

## User Guide

This document describes how to use Auckland Council's interactive census data mapping site [www.censusauckland.co.nz](http://www.censusauckland.co.nz) to understand more about the city's population and how it has changed between 2006, 2013 and 2018.

### Getting started

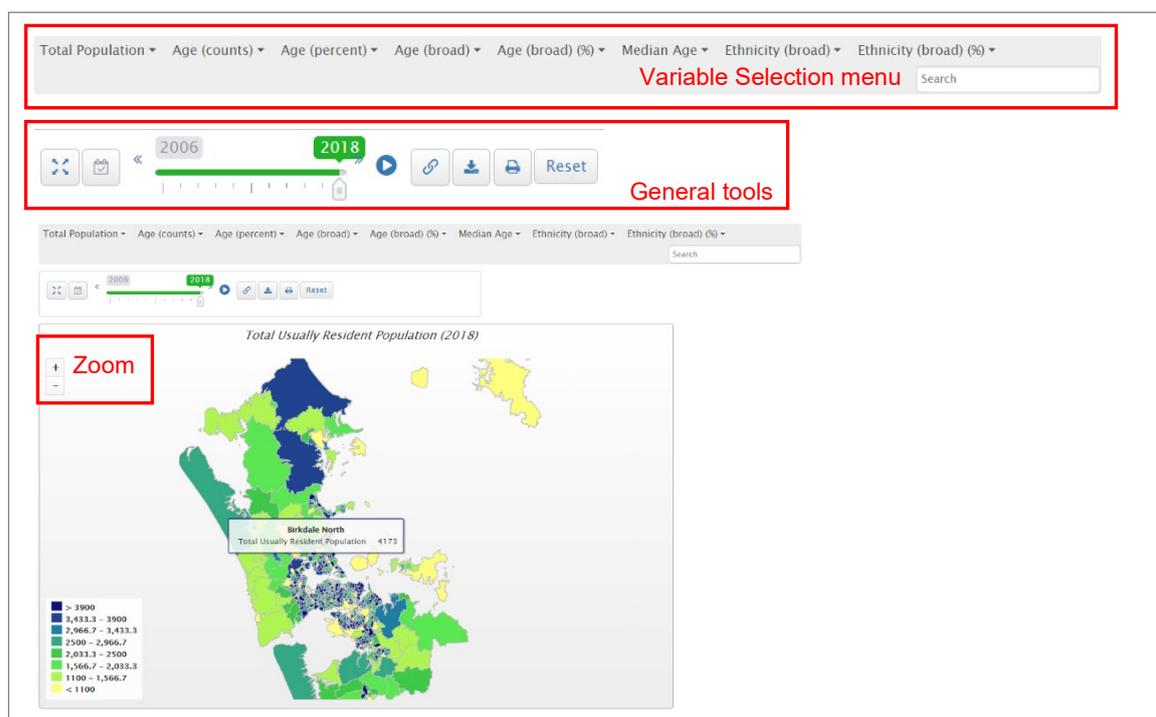
1. From the launch page, select either the local board or suburb-sized "SA2"\* view option.
2. Wait while the "StatPlanet Cloud" logo appears and the site loads.
3. The initial view shows a map of the total census usually resident population. Change the variable being displayed using the drop-down menus at the top of the screen.
4. To zoom in and out of the map, use the "+" and "-" buttons within the map window.
5. Hover over the area of interest to display the area name, the variable being shown, and its value. Data is also shown in chart format below the map.

The above steps are all you need to get started.

Below we provide additional information to help you get the most out of the tool — more on the general interface, a set of FAQs (Appendix 1), Auckland Total data for each variable (Appendix 2) and a guide to using the chart tools (Appendix 3).

### General interface

The figure below shows the layout of the top half of the screen (SA2 view shown).



\* SA2 stands for Statistical Area 2 and replaces the CAU (Census area unit) geography used in previous censuses.

The number of variables is currently limited but will be increased as more sub-regional data is released by Stats NZ.

General tools include (from left to right) window maximiser, time-slider, time-lapse 'movie mode' button, URL (webpage link) creator, and the export tool for map or data download.

Instead of using the print function located to the left of the 'Reset' button, we recommend clicking on the export tool icon<sup>1</sup> then selecting "Map" -> "Download JPEG image" or taking a screenshot of the map.

For information on the chart tools which appear below the map, please see Appendix 3.

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## Appendix 1: Frequently Asked Questions (FAQ)

### Screen layout

Q. How do I increase the size of the screen area dedicated to the map?

A. The window can be resized manually after following these steps: first, click on the maximise window button to the left of the time slider. Then, click on the button again (now a 'collapse window' icon). This will allow you to resize the window by dragging the lower-right corner to the desired dimensions. Note that occasionally, to return the layout to its original view, you may need to reload the page in the internet browser.

### Data download

Q. Can I download the data?

A. Yes, but there are limitations. The data download / export tool can only export the currently displayed 'variable slice' (e.g., residents aged 15-19yrs), rather than all data or even all 'age' data simultaneously. Click on the export tool then select "Graph" -> "Download XLS" to export the currently displayed data to an Excel file. Please contact us if you would like a more comprehensive extract of the site's data and we can send this via email instead.

### Showing data for two variables simultaneously

Q. Can the website show the numbers of those of a certain age group and a certain ethnic group at the same time (e.g., 30-34yr olds that identify with the European ethnic group?).

A. Unfortunately not. Raw cross-tabulated data can be obtained from Stat NZ's NZ.Stat website; alternatively contact us and we may be able to assist.

### Total Auckland comparisons

Q. How can I compare the data for a certain area with that for Auckland as a whole?

A. Total Auckland data is not included in the mapping tool. Comparisons may be made manually by referring to the data appearing in Appendix 2 of this guide.

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<sup>1</sup>  Data download / Export tool icon.

## Data source

Q. Where does the data come from and what changes, if any, have been made to the raw data?

A. Data for counts (i.e., total population, number of residents by age or ethnic group) were downloaded directly from the Stats NZ website “NZ.Stat”. Percentages were derived from these raw counts<sup>2</sup>. Stats NZ provides detailed technical information about the variables included in this site on their website (see links in Appendix 4).

## Site Development and contact information

Q. Who is responsible for the website development?

A. Auckland Council’s Research and Evaluation Unit (RIMU) developed the site. It has been built using Stats NZ Census data and the StatPlanet Cloud software platform produced by Statsilk.com. We welcome your feedback or any queries at [census@aucklandcouncil.govt.nz](mailto:census@aucklandcouncil.govt.nz).

## Area boundaries

Q. Where can I view the area boundaries in more detail, to understand better the location of each SA2 or local board?

A. See the two options below.

### Local board boundaries

We recommend visiting the Auckland Council’s interactive mapping service, Geomaps, accessible at <https://geomapspublic.aucklandcouncil.govt.nz/viewer/index.html>.

To view local board boundaries, follow these steps:

- a) Click on “Switch Themes”, the icon second from left under the drop-down menu where the text “Address” appears.
- b) select “Regulatory”
- c) Select “Local Electoral Boundaries” and click on the down arrow to the right
- d) Select “2019” and click on the down arrow to the right
- e) Untick both ‘Subdivisions’ and “Wards”. Local Board boundaries will remain; labels appear when the map is zoomed in.

### SA2 boundaries

We recommend visiting Stats NZ’s Datafinder mapping site.

View the SA2s by following these steps:

- a) Visit <https://datafinder.stats.govt.nz/layer/92213-statistical-area-2-2018-clipped-generalised/>

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<sup>2</sup> Other points to note: Macrons for local board names absent in the raw Stats NZ data were added (e.g, “Ōrākei”). For the ‘85yr and over’ data, four separate age bands (85-89yrs, 90-94 yrs, 95-99yrs and 100yrs and over) were added together.

- b) Click on the orange “plus” sign to the right of the small map of NZ at the top left of the page
- c) Zoom in to your area of interest and click on the SA2 to display its name.

At the time of writing, a series of PDF overview maps for SA2s across the city is being produced; please contact us if this option might suit you.

Note that the boundary files used in the website are simplified versions of the official boundaries, in order to improve website performance.

### Blank areas in the SA2 maps

Q. Why do some of the SA2 areas appear blank, and don’t display any information when the mouse is hovered over them?

A. This occurs for a small number of SA2 areas, all of which have very few residents (e.g., Riverhead Forest SA2, north-east of Kumeū). Blank SA2s indicate either data suppression has been undertaken by Stats NZ to protect confidentiality of individuals, or that derived percentages have been suppressed due to populations being too small to provide meaningful percentage values.

### The special case of Rangitoto and Mototapu Islands

Q. Why does the SA2 map seem to show Rangitoto and Mototapu Islands have over 100 residents – aren’t these essentially unpopulated?

A. Rangitoto and Mototapu Islands are part of the larger “Gulf Islands” SA2, which includes Kawau Island, Rakino Island and others. The coloured shading on Rangitoto and Mototapu reflects the value for the whole SA2 overall, rather than these islands’ individual populations.

## Appendix 2: Total Auckland Data for comparison with Local Board and SA2 suburb-level data

Note: Years are presented in reverse chronological order (i.e., 2018 Census data appears first)

Table 1. Total Population, Auckland Total

|                                   | 2018      | 2013      | 2006      |
|-----------------------------------|-----------|-----------|-----------|
| Total Usually Resident Population | 1,571,718 | 1,415,550 | 1,304,958 |

Table 2. Age (Broad), Auckland Total

|                   | 2018      | 2013      | 2006      |
|-------------------|-----------|-----------|-----------|
| Under 15 years    | 313,839   | 296,355   | 289,113   |
| 15-29 years       | 357,522   | 311,082   | 288,387   |
| 30-64 years       | 711,186   | 644,958   | 598,917   |
| 65 years and over | 189,177   | 163,158   | 128,544   |
| Total             | 1,571,718 | 1,415,550 | 1,304,958 |

Table 3. Age (Broad) (%), Auckland Total

|                   | 2018   | 2013   | 2006   |
|-------------------|--------|--------|--------|
| Under 15 years    | 20.0%  | 20.9%  | 22.2%  |
| 15-29 years       | 22.7%  | 22.0%  | 22.1%  |
| 30-64 years       | 45.2%  | 45.6%  | 45.9%  |
| 65 years and over | 12.0%  | 11.5%  | 9.9%   |
| Total             | 100.0% | 100.0% | 100.0% |

Table 4. Median Age, Auckland Total

|            | 2018 | 2013 | 2006 |
|------------|------|------|------|
| Median Age | 34.7 | 35.1 | 33.9 |

Table 5. Ethnic Group, Auckland Total

|                     | 2018      | 2013      | 2006      |
|---------------------|-----------|-----------|-----------|
| European            | 841,386   | 789,306   | 700,158   |
| Māori               | 181,194   | 142,770   | 137,304   |
| Pacific Peoples     | 243,966   | 194,958   | 177,948   |
| Asian               | 442,674   | 307,230   | 234,279   |
| MELAA <sup>3</sup>  | 35,838    | 24,945    | 18,561    |
| Other ethnicity     | 16,746    | 15,639    | 100,110   |
| Total people stated | 1,571,718 | 1,331,427 | 1,239,054 |

Table 6. Ethnic Group (%), Auckland Total

|                                  | 2018   | 2013   | 2006   |
|----------------------------------|--------|--------|--------|
| European                         | 53.5%  | 59.3%  | 56.5%  |
| Māori                            | 11.5%  | 10.7%  | 11.1%  |
| Pacific Peoples                  | 15.5%  | 14.6%  | 14.4%  |
| Asian                            | 28.2%  | 23.1%  | 18.9%  |
| MELAA <sup>3</sup>               | 2.3%   | 1.9%   | 1.5%   |
| Other ethnicity                  | 1.1%   | 1.2%   | 8.1%   |
| Total people stated <sup>4</sup> | 112.1% | 110.8% | 110.4% |

Table 7. Age Group, Auckland Total

|             | 2018    | 2013    | 2006    |
|-------------|---------|---------|---------|
| 0-4 years   | 102,765 | 102,357 | 94,077  |
| 5-9 years   | 109,425 | 97,593  | 95,328  |
| 10-14 years | 101,646 | 96,405  | 99,711  |
| 15-19 years | 103,695 | 102,918 | 99,444  |
| 20-24 years | 119,994 | 108,222 | 99,060  |
| 25-29 years | 133,830 | 99,939  | 89,883  |
| 30-34 years | 121,842 | 98,541  | 98,769  |
| 35-39 years | 111,138 | 95,538  | 105,231 |
| 40-44 years | 101,451 | 106,218 | 105,471 |
| 45-49 years | 108,405 | 102,384 | 92,997  |
| 50-54 years | 100,749 | 95,112  | 76,905  |
| 55-59 years | 91,788  | 78,963  | 68,289  |

<sup>3</sup> Middle Eastern, Latin American and African

<sup>4</sup> Totals exceed 100% due to multiple ethnicity responses, as people can identify with more than one ethnic group.

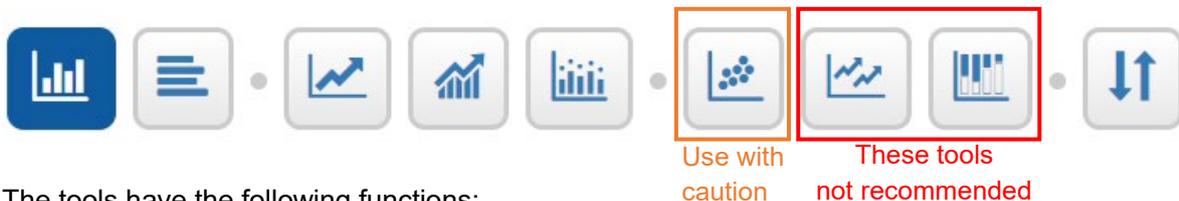
|                   |           |           |           |
|-------------------|-----------|-----------|-----------|
| 60-64 years       | 75,813    | 68,208    | 51,255    |
| 65-69 years       | 62,079    | 54,648    | 40,071    |
| 70-74 years       | 47,826    | 40,542    | 29,499    |
| 75-79 years       | 34,785    | 27,846    | 25,314    |
| 80-84 years       | 22,218    | 20,544    | 18,372    |
| 85 years and over | 22,269    | 19,578    | 15,291    |
| Total             | 1,571,718 | 1,415,550 | 1,304,958 |

Table 8. Age Group (%), Auckland Total

|                   | 2018   | 2013   | 2006   |
|-------------------|--------|--------|--------|
| 0-4 years         | 6.5%   | 7.2%   | 7.2%   |
| 5-9 years         | 7.0%   | 6.9%   | 7.3%   |
| 10-14 years       | 6.5%   | 6.8%   | 7.6%   |
| 15-19 years       | 6.6%   | 7.3%   | 7.6%   |
| 20-24 years       | 7.6%   | 7.6%   | 7.6%   |
| 25-29 years       | 8.5%   | 7.1%   | 6.9%   |
| 30-34 years       | 7.8%   | 7.0%   | 7.6%   |
| 35-39 years       | 7.1%   | 6.7%   | 8.1%   |
| 40-44 years       | 6.5%   | 7.5%   | 8.1%   |
| 45-49 years       | 6.9%   | 7.2%   | 7.1%   |
| 50-54 years       | 6.4%   | 6.7%   | 5.9%   |
| 55-59 years       | 5.8%   | 5.6%   | 5.2%   |
| 60-64 years       | 4.8%   | 4.8%   | 3.9%   |
| 65-69 years       | 3.9%   | 3.9%   | 3.1%   |
| 70-74 years       | 3.0%   | 2.9%   | 2.3%   |
| 75-79 years       | 2.2%   | 2.0%   | 1.9%   |
| 80-84 years       | 1.4%   | 1.5%   | 1.4%   |
| 85 years and over | 1.4%   | 1.4%   | 1.2%   |
| Total             | 100.0% | 100.0% | 100.0% |

### Appendix 3: An introduction to the chart tools

There are nine different chart tool options as shown below. These generally change the chart type; the exception being the far-right button which changes the sort order of the area names where applicable.



The tools have the following functions:

 Show data in column chart format

 Show data in bar chart format



Show time-series data as a line chart (you will be prompted to select an area of interest). Note that the time intervals are not equal (i.e., 7yrs between 2006 and 2013, and 5 years between 2013 and 2018).



Show time-series data for a selected area as a column chart



“Column mark” chart. This shows the latest two years’ data (can be changed using time-slider) on a single chart using a column and a dot.



Scatter plot. This option needs to be used with caution – see separate details below.



Not recommended – Multiple indicators (left) and Stacked column (right). These options are not well suited to the census data viewer.



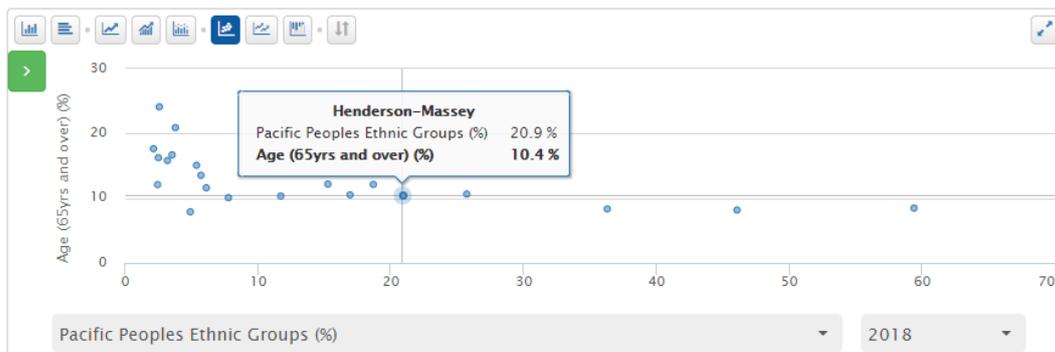
Sort order options, for use with bar or column charts. Areas can be sorted from highest to lowest values of the displayed variable, or alphabetically.

### Important notes about the scatter plot option

This option allows you to plot one variable (e.g., % aged 65yrs and over) against another (e.g., % Pacific Peoples), such that each dot represents an area (i.e., local board or SA2).

Caution is needed interpreting the resultant graph, however. To illustrate, see the example below for the Henderson-Massey local board. This shows the percentage of the population identifying with the Pacific Peoples ethnic group — across all age groups — and the proportion of residents aged 65yrs and over — across all ethnic groups.

We can see that across local boards (represented by dots on the chart), there is a general trend where those local boards with higher proportions of Pacific Peoples ethnic groups tend to have lower proportions of those 65yr and over. However, the graph does not mean that the proportion of Pacific Peoples ages 65yrs and over is 10.4% (this is, rather, the proportion of those 65yrs and over among the total population).



#### **Appendix 4: Links to Stats NZ website's technical information about census variables**

The following links provide further information on overall variable quality ratings, what sources were used to compile the data, and how the data is classified.

Age:

<http://datainfolplus.stats.govt.nz/Item/nz.govt.stats/5deebab2-9bf0-4a06-97f3-bdcc910f5924>

Ethnicity:

<http://datainfolplus.stats.govt.nz/Item/nz.govt.stats/7079024d-6231-4fc4-824f-dd8515d33141>

Census usually resident population count:

<http://datainfolplus.stats.govt.nz/Item/nz.govt.stats/858c2267-92e1-4eb2-a0c8-4cef372d24fd>

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This document last updated 11/10/2019 by the Research and Evaluation Unit (RIMU), Auckland Council

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