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# ***The contribution of rental affordability to child poverty in Aotearoa:***

## *Measuring affordable rental supply*

Developing benchmark rents for affordable homes at three income levels to measure changes in the supply of affordable rental stock over time.

*Greg Waite  
August 2023*

## Our mission

Founded in 1994, the Child Poverty Action Group (CPAG) is an independent, registered charity working to eliminate child poverty in Aotearoa New Zealand through research, education and advocacy.

## Our work

CPAG produces research about the causes and effects of poverty on children and their whānau and families, and uses this to inform public discussion and promote evidence-based responses.

CPAG is funded entirely by grants from charitable trusts and donations from the public. Our members across New Zealand include leading academics, doctors, teachers, health workers, community workers and many others.

Our work covers issues such as health, housing, education, taxation, disability, employment and income support.

## Our focus on children

CPAG focuses on eliminating poverty for children because:

*Overall effects of poverty are worse for children* — Child development is adversely affected by poverty, and can lead to detrimental effects for an entire life.

*Children are more likely to experience poverty* — Children are over-represented among those in deprived households.

*Children don't get a say* — Decisions affecting children are made without their input; state democracy involves only adults.

## Author

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## Overview

This is the second paper in a series, developing benchmark rents for affordable homes at three income levels to measure changes in the supply of affordable rental stock over time. The first paper introduces this new approach to measuring rental affordability and the third paper looks at systemic limitations within our income support systems.

## Executive Summary

In 2019 the Welfare Expert Advisory Group (WEAG) report *Whakamana Tāngata* recommended increases to social support payments so all households had sufficient income to afford a basic standard of living. To estimate this level of income, they costed and consulted on budgets for singles, couples, sharers and complex families; for the employed, those searching for employment and full-time parenting.

This paper uses those budgets, updated for inflation, combined with national tax, benefit and rent data to derive benchmarks for affordably priced rental at three income levels – median incomes, low wages, and benefit incomes - to measure changes in our rental stock which contribute to declining affordability.

Looking at trends *by dwelling size* for households reliant on benefits and low incomes, the proportion of affordable rental homes fell by between 0.3% and 4.7% between 2018 and 2023. In contrast, the proportion of rental stock which is affordable on median incomes rose by 2.1% and 1.1% for one and two bedrooms, but fell by 5.3% and 3.6% for three and four bedroom dwellings (Chart 1). While the affordable housing supply was mostly shrinking, population growth over the same period was 8%.

Looking at trends *across areas of higher to lower rents*, the supply of affordable rental has increased only in our most expensive suburbs (Area 1<sup>1</sup>) across all three income benchmarks (up between 2.3% and 5.4%). Supply has contracted in the other three areas covering lower-rent suburbs, with dramatic declines in the two lowest rent areas and the two lower-income benchmarks (down 11.5% to 20%). The declines in affordable supply over the last five years disproportionately impact households on the lowest incomes.

Only Area 1 provided enough new affordable stock to match the pace of population growth, which was 8% over last five years. In total, the national stock of private rental homes grew by 6%, but the total affordable stock at the benefit, low income and median income benchmarks changed by -3.5%, 1.4% and 1.6% respectively.

Today, we are bottom in the OECD's rental affordability rankings<sup>2</sup> and our population is growing faster than our supply of affordable rental homes. Without big changes, future generations will be much worse off as unaffordable renting replaces affordable home ownership for more young families and more retirees.

The ongoing failure to deliver affordable private rental makes a strong case to focus new spending on longer term solutions. Building enough new affordable homes to make a real difference will require large increases in state funding and new financial incentives, but also new partnerships with local government, communities and iwi.

While the first objective of these benchmarks is to monitor whether the share of affordable rental is rising or falling, they can also be used to define targeted incentives for construction of low-cost homes by private, partnered or non-profit organisations.

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<sup>1</sup> Areas 1 to 4 include suburbs as defined for Accommodation Supplement payments, with the highest rents in Area 1 and the lowest in Area 4. Area 1 includes the more expensive suburbs of Whangarei, Auckland, Wellington, Porirua, Christchurch and other cities; Area 4 includes smaller regional and rural locations. Each has different thresholds for payments and may also have wage differences which affect affordability.

<sup>2</sup> OECD Affordable Housing Database report Figure HC1.2.3b Share of population spending more than 40% of disposable income on private rent, in percent, 2020 or latest year.

## *Method for calculating rental affordability*

Housing affordability is typically measured as the ratio of housing costs to income, often by asking if housing costs are less than 30% of income. These ratio measures of affordability suit comparisons across time and nations, but they are only a rough rule of thumb. This paper measures affordability differently by calculating if income is sufficient to cover costs:

$$\text{weekly surplus/deficit} = \text{net wages} + \text{benefits} + \text{allowances} - (\text{budget living costs} + \text{rent})$$

Coverage here is limited to private renting, the tenure with the largest share of households in poverty and material hardship<sup>3</sup>. Further explanation is provided in the section on method, the technical appendices and references in paper one of this series of papers.

Tax, benefit, rent and census data is sourced from Statistics NZ, which replaces personal details with a numeric identifier so all these sources can be linked to provide an overall record of affordability without identifying individuals.

## *Measuring changes to our supply of affordable rental stock*

Understanding changes in rental affordability is not just about incomes, rents and living costs. We also need awareness of larger social trends. For example, during the Australian mining boom of the mid-2000s, unusually high wage and population growth in Queensland created a self-reinforcing property boom. Out-of-state buyers rushed to buy properties over the phone, regional house prices skyrocketed and rents followed. The Queensland government monitored changes in the housing supply and their impact on rents, and the Federal government intervened in the market with support for building new affordable housing<sup>4</sup>. After the mining boom passed, rents in mining areas dropped sharply.

Queensland's monitoring also found that in times of rapid change, the affordable end of rental supply can collapse more rapidly than simple measures like changes in median rent might indicate. When cheaper properties are targeted for renovation or redevelopment and replaced by high-end housing with higher profit margins, the affordable share of rental stock can decline precipitously.

A similar dynamic can be seen in Aotearoa's recent history as investors and home purchasers exited overpriced cities, creating excess demand in smaller regional markets. At this critical time, we need to understand changes in the market to inform new policies.

An important first step is measuring and monitoring our supply of affordable rental homes over time. The starting point for this stock analysis is a model of the total private rental supply in January 2018 and 2023, based on analysis of linked census and bond records over the period 2013-2018. A description of the method used to update rents is provided in the technical appendices.

## *Defining affordable rent benchmarks for housing stock*

Affordability here uses the same calculation as paper one in this series of papers: having sufficient

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<sup>3</sup> Perry, 2022 p.38 and p.25.

<sup>4</sup> The National Rental Affordability Scheme was a housing support scheme to increase the supply of affordable rental homes for low-to-moderate income households. The program ran from 2008 to 2014, cost \$3.1B and incentivised 32,628 affordable homes. Property investors accepted into the program got financial incentives for 10 years (\$11,168 p/a in 2022/23) when they rent out their property at a minimum 20% below market rate to eligible (waitlisted for social housing) residential tenants.

income to cover rent and basic living costs<sup>5</sup>. ‘Affordable rents’ are the median rents paid by the group of households whose net weekly surplus is close to zero<sup>6</sup>, meaning their income is just sufficient to cover costs. ‘Affordable rents’ vary with income, so separate benchmarks are calculated for three income groups; full rate main benefits; low incomes; and middle incomes<sup>7</sup> as previously defined<sup>8</sup>.

Affordable rents are calculated for each common household type, then grouped by typical dwelling size. The lowest of these rents are the benchmark rents which all households requiring that dwelling size<sup>9</sup> can afford, so these are the affordable rents used to measure changes in the supply of affordable rental homes shown in Charts 1-2 below. Separate benchmarks are derived for Areas 1 to 4 (highest to lowest rents) since each area has different rents and thresholds for Accommodation Supplement payments and may also have wage differences.

The 2021 benchmarks<sup>10</sup> are next indexed for annual wage inflation to compare affordable stock in 2018 and 2023. The benchmarks for each year are then used to flag affordable and unaffordable rental properties in the 2018 and 2023 rental data, to measure if the supply of affordable homes is increasing or decreasing over time. A full table with affordable rent benchmarks for all areas and all income levels is provided in the technical appendices.

Indexing for wage inflation ensures we are measuring only compositional changes in the supply of affordable rental properties, while excluding shifts in affordability which result from rising or falling incomes. Put simply, we measure how many rented homes are affordable in 2018 and 2023 on a set level of income.

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<sup>5</sup> The basic standard of living as defined by the WEAG’s supplementary report *Example Families* (published 2019, budgets for income adequacy as at June 2018) updated for inflation.

<sup>6</sup> ‘Close to zero’ includes surpluses of \$0 plus or minus 2% of income, to ensure a representative sample.

<sup>7</sup> Some smoothing has been applied with the two higher income levels in Areas 3 and 4, where lower rents and high incomes enable more tenant discretion and greater variance in medians.

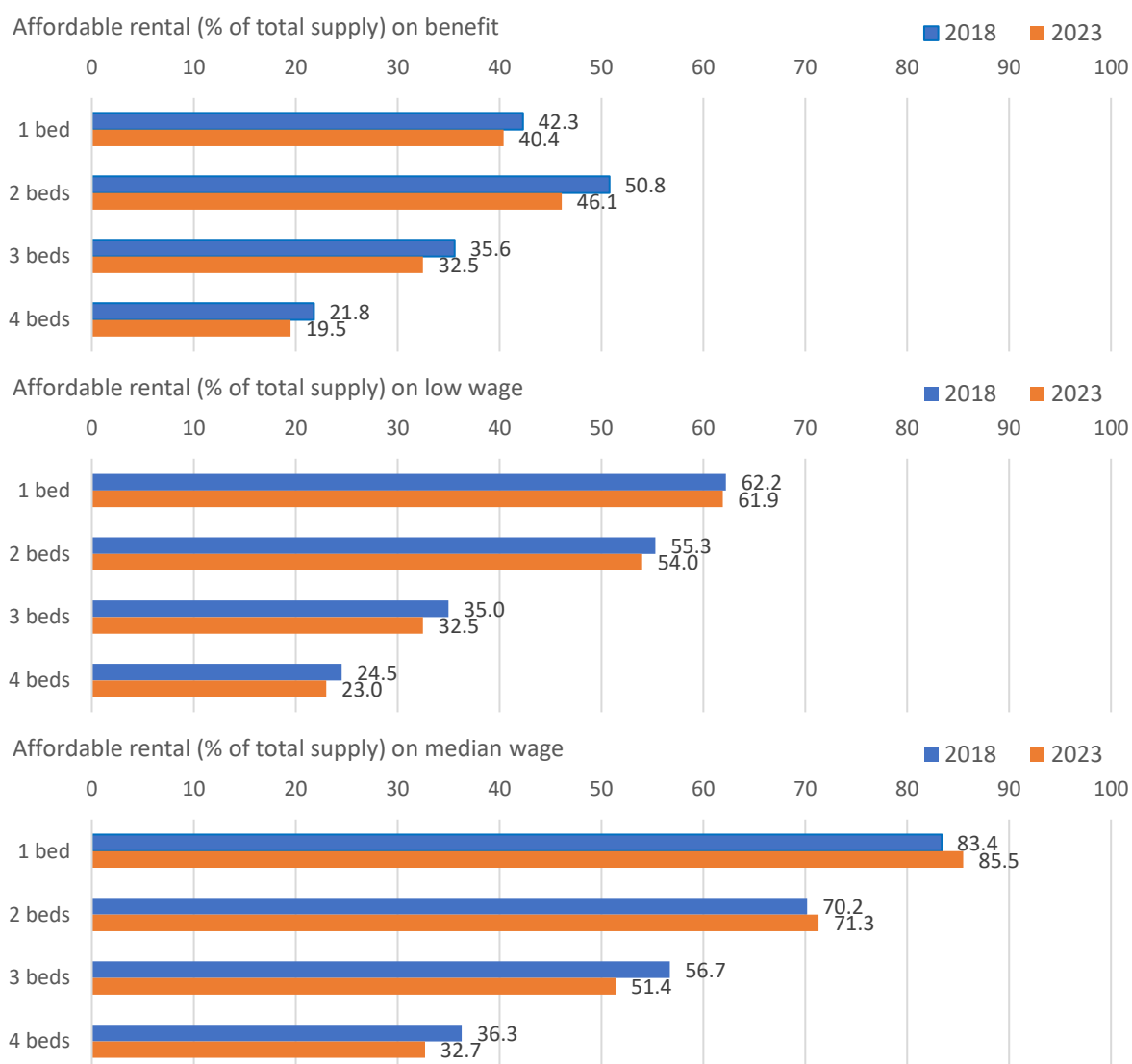
<sup>8</sup> See paper one in this series.

<sup>9</sup> Dwelling size makes no normative assumptions, basing the dwelling size for each household and income type on the most commonly rented dwelling size for that group. The only exception is single persons, who are assigned one bedroom flats but are more likely to rent two bedrooms because so few one bedroom flats are available in the market. Households often have to make difficult trade-offs between price and size when markets do not offer diversity.

<sup>10</sup> Benchmark rents are calculated at 2021 rather than the starting year of 2018 as there were errors in earlier IDI Working for Families tax credit data.

## Changes in affordable rental housing supply January 2018-2023

Chart 1. Change in affordable private rental stock (% of total stock) by income and beds, January 2018 to 2023

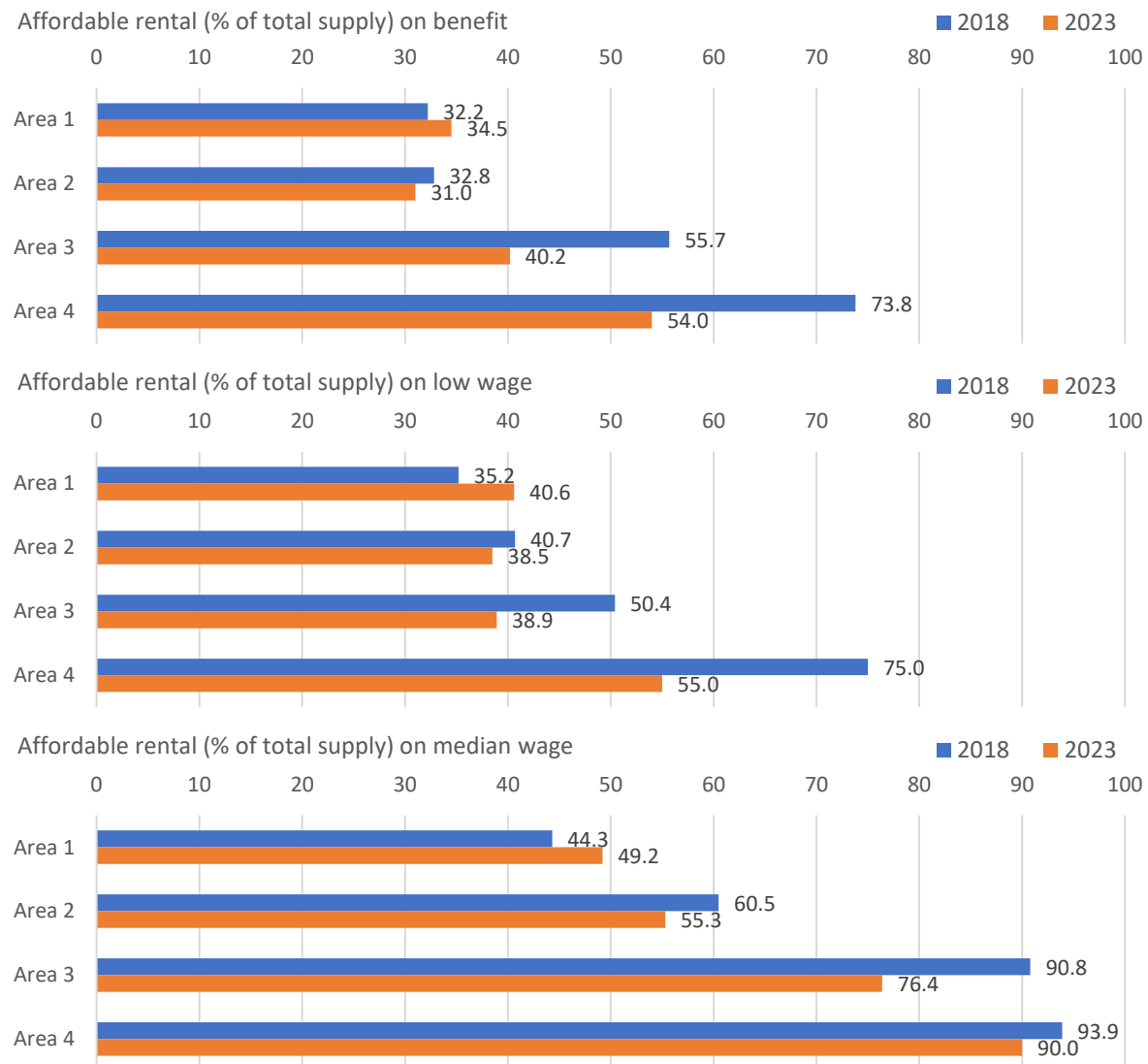


Notes: Low income covers all earned income from the minimum wage to the lower boundary of the median wage – 10%. Median incomes includes the median wage +/- 10%.

Trends over the last five years in the national supply of affordable rental stock *by dwelling size* are shown in Chart 1 above. Between 2018 and 2023 there is a mostly consistent decline of between 1% and 5% percent in the share of affordable housing. Small increases for one and two room properties affordable on the median wage are the only exception. To put these changes in context, population growth was 8% between 2018 and 2023, so the affordable stock has shrunk while demand has increased.

As expected, a much lower share of rental stock is affordable on benefits, varying from 20% for larger four bedroom homes up to 46% for two bedrooms in 2023.

Chart 2. Change in affordable private rental stock (% of total stock) by income and Area, January 2018 to 2023



Notes: Affordable rents have been defined for 1 to 4 bedroom housing only. Areas are defined for Accommodation Supplement, Area 1 has highest rents.

The combined results for 1-4 bedroom dwellings are shown in Chart 2 above to compare the trend *across Areas 1 to 4*, which are groupings of suburbs from highest to lowest rents. Here, the share of affordable rental has increased in our most expensive suburbs (Area 1) across all three income benchmarks, but supply has contracted in the other three areas covering lower costs suburbs, with dramatic declines in the two lowest rent areas and the two lower-income benchmarks (12% to 20%). The declines in affordable supply over the last five years disproportionately impact households on the lowest incomes.

Only Area 1 provides enough new affordable stock to match the pace of population growth, which is 8% over last five years. In total, the national stock of private rental homes grew by 6%, but the total affordable stock at the benefit, low wage and median wage benchmarks changed by -3.5%, 1.4% and 1.6% respectively.

An unexpected but interesting finding is that in 2023, the more expensive Area 1 has a higher share of low income affordable rental than Area 2, because the affordable supply increased in Area 1 but



decreased in Area 2 from 2018 to 2023. Suburb level trends are available for local government planners from the author at gregwaite@mail.com.

While the first objective of these benchmarks is to monitor whether the share of affordable rental is rising or falling, they can also be used to define targeted incentives for construction of low-cost homes by private, partnered or non-profit organisations.

### *Market rents are lower in longer tenancies*

The census-bonds comparison used to derive these affordable rent benchmarks also showed large differences between the average rents recorded in the census for recent tenancies and longer running tenancies<sup>11</sup>. Landlords tend to leave rents lower in long term tenancies<sup>12</sup>, then raise rents significantly when they start a new tenancy. Table 1 shows these rent savings compared to new tenancies increase in longer tenancies.

These differences are important because all our public rent statistics are based only on recent bonds<sup>13</sup>. That means they are representative of new tenancies and appropriate to guide rent setting for vacant properties, but misleading in relation to market rents for ongoing tenancies<sup>14</sup>.

Table 1. Comparison of rents in new and ongoing tenancies, 6 March 2018

Rent source	Tenancy length	1 bed	2 beds	3 beds	4 beds
Rental bond	<6 months	330	380	450	550
Census	<6 months	330	380	450	550
	1<3 years	300	360	420	520
	3<5 years	270	330	380	460
	5+ years	200	260	320	380
Reduction (%)	1<3 years	9%	5%	7%	5%
	3<5 years	18%	13%	16%	16%
	5+ years	39%	32%	29%	31%

Notes: These differences provide a guide to the average level of rent discounting in longer tenancies.

The size of the rent differences between new and ongoing tenancies are shown in Table 1 above. The first two rows show census and bond records are consistent for recent tenancies. Row three shows that on average 1 bedroom tenancies between one and three years duration pay \$30 less rent per week than recent lettings (9%), while tenancies of five years or more rent for \$130 less (39%). These are large differences.

This comparison highlights a serious gap in the current public information which guides rent setting. One solution would be adding plain language guidance for landlords and tenants on adjusting 'new tenancy' rents downwards for longer tenancies.

<sup>11</sup> This finding confirms earlier work by Bentley (2021).

<sup>12</sup> *Stuff*, 'Staying put in a rental can save you up to \$110 per week, research finds', 4 August 2021.

<sup>13</sup> The most accessible estimates for rents by suburb are published by Tenancy Services. Described online as "the amount a landlord might reasonably expect to receive, and a tenant might reasonably expect to pay, for a tenancy", these rents are calculated from bonds for new tenancies commenced in the previous six months, meaning they are representative only of new tenancies.

<sup>14</sup> The Tenancy Services report footnote states "This data is updated monthly and contains bond information from the previous 6 months (not including the most recent month)" but there is no advice to alert tenants and landlords to consistently lower rents in longer tenancies or guide fair rents in those tenancies.

## *Creating more affordable rental homes*

The story of all families is one of adaption through lifecycles, community changes and larger national transitions. In response to unaffordable housing we are seeing ongoing adaption in the rise of shared housing, the increasing hours worked by primary carers of children, the decline in the number of children per family, the shift from owning to renting, the rise in intergenerational housing<sup>15</sup> and childcare assistance, and the need to provide free food for struggling families.

Today, we are last in the OECD's rental affordability rankings and our population is growing faster than our supply of affordable rental homes. Rising rents and falling home ownership signal that we need to do more than just adapt to market trends.

This paper provides new analysis of our affordable rental supply to provide a more complete picture of today's rental sector. Our market-driven policies are steadily moving us towards a more difficult future, where more and more families will be forced into unaffordable renting throughout their working lives and into retirement. To create more affordable rental homes, we will need an expanded public debate and a new commitment to state funding and partnerships with local governments, communities and iwi.

### *Acknowledgements*

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### *Statistics NZ disclaimers*

Integrated Data Infrastructure (IDI): These results are not official statistics. They have been created for research purposes from the IDI which is carefully managed by Stats NZ. For more information about the IDI please visit <https://www.stats.govt.nz/integrated-data/>.

Census: Access to the data used in this study was provided by Stats NZ under conditions designed to give effect to the security and confidentiality provisions of the Data and Statistics Act 2022. The results presented in this study are the work of the author, not Stats NZ or individual data suppliers.

IRD: The results are based in part on tax data supplied by Inland Revenue to Stats NZ under the Tax Administration Act 1994 for statistical purposes. Any discussion of data limitations or weaknesses is in the context of using the IDI for statistical purposes, and is not related to the data's ability to support Inland Revenue's core operational requirements.

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<sup>15</sup> *NZ Herald*, "Home ownership: Bank of Mum and Dad is the fifth biggest lender", 28 April 2022.

## Technical Appendices

1. Rental bonds model
2. Affordable rent benchmarks

### A1. Rental bonds model

Current public data on local rents are calculated from bonds lodged in the last three or six months, since rents recorded at bond lodgement will be incorrect for many longer tenancies after rents increase. For example the 'market rents' available on the Tenancy Services website are based only on bonds lodged in the last six months. As show earlier, analysing only new tenancies biases rents upward, so here I take a different approach, including all bonds.

First, comparisons of census rents linked to bonds showed landlords are less likely to increase rents for ongoing tenants and more likely to increase rents at the start of tenancies. Second, this combined dataset demonstrated a clear bias in annual increases when calculated from new tenancies compared to all tenancies.

This project analyses rents up to 2023, five years after the census, so needed to update the rents of longer running tenancy bonds. A simple model was adopted, leaving all bond rents under three years unadjusted since their median increase was zero up to 2018 (i.e. more than half these tenancies had no rent increases in the three years since they began).

The only reliable data for recent rent increases is new bonds, so factors are derived from 2013-2018 census-bonds dataset to adjust for the overestimation of rents using new bonds only. Rents three or more years old are updated based on these scaled annual movements in new bonds. Tenancies commencing earlier than the census use the linked 2018 census rent and apply the same updates for rent inflation after 2018.

Table A1.1 2023 multipliers to estimate annual rent change for ongoing tenancies from new bonds

Area	0<1 year	1<2 years	2<3 years	3<4 years	4<5 years	5+ years
Area 1	no change	no change	no change	4.4%	7.2%	Census*10.0%
Area 2	"	"	"	4.3%	7.7%	Census*9.5%
Area 3	"	"	"	3.4%	6.2%	Census*10.5%
Area 4	"	"	"	3.1%	5.4%	Census*9.2%

Notes: These multipliers are derived by comparing movements in ongoing tenancy rents 2013 to 2018 to new tenancy rents, with ongoing rents from the census and new tenancy rents from 12 months bonds.

Other more technically sophisticated approaches are possible, but the trend results would be similar as consistent updates are applied to both the starting and ending years' data.

## A2. Affordable rent benchmarks

The 2018 and 2023 affordable rent benchmarks for each income level and area are shown below in Table A2.1.

Table A2.1 Affordable rent benchmarks, January 2018 and 2023, Areas 1-4 by bedrooms

Year	Area	Beds	1	2	3	4
2018	Area 1	Benefits	300	400	440	470
		Low wages	310	420	440	480
		Median wages	410	430	460	490
	Area 2	Benefits	210	310	330	350
		Low wages	300	320	340	370
		Median wages	340	360	390	420
	Area 3	Benefits	190	270	300	310
		Low wages	250	260	280	320
		Median wages	340	360	390	420
	Area 4	Benefits	180	250	280	300
		Low wages	250	250	280	300
		Median wages	340	360	390	420
2023	Area 1	Benefits	370	490	550	580
		Low wages	390	520	550	600
		Median wages	500	540	570	600
	Area 2	Benefits	260	390	410	440
		Low wages	370	400	420	460
		Median wages	420	450	480	520
	Area 3	Benefits	240	330	370	380
		Low wages	310	330	340	400
		Median wages	420	450	480	520
	Area 4	Benefits	220	320	340	370
		Low wages	310	310	340	370
		Median wages	420	450	480	520

Notes: NZ Super benchmarks not included as similar to Benefits rents for 1 and 2 bedrooms.

Table A2.2 then compares the affordable rents in Area 1 (highest rent) in 2023 to the tenth, twenty fifth, fiftieth and seventy fifth percentile rents in these higher rent suburbs. For example, in row one the affordable rents of \$370 to \$580 for benefit recipients in one to four bedroom rental homes mostly sit between the 25<sup>th</sup> and 50<sup>th</sup> percentiles of all rents shown in rows five and six. Looking back at Chart 2 confirms that 34.5% of all rental stock in Area 1 in 2023 were still affordable for the lowest defined income group.

Comparing household affordability and market rents in Table A2.2, there is a striking divergence between the affordable rent range for four bedroom homes of \$580 to \$600 for low to median incomes, and market supply which ranges from \$620 to right up to \$820 (the lower quarter of rents or 25<sup>th</sup> percentile and the 75<sup>th</sup> percentile).

Table A2.2 Affordable rents by income level and dwelling size, low wages Area 1 only January 2023

Bedrooms	1	2	3	4
Benefit, wage below minimum	370	490	550	580
Low wages	390	520	550	600
Median wages	500	540	570	600
10th percentile market rent	210	370	440	520
25th percentile market rent	320	450	530	620
50th percentile market rent	395	500	600	720
75th percentile market rent	465	570	670	820

Notes: Areas refers to accommodation supplement areas, e.g. Area 1 (highest rents) covers the more expensive suburbs of Whangarei, Auckland, Wellington, Porirua, Christchurch and other cities. Affordable rents for NZ Superannuation recipients are very close to benefits so are noted here but not included in charts (\$400 for one bedroom, \$490 for two).

The original affordable rents for 2021 are quite close across the three income levels. Once adjusted for wage inflation to 2018 and 2023 and rounded to tens to match typical rents, the affordable rents are occasionally the same across two income levels (e.g. 4 bedroom low and median wages, area 4, Table A2.1). In most lines this is not the case and the trends still demonstrate significant differences across the income levels, but this similarity suggests rounding to \$5 is preferable when creating future benchmarks.

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