# Housing Affordability in Jersey 2017 update

Statistics Jersey: www.gov.je/statistics



## **Summary of Results:**

#### The Jersey Housing Affordability Index

- in 2017 housing affordability in Jersey was essentially unchanged compared to 2016
- in the most recent 5-year period the overall housing affordability index has declined by 7%, meaning overall housing affordability has worsened over that period
- between 2002 and 2017, a working household with mean net income was not able to service a mortgage affordably on the purchase price of a median-priced house of any size
- a working household with mean net income was able to service a mortgage affordably on the purchase price of a median-priced 1-bedroom flat throughout the period 2002 to 2017
- a working household with mean net income was able to service a mortgage affordably on the purchase price of a median-priced 2-bedroom flat for most of the past 10 years, but not in the years 2006 and 2008

#### Ratio analysis

- the mean price of 1-bedroom flats was around 3 times the mean gross household income, whilst for 2-bedroom flats this ratio was around 5
- the ratio of mean price to mean gross household income for 2-bedroom houses was around 6
- the ratio of mean price to mean gross household income for 3-bedroom houses was around 8, whilst that for 4-bedroom houses was around 12

# The Jersey Housing Affordability Index

The Jersey Housing Affordability Index (JHAI) is an indicator of whether a working household with an average (mean) income is able to purchase property affordably.

In respect of the separate indices for individual property types, a value greater than 100 indicates that that type of property is considered "affordable" based on the central assumption criteria (see below). The level of the overall index does not represent any specific level of affordability but instead is designed to track overall affordability over time.

## **Central assumptions**

The central assumptions through which the JHAI attempts to quantify housing affordability are:

- mortgage payments (principal and interest) should consume no more than:
  40 percent of net income; or 30 percent of gross income
- the purchaser has a cash deposit of 10 percent of the purchase price
- the purchaser is financing a 90 percent mortgage at a variable interest rate for a term of 25 years, with both principal and interest payments paid each month throughout the term

The interest rates used in this report are derived from data published by the Bank of England: the sterling standard variable mortgage rates quoted to households by UK monetary financial institutions (excluding the central bank).

## **Overall affordability index**



Figure 1- Affordability indices based on household income of working households, 2002-2017

As Figure 1 shows, overall housing affordability was essentially unchanged in 2017 compared with 2016. The increase in average earnings was similar to the increase in overall property prices.

Housing affordability had seen some improvement in the period 2008 to 2011, driven largely by reductions in mortgage interest rates. More recently, however, increases in the median dwelling price above that of the increase in earnings have resulted in worsening affordability.

## Effect of property type and size

Separate indices are calculated for each type and size of dwelling (1- and 2-bedroom flats and 2-, 3- and 4-bedroom houses). These indices, shown in Figures 2 and 3, are based on mean net household income and the respective median prices for each category of property.

## Flats



#### Figure 2 - Affordability indices based on net household income, 2002-2017 – flats

The affordability of 1-bedroom flats improved significantly throughout the period 2008 to 2011 due to falls in median price and lower mortgage interest rates. In 2012 and 2013 the affordability of 1-bedroom flats declined, due to annual increases in the median price of this property type, coupled with increases in the mean mortgage interest rate. In the most recent three-year period, affordability

for this type of property has worsened marginally, with a small improvement recorded in the most recent year.

The index for 2-bedroom flats fell below 100 in both 2006 and 2008, indicating that a working household with mean net income was not able to service a mortgage affordably on a median-priced 2-bedroom flat in those years. In 2009 the affordability index for 2-bedroom flats rose above 100 and has since remained above that level. In the most recent three-year period, affordability for this type of property has worsened marginally, with a small improvement recorded in the most recent year.

#### Houses

The affordability indices shown for houses in Figure 3 indicate that during the period from 2002 to 2017 a working household with mean net income was not able to service a mortgage affordably on the purchase price of a median-priced house of any size at any time.

The affordability of all houses increased during the period 2008 to 2013, again driven by falls in median price and lower mortgage interest rates. More recently, increases in the median dwelling price of those properties have resulted in worsening affordability.



Figure 3 - Affordability indices based on net household income, 2002-2017 – houses

Table 3 shows the median prices of 2-, 3- and 4-bedroom houses in 2017 and the qualifying net income that would be required in order to service a mortgage "affordably" on the purchase price of each dwelling type. The 'deposit gap' represents the difference by which the median dwelling price exceeds the affordability threshold, expressed as a factor of mean net household income (£54,000).

	Median House Price	Qualifying Net Income	Additional deposit required	<b>Deposit Gap*</b> as a factor of mean net income
2 bed house	£407,000	£60,000	£34,000	0.6
3-bed house	£525,000	£77,000	£140,000	2.6
4-bed house	£755,000	£111,000	£347,000	6.4

\*Gap between the median house price and the affordability threshold, as a factor of mean net household income.

For the purchase of a median-priced 3- or 4-bedroom house, the total deposit therefore required<sup>1</sup> was £193,000 and £423,000, respectively, representing a deposit gap of over two and a half for a 3-bedroom house and over six for a 4-bedroom house.

## Sensitivity to central assumptions

The effects of changes in property prices, mortgage interest rates and the central assumptions underpinning the JHAI (e.g. the percentage of gross or net income consumed by mortgage payments) can be examined. In this section, the effect of such variations on the affordability of 2-bedroom flats and of 3-bedroom houses is considered.

## Two-bedroom flats

In 2017:

- a median-priced 2-bedroom flat (£330,000) was affordable to a household with annual gross income of at least £65,000 and net income of at least £48,000
- a household with mean income was able to service a mortgage on a median-priced 2-bedroom flat, with mortgage payments accounting for 28% of their gross income or 36% of their net income
- if mortgage interest rates and household incomes remained constant at 2017 levels, then the median price of a 2-bedroom flat could increase by around £30,000 before such a property would be considered unaffordable to a household with mean income
- if household incomes and property prices remained constant then the mortgage interest rate could increase by around 1 percentage point before a property would be considered unaffordable to a household with mean income
- the gross earnings of 1.7 FTE employees were required in order to service a mortgage affordably on the purchase of a median-priced 2-bedroom flat

## Three-bedroom houses

In 2017:

- a median-priced 3-bedroom house (£525,000) was affordable to a household with annual gross income of at least £103,000 and net income of at least £77,000
- the mortgage payments on a median-priced 3-bedroom house accounted for over two-fifths (44%) of the mean gross income and almost three-fifths (57%) of the mean net income of working households
- if mortgage interest rates and household incomes remained at 2017 levels, the median price of a 3-bedroom house would need to fall by around £160,000 in order to make the purchase of such a property affordable to a household with mean income
- the gross earnings of 2.7 FTE employees were required in order to service a mortgage affordably on the purchase of a median-priced 3-bedroom house

<sup>&</sup>lt;sup>1</sup> It is assumed as part of the JHAI criteria that the household has a 10% cash deposit available

# **Ratio analysis**

## Introduction

The ratio of property price to income is a widely used measure of housing affordability and is particularly useful for examining trends in affordability over time.

Several versions of this indicator are used internationally; however, many of these methodologies compare dwelling prices with the earnings of individuals, an approach which can amplify affordability difficulties. Therefore, the ratio of mean property price to mean household (gross) income is presented for Jersey.

#### Ratio of mean property price to mean gross household income

Figures 5 and 6 show the ratio of mean property price to mean gross household income (all working households) for flats and houses in Jersey during the period from 2002 to 2017.

Figure 5 - Ratio of mean property price to mean gross household income, 2002-2017 - flats







In 2017, the ratio of the mean property prices to mean gross household income in Jersey was approximately:

- 3 for 1-bedroom flats
- 5 for 2-bedroom flats
- 6 for 2-bedroom houses
- 8 for 3-bedroom houses
- 12 for 4-bedroom houses

In the latest year (2017) the ratio of mean dwelling price to mean household income in Jersey was essentially unchanged compared to 2016 for all property types.

## Notes

## 1. Revised Jersey Housing Affordability Index

Previous versions of this index used a median house price measure based on the transactions that took place over the relevant calendar year. This approach was susceptible to changes in the "mix" of properties that were transacted during that period. Given the relatively small number of transactions that take place in a given year in Jersey, the median price can be particularly influenced by large-scale developments of a particular property type. Due to this limitation, the overall index has been revised and the reference median house price is now adjusted each year in line with the mix-adjusted Jersey House Price Index.

This revised index is designed to track the change in overall affordability of typically transacted properties in Jersey.

## 2. Property purchase prices

Mean average property prices and measures of distributions, such as median and lower quartile prices, are derived from data collected for the compilation of Jersey's quarterly House Price Index. The data on transaction prices comes principally from the Jersey Property Bulletin (for freehold and flying freehold properties, recorded by the Royal Court) and the States of Jersey Income Tax Department (for share transfer transactions).

Property prices (means and measures of distributions) have been calculated using the transaction prices of all 1- and 2-bedroom flats and 2-, 3- and 4-bedroom houses sold in Jersey in each year. Certain property types (e.g. bedsits, 1- and 5- or more bedroom houses and commercial properties) are excluded from the analysis.

To determine mean property prices, distributions are winsorised in order to prevent exceptionally high or low values from overly influencing the estimate of the mean. Mean prices of each dwelling type in each calendar year are derived from quarterly data weighted by turnover; furthermore, the overall mean price for each calendar year is "mix-adjusted", i.e. it is independent of the particular "mix" of properties sold in a given year.

Median prices are measures derived directly from distributions and do not account for differences in the mix of properties sold.

## 3. Housing loan interest rates

Housing loan interest rates are derived from figures published by the Bank of England and represent a yearly mean average of interest rates offered by UK monetary financial institutions. The rates used are those for sterling variable rate mortgages quoted to households.

It should be acknowledged that a different range of mortgage products from that in the UK may have been available to Jersey residents throughout the period covered by this report.

## 4. Income

Measures of net and gross household income have been derived from data collected from both the 2009/2010 and 2014/2015 Jersey Income Distribution Survey. Household-level data are weighted by tenure.

A process of winsorisation was applied for the calculation of mean household incomes, to prevent exceptionally high or low values from overly influencing the estimate of the mean.

Since the Jersey Income Distribution Survey is not conducted annually, measures of household income for the years falling outside these two surveys have been calculated by deflating/inflating values derived from the nearest relevant survey according to the annual percentage changes determined by the Jersey Index of Average Earnings.

Data on individual employment income is sourced from the annual survey for compiling the Jersey Index of Average Earnings; this survey enables estimation of the mean full-time weekly earnings for both private and public sector workers in Jersey (gross earnings, including overtime, but excluding bonuses, employers' insurance contributions, holiday pay and benefits in kind).

For this survey, firms report the total gross wages and salaries paid to employees before any deductions (e.g. for income tax, social security or pensions) as well as the number of people employed (part-time employees are converted to full-time equivalents, FTEs). Mean earnings are compiled for each sector and the sectoral means are weighted according to the sectoral share of total employment in order to provide an estimate of the overall mean weekly earnings per FTE employee in Jersey.

## 5. Definitions

#### "Average" property price

(the same statistical definitions apply to income)

- the **mean** average of a distribution of property prices (purchase or rental) is calculated by adding together the prices of all the properties and then dividing by the number of properties
- the **median** average is the 'middle' price if all the properties were listed in order of their price, from lowest to highest; half of all properties lie below the median and half lie above
- a small number of very highly priced properties will tend to increase the mean average but not the median average
- the median average may, therefore, be considered to be a more representative measure of the 'central' property price

**Gross household income**: all gross earned and unearned income, pensions and gifts (e.g. inheritance), plus benefits.

**Net household income**: gross household income, plus benefits in kind, minus income tax, social security contributions and pension contributions; before the deduction of housing costs.

**Qualifying income**: the income required to service a mortgage affordably on the purchase of a dwelling at a specified purchase price or the mean monthly rental payments in the private sector (based on the assumptions of affordability considered in this report).

Working household: a household with at least one adult in paid employment.

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