

## 1 Introduction

Statistics Jersey periodically produce projections of the resident population and number of households in Jersey in order to provide data for policy and service development, and planning. The purpose of projections is not to forecast or predict the future, but to support decision making by providing the size and make up of the population and households that would occur under particular conditions (“assumptions”) of fertility and mortality, and under various migration scenarios.

The previous [2023 population projections](#) and [2023 household projections](#) were published on 20 December 2023 and 20 March 2024 respectively, and were calculated using the estimate of the resident population at the end of 2022 as a baseline (the most recently available population estimate at the time of publication), and projecting forwards in time to the end of 2080.

The [Population projections 2025 to 2080](#) and [Households and housing needs projections 2025 to 2040](#) reports were published on 25 February 2026. These were calculated by taking the estimate of the resident population at the end of 2024 as a baseline (the most recently available population estimate at the time of publication) and projecting forwards in time to the end of 2080.

The methodology underlying the population and household projections has changed in the following key ways in the most recent publications:

- updated fertility assumptions
- updated mortality assumptions
- more evenly spaced migration scenarios
- a more granular approach to calculating the migration trends
- improved methods have enabled Entitled for work and Entitled groups to be split out

Statistics Jersey engaged with internal stakeholders including colleagues in Public Health, economics, and policy. Statistics Jersey were particularly guided by Public Health colleagues on the range of fertility assumptions to use. A new set of migration scenarios has also been introduced, equally spaced around the most recent 10-year trend of +400 net migration per year, after consultation with the range of internal stakeholders. This document describes the changes to methodology, migration scenarios, and assumptions, and the impact of these changes on the projected numbers to support users in interpreting the outputs.

## 2 Fertility assumptions

### 2.1 What has changed

The mid-range fertility assumption in the previous 2023 projections was based on the trends in the ONS [UK fertility projections](#). This source projected that the fertility rate in the UK would steadily increase, and this same pattern was applied to the Jersey age-specific fertility rates. In reality, fertility rates in Jersey have historically been lower than in the UK and have been declining. For example, the fertility rate fell from 1.55 children per woman for the period 2012 to 2014 to 1.20 for the period 2022 to 2024 in Jersey, compared to 1.83 in 2013 and 1.42 in 2023 in the UK.<sup>1</sup>

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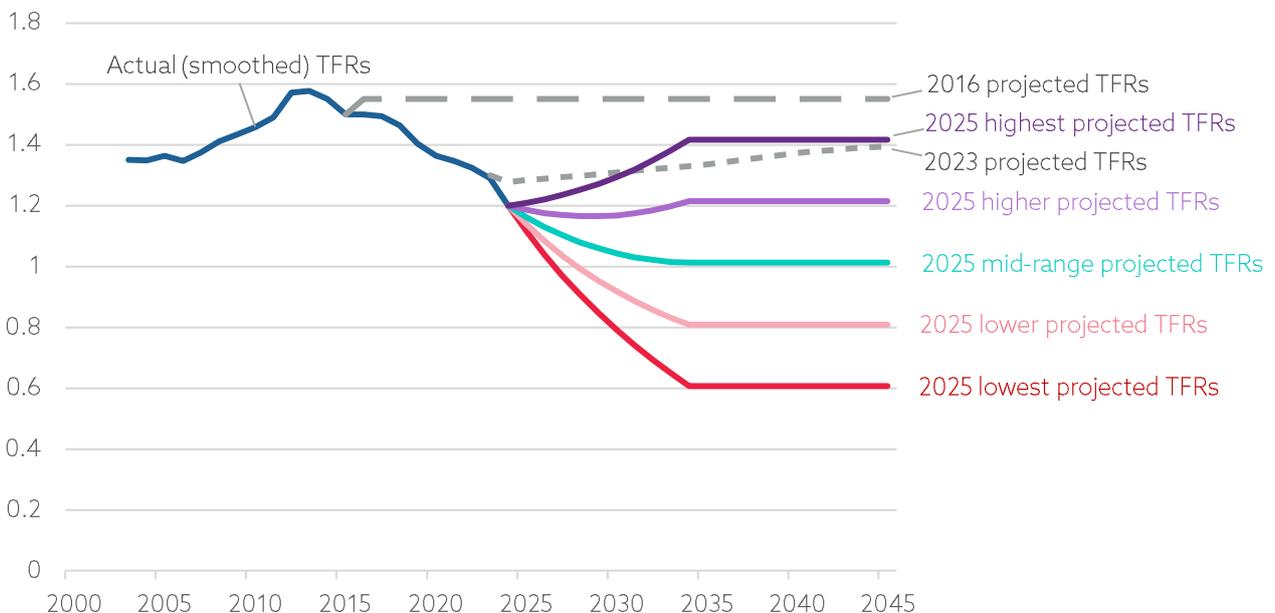
<sup>1</sup> [Births in England and Wales - Office for National Statistics](#)

Consultation by Statistics Jersey with stakeholders at the end of 2025, and particularly Public Health, along with recent data, indicated an ongoing downward trend in fertility would be more realistic as the mid-range fertility assumption for Jersey.

The new assumptions have been produced using trends in Jersey's age-specific fertility rates over the last 10 years (2014 to 2024). The new mid-range fertility assumption is that fertility will continue to decline from 1.20 at the start of the projections, to 1.01 children per woman by 2034, and then remain at that rate.

However, particularly given the uncertainty and impact of future fertility rates on the population, a range of other scenarios have also been published. The main report includes a 'higher' and a 'lower' fertility assumption, whilst a further 'highest' and 'lowest' fertility assumption have also been made available on [Open Data](#) and on the [projections data explorer](#). The chart below illustrates the range of fertility assumptions that have been modelled in the 2025 projections and what was modelled in previous projections (2023 and 2016).

**Figure 1: Historic total fertility rate for Jersey, and five projected fertility assumptions**



## 2.2 How this impacts the population projections

The new mid-range fertility assumption has declining rates over the next 10 years before stabilising. This has a significant impact on the population projections compared to the previous methodology and outputs. This is particularly evident in the numbers of births, dependent children, and in time, the number of working age people.

Using the net nil migration scenario to compare previous projections with current projections shows the impact of the updated fertility assumptions on births (Figure 2) and the size of the population aged under 16 (Figure 3).

Figure 2: Adjusting the fertility assumptions in the 2025 projections results in considerably fewer births in the period 2030 to 2080 compared to the 2023 projections

Projected births over time for net nil migration and mid-range fertility and life expectancy assumptions

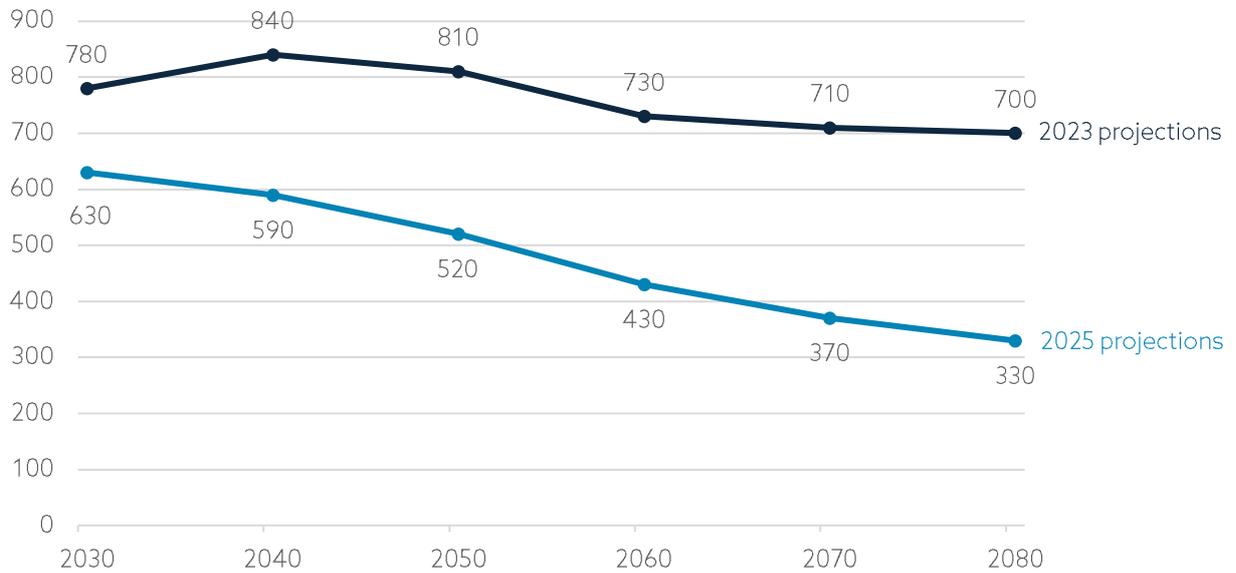
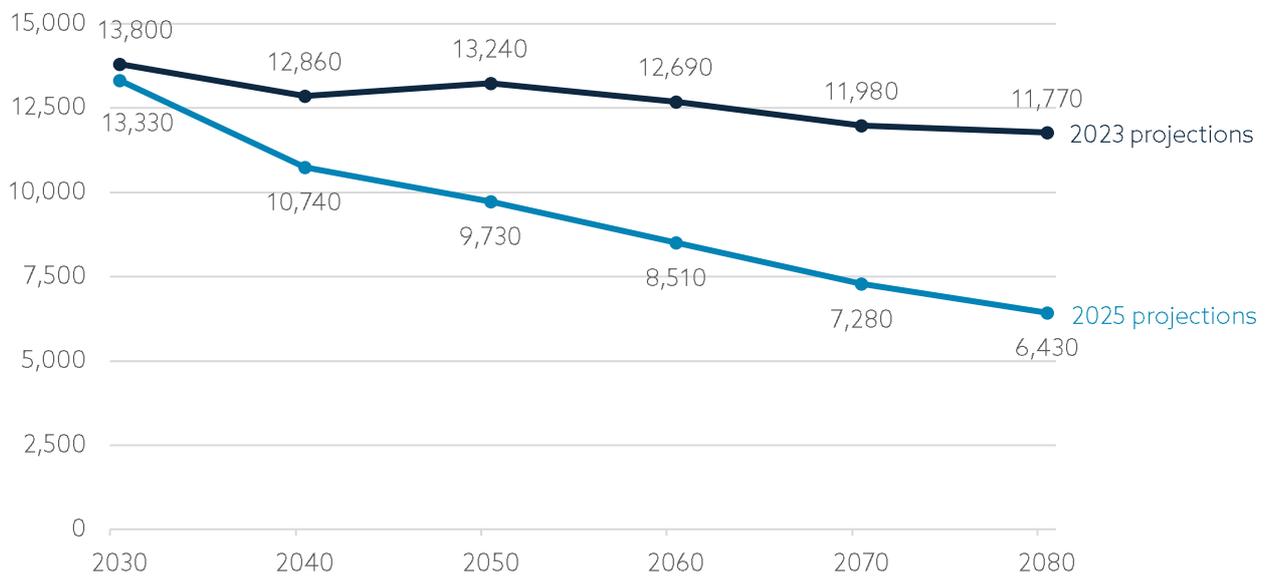


Figure 3: Adjusting fertility assumptions in the 2025 projections results in a smaller population aged under 16 in the period 2030 to 2080 compared to the 2023 projections

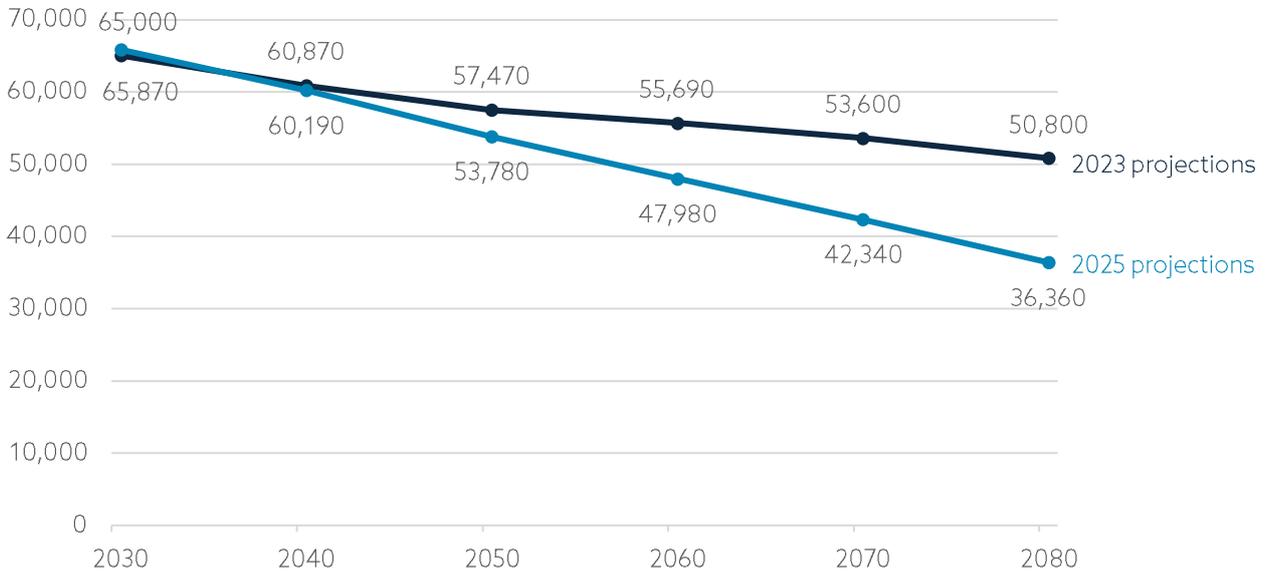
Projected size of population aged under 16 years for net nil migration and mid-range fertility and life expectancy assumptions



After the initial 16 years of the projections, the change in fertility assumption begins to impact on the working age population. The net nil migration scenario shows this clearly in Figure 4.

The impact of lower fertility assumptions on the subsequent size of the working age population in turn impacts on the level of net migration that would be required to maintain a stable working age population. For example, previously the +325 net migration assumption resulted in a roughly stable working age population size over the period 2025 to 2080. In the 2025 projections, net migration would need to be around +700 to maintain a stable working age population.

Figure 4: Adjusting fertility assumptions in the 2025 projections results in a smaller working age population being projected in the period 2040 to 2080, compared to the 2023 projections  
 Projected working age population for net nil migration and mid-range fertility and life expectancy assumptions



### 2.3 How this impacts the household projections

Fewer children being born will also impact the average household size into the future and have an impact on the distribution of dwellings needed by household size, but not within the timescales of these household projections.

### 3 Mortality assumptions

#### 3.1 What has changed

Both the 2023 and 2025 projections use the ONS developed [age-specific mortality rates](#), but in slightly different ways.

For the 2023 projections the ONS’ projected age-specific mortality rates for England were used, but with Jersey specific scaling factors applied to reflect the slightly different mortality in Jersey compared to England. The scaling factors are given in Table 1.

**Table 1: Age specific mortality rate scaling factors used in 2023 projections**

Age group	Scaling factors	
	Male	Female
0 to 49	0.90	0.70
50 to 79	0.94	0.92
80+	1.03	0.93
Total	0.98	0.92

For the 2025 projections, Locally Estimated Scatterplot Smoothing (LOESS) regression was applied to Jersey’s current age-specific mortality rates (2022 to 2024). LOESS regression is a way of describing underlying trends in data without constraining the trend to be a particular mathematical formula, by taking small sections of the data at a time and then drawing a smooth curve through all the data. It is useful in this context as it ‘smooths out’ some of the natural volatility that would be seen in age-specific mortality rates in a small population over a small time period. A small adjustment was applied to these smoothed age-specific rates to ensure the resulting overall life expectancy (calculated from the modelled age-specific mortality rates) matched the 2022 to 2024 figure published by Public Health.

Finally, [projected rates for the UK](#) (from the ONS) were then used to project Jersey’s current rates forwards by applying the projected odds ratios by single-year-of-age.

#### 3.2 How this impacts the projections

This change to the way mortality baseline rates were modelled had little impact on the projection outputs.

## 4 Migration scenarios

### 4.1 What has changed

The previous set of net migration scenarios projected were: -100, net nil, +325, +700, +1000.

Net migration has averaged approximately +400 over the last 10 years. Internal stakeholders were therefore consulted on a proposal to change the range of migration scenarios, so they are spaced evenly around the mid-range scenario of +400 net migration. Stakeholders generally supported the new set of scenarios, which are: net nil, +200, +400, +600, +800.

However, some stakeholders expressed a need for two historic scenarios to be produced as well (+325 and +700) to facilitate comparisons with previous projections. Projections for these scenarios have therefore also been produced, with the data available in a [supplementary tables](#) and on [Open Data](#).

### 4.2 How this impacts the projections

Different net migration scenarios particularly affect the working age population, as the majority of migration occurs in this age group. Net migration will also impact on the number of births and dependents associated with working age migrants. There are three common net migration scenarios available for both 2023 and 2025 projections to facilitate comparison where needed: net nil, +325 and +700.

## 5 Calculation of migration probabilities

### 5.1 What has changed

In the 2023 population projections, the probabilities of emigration were estimated based on 2017 to 2021 trends, using length of residency in Jersey and a broad age/residential status group. The five groups that were modelled separately were: under 16s; those aged 65 and over; those with Entitled and Entitled for work status (the methods had not been developed to separate these groups); those with Registered status; and, finally, those with a Licensed status<sup>2</sup>.

For the 2025 projections, the probability of people emigrating was estimated based on a longer period of data (2017 to 2023), and used more granular characteristics of age, residential status and length of residency, as improved data on residential status meant Entitled and Entitled for work groups could be estimated separately (see Section 6). These emigration probabilities were then applied to the projected population for each year to estimate the level of outward migration. Each migration scenario is then created by applying the level of **inward** migration required to achieve the net level.

### 5.2 How this impacts the projections

Using a longer time period for the modelling together with the improvements to the model resulted in slight changes to the migration probabilities for some groups in the 2025 projections compared to those used in the 2023 projections.

One impact noted was that the 2025 projections produce a lower outward migration of people aged between 40 and 64 years than projected by the 2023 projections. For example, in the +400 net migration scenario, using 2023 emigration probabilities for those aged 40 to 64 would have resulted in around 39 emigrants per 1,000 people of that age, compared to around 29 emigrants per 1,000 using 2025 emigration probabilities.

This, in turn, leads to higher numbers of older working age people and those of pensionable age staying in the island than previously projected. As Figure 5 shows, under the net nil migration scenario, the most recent projections have higher numbers of people aged 65 and over than were previously projected.

The new model also causes the 2025 projections to produce a higher outward migration of people aged 16 to 23 years, compared to the 2023 projections.

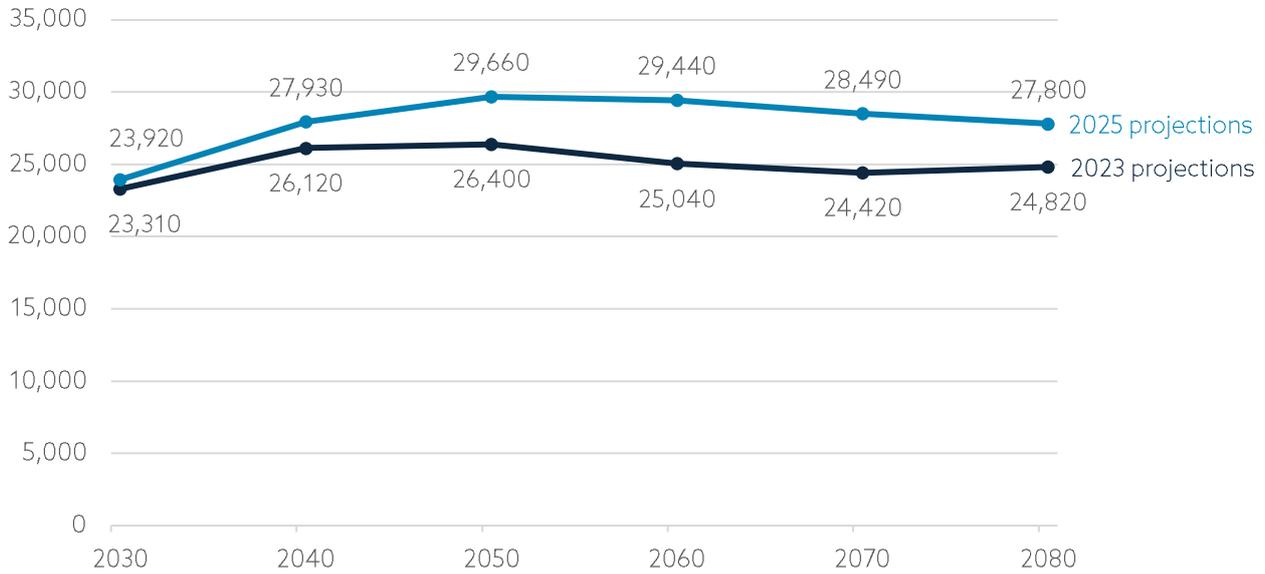
As older age people are more likely to live in smaller sized households (often as single households, or couple households with no children) and younger people more likely to live in bigger households (such as with their parents, or with partners and families of their own), there is also an impact on the projected number of households and type of households required. A larger number of households, relative to the number of people, is therefore projected in the 2025 household projections than was projected in the 2023 household projections.

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<sup>2</sup> For information on Entitled, Entitled for Work, Licensed and Registered statuses, see [Residential and employment statuses and what they mean](#)

Figure 5: Updated migration probabilities in the 2025 projections results in a larger population aged 65 and over, compared to the 2023 projections

The projected population aged 65 and over under net nil migration and mid-range fertility and life expectancy assumptions



## 6 Splitting out Entitled for work from Entitled

### 6.1 What has changed

Improved methods have enabled the two groups Entitled and Entitled for work to be separated out into distinct categories in the analysis, whereas previously they had to be combined, as well as being able to establish specific residential statuses for those aged 65 and over.

Residents were grouped into the following residential and employment status categories to use when modelling migration, and when calculating number of dwellings by type in the household projections.

#### 2023 projections

- Entitled (including Entitled for work)
- Registered
- Licensed
- Aged 65 and over
- Aged under 16

#### 2025 projections

- Entitled
- Entitled for work
- Registered
- Licensed
- Aged under 16

### 6.2 How this impacts the population projections

As explained in the section on calculation of migration probabilities, being able to split Entitled for work and Entitled status residents into two groups facilitates improved modelling of outward migration probabilities but had little impact on the population projections compared to the previous methodology.

### 6.3 How this impacts the household projections

In these projections, households headed up by a person with Registered status are assumed to occupy non-qualified housing, as in the previous projections. Households headed up by a person with Entitled for work status are assumed to 50% of the time occupy non-qualified housing, and 50% of the time occupy qualified housing (representing situations where the Entitled for work status is granted to a spouse of a Licensed or Entitled person). In the previous projections, all Entitled for work heads of households were assumed to occupy qualified housing, as they could not be separated from Entitled heads of households in the analysis.

**Table 2: Changes in qualified and non-qualified between projections reports**

	2023 projections	2025 projections
Qualified housing	Entitled, Entitled for work, Licensed, and those aged 65 and over	Entitled, Licensed, and 50% of Entitled for work
Non-qualified housing	Registered	Registered and 50% of Entitled for work

An analysis of this methodological change indicated that it results in higher estimates (by about 300) of numbers of households in the 2025 estimates compared to the 2023 estimates. This increase in households in the 2025 projections, compared to the 2023 projections, therefore reflects a methodological (and not actual) change.

## 7 Future improvements

### 7.1 Outward migration probabilities

Using linked administrative data provides more frequent population and migration estimates that can be used to compare modelling to recent trends. Compared to recent observed trends in outward migration, the logistic modelling techniques underestimated the probability of younger people outwardly migrating and overestimated the probability of older people outwardly migrating.

For the next set of projections, further, more sophisticated modelling techniques could be tested and evaluated to improve the modelling of emigration probabilities for different ages. This could have an impact on the population, household, and housing needs projections. Considerable time would be required to fully evaluate a range of techniques and their impact to identify the optimal improvements to the modelling. There was insufficient time to carry out this work in this round of projections.

## 7.2 Estimating household formation

To produce the household projections, data from censuses in 2011 and 2021 was used to analyse how the composition of households had changed over time. This was done by calculating the proportion of different demographic groups by age group, sex, household type and whether qualified or non-qualified who were the 'head' of their household in the data.<sup>3</sup> This proportion is termed the 'headship rate'. The changes in the headship rates between 2011 and 2021 could be projected forwards and applied to a projected population to provide the number of households that population would have.

Given the methodology relies on data from the censuses, it is possible that the household compositions were affected by point in time factors, such as the Covid-19 pandemic in the case of the census in 2021. One identified future improvement would be to find a more regular and timelier source of household composition data. Such a data source would enable grouping the residents in the linked administrative data system into households with sufficient accuracy for both producing estimates of current household numbers and composition, as well as projecting future numbers and composition.

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<sup>3</sup> In this case the head of household was identified using the 'first on form' method where the person who filled in the census form for the household was categorised as the 'head of household'.