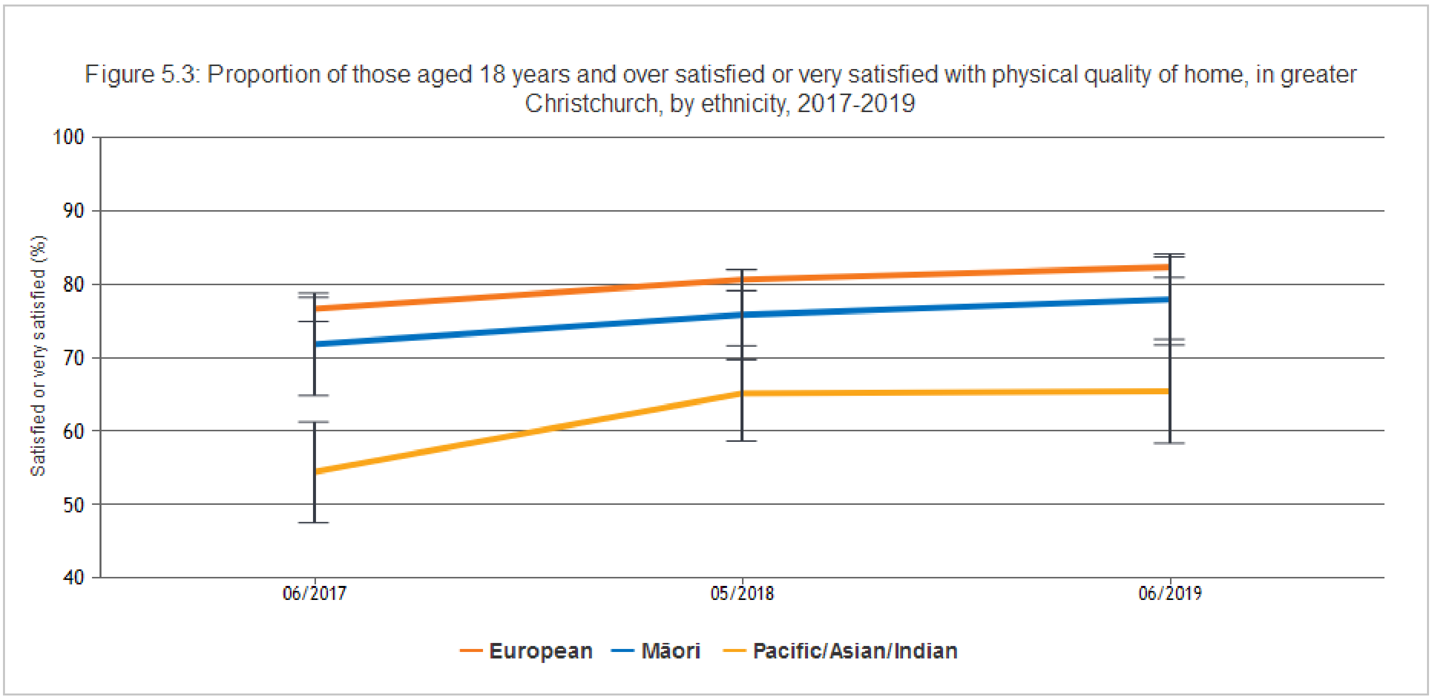
Breakdown by Territorial Authority

Figure 5.2: Proportion of those aged 18 years and over satisfied or very satisfied with physical quality of home, by Territorial Authority, 2017-2019



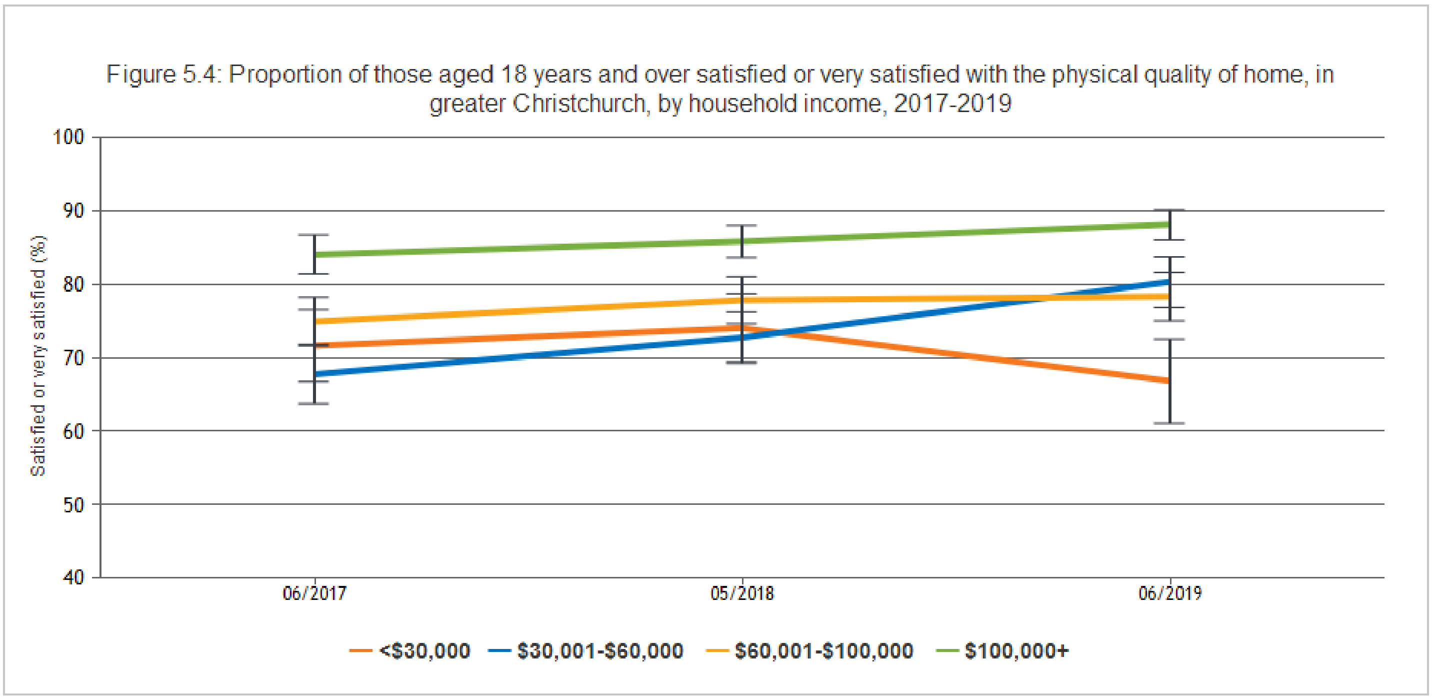
The figure shows that in June 2019, over three-quarters of Christchurch City respondents indicated that they were satisfied or very satisfied with the physical quality of the home in which they lived. Respondents living in Selwyn District and Waimakariri District were statistically significantly more likely to indicate that they were satisfied or very satisfied with the overall quality of their home (Selwyn 88.9 percent; Waimakariri 85.5 percent) compared with Christchurch City residents (78.4 percent). While the general pattern seen in 2019 reflects that seen in the previous two years, the proportion of Christchurch City residents reporting that they were satisfied or very satisfied with the physical quality of their home has increased statistically significantly between 2017 and 2019 (from 71.8 percent in 2017 to 78.4 percent in 2019).

Breakdown by ethnicity



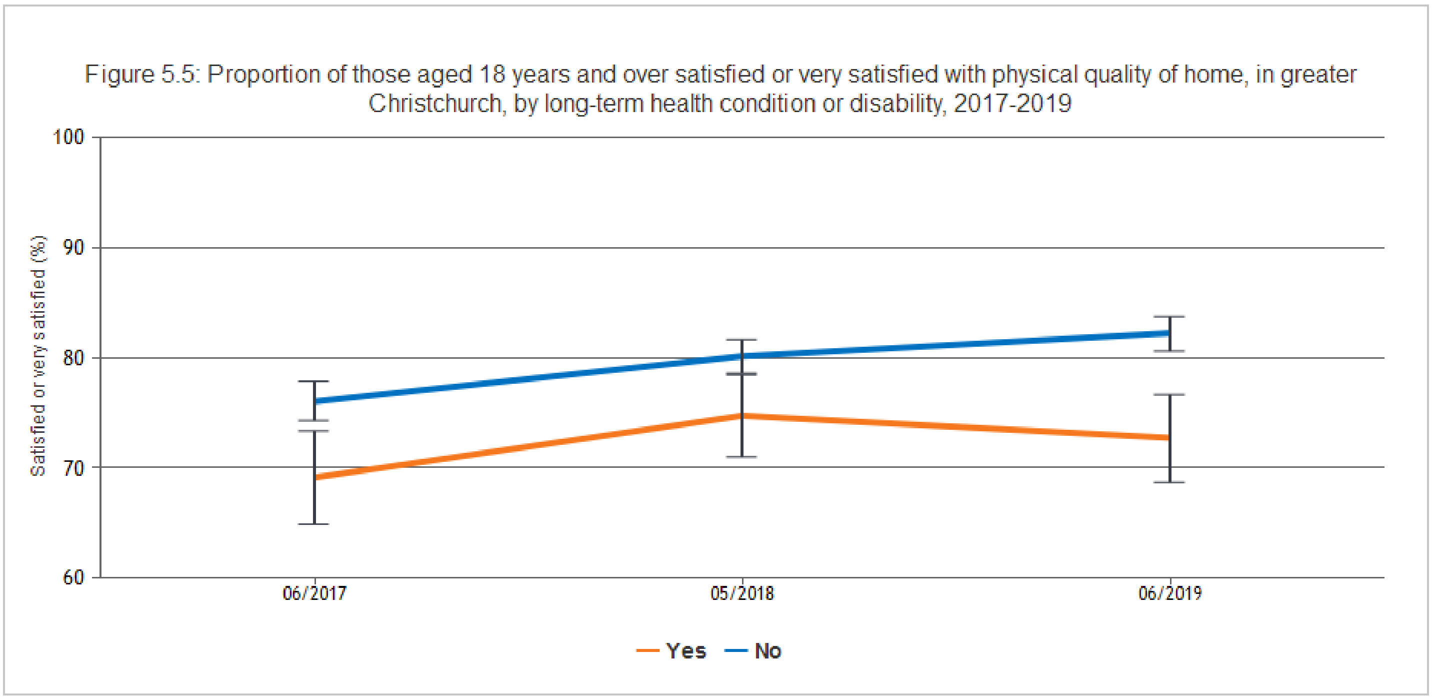
The figure shows that in June 2019, over three-quarters of European and Māori respondents indicated that they were satisfied or very satisfied with the physical quality of the home in which they lived. Approximately two-thirds (65.4 percent) of Pacific/Asian/Indian respondents indicated that they were satisfied or very satisfied with the physical quality of the home in which they lived (statistically significantly lower than European respondents). The pattern seen in 2019 generally reflects that seen at the 2017 and 2018 time-points (along with a general increase in satisfaction, 2017–2019).

Breakdown by income



The figure shows an overall pattern of increased satisfaction with the quality of the home with increasing household income. The proportion of respondents in the less than $30,000 income bracket satisfied or very satisfied with housing quality was statistically significantly lower than that for respondents from all the other income groups in 2019. In contrast, those in the $100,000+ household income group were statistically significantly more likely to indicate being satisfied or very satisfied than respondents from all other income groups, at all time-points.

Breakdown by disability



The figure shows that in June 2019, there was a statistically significant difference in satisfaction with the quality of the home for greater Christchurch respondents with a long-term health condition or disability compared to those without (72.7 percent and 82.2 percent respectively, 9.5 percentage point difference). This gap has increased since 2018 (74.7 percent and 80.1 percent respectively, 5.4 percentage point difference in 2018).

Data Sources

Source: Canterbury District Health Board.
Survey/data set: Canterbury Wellbeing Survey to 2019. Access publicly available data from the Community and Public Health (Canterbury DHB) website www.cph.co.nz/your-health/wellbeing-survey/
Source data frequency: Annually.

Metadata for this indicator is available at https://www.canterburywellbeing.org.nz/index-data

REFERENCES

1 Ministry of Social Development (2016) *The Social Report 2016*. Wellington: Ministry of Social Development.

2 Howden-Chapman P (2004) Housing standards: a glossary of housing and health. *Journal of Epidemiology and Community Health.* 58: 162-168.

3 National Health Committee (1998) *The Social, Cultural and Economic Determinants of Health in New Zealand: Action to Improve Health*. Wellington: National Health Committee.

4 Thomson H, Thomas S, Sellstrom E, Petticrew M (2013) Housing improvements for health and associated socio-economic outcomes. *Cochrane Database Syst Rev*: Cd008657.

5 Carter D, Sharp S, British Medical Association (2003) *Housing and health: Building for the future*. London: British Medical Association.

6 Howden-Chapman P, Matheson A, Crane J, Viggers H, Cunningham M, et al. (2007) Effect of insulating existing houses on health inequality: cluster randomised study in the community. *BMJ* 334: 460.

7 Howden-Chapman P, Pierse N, Nicholls S, Gillespie-Bennett J, Viggers H, et al. (2008) Effects of improved home heating on asthma in community dwelling children: randomised controlled trial. *BMJ* 337.

8 Mitchell I, O'Malley S (2004) How affordable is housing in New Zealand and what strategies are available to reduce housing stress? Social Policy, Research and Evaluation Conference, 25–26 November. Wellington.

9 Baker MG, Goodyear R, Telfar Barnard L, Howden-Chapman P (2012) *The Distribution of Household Crowding in New Zealand: An analysis based on 1991 to 2006 Census data*. Wellington: He Kainga Oranga/Housing and Health Research Programme, University of Otago.

10 Ministry of Housing and Urban Development. (2019). *Housing Affordability Measure Method HAM version 1.4*. Wellington: Ministry of Housing and Urban Development.

11 Miller S, Suie S, Bycroft C (2018) *Comparing housing information from census and tenancy bond data*. Wellington: Statistics New Zealand.

12 Baker MG, McDonald A, Zhang J, Howden-Chapman P (2013) *Infectious Diseases Attributable to Household Crowding in New Zealand: A systematic review and burden of disease estimate*. Wellington: He Kainga Oranga/Housing and Health Research Programme, University of Otago.

13 Crothers C, Kearns R, Lindsey D (1993) Housing in Manukau City: Overcrowding, Poor Housing and Their Consequences *Working Papers in Sociology, University of Auckland* 27.

14 Evans GW (2003) The built environment and mental health. *J Urban Health* 80: 536-555.

FIND OUT MORE

> **MBIE Tenancy and Housing data**
This Ministry of Business, Innovation and Employment webpage provides data and statistics about rental bonds.

> **MHUD Housing data**
This Ministry of Housing and Urban Development webpage provides links to research and data about the housing sector, including the Housing Affordability Measure (HAM) and Housing Market Indicators.

> **Statistics New Zealand Housing data**
This Statistics New Zealand webpage contains links to a variety of housing-related information.

> **Environmental health indicators**
A Ministry of Health-funded Massey University website that provides data at a national and regional level on a number of environmental health-related indicators including household crowding.

> **Christchurch City Council housing-related data**
This webpage provides links to various statistics about housing in the Christchurch City Council area.

> **Community and Public Health housing information**
This webpage presents information about housing from a public health perspective.

> **BRANZ reports**
Each year BRANZ invests the Building Research Levy in research as part of its vision to inspire the industry to provide better buildings for New Zealanders. The website reports on topics such as housing quality as well as providing technical reports.